

The Metropolitan Water District of Southern California

Agenda

The mission of the Metropolitan Water District of Southern California is to provide its service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

Board of Directors - Final - Revised 2

July 11, 2023

1:00 PM

Tuesday, July 11, 2023 Meeting Schedule
08:30 a.m. FAIRP 10:30 a.m. EOP 12:30 p.m. Break 01:00 p.m. BOD 02:30 p.m. Sp Exec

Agendas, live streaming, meeting schedules, and other board materials are available here: <https://mwdh2o.legistar.com/Calendar.aspx>. A listen-only phone line is available at 1-877-853-5257; enter meeting ID: 891 1613 4145. Members of the public may present their comments to the Board on matters within their jurisdiction as listed on the agenda via in-person or teleconference. To participate via teleconference 1-833-548-0276 and enter meeting ID: 815 2066 4276 or click <https://us06web.zoom.us/j/81520664276pwd=a1RTQWh6V3h3ckFhNmDsUWpKR1c2Zz09>

MWD Headquarters Building • 700 N. Alameda Street • Los Angeles, CA 90012

Teleconference Locations:

Fullerton City Hall Council Chambers • 303 W. Commonwealth Avenue • Fullerton, CA 92832

2680 W. Segerstrom Avenue Unit I, • Santa Ana, CA 92704

3008 W. 82nd Place • Inglewood, CA 90305

Meritage Resort • 875 Bordeaux Way • Napa, CA 94558

1. Call to Order

- a. Invocation: Director John T. Morris, City of San Marino
- b. Pledge of Allegiance: Board Secretary Lois Fong-Sakai, San Diego County Water Authority

2. Roll Call

3. Determination of a Quorum

4. Jordan D. Joaquin, President Fort Yuma Quechan Indian Tribe

5. Opportunity for members of the public to address the Board on matters within the Board's jurisdiction. (As required by Gov. Code §54954.3(a))

6. OTHER MATTERS AND REPORTS

- A. Report on Directors' Events Attended at Metropolitan's Expense [21-2261](#)
Attachments: [07112023 BOD 6A Report \(REVISED 7/5/2023\)](#)
- B. Chair's Monthly Activity Report [21-2262](#)
Attachments: [07112023 BOD 6B Report \(REVISED 7/8/2023\)](#)
- C. General Manager's summary of activities [21-2263](#)
Attachments: [07112023 BOD 6C Report](#)
- D. General Counsel's summary of activities [21-2264](#)
Attachments: [07112023 BOD 6D Report](#)
- E. General Auditor's summary of activities [21-2265](#)
Attachments: [07112023 BOD 6E Report](#)
- F. Ethics Officer's summary of activities [21-2266](#)
Attachments: [07112023 BOD 6F Report](#)
- G. Induction of new Director Gary E. Bryant of Foothill Municipal Water District. [ADDED SUBJECT 7/6/2023] [21-2533](#)
(a) Receive credentials
(b) Report on credentials by General Counsel
(c) File credentials
(d) Administer Oath of Office
(e) File Oath
- H. Presentation of 5-year Service Pin to Director Tim M. Smith, San Diego County Water Authority

**** CONSENT CALENDAR ITEMS -- ACTION ****

7. CONSENT CALENDAR OTHER ITEMS - ACTION

- A. Approval of the Minutes of the Board of the Directors Meeting for June 13, 2023 (Copies have been submitted to each Director, any additions, corrections, or omissions) [21-2267](#)
Attachments: [07112023 BOD 7A \(06132023\) Minutes](#)

- B. Approve Commendatory Resolution for Director Richard Atwater representing Foothill Municipal Water District [21-2490](#)
- C. Approve Committee Assignments [21-2487](#)

8. CONSENT CALENDAR ITEMS - ACTION

- 7-1 Authorize an increase of \$950,000 in change order authority for the contract with W.A. Chester, LLC to terminate 6.9 kV power cables at all five Colorado River Aqueduct pumping plants; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (EOT) [21-2456](#)

Attachments: [07112023 EOT 7-1 B-L](#)
[07112023 EOT 7-1 Presentation](#)

- 7-2 Authorize an increase of \$2 million to an agreement with Jacobs Engineering Group, Inc. for a new not-to-exceed total amount of \$2.65 million for final design of the first stage of security upgrades for the Colorado River Aqueduct Region; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (EOT) [21-2457](#)

Attachments: [07112023 EOT 7-2 B-L](#)
[07112023 EOT 7-2 Presentation](#)

- 7-3 Award a \$452,886 contract to Best Contracting Services, Inc. for replacement of the administration and warehouse building roofs at the Lake Mathews site; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (EOT) [21-2458](#)

Attachments: [07112023 EOT 7-3 B-L](#)
[07112023 EOT 7-3 Presentation](#)

- 7-4 Award a \$349,527.80 procurement contract to TechnoFlo Systems Inc. for 50 magnetic flowmeters to comply with surface water diversion regulations on Metropolitan's Delta Island properties; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (EOT) [21-2459](#)

Attachments: [07112023 EOT 7-4 B-L](#)
[07112023 EOT 7-4 Presentation](#)

- 7-5** Adopt Ordinance No. 152 determining that the interests of Metropolitan require the use of revenue bonds in the aggregate principal amount of \$500 million to finance a portion of capital expenditures and waive the full reading of Ordinance No. 152 (two-thirds vote of the Board); the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. [SUBJECT REVISED 7/5/23] (FAIRP) [21-2475](#)

Attachments: [07112023 FAIRP 7-5 B-L](#)

- 7-6** Review and consider the Lead Agency's adopted Mitigated Negative Declaration and take related CEQA actions, and adopt resolution for 114th Fringe Area Annexation to Eastern Municipal Water District and Metropolitan (FAIRP) [21-2476](#)

Attachments: [07112023 FAIRP 7-6 B-L](#)
[07112023 FAIRP 7-6 A-4](#)
[07112023 FAIRP 7-6 Presentation](#)

- 7-7** Award a \$359,725 contract to Mesa Energy Systems, Inc. for the repair of heating, ventilation and air conditioning (HVAC) chiller #2 located at the Metropolitan Headquarters building; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (FAIRP) [21-2477](#)

Attachments: [07112023 FAIRP 7-7 B-L](#)
[07112023 FAIRP 7-7 Presentation](#)

- 7-8** Approve General Auditor's Business Plan for fiscal year 2023/24; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (FAIRP) [21-2478](#)

Attachments: [07112023 FAIRP 7-8 B-L](#)
[07112023 FAIRP 7-8 Presentation](#)

**** END OF CONSENT CALENDAR ITEMS ****

9. OTHER BOARD ITEMS - ACTION

- 8-1** Award a \$3,740,792 contract to M.S. Construction Management Group, Inc. for replacement of a portion of the existing fire sprinkler system's piping and network components at Metropolitan's Headquarters Building; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (EOT) **[21-2455](#)**

Attachments: [07112023 EOT 8-1 B-L](#)
[07112023 EOT 8-1 Presentation](#)

- 8-2** Approve amendment of the Metropolitan Water District Administrative Code to delete the requirement that matters may not be placed on consent if a roll call vote is required and increase the cost of items that may be placed on the Consent Calendar from \$2 million to \$10 million; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (LC) **[21-2473](#)**

Attachments: [07112023 LC 8-2 B-L](#)
[07112023 LC 8-2 Presentation](#)

- 8-3** Award a \$16,490,000 contract to J. F. Shea Construction Inc. to replace equipment storage buildings at three Colorado River Aqueduct pumping plants; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. [ADDED SUBJECT 7/6/2023] (EOT) **[21-2532](#)**

Attachments: [07112023 EOT 8-3 B-L](#)
[07112023 EOT 8-3 Presentation](#)

10. BOARD INFORMATION ITEMS

- 9-1** Conservation Program Board Report **[21-2268](#)**

Attachments: [07112023 BOD 9-1 Report](#)

- 9-2** Governor Newson's Infrastructure Trailer Bill Package (LRAC) **[21-2484](#)**

Attachments: [07112023 LRAC 9-2 B-L](#)
[07112023 LRAC 9-2 Presentation](#)

11. OTHER MATTERS

NONE

12. FOLLOW-UP ITEMS

NONE

13. FUTURE AGENDA ITEMS

14. ADJOURNMENT

NOTE: Each agenda item with a committee designation will be considered and a recommendation may be made by one or more committees prior to consideration and final action by the full Board of Directors. The committee designation appears in parenthesis at the end of the description of the agenda item, e.g. (EOT). Board agendas may be obtained on Metropolitan's Web site <https://mwdh2o.legistar.com/Calendar.aspx>

Writings relating to open session agenda items distributed to Directors less than 72 hours prior to a regular meeting are available for public inspection at Metropolitan's Headquarters Building and on Metropolitan's Web site <https://mwdh2o.legistar.com/Calendar.aspx>.

Requests for a disability-related modification or accommodation, including auxiliary aids or services, in order to attend or participate in a meeting should be made to the Board Executive Secretary in advance of the meeting to ensure availability of the requested service or accommodation.

July 11, 2023 Board Meeting

REVISED Item 5A



Metropolitan Water District of Southern California Summary of Events

Attended by Directors at Metropolitan's Expense in June 2023

Date(s)	Location	Meeting Hosted by:	Participating Director(s)
June 1-2	Arizona Las Vegas, NV	<u>Hoover Dam Inspection Trip for</u> Water Education for Latino Leaders (WELL)	Adán Ortega
June 6-8	Santa Barbara, CA	CA Water Law Conference	Adán Ortega
June 14	Burbank, CA	Colorado River Board Meeting and Tour	Gloria Cordero
June 20-21	Sacramento, CA	Groundwater Resource Association of CA (GRA)	Adán Ortega Juan Garza Gloria Goldberg Nancy Sutley
June 29	Orange County, CA	Association of California Water Agencies (ACWA) Region 10 Program and Tour	Dennis Erdman



● Chair of the Board Adán Ortega Jr.'s Monthly Activity Report – June 2023

Summary

This report highlights activities of the Chair of the Board during the month of June 2023 on matters relating to The Metropolitan Water District of Southern California's business. The portion under "Notable Correspondence" has been edited to accurately reflect events.

Monthly Activities

Speaking Engagements/Events

- Served as a luncheon speaker at the Pasadena Optimist Club, where I discussed the status of water supply management and long-term planning efforts under Metropolitan's Climate Adaptation Plan (CAMP4Water), to mitigate future drought impacts.
- Participated in a special Hoover tour and Colorado River Inspection trip hosted by Water Education for Latino Leaders (WELL). We were joined by Water Education for Latino Leaders executive director Paul Hernandez, General Manager Adel Hagekhalil, Manager of Colorado River Resources Bill Hasencamp, Program Manager Jason Rollo, and elected officials from California cities. In my remarks to the group, I emphasized the importance of land use decisions for managing climate change and water scarcity.



- Served as a panelist at the California Water Law and Policy Conference in Santa Barbara, California, where I was asked to address "The Age of Climate Adaptation and Water Security" along with Genevieve Johnson from the United States Bureau of Reclamation. I emphasized that climate change is having a significant impact on the operations of water systems by affecting water availability, quality, infrastructure, and resilience, among other factors. I discussed the current and future state of the Colorado River and Metropolitan's Climate Adaptation Plan (CAMP4Water), which will inform regional and local water project development and long-term financial planning.

- Served as a virtual panelist at the Sonoran Institute's California Growing Water Smart workshop held in Ontario, California, along with Heather Dyer, General Manager of San Bernadino Valley Municipal Water District. I emphasized the need for greater integration of water with land use policies to develop solutions for climate change impacts. I also pointed to various programs by Metropolitan to help cities including those representing underserved communities implement conservation and other conservation methods. I also engaged in a robust question-and-answer session addressing climate change impacts, service costs, water quality, and Delta conveyance. Approximately 50 community leaders attended, including elected officials from Baldwin Park, El Monte, Indio, and Rialto.



- Served as a luncheon speaker at the Groundwater Resources Association of California Law & Legislation Forum in Sacramento, California, where Senator John Laird introduced me. I addressed Metropolitan's climate adaptation measures and related issues about the Colorado River, and took various questions from the audience, about the lack of access to proposed stored supplies surrounding the proposed Sites Reservoir. -I was joined by Vice Chairs Gail Goldberg and Michael Camacho, General Manager Adel Hagekhalil, and Chief Sustainability Resilience and Innovation Officer Liz Crosson. Directors Nancy Sutley and Juan Garza also attended the conference and spoke on panels related to groundwater planning and reliability.



- Participated in a virtual “meet-and-greet” with the Board of Directors of the Los Angeles County Business Federation (BizFed). I encouraged members to engage with Metropolitan on planning for regional resiliency and water affordability. I also urged BizFed members to share their business and economic perspectives on jobs and the economy when they advocate on water issues to lawmakers. The board expressed appreciation for Metropolitan’s General Manager Adel Hagekhalil’s work with CalTrans to develop new stormwater capture programs for development and future presentation to the Metropolitan’s Board as part of a dialogue that was initiated by former Metropolitan Board Vice Chair Heather Repenning
- Met with the Board of Directors of Re-Build SoCal, a group comprised of business and labor organizations to promote infrastructure development. During the meeting, I addressed Metropolitan’s CAMP4Water process and the need to develop a new class of infrastructure to deal with climate change. I emphasized last year’s Project Labor Agreement that is groundbreaking because it makes provisions for local hiring and training programs; small business participation; and a range of projects covered under the agreement. The board expressed appreciation for our General Manager Adel Hagekhalil’s role in negotiating the Project Labor Agreement as well as former Metropolitan Board Vice Chair Heather Repenning.

Interviews, Correspondence, and Other Activities

- Interviewed with the San Fernando Valley Sun editor Diana Martinez about water quality, conservation, and climate change. I focused on affordability, outdoor native landscaping and encouraged careers in the water industry.
- Took part in a Podcast recording with Rebuild SoCal Zone, where I discussed the history and mission of Metropolitan in providing water delivery to millions of Southern Californians. I emphasized the need for continued efforts to develop solutions for the future, like Metropolitan’s Pure Water Southern California Program to address climate impacts and vulnerabilities facing the region’s water system and the communities served to advance strategies for an equitable and resilient water future.
- Acknowledged outgoing Vice Chair Heather Reppening for her leadership, dedication, and expertise around climate change.



Delegation of Activities

- Given my diagnosis with COVID from which I have since recovered, I asked Director Miguel Luna to provide welcoming remarks on behalf of the board at a reception held at Metropolitan sponsored by the Water Replenishment District and Mujeres De La Tierra, recognizing the remarkable achievements of Latina and Latino leaders for their pioneering efforts in water management, policy, and conservation. Many distinguished honorees, including Metropolitan Water District board members Desi Alvarez, Michael Camacho, Art Chacon, Gloria Cordero, David De Jesus, Brenda Dennstedt, Juan Garza, Miguel Luna, Marsha Ramos, and Nancy Sutley were recognized for their contributions to water. Also recognized were former Metropolitan General Manager Ron Gastelum and former Board member Charles Trevino. In attendance were General Manager Adel Hagekahalil and leaders from Metropolitan's Hispanic Employees Association.



Notable Correspondence (Please Note Revisions Below)

In June, I received a letter (distributed to the Board) from the general managers of two member agencies (“the sub-agencies”) of the San Diego County Water Authority (SDCWA) who in 2020 applied to San Diego LAFCO for a simultaneous detachment and annexation to Eastern Municipal Water District (EMWD). The letter was in reaction to the discussion by the Finance, Audit, Insurance, and Real Property Committee (FAIRP) about the potential policy implications from the precedent of forced changes to boundaries within Metropolitan’s service area imposed by entities such as San Diego LAFCO, and perhaps other governmental entities; as well as by my previous communication to San Diego LAFCO’s Executive Officer.

In their letter, the San Diego sub-agencies admonished me for not subscribing to the culture of personal hostility that erupted from litigation between MWD and SDCWA. In their view, I should regard people associated with SDCWA with apprehension. The letter included references to conspiracy theories about my motives and thinly veiled threats. In recognition of free speech rights, but to avoid the festering and seemingly personal animosities apparently still in play, I will not reply in kind. To be constructive, I have asked staff to ensure that the San Diego sub-agencies are engaged through SDCWA as we discuss affordability in our Climate Adaptation Master Planning Process.

I have acted to protect and promote our Board’s policy prerogative on issues affecting boundary changes and their potential precedents impacting Metropolitan’s planning, finance, and governance. The consensus at FAIRP as proposed by Director Michael Camacho was that the Board Chair form an ad hoc committee to weigh the policy implications after Director Jeff Armstrong suggested that such discussion might be warranted.~~The consensus at FAIRP as proposed by Director Jeff Armstrong was that an ad hoc committee should be formed to~~

~~weigh the potential precedent and policy implications.~~ I am consulting with our General Counsel and staff as well as the Board's Vice Chairs about forming the ad hoc committee consistent with the FAIRP committee's discussions. As an alternative, I am also discussing with Diversity, Equity, and Inclusion Committee Chair Tana McCoy and staff about the possibility of weighing the related affordability issues in that committee instead, probably at the Committee's August meeting in order to inform CAMP4Water.

While we stretch to- expand supply alternatives to the State Water Project dependent areas, we would be pretending that an involuntary detachment and annexation driven by third parties to secure *sole* reliance on cheaper imported water for its proponents is inconsequential to our planning efforts. Moreover, it would be an effective reconsideration of our current policies that endorse integrated resources planning, not sole reliance on imported water.

Regularly Scheduled/Ongoing Meetings

I continue to meet regularly to review issues and coordinate activities with the Board Vice Chairs, Department Heads, and Directors.



General Manager's Monthly Report



Activities for the Month of June 2023



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Message from the General Manager

Earlier this year, the Board met and discussed the serious nature of climate change, its impact on water supplies, and the risks it poses to Metropolitan's operations. Since then we have begun to develop a Board-led Climate Adaptation Master Plan for Water (CAMP4W) that will better integrate Metropolitan's planning for water resources, climate resilience, and finances, and thereby strengthen our ability to withstand and recover from disruptions.

The weather extremes of 2023 have further demonstrated that the climate emergency is already upon us. "Weather whiplash" isn't just complicating the public messages around water conservation. It is also placing new demands on staff and stressing our systems as we have to rapidly switch from extreme drought to high flows, adjust treatment methods to maintain water quality, and do it all under heightened risks of flood, fire and record breaking heat.

Climate adaptation demands our immediate attention, and we have deployed our planning tools and the best minds on our team to support the Board's CAMP4W process. I am confident it will result in a decision-making framework to shape and evaluate policies, programs, pathways and projects that increase the climate resilience of Metropolitan's infrastructure, aiding our employees and Member Agencies, bolstering our reliability, and furthering the goals of affordability and financial sustainability. We can start with "low-regrets" projects that provide benefits at relatively low risk, and we will go beyond that with careful analysis and the best available information.

I am grateful to all those who are engaged in and rallying around this urgent process, to the Board and Member Agency managers who are wrestling with the regional and local implications of this work, and, as always, to our frontline staff who are facing down the daily demands of a worsening climate.

We are approaching this charge with resolve and the utmost speed, because in the face of climate change, time is not on our side. Together, as first envisioned at the Board Retreat a few months ago, we will identify and invest in strategies that build the climate resilience of Metropolitan and its Member Agencies.

We are one,

Adel



"You cannot escape the responsibility of tomorrow by evading it today."

***- Abraham Lincoln,
16th U.S. President***



Strategic Priorities Update

The General Manager's Strategic Priorities guide actions in key areas of focus, investment, and transformation for Metropolitan.

Empower the workforce and promote diversity, equity, and inclusion

Build a safe, inclusive, and accountable workplace where all employees feel valued, respected, and able to meaningfully contribute to decisions about their work.

This month staff celebrated National Safety Month with the theme "Safety is for Everyone." Employees and facilities participated in over 20 events focused on worker safety and accident prevention. Activities included safety training, staff recognition and awards, safety-based games with prizes, and equipment vendor displays to update employees on the latest safety industry developments. Staff also held three webinars including Empowered Ergonomics: Simple Solutions to Align Your Home Workstation; Personal Protective Equipment: Prepare to Protect Yourself When Visiting Worksites; and Safety is for Everyone: Information on USHQ HVAC System, COVID-19 Updates and Personal Security.

This month the 14th cohort of Metropolitan Management University (MMU) was launched for 21 newly appointed managers and the first trainings focused on leadership techniques. The cohort of MMU will be expanded by one session to work in additional content on Conflict Styles and Managing Teams.

Prepare and support the workforce by expanding training and skill development and updating strategies to recruit and retain diverse talent at a time when Metropolitan's needs are evolving and employee expectations about the workplace are changing.

To reduce the time it takes to fill vacant positions, we are supplementing the recruitment staff with external recruitment support. Additional temporary staff has been brought on and contracts with recruiting firms are being finalized.

Sustain Metropolitan's mission with a strengthened business model

Conduct a careful, deliberative and inclusive review of the rate structure to ensure the business model can adapt to changing needs of the member agencies and support sustainable local and imported supplies.

The Climate Adaptation Master Plan for Water (CAMP4W) progressed with Member Agency meetings and a Board Workshop to discuss how we incorporate Metropolitan and Member Agency resource plans and how our Needs Assessment will be used to identify resource gaps and help evaluate potential investments in water supply and distribution. Member Agency Managers will meet monthly through November to focus on CAMP4W.

Manage rate pressure on member agencies through attention to programmatic costs, organizational efficiencies and efforts to secure external funding for projects with broad and multi-purpose benefits.

The Governor and DWR announced a \$38 M to Metropolitan under the Urban Community Drought Relief Grant program. The grant will support turf replacement (\$30M), equipment to save water during firefighter training (\$3M), and the direct install program run in collaboration with Gas Company (\$5M). This award is a testament to our success in conservation and leadership in turf removal. In FY23, Metropolitan was awarded \$200M in new, external funding in the current fiscal year.

In June, Fitch Ratings affirmed Metropolitan Water District's revenue bonds at AA+/stable. This follows recent rating actions by S&P (AAA/stable) and Moody's (Aa1/stable) and reflects continued strength in Metropolitan's underlying financials and reflect investor confidence in our comprehensive long-term strategy for sound operational and financial management. Our high credit ratings not only position us favorably for future business activities and investments, but also support the credit ratings of our member agencies.

Investor confidence in Metropolitan was also affirmed by our successful pricing of 2023A bonds for \$257 million to support our CIP and \$36.3 million to refund outstanding debt. In conjunction with two other refunding transactions in FY23, Metropolitan has generated over \$84.3 million in projected gross debt service savings (\$68.2 million present value savings).

Adapt to changing climate and water resources

Provide each member agency access to an equivalent level of water supply reliability through necessary adaptive implementation of the IRP findings.

Water Resource Management and Engineering Services staff continued to meet with the State Water Project dependent area agencies to advance solutions to provide an equivalent level of water supply reliability. Staff also continued to explore how the IRP scenarios affect overall reliability and how they can be resolved through infrastructure fixes.

Design of the Inland Feeder Rialto Pipeline Intertie is complete. Bids will be opened in July and a board action to award a construction contract is planned for Aug 23. The on-line date is the second quarter of 2025.

Metropolitan is now an official co-sponsor of AB 1572 (Friedman), statewide legislation which would prohibit businesses and institutions (CII) from using potable water to irrigate non-functional turf. If enacted into law, requirements would go into effect in phases, beginning in 2027. The proposed legislation is set to be heard in Senate Committees starting in July.

Advance the long-term reliability and resilience of the region's water sources through a One Water approach that recognizes the interconnected nature of imported and local supplies, meets both community and ecosystem needs, and adapts to a changing climate.

Projects identified as part of Seismic Resilience planning are moving forward on schedule.

Staff initiated work to obtain ENVISION certification for the Casa Loma Siphon project.

Staff presented to the One Water and Stewardship Committee about short- and long-term strategies to improve stormwater capture. Staff met with Caltrans to discuss collaborative stormwater capture opportunities and next steps; a follow-up meeting is scheduled for mid-August. Staff met with the ARLA team to discuss their analysis of co-benefits, which we expect to be provided in a report to Metropolitan in the coming weeks. Staff evaluated the development potential for stormwater and proposed target alternatives. A technical memorandum will be prepared to summarize these assessments later this summer. This information will help inform the CAMP4Water discussion as well as other resource planning.

Metropolitan joined a press event at the Pure Water Southern California site, announcing an EPA grant (\$1.8M) to our project partner LA County Sanitation Districts to help clean up the site—the location of our future advanced water purification facility. Remediation needs to be completed for our project to move forward. EPA Region 9 Administrator Martha Guzman and other officials were provided with a tour of the Pure Water Demonstration Plant.

Protect public health, the regional economy, and Metropolitan's assets

Proactively identify, assess, and reduce potential vulnerabilities to Metropolitan's system, operations, and infrastructure.

This month, development of dam emergency action plans continued. Two additional plans were submitted to Cal OES for review, and four plans are being reviewed by stakeholders before submittal. Four of 13 plans have been approved. Work also continued developing various staffing and support services options for the new Cyber Security Operations Center and assessing of service connections and meters for the condition assessment tool.

Apply innovation, technology, and sustainable practices across project lifecycles (design, construction, operations, maintenance, and replacement).

This month, Metropolitan hosted Isle Utilities' Technology Approval Group, which included the review of multiple emerging technologies focused on water quality, leak detection, and other needs. Over a dozen western utilities had representatives in the room.

For the Enterprise Content System, the Request for Proposals (RFP) process has been completed and the evaluation committee has identified a recommended vendor to provide the requested software and services. A contract award will be considered for approval by the Board in August as the next step.

Partner with interested parties and the communities we serve

Grow and deepen collaboration and relationships among member agencies, interested parties, and leaders on the issues most important to them and toward mutual and/or regional benefits.

Changes to the Community Partnering Program were presented to the Legislation, Regulatory Affairs, and Communications Committee in June 2023 and are effective in July 2023, increasing the amount of grants available and targeting two grants toward sustainability priorities. Website management capabilities will be finalized when IT approves content management system and security software. Meetings with management will consider recommendations for integrating public input into board letters and board decision-making process.

Reach underserved communities and non-traditional interested parties to better understand their needs and ensure their inclusion in decision making.

Work to build on foundational efforts in FY23 to reach underserved and tribal communities will proceed in the coming fiscal year through enhanced advertising, outreach, partnerships, sponsored events, and other initiatives.

This fiscal year, our earned media coverage reached 2.4 billion audience views, the equivalent of paid media worth \$46 million.

Executive Summary

This executive summary is added to this report to provide a high-level snapshot of a key accomplishment from each area of the organization. Detailed information is reported in the pages following this summary.

Bay-Delta Initiatives

At the June 16 Joint Sites Reservoir Committee and Authority Board meeting, the Reservoir Committee and Authority Board authorized the Executive Director to enter into a new Memorandum of Agreement with the U.S. Bureau of Reclamation that includes preconstruction activities addressing continued planning and engineering, including geotechnical investigations, design, environmental permitting, and the water rights process.

Chief Financial Officer

On June 21, 2023, Metropolitan issued the \$258,410,000, Water Revenue and Refunding Bonds, 2023 Series A. The bond pricing, held on June 6, 2023, was a tremendous success. Bond orders from 49 institutional investors totaled \$874 million, or 3.3 times the amount of bonds sold. Bond proceeds will be used to fund a portion of Metropolitan's Capital Investment Plan and to refund a short-term note that was issued to prepay approximately \$35 million of subordinate lien revenue bonds. Siebert Williams Shank & Co., LLC, was the senior manager on the transaction, with Ramirez & Co., Inc., as co-senior manager, and Barclays and Cabrera Capital Markets LLC, as co-managers.

S&P and Moody's affirmed ratings of AAA/stable and Aa1/stable, respectively for Metropolitan's recent bond transaction. These ratings reflect the continued strength of Metropolitan's underlying financials and reflect investor confidence in our comprehensive long-term strategy for sound operational and financial management. These high credit ratings position Metropolitan favorably for future business activities and investments and support the credit ratings of our member agencies.

Colorado River

On June 16, Reclamation initiated the Post-2026 National Environmental Planning Act process by publishing a Notice of Intent to prepare an Environmental Impact Statement in the Federal Register. The first step is a 60-day public scoping period, which closes on August 15, 2023. The Colorado River Basin States are working together to develop a scoping letter supported by all states.

Diversity, Equity & Inclusion

From June 11-13, DEI staff attended the American Water Works Association (AWWA) annual ACE 23 Conference. Staff was invited to participate in an inaugural panel discussion "Indigenous voices and First Nations Water Rights." The panel included a traditional First Nations Anishinaabe water ceremony and ancient Lakota water teachings. Staff conversed with world-renowned 18-year-old Autumn Peltier, dubbed the "Water Walker," who spoke in front of the United Nations Council on behalf of Indigenous peoples' water rights. Dr. Dawn Martin Hill of McMaster University was also a panel participant. The panel conversation included preservation of water rights, water quality improvement, and water workforce development for indigenous people. The session was attended by 200 event participants.

Engineering Services

Following Metropolitan's 2016 acquisition of the Verbena land in the Palo Verde Valley, Engineering Services undertook a project to complete Records of Survey for these properties. Engineering Services surveyed over 12,800 acres, mapped the 65 parcels, and measured and set over 1700 monuments. Record of survey maps, as well as encumbrance maps to document easements, were prepared. As of June 2023, all surveying is complete, the Record of Survey Maps have been registered with Riverside and Imperial Counties, and all work is now complete.

External Affairs

Metropolitan and GM Hagekhalil were honored by the LA Conservation Corps with the Climate Resiliency Public Partner Award for long-term support of workforce development and sustainability projects. Vice Chair Repenning and Directors Luna and McMillan attended. (June 1)

Human Resources

The Organizational Development & Training Unit (OD&T) hosted an in-person training for the Engineering Services Design Section on Communication Skills.

Information Technology

The Information Technology Group completed the Oracle data access upgrade for select reporting tools. This project will continue to upgrade legacy databases.

Real Property

Two staff members were each awarded “Young Professional of the Year” by the International Right of Way Association (IRWA) at the chapter and regional level, respectively. This award recognizes IRWA members for their dedication and contributions to the right of way industry, professional development pursuits, and workplace accomplishments.

Security Management

Metropolitan partners with San Bernardino County first responders for Safety Field Day at Iron Mountain Pumping Plant.

Sustainability, Resilience and Innovation

SRI worked with the Climate Adaptation Master Plan for Water (CAMP4W) Planning team to organize and execute the Board Workshop focused on Member Agency Alignment and the Water Resources Needs Assessment. The team also participated in Safety Fairs at several Metropolitan facilities to introduce the SRI team and mission. Staff also hosted the GM’s Environmental Listening Session on the CAMP4W process and solicited input on the process and community engagement strategy.

Water Resource Management

Water Resource Management staff is actively exploring opportunities to capture more of this year’s water supply. Staff is working with member agencies and groundwater basin managers to either modify or create new programs to encourage storage.

Water System Operations

This month, Metropolitan celebrated National Safety Month with employees participating in events focused on worker safety and accident prevention. Activities included safety training, safety webinars, staff recognition and awards, safety-based games with prizes, and equipment vendor displays to update employees on the latest safety industry developments. Celebrating National Safety Month has been a long-standing tradition at Metropolitan that receives enthusiastic participation from employees at all levels. This year was no different, with over 20 well attended events held at all of Metropolitan’s main facilities.



“Working as a water educator for nearly 30 years and having taught close to 48,000 students about water recycling and conservation, I am extremely proud to have been part of the team that developed Water Engineering 4 Good to provide middle and high school students with a S.T.E.A.M learning experience and possibly inspire them to pursue a career in the water industry.”

*Mark R. Moss, Principal Public Affairs
Representative, Education Team*

PROGRAM DESCRIPTION

Water Engineering 4 Good is Metropolitan’s newest STEAM (Science, Technology, Engineering, Arts, and Mathematics) program for middle and high school students. Launched as the recent historic drought, built a conservation device out of recycled/upcycled materials, animated their device with a CAD program, and created a social media campaign to promote their device.

In April, the student teams concluded their work by presenting the projects to a panel of Metropolitan engineers, who asked questions and provided feedback. The winner in the Middle School Division was Hollencrest Middle School in West Covina and in the winning high school was Oxford Academy in Cypress.

IMPORTANCE TO METROPOLITAN

Programs such as WE4G are important to Metropolitan because they teach students to consider ways to use science, technology and creative thinking to address issues such as climate change, mega droughts and conservation. They can also serve as a pipeline to create a better educated citizenry and inspire young people to consider careers in the water industry.

MEMORABLE MOMENT

When the teams presented their conservation device to a panel of Metropolitan engineers at the end of this year’s program, the enthusiasm and pride was truly contagious. Additionally, the feedback from participating teachers let us know students had a very positive experience and look forward to WE4G 2024.



Water Resources and Engineering



Water Resource Management

Ensure Access to Sufficient Water Supplies to Operate a Full Colorado River Aqueduct in Times of Drought

Staff attended a meeting of the Colorado River Basin Salinity Control Forum (Forum) in Jackson Hole, Wyoming. Topics discussed included (1) proposed language for the 2023 federal Farm Bill to reduce the state cost-share requirement from 30 percent to roughly 15 percent for salinity control funding from the Natural Resources Conservation Service (NRCS), which would reduce the existing Salinity Control Program (Program) funding deficit; (2) an update on the U.S. Bureau of Reclamation's (USBR's) Request for Information (RFI) from private industry representatives to solicit new alternatives for the long-term replacement of the Paradox Valley Unit (PVU); (3) the draft 2023 "Triennial Review," in which the Forum communicates to the U.S. Environmental Protection Agency (EPA) an assessment of the sufficiency of existing water quality criteria for salinity on the Lower Colorado River; and (4) updates from key federal agencies involved in the Program, including USBR, NRCS, the Bureau of Land Management (BLM), and the U.S. Geological Survey.

Support Capital Investment Program Planning

The Capital Investment Program (CIP) Office has started a new cycle of proposal reviews. Together with staff from Water System Operations (WSO), Real Property, and Finance and facilitated by the CIP Office, Water Resources Management (WRM) staff participate in twice weekly, day-long reviews of the proposals that will be in the CIP book for the next budget cycle. Staff reviews the proposals and the risk matrix and scores each proposal based on standardized parameters such as obsolescence and operational flexibility improvements.

Participate in Federal, State and Local Water-Energy Nexus processes to support Metropolitan Energy Sustainability and Climate Action Plans

Staff coordinated with the State Water Contractors on their comments to the California Water Commission hearing on SB1020 and the State's energy roadmap. Comments highlighted support for the State Water Project to use 100 percent renewable energy by 2035 while maintaining water affordability and that the roadmap serves as an example for contractors' clean energy policies. The need for additional funding for potential projects and operational changes at both the state and federal levels was also emphasized.

Implement Regional Conservation Program

Staff presented Metropolitan's conservation program at the American Water Works Association ACE23 conference in Toronto, Ontario, Canada. The first topic, "From Local to Regional Programs—You Need all the Tools in the Toolbelt to Support Customers," covered both the regional incentive programs as well as how Metropolitan provides funding for local conservation programming. The second topic was "How a Regional Wholesaler Can Use Flume Data for Targeting Purposes". Staff shared data from Metropolitan's Household Water Use Study. Both panels were moderated by the Environmental Protection Agency (EPA) WaterSense Branch Chief and were attended by over 50 attendees.

Adaptively Prepare for a Range of Possible Futures through the Incorporation of Scenario Planning in the IRP.

Metropolitan staff provided presentations and participated in board and member agency discussions in review of the scenario analyses from the 2020 IRP Needs Assessment as part of the Climate Adaptation Master Plan for Water (CAMP4W) at special workshops for the member agency managers on June 15 and the Board of Directors on June 27.

Collaborate with Member Agencies, Water Agencies and Associations, and Provide Leadership for Policy Development, Advocacy, Outreach and Education

Metropolitan staff continued ongoing technical collaboration with member agencies with the 2023 Annual Local Production Survey, which was sent out to all member agencies on March 21. Survey results were received from member agencies in June and are currently under review for updates to member agencies' inventories of existing and planned local supplies. Metropolitan uses the survey information to estimate total regional demand, potable consumptive per capita water use, and for use in water resource analyses and modeling.

Metropolitan submitted its Annual Water Supply and Demand Assessment to DWR to meet the legislatively required deadline of July 1, or within 14 days of receiving final State Water Project or Central Valley Project allocations (whichever is later). The Annual Water Supply and Demand Assessment is an annual State requirement for urban water suppliers that is part of the 2018 Conservation as a California Way of Life legislation and related to State Water Shortage Contingency Plans.

Staff provided input to CalDesal's comments on DWR's California Water Plan's Resource Management Strategy for desalination. Over the next year, CalDesal will be addressing funding for desalination projects in the proposed bond measures, recommendations from State Agency's proposed siting criteria, and potential changes to California's Ocean Plan amendments. CalDesal will hold its annual conference in Sacramento on February 8–9, 2024.

Implement Future Supply Actions Funding Program

Staff hosted a Future Supply Actions Funding Program (FSA) webinar on watershed monitoring and stormwater capture on Thursday, June 15th. The webinar covered the Moulton Niguel Metropolitan's pilot test of the coupling of an advanced watershed sensor network to existing metering infrastructure. The pilot demonstrated the system's ability to capture real-time flow and salinity data for San Juan Creek. The study also demonstrated the value of using data analytics and dashboards for evaluating stormwater capture potential from real-time data. MWDOC was the lead member agency for the study. Staff from External Affairs and Information Technology assisted with the webinar which included over 50 participants. FSA study presentations, webinar recordings, and final reports are available on Metropolitan's website: <https://www.mwdh2o.com/funding-opportunities#future-supply>

Position Metropolitan as a leader in Open Water Data.

Staff hosted several meetings for the California Water Data Consortium (CWDC) at Union Station on June 21–22. This included board meetings, strategic planning sessions, and related workshops. CWDC staff led discussions and updates on key CWDC projects including:

- Urban Water Data Reporting Project
- Groundwater Accounting and Data Reporting Platform
- Telemetered Data Reporting Project

Participants discussed opportunities for future projects and aligning the CWDC's budget to its long-term goals. The consortium has been awarded grants from DWR, the SWRCB, and USBR to support ongoing work for these projects. The CWDC will also be holding a series of workshops this fall on responding to new SWRCB reporting requirements. Additional information on CWDC's initiatives is available here: <https://cawaterdata.org>.

Promote Metropolitan's technical capabilities and innovation efforts to advance the understanding of water resources management.

Staff participated in Peer-2-Peer (P2P) meetings with several domestic and international utilities in June. The topics included Olympics and large event preparation, delta island/levee management, asset condition assessment, achieving net-zero GHG emissions, and workforce developments. The meetings were organized through Metropolitan's P2P innovation agreements with Arcadis, WaterStart, Booky Oren GWT, and ISLE Utilities, Inc.

Water Resources and Engineering

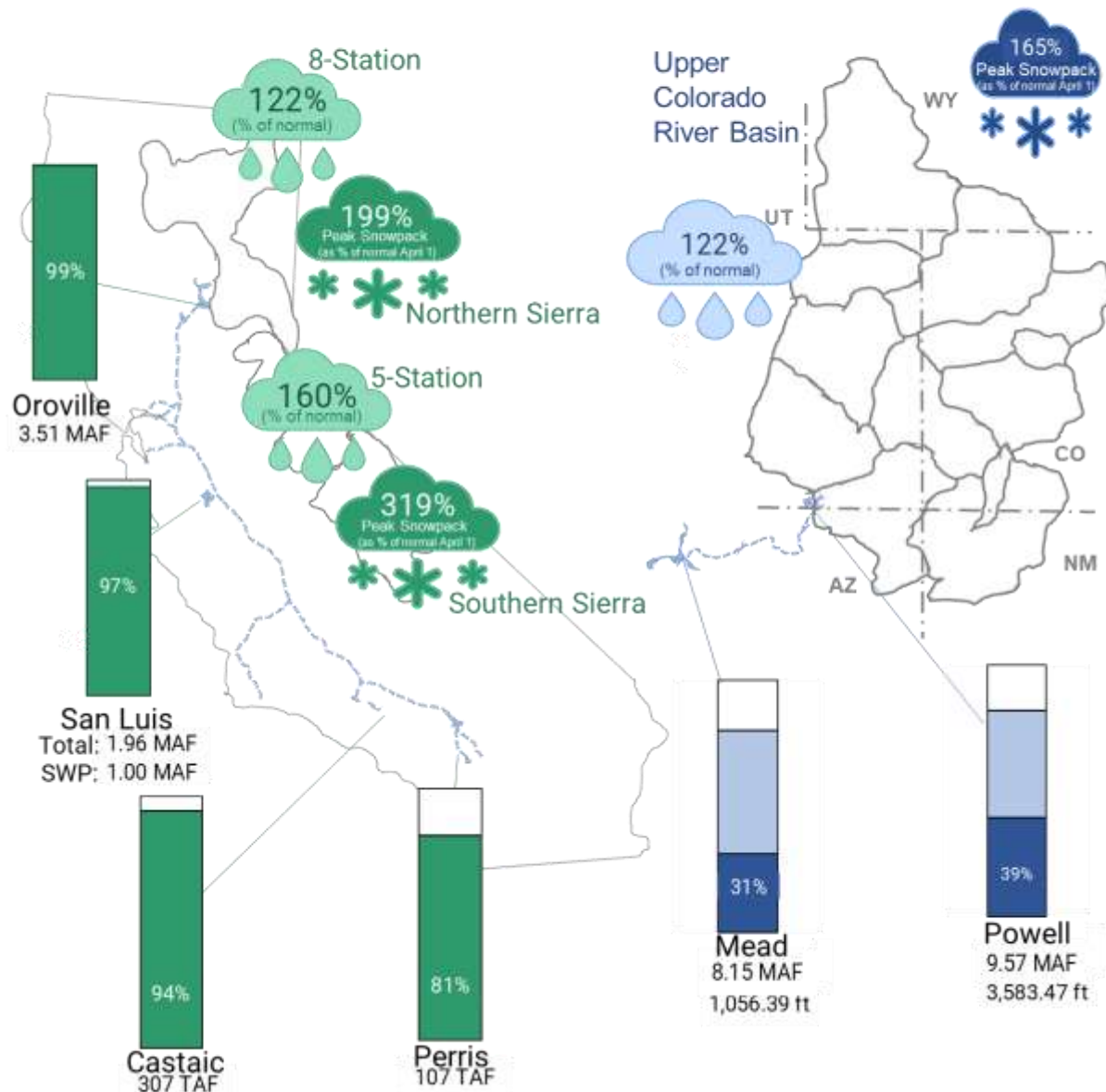
(continued)

State Water Project Resources

SWP Table A- 100% - 1,911,500 acre-feet

Colorado River Resources

Projected CRA Diversions - 748,000 acre-feet



Extended Report:

<https://www.mwdh2o.com/WSCR>

As of June 30, 2023

Bay-Delta Initiatives

Core Functions

Delta Conveyance

The California Department of Water Resources (DWR) released a draft Environmental Impact Report (EIR) to comply with the California Environmental Quality Act for a public review that ended on December 16, 2022. DWR received more than 700 unique comment letters with over 6,000 individual comments. DWR is currently working to organize the comments and develop responses. The Final EIR is expected at the end of 2023. It will include responses to all substantive comments on the Draft EIR and edits to the Draft EIR, as appropriate, to respond to the comments.

DWR recently published a fact sheet addressing how modernizing infrastructure can help to capture more storm flow. The fact sheet can be found [here](#).

The U.S. Army Corps of Engineers (USACE), as part of its permitting review under the Clean Water Act and Rivers and Harbors Act, released a draft Environmental Impact Statement (EIS) to comply with the National Environmental Policy Act for a public review that ended on March 16, 2023. USACE is working to organize the comments received.

Delta Conveyance related Joint Powers Authorities

On June 15, the Delta Conveyance Design and Construction Authority (DCA) Board of Directors held a Special Board Meeting, and the DCA Board authorized letters of high-level support for Executive Order N-8-23 and the Governor's Proposal to Build California's Clean Future Faster.

At the regularly scheduled June 15 DCA Board Meeting, the board approved the \$39.9 million budget for fiscal year 2023/24. This budget includes providing support to the DWR preparation of permit documents and applications and preparing responses to public comment on engineering aspects of project alternatives. The budget also includes continued execution of the geotechnical program to better understand conditions across the Delta, consideration of a range of engineering concepts and procurement, and continued development of DCA policies and procedures to support potential future program phases.

The DCA Board approved the Sustainability Policy establishing high-level sustainability goals and identifying supporting processes and procedures required to drive the successful implementation of sustainability practices throughout the Program. The DCA Board also approved the Statement of Investment Policy for fiscal year 2023/24, including delegating authority to the Treasurer to invest DCA funds for fiscal year 2023/24. Anticipating increased outreach and communications in the next fiscal year, the DCA Board amended the contract with VMA Communications, Inc. to include additional budget.

The June 15 regularly scheduled Delta Conveyance Finance Authority (DCFA) meeting was cancelled.

Sites Reservoir

At the June 16 Joint Sites Reservoir Committee and Authority board meeting, the Reservoir Committee and Authority Board authorized the Executive Director to enter into a new Memorandum of Agreement with the U.S. Bureau of Reclamation that includes activities necessary to move the Sites Reservoir Project forward into construction. These

preconstruction activities include continued planning and engineering, including geotechnical investigations, design, environmental permitting, and the water rights process.

Funding the Sites Reservoir Project beyond the planning phase and into detailed design, construction, and operation will require developing a Sites Reservoir Benefits and Obligations Contract (Contract). The Contract will also serve as the long-term commitment of the Sites Authority to provide the Participant with its capacity interest in the Sites Reservoir water storage system. Executing this Contract will be expected following the receipt of a water rights decision and securing critical permits. The Reservoir Committee and Authority Board authorized Sites Reservoir staff to proceed with negotiation of the Contract (Draft 1) with the participants.

The Reservoir Committee and Authority Board also approved two contracts for geotechnical monitoring as-needed services with the Cachil Dehe Band of Wintun along with geotechnical monitoring as-needed services and an ethnographic study with the Paskenta Band of Nomlaki Indians.

Science Activities

Staff continued participating in the Collaborative Science and Adaptive Management Program (CSAMP) with state and federal agencies, water agencies, and the NGO environmental community. Key progress this month focused on the Delta Smelt Structured Decision Making (SDM) Project. Staff is participating in a multi-stakeholder technical work group to develop and evaluate management action portfolios that may improve the population trajectory of Delta smelt in the next 5–10 years. In June, the results of the first round of Delta smelt SDM evaluations were presented to the CSAMP Policy Group. The results suggest that actions that include reducing predation and increasing prey availability would have the greatest chance of meeting the objectives. These actions include turbidity management, habitat restoration, aquatic weed control, and flow. The next phase of the SDM project will include additional refinement and evaluation of management action portfolios.

In June, staff attended a *Decision Analysis: Elicitation and Facilitation* training at the U.S. Department of Interior's National Conservation Training Center in West Virginia. The training is designed for structured decision-making practitioners to develop skills as decision analysts, particularly in the facilitation of the decision-making process and elicitation techniques. The course provided staff with the opportunity to gain access to specialized training in decision analysis and network with experts in this field and will provide benefits as staff participates in collaborative science processes.

Colorado River

Reclamation Begins Post-2026 NEPA Process

In December 2007, the Bureau of Reclamation (Reclamation) adopted a Record of Decision implementing the Colorado River Interim Guidelines, which included surplus and shortage criteria, Lake Powell, and Lake Mead operations, and established the Intentionally Created Surplus (ICS) program. The Guidelines expire on December 31, 2025. Because the operating conditions for 2026 will have already been approved by that date, the 2007 Interim Guidelines essentially are in effect through 2026. These Guidelines were derived from a consensus-based agreement among the Basin States, which followed a statement by then Secretary of the Interior Gale Norton in 2005 to develop such a plan or risk having the federal government develop its own plan. The consensus-based guidelines were followed by other consensus-based agreements, including new minutes to the Mexican-American water treaty and the 2019 Drought Contingency Plan.

On June 16, Reclamation initiated the process for developing the next set of Guidelines. They laid out a schedule in which a Draft Environmental Impact Statement (EIS) would be prepared by the end of 2024, followed by a Final EIS and Record of Decision in time for the 2027 operating year. The initial step is to solicit scoping comments for the National Environmental Planning Act (NEPA) process. Reclamation has requested input on the scope, strategies, and other issues that should be considered in the development of the EIS. The Colorado River Basin States have committed to work together to develop a seven-state scoping comment letter. Metropolitan will also be submitting scoping comments and will be working with our partners to encourage them to also submit scoping comments. Comments are due August 15, 2023.

Engineering

Core Business Function – Execute Capital Investment Plan Projects

Engineering Services manages and executes projects within the Capital Investment Plan (CIP) to maintain infrastructure resiliency, ensure regulatory compliance, enhance sustainability, and provide flexibility in system operations to address uncertain water supply conditions.

Distribution System Reliability Program

This program maintains reliable water deliveries through specific rehabilitation and upgrade projects on Metropolitan's pipelines, reservoirs, and control structures. Recent activities include the following:

- **Orange County Feeder Lining Repairs**—This project replaces the deteriorated internal lining along an 11-mile portion of the Orange County Feeder within the cities of Santa Ana, Costa Mesa, and Newport Beach. Rehabilitation is proceeding in three stages. Construction of Stages 1 and 2 are complete. Metropolitan's Board awarded a construction contract for the third and final stage in April 2022. The contractor completed the removal of the existing coal tar lining and is continuing to apply mortar lining. Construction is approximately 75 percent complete and is anticipated to be complete by September 2023.
- **Lake Mathews Wastewater Replacement**—This project consists of replacing the existing septic tank system with a wastewater collection system at Lake Mathews. The new wastewater system connects to a nearby off-site Western Municipal Water District main wastewater line. Metropolitan's Board awarded a construction contract for the final stage in October 2021. The contractor continues to install the sewer line. The connection to the municipal wastewater line was completed in June 2023. Construction is approximately 92 percent complete and is scheduled to be complete in August 2023.
- **La Verne Shops Building Completion—Stage 4**—This project will complete the La Verne Shops building improvements and install Metropolitan-furnished shop equipment. Metropolitan's Board awarded a construction contract in May 2022. The contractor completed installation of the press brake, hydraulic shear, and band saw. Work continues on the vertical machine center foundation, electrical upgrades, and exterior wall resurfacing. Construction is approximately 40 percent complete and is scheduled to be complete in August 2024.
- **OC-88 Pump Station Chillers Replacement**—This project replaces three existing chillers and two water pumps at the OC-88 Pump Station. The contractor is performing trenching work near the existing chillers and pumps to install underground conduit, and the scaffolding has been built for the electricians to access the conduits running in the ceiling. Construction is 24 percent complete and is scheduled to be complete in January 2024.



Lake Mathews Wastewater Replacement
Installation of containment lining inside manhole



La Verne Shops Building Completion, Stage 4,
Equipment pad excavation



Figure 10C-88 Pump Station Chillers Replacement
Electrical Conduit Installation

Prestressed Concrete Cylinder Pipe (PCCP) Reliability Program

This program was established to enhance the reliability of Metropolitan's water distribution system and to reduce the risk of costly emergency repairs of PCCP. The priority pipelines included in the program are the Second Lower Feeder, Sepulveda Feeder, Calabasas Feeder, Rialto Pipeline, and the Allen-McColloch Pipeline. A total of 100 miles of PCCP pipelines will eventually be relined with new steel pipe liners under this 20-year program. Recent activities include the following:

- **Second Lower Feeder PCCP Rehabilitation Reach 3A**—This project rehabilitates 6,000 feet of PCCP portions of the Second Lower Feeder within the city of Rolling Hills Estates. Metropolitan's Board awarded a construction contract in May 2022. The contractor has completed all relining and shutdown work and returned the pipeline to service on May 11, 2023. The contractor is finalizing restoration activities for the laydown and storage areas at Los Angeles Harbor College and for streets in the City of Rolling Hills Estates. Construction is 98 percent complete and is scheduled to be complete in July 2023.
- **Second Lower Feeder Valve Procurement**—This procurement contract provides 13 conical plug valves for the Second Lower Feeder PCCP rehabilitation. Metropolitan's Board awarded a procurement contract for the valves in December 2018. Seven valves have been delivered as of March 23, 2023. Three more valves are scheduled for delivery in 2023, two in November and one in December. Fabrication of the last three valves will be completed in early 2024 and delivery is projected for mid-2024.
- **Sepulveda Feeder Urgent Carbon Fiber Lining**—During a February 2023 pipeline inspection, staff identified new wire breaks at three locations along the Sepulveda Feeder. This project will rehabilitate the deteriorated PCCP at these three locations using carbon fiber lining. The use of the carbon fiber lining will allow the affected pipe sections to be strengthened in a timely manner to ensure that interruptions to deliveries of State Water Project supplies are minimized. Staff prequalified carbon fiber lining manufacturers/installers and completed final design. Design is complete, and award of a construction contract is scheduled for August 2023.
- **Sepulveda Feeder North Reach**—This PCCP rehabilitation project was re-prioritized to support the West Area Water Supply Reliability Improvements. The North Reach project, in conjunction with the Sepulveda Feeder Pump Stations, will allow the reversal of normal flow in the Sepulveda Feeder to augment treated water deliveries to the west service area. The North Reach preliminary design is approximately 15 percent complete and is scheduled to be complete in December 2023.



**Second Lower Feeder Valve Procurement
Conical Plug Valve Body Inspection**



Second Lower Feeder Valve Procurement
Conical Plug Valve Shop Performance Testing

Colorado River Aqueduct (CRA) Reliability Program

This program maintains the reliability of Metropolitan’s CRA conveyance system. Recent activities include the following:

- **CRA Main Transformer Replacement**—This project replaces the 35 230 kV and 69 kV step-down transformers that are used to run the main pumps at all five of Metropolitan’s Colorado River Aqueduct pumping plants. Preliminary design is complete. The new transformers will be procured by Metropolitan and are currently advertised for bid. A transformer procurement contract, as well as award of a contract for final engineering design, is scheduled for September 2023.
- **Cabazon Radial Gate Replacement**—This project replaces two radial gates and makes security, access, and safety improvements to the Cabazon Radial Gate Structure. Final design is 10 percent complete and is scheduled to be complete by April 2024.
- **Domestic Water System**—This project replaces the membrane filtration system and associated water treatment equipment at the five Colorado River Aqueduct pumping plants. Metropolitan’s Board awarded a construction contract in December 2021. The contractor is currently installing electrical duct banks at Gene Pumping Plant. Construction is 25 percent complete and is scheduled to be complete by March 2025.
- **Conduit Structural Protection**—This project consists of installing new reinforced concrete slab protection crossings over portions of the cut-and-cover conduits on the Colorado River Aqueduct. Metropolitan’s Board awarded a construction contract in April 2023. A pre-construction biological survey is underway, and the contractor is preparing submittals for review. Construction is scheduled to be completed by May 2024.

System Flexibility/Supply Reliability

Projects under this program will enhance the flexibility and/or increase the capacity of Metropolitan's water supply and delivery infrastructure to meet current and projected service demands. Projects under this program address climate change affecting water supply, regional drought, and alternative water sources for areas dependent on State Project Water.

- **Sepulveda Feeder Pumping Stations**—This project will install new pump stations at the existing Venice and Sepulveda Canyon Pressure Control Facilities, providing the ability to reverse flow in the Sepulveda Feeder and deliver water from the Central Pool to portions of the Jensen plant exclusive area. This project will use progressive design-build (PDB) for delivery. Statements of Qualifications (SOQs) from potential design-build entities were received in May. Staff has evaluated the SOQs for selection of the design-builder. The three respondents have been invited to separate interviews, from which a recommended design-build entity will be identified. Staff will then begin negotiating a final agreement for Phase 1 preconstruction design services under a PDB contract with the recommended design-builder. Board award of the Phase 1 agreement is planned for September 2023.
- **Wadsworth Pumping Plant Bypass**—In conjunction with three other projects, this project enhances water supply reliability in the Rialto Pipeline service area by enabling water to be pumped from the Wadsworth Pumping Plant forebay to Rialto Pipeline by way of the Inland Feeder. This project will install a bypass pipeline and an isolation valve to interconnect the Wadsworth Pumping Plant with the Eastside Pipeline. Metropolitan's Board awarded a construction contract in January 2023. The contractor is currently preparing submittals for review and approval. Construction is 5 percent complete and is anticipated to be complete by February 2024.
- **Badlands Surge Protection Facilities**—In conjunction with three other projects, this project enhances water supply reliability in the Rialto Pipeline service area by enabling water to be pumped from the Wadsworth Pumping Plant forebay to Rialto Pipeline by way of the Inland Feeder. This project will protect the Inland Feeder from excessive negative pressures that could develop from an unexpected shutting down of the pumps at Wadsworth Pumping Plant. Final design is 98 percent complete and is scheduled to be complete in July 2023, and a contract award anticipated in October 2023.
- **Inland Feeder-Rialto Pipeline Intertie**—In conjunction with three other projects, this project enhances water supply reliability in the Rialto Pipeline service area by enabling water to be pumped from the Wadsworth Pumping Plant forebay to Rialto Pipeline by way of the Inland Feeder. This project will install an interconnection pipeline and isolation valve structure between the Inland Feeder and Rialto Pipeline. Final design for this project is complete, and it is currently being advertised. Contract award is anticipated in August 2023.
- **Inland Feeder—Foothill Pump Station Intertie**—In conjunction with three other projects, this project enhances water supply reliability in the Rialto Pipeline service area by enabling water to be pumped from the Wadsworth Pumping Plant forebay to Rialto Pipeline by way of the Inland Feeder. This project will connect San Bernardino Valley Municipal Water District's (SBVMWD) Foothill Pump Station with the Inland Feeder to provide the needed hydraulic lift to deliver water from DVL to Rialto service area. Final design is complete. The project will be advertised for construction bids once right-of-way issues are resolved. Environmental permitting and right of way acquisition is ongoing. A Joint Use Agreement for the pump station is being drafted between Metropolitan and SBVMWD.

Treatment Plant Reliability Program

This program was initiated to maintain reliability and improve the operating efficiency of Metropolitan's water treatment plants through specific improvement projects. Recent activities include the following:

- **Weymouth Basins 5–8 and Filter Building No. 2 Rehabilitation**—This project rehabilitates major mechanical and structural components including the flocculation/sedimentation equipment, sludge pumps, baffle boards and walls, launders, inlet gates, and outlet drop gates at the Weymouth plant. Rehabilitation work also includes seismic upgrades of basin walls and inlet channel, hazardous material abatement, and replacement of filter valves and actuators in Filter Building No. 2. Metropolitan's Board awarded a construction contract in May 2022. The contractor began installation of filter valves and piping in Filter Building No. 2 and continued other work under the first quarter-plant outage, including new concrete construction and installation of new electrical conduits. Construction is 30 percent complete and is scheduled to be complete by May 2025.
- **Mills Ozonation System PLC Upgrade**—This project replaces the outdated ozone generator control system at the Mills plant with new programmable logic controller equipment along with upgraded software. Installation of the new software and commissioning is complete. The ozone system will be returned to service, with ozone as the plant's primary disinfectant, in July 2023.
- **Mills Electrical Upgrades**—This project upgrades the electrical system with dual-power feeds to key process equipment to comply with current codes and industry practice, improve plant reliability, and enhance worker safety. Stage 1 construction is complete, and a construction contract for Stage 2 improvements was awarded in November 2021. Stage 2 improvements will add a second incoming 12 kV service from Riverside Public Utilities, reconfigure the existing 4160-volt switchgear, and replace the standby generator switchgear and the emergency generator programmable logic controller. Metropolitan's Board awarded a construction contract in November 2021. The contractor is preparing the subgrade for expansion of the ORP switchgear building and is installing concrete equipment pads for the Riverside Public Utility switchyard. Construction is 25 percent complete and is scheduled to be complete by February 2025.
- **Jensen Ozone PSUs Replacement**—This project rehabilitates the ozone generation system at the Jensen plant by replacing four existing ozone power supply units (PSUs) and four sets of generator dielectrics. The project also makes required modifications to the associated electrical, control, and cooling water systems. Metropolitan's Board awarded a construction contract in June 2022. All PSUs and dielectrics have been manufactured and delivered. Installation of two PSUs is complete and dielectrics for two ozone generators have been replaced. The contractor continued working on the coordination study for start-up testing of the two newly installed PSUs, and pipe fabrication and valve procurement to implement modifications to the cooling water system. Construction is 40 percent complete and is scheduled to be complete by December 2023.



Weymouth Basins 5–8 and Filter Building No. 2 Rehabilitation
Backwash Valve Installation



Weymouth Basins 5–8 and Filter Building No. 2 Rehabilitation
Installation of Concrete Placement Panels

System Reliability Program

The System Reliability Program consists of projects to improve or modify facilities located throughout Metropolitan's service area to use new processes and/or technologies and improve facility safety and overall reliability. Recent activities include the following:

- **Headquarters Physical Security Upgrades**—This project implements comprehensive security upgrades for The Metropolitan Headquarters Building. These upgrades are consistent with federally recommended best practices for government buildings. This work has been prioritized and staged to minimize rework and impacts on day-to-day operations within the building. Stage 1 work is complete and provides enhanced security related to perimeter windows and doors. Stage 2 work is complete and provides security system upgrades inside the building with a focus on the main entry rotunda area, boardroom, executive dining lounge, and security control room. Stage 3 improvements will provide security system upgrades around the perimeter of the building. Metropolitan's Board awarded the Stage 3 construction contract in December 2022. The contractor continued demolition of the sidewalk around the building and began removal of waterproofing at bollard locations and installation of bollard baseplates. Construction is 20 percent complete and is scheduled to be complete by January 2024.
- **Headquarters Building Fire Alarm and Smoke Control System Upgrades**—This project upgrades the Metropolitan Headquarters Building fire life safety systems, which includes replacement of the fire detection and alarm system and HVAC system improvements for smoke control. The fire alarm and smoke control systems in the Metropolitan Headquarters Building provide detection, notification, and control of building functions so that occupants and visitors can safely exit in the event of a fire. Metropolitan's Board awarded a construction contract in August 2020. The contractor completed the migration of the new carbon monoxide monitoring system to the new smoke control system and commissioning of the new smoke fire dampers. Construction is 90 percent complete and is scheduled to be complete by September 2023.
- **SCADA System Upgrades**—This project will upgrade Metropolitan's entire control system in incremental stages, spanning the Colorado River Aqueduct, the five water treatment plants, and the conveyance and distribution system. The first stage of this project replaces the control system at the Mills plant, starting with a pilot effort on one of the plant's remote terminal units. The pilot effort will demonstrate the proposed technology and the consultant's approach for the plant and the overall project. The consultant continued providing submittals, performing equipment verification, and developing control narratives and a training plan. The pilot phase is approximately 30 percent complete and currently scheduled to be complete by November 2023. The system upgrades at the Mills plant are scheduled to be complete by April 2026.
- **Foothill Hydroelectric Plant and Control Building Seismic Upgrade**—This project strengthens the Foothill Hydroelectric Plant and Control Building to withstand a significant earthquake, by removing and replacing the roofing system; adding encasements to enlarge and strengthen concrete columns; and reinforcing shallow foundations. A construction contract was awarded in April 2023. The contractor has provided initial project submittals for review and will complete mobilization in July 2023. Construction is scheduled to be completed by December 2024.

Protecting the Public and Metropolitan's Assets

Engineering Services continued to develop state-mandated Emergency Action Plans (EAPs) for Metropolitan's state-regulated dams to help ensure long-term public safety. The Mills Treatment Plant EAP was formally approved by the California Governor's Office of Emergency Services (Cal OES) this month. Outreach to the local emergency management organizations and first responders for the Lake Mathews EAP and Lake Skinner and Skinner Finished Water Reservoir EAP was completed, and the plans will be submitted to the Cal OES for review and approval.

Operations

Water System Operations

Core Business Objectives

Prepare Employees for New Opportunities

The Water System Operations Apprentice and Technical Training Programs develop and train personnel to become qualified mechanics and electricians responsible for maintaining Metropolitan's water treatment and distribution systems. The Class of 2023 electricians and mechanics completed their Demonstrated Proficiency Assessment (DPA). The DPA is a series of hands-on exams that test an apprentice's competency. The assessment examines troubleshooting skills, fabrication skills, and time management skills: all skills needed as a journey electrician or mechanic. In addition to completing the DPA, apprentices will also need to complete 7,280 hours of on-the-job training to become certified journey electricians or mechanics with the State of California.



Class of 2023 electrical and mechanical apprentices completing their Demonstrated Proficiency Assessment

Manage Vacancies

WSO filled four vacancies in May 2023.

Provide Reliable Water Deliveries

Metropolitan member agency water deliveries were 86,000 acre-feet (AF) for June with an average of 2,900 AF per day, which was about equal to daily deliveries in May. Treated water deliveries increased by 1,000 AF from May for a total of 49,700 AF, or 58 percent of total deliveries for the month. The Colorado River Aqueduct (CRA) pumped a

total of 69,000 AF in June. State Water Project (SWP) imports averaged 3,900 AF per day, totaling about 116,400 AF for the month. The target SWP blend decreased from 80 to 60 percent for Weymouth and Diemer plants and increased from 20 to 40 percent for the Skinner plant by the end of the month.

Manage Water Reserves

The 100 percent SWP allocation, when combined with Colorado River supplies, provides the region with more water than normal demands. Water continues to be managed according to Water Surplus and Drought Management (WSDM) principles and operational objectives, with an emphasis to position SWP supplies to meet future demands in the SWP-dependent area. Castaic and Perris Flexible Storage has been filled, SWP Carryover will be maximized by the end of the year, as well as deliveries to groundwater storage programs that support the SWP dependent area. Metropolitan also continued deliveries to Desert Water Agency and Coachella Valley Water District to meet Metropolitan's exchange obligation. Staff is working with member agencies to manage supplies through the Cyclic and Cyclic Cost Offset Program. In June, Metropolitan started cyclic deliveries to Upper San Gabriel Valley Municipal Water District that averaged around 200 cubic feet per second. In this surplus year, Metropolitan expects to deliver over 1 million acre-feet into storage in 2023.

Support Imported Supply Reliability

The La Verne Shops received a request to refurbish two flow control wing gates for the Department of Water Resources' (DWR's) John E. Skinner Delta Fish Protective Facility. Each gate is 10 feet wide by 30 feet tall and weighs 8,000 pounds. This work included removing corroded sections of the gates and welding new ones, manufacturing various rotating internal components and two large shafts, and then finally coating both gates with corrosion-resistant coating. DWR plans on sending another pair of gates for refurbishment after installation of the recently completed gates.



As received condition of wing gates (left) and removal of corroded gate components (right) for DWR

Operations

(continued)



Completed manufacturing of center post (left) and machining of the gate's lower bearing (right) for DWR



Finished coating of pillow blocks and drive shafts (left) and stenciling of finished crank arms (right) for DWR



Test fit of internal components (left) and completed gate with finished coating (right) for DWR

Support the Pure Water Southern California Program

Staff completed collecting microbial samples and reverse osmosis concentrate samples from the secondary membrane bioreactor (MBR) treatment process at the Pure Water Southern California demonstration plant. Staff continued spiking studies on the ultraviolet light/advanced oxidation process using free chlorine or hydrogen peroxide as the oxidant and also started additional spiking studies to evaluate chemical removal through the process. The Independent Science Advisory Panel delivered its final report on the sixth project workshop held in March 2023, and staff assessed approaches to incorporate the feedback into future testing plans. The Panel also delivered its review of the draft final report that presented the results and conclusions of the tertiary MBR testing phase of the program.



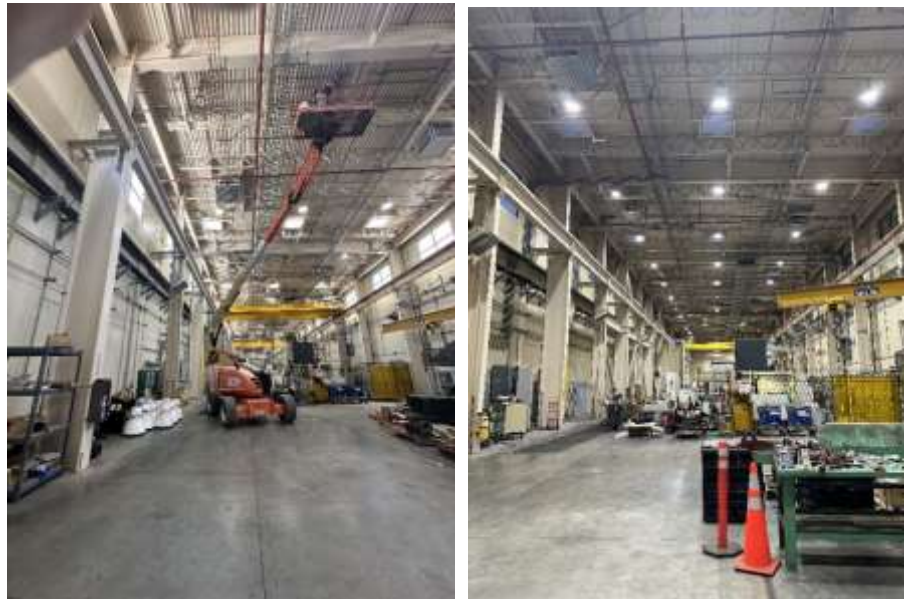
Staff collecting microbial samples following secondary membrane bioreactor treatment at the PWSC demonstration plant

Manage Power Resources and Energy Use in a Sustainable Manner

Energy markets in June 2023 continued to exhibit reduced price volatility, and electricity prices in the California ISO market were generally within seasonal norms. Natural gas prices recovered somewhat from their seasonal lows in May, when they dropped to the \$2/MMBtu range, and rose into a more typical \$3–4/MMBtu range. CRA energy costs for May 2023 were about \$3 million; the total energy costs to operate the CRA for fiscal year 2022–23 is forecast to be around \$138 million.

Because of system operating conditions focused on refilling water storage and low demands, daily generation output from Metropolitan’s small hydroelectric plants averaged around 10 MW during the month of May, for a total energy output of about 7,200 megawatt-hours (MWh). However, hydroelectric plant output is forecast to trend upwards later in 2023 as demands increase and Metropolitan receives deliveries from the 100 percent SWP allocation. Metropolitan’s solar facilities totaling 5.4 megawatts of capacity generated approximately 1,200 MWh in June 2023.

Staff is in the final stages of upgrading all of the lighting to more modern and energy-efficient equipment at the Weymouth plant. A minor capital project was initiated to upgrade the failing and inefficient lighting system in the south area of the MSU shops. Staff has completed approximately 90 percent of the work and is waiting on contractor-related activities to complete installation of the remaining 12 fixtures. Once completed, the energy used by the system will be reduced by approximately 55 percent while providing an additional 20 percent more illumination for staff. Additionally, the need for maintenance will be reduced over the next 10–15 years.



Staff installing new LED fixtures (left) and the shop facilities with new LED fixtures (right) at the La Verne site

Ensure Water Quality Compliance, Worker Safety, and Environmental Protection

Metropolitan complied with all water quality regulations and primary drinking water standards during May 2023.

This month, Metropolitan celebrated National Safety Month with employees and facilities participating in over 20 events focused on worker safety and accident prevention. Activities included staff recognition and awards, safety-based games with prizes, and equipment vendor displays to update employees on the latest safety industry developments. Celebrating National Safety Month has been a long-standing tradition at Metropolitan that receives enthusiastic participation from employees at all levels.



2022 Safety Award Winners



General Manager Hagekhalil speaking to employees at the Gene Safety Day event

To celebrate National Safety Month and continue to improve employee safety at Headquarters, staff held the following three webinars: Empowered Ergonomics: Simple Solutions to Align Your Home Workstation; Personal Protective Equipment: Prepare to Protect Yourself When Visiting Worksites; and Safety is for Everyone: Information on USHQ HVAC System, COVID-19 Updates and Personal Security.



Flyers on National Safety Month Webinars

On June 8, staff held a Safety Day event at the Jensen plant. The day began with an evacuation drill, followed by presentations from Jensen Safety Committee members and the DEI Team. An outside vendor also conducted training for the new multi-gas meters and IT staff presented an amazing drone demonstration. To cap off the event, the Safety and Regulatory Services Section Manager presented Jensen with an award for Best in Safety Communication.



Jensen plant staff and guests at the safety event



IT's Dave Malloy preparing for the drone demonstration during the safety event at the Jensen plant



An outside vendor providing a training session on the new multi-gas meters during the safety event at the Jensen plant



SRS Field Specialist, Adam Aranda, served as emcee during the safety event at the Jensen plant

Diamond Valley Lake and the Soto Street facility hosted Safety Day events on June 8 and June 15 for National Safety Awareness month. Events included evacuation drills, safety presentation, safety games, giveaways, and lunch for all in attendance.



Safety event at Diamond Valley Lake



Safety event at Soto Street facility



Safety event at the Soto Street facility

On June 22, Water Quality staff received stop-the-bleed and use of automated external defibrillators emergency response training as part of National Safety Month activities. On June 27, staff at the PWSC demonstration plant received training on a personal gas monitoring device, which provides real-time monitoring and notification of potential gas hazards.



Staff learning the correct application of tourniquets during stop-the-bleed training at the Water Quality Lab



Staff receiving training on personal gas monitors at the PWSC demonstration plant

This month, staff published and posted a new Safety Talk on the IntraMet to inform and promote employee safety and regulatory compliance during on-the-job activities. The topic, Desert Emergency Medical Procedures and Services, provides information on how to be prepared for medical emergencies.



Safety Talk on Desert Emergency Medical Procedures

Staff attended the Zero Emission Vehicle Western Truck Exchange (WTE) and met with WTE representatives to explore “Try-Before-You-Buy” opportunities to bring fully electric trucks for short-term operation at prospective Metropolitan locations. The Class 6–7 battery electric truck is being scheduled for trial use at upcoming shutdowns.



Staff meeting with WTE Representatives

Optimize Maintenance

Staff replaced two corrugated metal pipe culverts that cross over San Diego Pipelines 4 and 5 in the city of Fallbrook. These culverts convey nuisance water across each pipeline and have surpassed their useful lifespan. The existing metal culverts were replaced with HDPE corrugated material, which will have a longer life span and not deteriorate.



Staff using an excavator to complete the trench for the culvert along San Diego Pipelines 4 and 5

Desert staff process base material from existing stockpiles. This process separates material into different sized aggregate for a variety of functions. This material is used for road repair, base material for concrete work, fill material, and many other uses.



Staff processing base material through a screening machine for separation into various size aggregate at a Desert facility

Heavy equipment in the Desert Region is subject to extreme elements and conditions. Staff work in shops and in the field to keep equipment operating at peak efficiency. Welding, cutting, tightening, adjusting, and filling are just some of the regular maintenance performed to keep this expensive and capable equipment operational.



Staff welding a dozer arm to repair wear from recent project usage at a Desert facility

Each of the five Desert pumping plants has a battery backup bank, called the station battery, that supports critical equipment during an electrical grid outage. The Desert acquired a mobile battery backup trailer to support the pump plants in the event of a failed station battery. This trailer also has the added benefit of simplifying regular testing and maintenance. Minor modifications had to be made to each facility to accept power from the trailer. Quick disconnects were selected to optimize hookup and disconnect speeds in case of an emergency and to optimize efficiency during normal maintenance.



Staff wiring a direct current quick disconnect to plug in the battery backup trailer at a Desert facility

Staff replaced several critical components on one of the sludge pumps at the Diemer Solids Handling Facility. The new components included bridge breakers, bearings, the variable frequency drive (VFD), and motor. The new VFD is installed at a different location, away from moisture, to improve the longevity of the equipment and ease of maintenance. The sludge pump receives dry solids from the belt press and pumps it to the unloading hopper. The dry solids are then hauled offsite for disposal by a contractor.



New bridge breakers (left) and bearings (right) on the sludge pump at the Diemer plant



New VFD (left) and motor (right) on the sludge pump at the Diemer plant

Staff replaced the nitrogen compressor for the ozone system at the Mills plant. The replacement work was scheduled concurrent with the Ozone PLC Upgrade Project to avoid any additional disruption to the treatment process. This work will result in less energy consumption and lower annual maintenance costs. Over the last five years, the old compressor required an average of 51 hours per year of corrective maintenance.



New apprentice observing electrician removing wiring (de-energized equipment) for compressor replacement at the Mills plant

Staff relocated the Diamond Valley Lake SCADA server to create a physical separation of redundant components, which were formerly located in proximity to one another. This separation increases the reliability of the SCADA system in the event of physical equipment damage that may be caused by fire, water intrusion, etc. to one of the servers. Staff from multiple disciplines worked together to provide uninterruptible back-up electrical power and software testing to ensure that SCADA applications were running correctly.



Staff transporting the SCADA server for installation at DVL

Skinner plant staff are in the process of installing infrared scanning windows to allow the use of thermography equipment as part of its predictive maintenance program. Thermography equipment is used to scan electrical connections. Finding anomalies in temperature, also called hotspots, provides technicians the data needed to address issues ahead of equipment failures.



Staff installing infrared scanning windows onto high-voltage equipment at the Skinner plant

Optimize Water Treatment and Distribution

The target blend entering the Weymouth and Diemer plants was lowered from 80 percent to 60 and 65 percent, respectively, in mid-June to accommodate deliveries to USG-3 from the East Branch State Water Project (SWP). The Mills plant continued to receive a blend of water from Silverwood Lake and Lake Perris in June because of low alkalinity in the East Branch SWP. The SWP target entering Lake Skinner fluctuated to accommodate multiple operational needs and to maximize the delivery of water from the SWP. The SWP blend leaving the lake continued to increase and is expected to reach up to 75 percent over the next few weeks. Chemical dosages were adjusted at Weymouth, Diemer, Mills, and Skinner plants to ensure that water quality objectives continue to be achieved following the blend changes.

Flow-weighted running annual averages for total dissolved solids from May 2022 through April 2023 for Metropolitan's treatment plants capable of receiving a blend of supplies from the SWP and the Colorado River Aqueduct were 568, 580, and 620 mg/L for the Weymouth, Diemer, and Skinner plants, respectively.

Staff replaced the flow meters at the ammonia tank farm that are used to ensure the proper feed rate of aqueous ammonia with a chlorine solution that forms chloramines at the Weymouth plant. When injected before ozone, chloramines inhibit the formation of bromate, which is a regulated disinfection byproduct. After installation of the meters, staff properly programmed, calibrated, and verified the flow both locally and remotely via the SCADA system.



Staff installing and verifying ammonia flow meters at the Weymouth plant

Improve Emergency Preparedness and Response

Staff continued emergency response training at multiple levels of Metropolitan. On June 5, Metropolitan's executive management team participated in an Executive Level Incident Command System (ICS) course at the Metropolitan Headquarters Building. This State of California course focused on how local, state, and federal governments work together to respond to emergencies, and the role of senior officials during a response.

On May 31, staff from the Headquarters Incident Command Post (ICP) ran a drill to practice setting up a remote ICP to manage a local emergency response at the Metropolitan Headquarters Building.

On June 12, staff from the Lake Mathews ICP participated in training to review how they would respond to emergency at the Lake Mathews facility. These regular exercises help Metropolitan maintain a state of readiness for future emergencies.

Actively Engage in Capital Project Planning and Execution

On June 15–16, staff participated in workshops with the project design team on the Water Quality building improvement project to review and discuss the initial preliminary design layouts for each section of the building. This project will upgrade the seismic resiliency of this essential facility, improve workflow and space efficiency, and ensure that Metropolitan can comply with future monitoring regulations and fully address new and emerging water quality issues.



Staff during Water Quality Laboratory building improvement workshop

Protect Source Water Quality

On June 9, the California Department of Water Resources treated Lake Perris with copper sulfate to control a bloom of geosmin-producing cyanobacteria. Geosmin is not a regulated constituent but can impart an unpleasant taste and odor leading to potential customer complaints and a reduction in consumer confidence in drinking water. Geosmin quickly dissipated following the treatment.

Prepare for Future Legislation and Regulation

On May 30, Metropolitan submitted a comment letter to the Environmental Protection Agency on its proposed National Primary Drinking Water Regulation (NPDWR) for six PFAS. The rule proposes to set individual maximum contaminant levels (MCLs) for perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS) at 4.0 parts per trillion (or ng/L) and regulates the remaining four compounds (perfluorononanoic acid [PFNA], hexafluoropropylene oxide dimer acid [HFPO-DA, commonly known as GenX Chemicals], perfluorohexane sulfonic acid [PFHxS], and perfluorobutane sulfonic acid [PFBS]) as a mixture. While staff supports regulating PFOA and PFOS in drinking water, staff commented that regulating the remaining PFAS is premature as these compounds did not follow the full regulatory process and may have unintended economic impacts. Staff will continue to monitor and engage in EPA's efforts to control PFAS in the environment.

On June 6, staff provided oral testimony to the State Water Resources Control Board regarding the Division of Drinking Water's (DDW's) Drought and Conservation Reporting Order. Staff reiterated that providing volumetric flow and lake elevation data for our main water system, as well as three of our five housing villages, does not provide meaningful information about Metropolitan's drought readiness. Staff will participate in DDW's workshop on July 13 to discuss ways to simplify the reporting requirements and potentially exclude our small systems from the need to report.

Enhance Support Infrastructure at the Desert Facilities

Staff continued construction efforts to improve the Desert facility infrastructure for the residents by constructing carport canopies to protect the residents' vehicles from the intense desert sunlight and heat. Staff completed the work at Gene Camp and continues to progress at the Iron Mountain facility. The work includes concrete footing placement for the canopies needed to anchor the structures and protect them from damage by the frequent wind events experienced at the Desert facilities.



Footing formed to protect utility (left) and staff potholing buried utilities (right) at a Desert housing unit

Advance Education and Outreach Initiatives

The La Verne facility hosted two new employee orientation tours for all employees that report to the facility and had been hired in the last three years. Approximately 50 employees participated and visited the various sites that are located at the plant. The tour was designed to provide new employees with an understanding of how each department is interdependent with the others to provide safe and reliable drinking water to our member agencies.

Staff partnered with the Education Team to exhibit Metropolitan's water model. This model replicates the water system, starting with intake, water treatment process, and finally distribution to the household tap. The model was set up and displayed for Eastern Municipal Water District's Public Relations Department and Hemet Unified School District.



Metropolitan's educational water system model

Support and Engage with Member Agencies on Technical Matters

On June 22, Metropolitan hosted a virtual half-day workshop on nitrification and chloramine disinfection for Member Agency Water Quality Managers with over 130 participants. Key presentations by staff and an external expert included discussions on chloramine chemistry; the microbiology of nitrification; prevention, monitoring, and control of nitrification; and Metropolitan's historical development of chloramine operations.

Monthly Update as of:

6/30/2023

<u>Reservoir</u>	<u>Current Storage</u>	<u>Percent of Capacity</u>
<i>Colorado River Basin</i>		
Lake Powell	9,574,258	39%
Lake Mead	8,147,980	31%
<i>DWR</i>		
Lake Oroville	3,553,405	100%
Shasta Lake	4,274,570	94%
San Luis Total	2,027,835	100%
San Luis CDWR	1,062,180	100%
Castaic Lake	306,713	95%
Silverwood Lake	69,248	92%
Lake Perris	107,043	81%
<i>MWD</i>		
DVL	602,431	74%
Lake Mathews	167,020	92%
Lake Skinner	37,685	86%



Hoover Dam

Information Technology

Project Highlights

Maintenance Management Updates

Maintenance Management Updates (MMU) Dashboard

Maintenance Management (MM) is the process of managing maintenance resources and practices to ensure that an organization experiences minimal downtime because of equipment failure. Simply put, the goal of an MM program is to achieve more cost-effective reliability through the implementation of better operations and maintenance practices.

There are many approaches to maintenance management, but all strive toward implementing best practices for operations and maintenance activities. Performance measures or benchmarks are also used to assess current maintenance practices and procedures, which helps to identify areas for improvement and to track progress toward achieving goals. Computerized Maintenance Management System (CMMS) software is often used to assist with MM. Metropolitan uses the Maximo system.

The goal of Metropolitan's Maintenance Management Updates (MMU) Dashboard is to ensure that Metropolitan decision makers and staff at different levels can view and track maintenance activities in a centralized dashboard. The MMU Dashboard can display useful data at multiple levels of management, starting at the Group level with the ability to drill down all the way to the individual team level and vice-versa. This built-in level of flexibility enables a Group, Section, Unit, and Team to review their relevant maintenance metrics and gain a better perspective on how their team is performing.

Benefits of MMU Dashboard:

Collecting data in Excel worksheets from Maximo, developing Excel reports and consolidating these reports to create a Weekly Operations Report had its own challenges in terms of strategic data governance guidelines. These were a few of the shortfalls of such previous practices:

- Excel reports could be changed without audit trails. No data protection to avoid unwanted and/or inadvertent data manipulation.
- The reporting system's reliability was tied directly to MS Office. This software's version changes could adversely affect the system functions and performance.
- The Excel reports were saved on Metropolitan's network in shared folders without a standard process of version control and appropriate file sharing capabilities, thereby contributing to data privacy issues, an imperative shortfall of an effective data governance strategy.

Consistent with Metropolitan Business Intelligence Team's design strategy, CMS employs an appropriate data governance strategy for a compliance lifecycle to ensure that the raw data from the Maintenance Management system that are processed, integrated, and distributed to compliance engineers for inspection are governed properly in a controlled and automated manner. This has its own benefits, such as eliminating reliance on cumbersome Excel processes, thereby establishing enhanced data privacy and protection. The Dashboard is a read-only reporting tool,

and it prevents users from making changes directly to the reports, unlike Excel reports. This helps to ensure that the data changes are made at the data source where audit trails can be captured.

The Dashboard was well received by the Maintenance Management team at Metropolitan. The drill-down, drill-up, and drill-through features provide users whichever view of maintenance operations metrics that they want to see in one centralized dashboard by a well-documented maneuvering runbook.

KPIs used in the MMU Dashboard:

- Compliant and Non-Compliant PM Workorders by different organizations and time intervals.
- PM Compliance percentage by regulatory or regular and by different organizations and time intervals.
- Tabular details via the drill-through feature for all Work Order details and tracking its status
- Backlog of work orders by different organizations and time intervals.
- Wrench Time percentage by different organizations and time intervals.
- Service Connection Meters billing compliance/non-compliance by different organizations and time intervals.
- Trend charts for all the components with drill-down, drill-up features by different organizations and time intervals.

Telecom Network Cost Savings

The Information Technology Network Systems Team in conjunction with our consultants at Procure America recently evaluated our wired and wireless telecom inventories. This study was brought forth by IT Management as a potential cost savings measure. Through an on-going physical assessment of all of Metropolitan's wireline circuits, along with the examination of Metropolitan's 10 separate telecommunications provider billing invoices, the first month has seen a savings of nearly \$125,000. This is a significant portion of the nearly \$3.2 million in annual operating costs. This was accomplished through the disconnection of no longer operating circuits, the restructuring of contracts with non-CalNet 3 providers to match CalNet 3 pricing, the review of misapplied city and county tax ordinances, and price improvement for existing services. The wireless portion of the assessment will produce another potential yearly savings of \$70,000 by restructuring our current billing plans. This pro-active approach pursued by IT staff will prove very beneficial for our ever-expanding network and required network reliability.

Real Property

Highlights

Foster staff training and development.

Completed the following International Right of Way Association courses:

- Specialized Nonresidential Payments. Demonstrates the benefits of certain nonresidential relocation payments and how to facilitate a successful business relocation.
- Introduction to the Income Capitalization Approach. Introduces the income capitalization approach, a method of valuing a property by estimating future cash flows and taking into consideration the time value of money.

Two staff members were each awarded “Young Professional of the Year” by the International Right of Way Association (IRWA) at the chapter and regional level, respectively. This award recognizes IRWA members for their dedication and contributions to the right of way industry, professional development pursuits, and workplace accomplishments.

Core Business: Real Property Acquisition, Management, and Revenue Enhancement

Provide valuation, land management, and real property disposition support services for the maximum return or use of Metropolitan-owned land and facilities.

An entry permit was issued to Eagle Mountain Elementary School for the use of the swimming pool at the Hinds Pumping Plant Village. The school hosted an end-of-year event for its students at the pool.

The City of Hemet has been granted a permanent easement for flood control purposes. The easement area is a key portion of the City’s proposed Cactus Valley Flood Control Channel.

Efficiently maintain and operate assets not related to the treatment and distribution of water.

The increasing elevation of Diamond Valley Lake is attracting a greater number of anglers to enjoy a fishing day on the lake. A greater number of largemouth bass have also been observed since the lake level started rising. The higher lake elevation improves access to shoreline fishing and makes accessing the floating boat docks easier.



Lake Skinner hosted the 40th annual Temecula Valley Balloon & Wine Festival at Lake Skinner Regional Park that is operated through Metropolitan's agreement with the Riverside County Regional Park and Open Space District. Over 40,000 people attended the three-day festival that was headlined by top performing artist Brad Paisley and included beer and wine tasting, food vendors, and hot air balloon rides.



District Housing Maintenance and Management.

Storm damage repairs were completed at District Housing located at the Palo Verde Reservoir. A winter storm caused the damage in March of 2023 when several trees were knocked over. One of the trees caused structural damage to the shed which required rebuilding a portion of the floor and roof. It also took out several panels of the vinyl fence which encloses the backyard.





Pre-occupancy repairs were completed on two district houses during this reporting period. Repairs to these houses included paint touchups, minor repairs, and cleaning. Desert housing maintenance staff also completed tenant-requested work orders consisting of air conditioning unit repairs, roof patching, fencing repairs, and repairs to irrigation systems.

Desert Housing and Recreation Interim Action Plan (DHRIAP) has been implemented and work continues on several projects.

With the completion of all carport installations at Gene, carport installation efforts have now transitioned to Iron Mountain and Hinds in which excavations for concrete footings have been completed. All concrete for the footings and curbing has been completed at Iron Mountain. Carport assembly at Iron Mountain will begin once the concrete work is completed at Hinds.

The renovation of house 25-I at Iron Mountain is progressing; all insulation installation is completed, and the drywall and cabinetry are currently being installed.



The renovation of house 122-I has begun, as well, in which the new air conditioning/heater has been installed and the exterior of the house has been painted. Waste pipe plumbing is currently being replaced as well as interior plumbing. The patio cover was also replaced and painted.



The renovation of house 04-G has also begun. Asbestos abatement has been completed and interior demo work has started. The exterior painting has also been completed.

Security

Project Highlights

Security and Emergency Response

The Cybersecurity and Infrastructure Security Agency (CISA) Regional Resiliency Assessment Program (RRAP) addresses potential significant impacts and cascading effects a 7.8-magnitude earthquake would have on the delivery of essential goods and services (e.g., fuel, water infrastructure, electric power infrastructure, communications services, etc.) required to stabilize lifeline services.

Metropolitan staff from Engineering, Business Continuity, Security, and Emergency Management met with and provided CISA with their consolidated input and guidance in shaping CISA's FY2022 Inland Empire Stabilization RRAP. Staff will be assisting CISA in the development of actionable plans, planning factors, and viable alternatives that will assist in stabilizing lifeline services following a major earthquake in our service area, specifically in the Inland Empire region of Southern California.

The project will inform regional stakeholders, including Metropolitan, about the lifeline infrastructure challenges associated with a major earthquake and help us understand the location, acquisition, transportation, and delivery of the equipment and supplies needed to stabilize selected lifeline services specific to drinking water treatment and delivery.



Metropolitan staff partner to develop the CISA Inland Empire Stabilization RRAP

Employee Readiness for All Hazards and Emergencies

Iron Mountain facility management and security staff hosted a Safety Field Day for first responders from San Bernardino County Sheriff and Fire Departments.

Opportunities like this provide invaluable information to first responders including familiarity with:

- Metropolitan's facilities, pumping plant operations, and employee daily life
- Critical infrastructure vulnerabilities
- Security features and key access points
 - Ingress and egress routes for emergency equipment
 - Hazardous material locations
 - Operational key nodes and fire hydrants
 - Other essential safety information

Metropolitan Security, Water System Operations (WSO), External Affairs, Emergency Response, Business Continuity, and Iron Mountain Plant staff will continue to pursue joint emergency exercise partnerships with regional first responders for future mutual learning opportunities.



**Metropolitan partners with San Bernardino County's first responders
for Safety Field Day at Iron Mountain Pumping Plant**

Finance and Administration

Finance

Maintain Strong Financial Position

Provide timely and discerning financial analyses, planning, and management to ensure that forecasted revenues are sufficient to meet planned expenses and provide a prudent level of reserves consistent with board policy.

Manage risk to protect Metropolitan's assets against exposure to loss.

The Risk Management Unit completed 45 incident reports communicating instances of Metropolitan property damage, liability, workplace injuries, regulatory visits, and spills.

Risk Management completed 51 risk assessments on contracts, including professional service agreements, construction contracts, entry permits, special events, and film permits.

Business Continuity

Facilitate district-wide planning and training to prepare employees and managers to effectively carry out critical roles and recover mission essential functions thus ensuring continuity of operations and resiliency in the event of a disaster.

Manage the Business Continuity Management Program in accordance with Operating Policy A-06.

- Participated in a kickoff meeting for the Inland Empire Stabilization Regional Resiliency Assessment Program (RRAP) project, which will enhance planning and resiliency following a major regional earthquake.
- Met with Water System Operations (WSO) and the MetAlert (emergency notification system) vendor to discuss implementing features that would allow check-in/check-out functionality for employees and other visitors at field locations. This would allow for an accurate accounting of people during an emergency when away from their primary work locations and targeted messaging.
- Moved forward with the review and update process for Operating Policy A06, Business Continuity and Emergency Management.
- Continued collaboration with IT and Cybersecurity to develop cyber resiliency plans for Metropolitan to continue working in the event of a cyber-attack rendering systems and computers unavailable.
- Continued working with the Fusion software vendor to make updates to the guided workflows used by planning coordinators to update their business continuity plans.

Financial Management

Manage Metropolitan's finances in an ethical and transparent manner and provide consistent, clear, and timely financial reporting. Update Metropolitan's capital financing plans and work with rating agencies and investors to communicate Metropolitan's financial needs, strategies, and capabilities, thus ensuring that Metropolitan has cost effective access to capital markets and the ability to finance ongoing future needs. In addition, actively manage Metropolitan's short-term investment portfolio to meet ongoing liquidity needs and changing economic environments.

Record and report the financial activities of Metropolitan in a timely, accurate, and transparent manner to the Board, executive management, member agencies, and the financial community.



- Water Transactions for May 2023 (for water delivered in March 2023) totaled 61.5 thousand acre-feet (TAF), which was 37.2 TAF lower than the budget of 98.7 TAF and translate to \$59.5 million in receipts for May 2023, which was \$33.8 million lower than the budget of \$93.3 million.
- Year-to-date water transactions through May 2023 (for water delivered in May 2022 through March 2023) totaled 1,310.4 TAF, which was 160.2 TAF lower than the budget of 1,470.6 TAF. Year-to-date water receipts through May 2023 were \$1,247.5 million, which was \$139.9 million lower than the budget of \$1,387.4 million.
- In May 2023, Accounts Payable processed approximately 3,700 vendor invoices for payment.
- In May the Board approved a resolution to continue Metropolitan's Water Standby Charge for fiscal year 2023/24.

Update capital financing plans and work with rating agencies and investors to communicate financial needs and capabilities, ensure cost-effective access to capital markets, and maintain long-term bond ratings of AA or better.

On June 21, 2023, Metropolitan issued the \$258,410,000, Water Revenue and Refunding Bonds, 2023 Series A. The bond pricing, held on June 6, 2023, was a tremendous success. Bond orders from 49 institutional investors totaled \$874 million, or 3.3 times the amount of bonds sold. Bond proceeds will be used to fund a portion of Metropolitan's Capital Investment Plan and to refund a short-term note that was issued to prepay approximately \$35 million of subordinate lien revenue bonds. Siebert Williams Shank & Co., LLC was the senior manager on the transaction, with Ramirez & Co., Inc., as co-senior manager, and Barclays and Cabrera Capital Markets LLC, as co-managers.

S&P and Moody's affirmed ratings of AAA/stable and Aa1/stable, respectively for Metropolitan's recent bond transaction. These ratings reflect the continued strength of Metropolitan's underlying financials and reflect investor confidence in our comprehensive long-term strategy for sound operational and financial management. These high credit ratings position Metropolitan favorably for future business activities and investments and support the credit ratings of our member agencies.

Prudently manage the investment of Metropolitan's funds in accordance with policy guidelines and liquidity considerations.

As of May 31, 2023, Metropolitan's investment portfolio balance was \$1.3 billion; in May 2023, Metropolitan's portfolio managers executed 19 trades.

In May 2023, Treasury staff processed 1,033 disbursements by check, 21 disbursements by Automated Clearing House (ACH), and 113 disbursements by wire transfer. Treasury staff also processed 71 receipts by check, 51 receipts by ACH, and 51 receipts by incoming wires and bank transfers.

In addition, there were 9,851 P-One Card transactions, totaling \$1.6 million, recorded in the May bank statement.

Human Resources

HR Priorities

Partner with Metropolitan leadership to support learning, development, and adaptive workforce planning initiatives.

In June, 297 Metropolitan employees attended virtually facilitated classes, including MS Project, Contract Administration, Interviewing Skills, Project Management, Franklin Covey 7 Habits, Time Management, and Effective Communication Skills.

LinkedIn Learning, Metropolitan's online e-learning content platform, was accessed for such topics as Cybersecurity at Work, Construction Management, Compassionate Directness, Communicating with Empathy, Ethics in the Age of Generative A.I., Leading with Innovation, and Technical Writing.

The Organizational Development & Training Unit (OD&T) hosted an in-person training for the Engineering Services Design Section on Communication Skills.

Seek diverse, high-quality talent, and establish partnerships to discover additional outreach opportunities that aid in staffing positions.

Recruitment successfully filled 37 positions for June. Recruitment received new staffing requisitions for 23 positions, resulting in 207 positions currently in recruitment.

HR Core Business: Provide Excellent Human Resources Services

Objective #1: Administer all HR services with efficiency and a focus on customer service excellence, consistency, and flexibility.

The Business Support Team planned, organized, and coordinated a "Mind & Body Emotional Well-Being" wellness webinar. The live webcast was held on June 28, 2023, and hosted by Kaiser Permanente. The webinar invited employees to learn strategies to help with emotions and identified self-care practices for managing mood and stress in a positive way. Employees were also invited to create a realistic plan and use personal strengths to improve their emotional well-being.

HR Core Business: Comply with Employment Laws and Regulations

Effectively administer all Human Resources policies, programs, and practices in compliance with applicable federal and state laws and Metropolitan's Administrative Code, Operating Policies, and Memorandum of Understanding.

In June, seven new workers' compensation claims were received. Four employees are currently off work because of an industrial injury or illness, and two employees have returned to work. This reflects Metropolitan's effort to accommodate injured workers, while enabling them to be productive and on the job. Staff continues to address four accommodations both in house and with Shaw HR Consulting.

Staff continues to work closely with our Workers' Compensation Third-Party Administrator, TRISTAR Risk Management.

Finance and Administration

(continued)

HR Metrics	June 2022	June 2023	Prior Month May 2023
Headcount			
Regular Employees	1,762	1779	1,770
Temporary Employees	37	25	17
Interns	2	0	0
Recurrents	18	18	18
Annuitants	19	24	24

	June 2023	May 2023
Number of Recruitments in Progress (Includes Temps and Intern positions)	207	221
Number of New Staffing Requisitions	23	47
	June 2023	May 2023
Number of Job Audit Requests in Progress	6	7
Number of Completed/Closed Job Audits	1	2
Number of New Job Audit Requests	0	0

Transactions Current Month and Fiscal YTD (includes current month)			
<u>External Hires</u>	<u>FY 21/22 Totals</u>	<u>June 2023</u>	<u>FISCAL YTD</u>
Regular Employees	82	14	116
Temporary Employees	36	14	36
Interns	4	0	0
Internal Promotions	70	5	72
Management Requested Promotions	152	7	149
Retirements/Separations (regular employees)	127	5	98
Employee-Requested Transfers	15	4	19

Departures

Last	First Name	Classification	Eff Date	Reason	Group
Ajoc	Raymundo	Wtr Treatment Plant Specialist	4/28/2023	Retirement—Service	WATER SYSTEM OPERATIONS GROUP
Lin	Tzyhmin	Sr Engineering Technician	4/28/2023	Retirement—Service	ENGINEERING SERVICES GROUP
Cardona	Rebecca	Training Administrator	5/2/2023	Retirement—Service	HUMAN RESOURCES GROUP
Marquez	Alex	Accounts Payable Administrator	5/13/2023	Retirement—Service	FINANCE GROUP
Mantel	Russell	Wtr Trtment Plant Operator III	5/2/2023	Retirement—Service	WATER SYSTEM OPERATIONS GROUP

Diversity, Equity, and Inclusion

Tribal Outreach & Engagement

From June 11 to 13, DEI staff attended the American Water Works Association (AWWA) annual ACE 23 Conference. Staff was invited to participate in an inaugural panel discussion “Indigenous voices and First Nations Water Rights.” The panel included a traditional First Nations Anishinaabe water ceremony and ancient Lakota water teachings. Staff conversed with world-renowned 18-year-old Autumn Peltier, dubbed the “Water Walker,” who spoke in front of the United Nations Council on behalf of Indigenous peoples’ water rights. Dr. Dawn Martin Hill of McMaster University was also a panel participant. The panel conversation included preservation of water rights, water quality improvement, and water workforce development for indigenous people. The session was attended by 200 event participants.



Business Outreach & Community Engagement

On June 2, in partnership with Legislative Affairs, Business Outreach Staff attended the San Fernando Valley United Chamber of Commerce's Small Awards Business Breakfast. About 200 businesses attended the event.

On June 6, Metropolitan hosted the Asian American Architects and Engineers (AAa/e) Annual Scholarship event held in the courtyard patio. The AAa/e is committed to empowering AEC (architecture, engineering, and construction) students and professionals in personal development, networking, and scholarship opportunities. Featured speakers included John Bednarski, Metropolitan Chief Engineer; Tim Lindholm, L.A. Metro Deputy Chief Program Management Officer; Bea Hsu, Brookfield Properties Executive Vice President Development; Nazanin Zarkesh, Universal Creative at NBCUniversal Director of Facility Design; and Peter Otoshi, Biola University 2022 AAa/e Undergraduate Scholarship Recipient.



On June 20, Business Outreach Staff attended the Conversation with LGBTQ Business Community—Breaking Bias sponsored by the Women Business Enterprise Council—West. About 100 businesses attended the event.

On June 21, Business Outreach Staff participated in a panel presentation at the Construction, Conversation & Cocktails. The event was sponsored by The Veterans In Business (VIB) Network. Over 100 businesses attended the event.

Finance and Administration

(continued)



On June 21, Business Outreach Staff participated as an exhibitor at the Filipino American Chamber of Commerce of Orange County Go Green Health & Expo at the Irvine Valley College in Irvine California. The annual Go Green Health & Expo is the largest and most heavily attended of FACCCOC's signature events. Businesses hailing from the "green" space—eco-friendly, conservation-focused, sustainability-conscious businesses—take center stage at this event. Additional participating businesses are those support businesses that provide operational support services, or even big businesses that want to exhibit the eco-friendly efforts their companies have enacted.



Finance and Administration

(continued)

On June 22, Business Outreach Staff participated in a panel presentation at the National Association of Minority Contractors—SoCal Business Mixer. Over 20 businesses attended the event.



On June 28, Business Outreach staff participated in the Los Angeles Area Chamber of Commerce 2023 Small Business Summit. The Chamber Foundation advocates for the region's small business resiliency, which fuels L.A. and helps shape every sector of our economy. Small Business Summit is just one way we empower and support our region's innovators and job creators. Small Business Summit featured informative sessions and an Exhibit Pavilion offered by the Chamber and our community partners across the L.A. region designed to provide the resources, tools, and inspiration to help entrepreneurs grow and thrive.





External Affairs

Highlights

Metropolitan and GM Hagekhalil were honored by the LA Conservation Corps with the Climate Resiliency Public Partner Award for long-term support of workforce development and sustainability projects. Vice Chair Repenning and Directors Luna and McMillan attended. (June 1)

GM Hagekhalil was the keynote speaker for the Greater Riverside Chamber of Commerce “Good Morning Riverside” event and provided an update on water supply conditions and the Colorado River. (June 8)



MWD receives LA Conservation Corps Public Partner Award



GM Hagekhalil at Greater Riverside Chamber of Commerce event

Metropolitan hosted a Colorado River inspection trip for Water Education for Latino Leaders (WELL) and local elected officials. Chair Ortega, GM Hagekhalil, and Metropolitan staff met with the group and provided presentations on key issues. (June 3-4)

Chair Ortega spoke at the Sonoran Institute's Growing Water Smart California workshop. (June 12)

GM Hagekhalil was the keynote speaker for the Next Generation Water Summit on water reuse and conservation. (June 15)

Directors Luna, Sutley, Cordero, and Ramos attended the 10th anniversary celebration of WELL. (June 17)

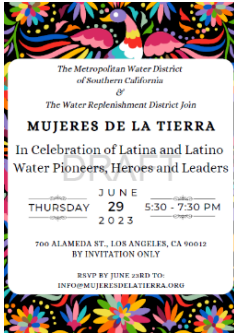


Metropolitan hosted a Colorado River inspection trip for WELL leaders (left) Current and former directors attended WELL's 10th anniversary event.

GM Hagekhalil spoke as part of the HDR One Water Roundtable webinar on the top One Water Drivers facing water agencies. (June 21)

Metropolitan sponsored, Chair Ortega was a featured speaker at, and Directors Goldberg, Luna, and Garza, and GM Hagekhalil attended the Groundwater Resources Association Law and Legislation Forum. (June 21)

Metropolitan sponsored and Directors Ackerman, Dennstedt, Dick, Erdman, Jung, Lefevre, Seckel, and staff attended the Municipal Water District of Orange County's Water Policy Forum & Dinner with featured guest Ed Ring of the California Policy Center. (June 22)



GM Hagekhalil provided the keynote address at the Three Valleys Municipal Water District Leadership Breakfast and spoke to local government representatives, chambers, and regional water agencies about Pure Water Southern California and long-term water challenges for the region. (June 29)

Metropolitan hosted a reception for Mujeres De la Tierra honoring many Latino water leaders including Rep. Napolitano, former GM Gastelum, Chair Ortega, Directors Chacon, Garza and Luna, State Water Board Chair Esquivel, and US EPA Regional Administrator Guzman. (June 29)

Legislative Services

Federal

Metropolitan staff advocated for increased federal investments in water infrastructure funding as part of the FY 2024 appropriations bills and to ensure funding for water programs as part of the federal budget.

Provided GM Hagekhalil quote for Senator Feinstein's press release on the re-introduction of the Canal Conveyance Capacity Restoration Act.

State

Metropolitan staff is monitoring legislation to promote water conservation and turf removal, extend opportunities to use progressive design build on water infrastructure projects, and modernize water rights. Governor Newsom introduced a package of budget trailer bills focused on streamlining water, transportation, and energy infrastructure projects.

Working with the author's office and co-sponsors, Metropolitan secured amendments to remove multifamily properties from the requirements of AB 1572 (Friedman) which prohibits using drinking/potable water to irrigate non-functional turf on commercial and industrial properties. With these amendments, Metropolitan became a co-sponsor of the bill. Metropolitan is also supporting AB 1573 (Friedman) to prohibit installation of turf in commercial and industrial properties and require use of native plants for landscaping.

Metropolitan's board voted to support, if amended, two proposed bond measures—Assembly Bill 1567 (Garcia) and Senate Bill 867 (Allen)—to fund projects to make California more climate resilient in addressing wildfire, drought, flood, extreme heat, coastal resilience, clean energy, and workforce development.

Metropolitan is advocating for a budget funding and securing additional support for \$50 million dollars for projects to move more water resources to State Water Project-dependent areas in Metropolitan's service area.

Other priority legislative measures include:

- AB 460 (Bauer-Kahan), AB 1337 (Wicks), and SB 389 (Allen) to make changes to the water rights system
- SB 366 (Caballero) to set new 2050 water supply targets

- SB 659 (Ashby) to create the California Water Supply Solutions Act to achieve an increase of 10 million acre-feet of annual groundwater recharge by the end of 2035.

Local

Metropolitan staff made a presentation to the Montclair city council on SWP and Colorado River supply conditions and efforts to further enhance service area resiliency. (June 5)

Chair Ortega participated in a virtual meet-and-greet with members of the Los Angeles County Business Federation (BizFed) to discuss current water issues. (June 20)

Metropolitan sponsored the Western Riverside Council of Governments' annual General Assembly attended by 700 Riverside County business, community, and elected leaders. (June 29)

Metropolitan staff presented, monitored, and/or participated in 69 webinars, virtual meetings, and events this month with community organizations, trade associations, and local officials on water-specific topics.

Media and Communications

- Arranged for day-in-the-life profile of GM Hagekhalil by LA Times reporter Ian James.
- Coordinated an interview between CBN News reporter Caitlin Burke and GM Hagekhalil regarding announcement of Lower Basin Plan for Colorado River.
- Set-up an interview for LA Times reporter Hayley Smith and GM Hagekhalil regarding the future of water in Los Angeles as part of the paper's LA2050 project.
- Coordinated an interview between Chair Ortega and Voice of San Diego reporter Mackenzie Elmer regarding LAFCO action on Rainbow and Fallbrook water agencies.
- Arranged an interview with the San Fernando Sun and Chairman Ortega for story published on the first day of summer.
- Coordinated with DWR on public messaging for planned drawdown of Lake Perris water levels to address drinking water quality issues.



Press Releases

- Received \$38 million in state funding for Southern California water efficiency programs.
- Public attitude survey showing water quality, availability, and cost among top concerns for Southern Californians.
- Co-sponsored state legislation to prohibit businesses and institutions from using drinking water to irrigate decorative or non-functional lawns.
- Maintained high ratings from three bond rating agencies.

Website

Upgraded content management system to comply with district's high information security standards.

Received nearly 67,000 views on mwdh2o.com, with careers, job listings and Board of Directors pages among the most visited. Logged more than 100,000 page views on bewaterwise.com.

Creative Design

Completed Water Efficient Landscape Dual Certification Program video for landscape professionals. Spanish version is in production.

Produced more than 2,000 creative assets for the water conservation summer advertising and outreach campaign in six languages for placement on digital billboards, transit shelters, in-language community newspapers, and social media.

Designed a new video game called "Lawn Be Gone," promoting water conservation and turf replacement.

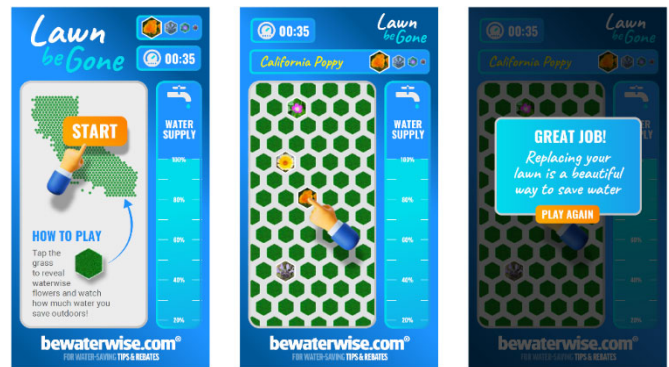
Social Media

Reached nearly 14 million people with more than 30 million impressions and 220,000 click-throughs in response to the conservation advertising campaign.

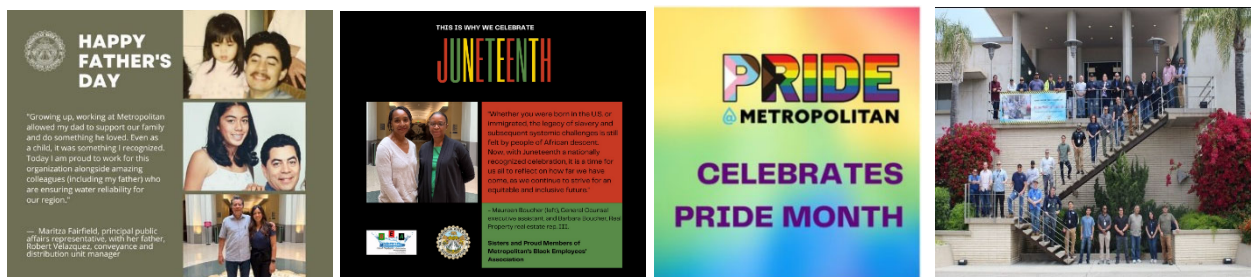
Received the year's highest engagement on Facebook for social media influencer campaign spots in Spanish featuring actor Fred Armisen.

Featured World Environment Day (June 5) for the first time by highlighting some of the threatened and endangered species protected by Metropolitan's reserves and habitats.

Posts this month featured sisters Maureen and Barbara Boucher (Legal and Real Property) on the importance of Juneteenth; Maritza Fairfield talked about her father Robert Velazquez (EA and WSO) for Father's Day; the employee resource group, Pride @ Metropolitan; and photos from district-wide Safety Day/Sustainability Fairs to recognize National Safety Month.



New water conservation-themed video game designed by Metropolitan



Highest performing social media posts featured Metropolitan employees on Father's Day, Juneteenth, Pride Month and Safety Fairs.

Public Outreach and Member Services

Pure Water Southern California

Demonstration Plant tours with Walnut Valley Water District (June 1), general public (June 3), LA County Public Health (June 13), Job Corps (June 14), Carson Chamber of Commerce (June 15), Technology Approval Group (June 27), Assemblymember Gipson's staff (June 29), and part of LACSD's press event with US EPA officials (June 30)

Meetings with Cal Pacific Land Services/Alameda Corridor Transportation Authority (June 2), Port of Long Beach (June 7), and City of Downey (June 12)

Hosted information booths at Whittier Farmer's Market (June 16), Carson's Juneteenth event (June 17), and Lakewood Concert in the Park (June 29)

Director Fellow, Upper San Gabriel Valley GM Love, and Metropolitan staff participated in the Pure Water Bike Ride with Active SGV which followed part of the project's alignment and provided participants with information about the project and local water supply issues. (June 10)



The second Pure Water Bike Ride, sponsored by Active San Gabriel, attracted more than 70 riders including Director Fellow and Upper San Gabriel Valley MWD GM Love.

Other Outreach Activities

- Notified residents of potential impacts of construction for Second Lower Feeder Reach 3B. (June 1)
- Met with member agency managers to discuss water management, development of the Climate Adaptation Master Plan for Water, and current legislation. (June 2 and June 30)
- Met with Getty Center officials regarding potential impacts from the future Sepulveda Feeder PCCP Relining project. (June 12)
- Met with Brentwood Community Council on the upcoming Sepulveda Feeder Urgent Repair. (June 14)
- Met with residents to discuss activities for the future Sepulveda Feeder Relining project. (June 20)
- Notified residents on progress of Etiwanda Feeder and accelerated schedule. (June 2 and June 22)
- Provided five director inspection trips to Hoover Dam and the Colorado River, State Water Project, and regional water infrastructure. Also provided an inspection trip to Skinner Water Treatment Plant and Diamond Valley Lake for the University of La Verne's REACH program for first generation college students.
- Hosted a delegation from South Korea with GM Hagekhalil and Director Jung. (June 28)

Education and Community Relations



Water is Life Student Art Display

During the 2022–23 school year, Metropolitan staff interacted with more than 20,000 teachers, students, and adults through in-person and online field trips, community events, meetings, and customized ZOOM class presentations.

The 2023 Water is Life Poster Contest art pieces were displayed at Cucamonga Valley Water District and MWDOC offices.

Community Partnering and Sponsorship Program

Sponsored the following Community Outreach events:

- Andres Y Maria Cardenas Family Foundation event (June 3)
- National Assoc of Women in Construction Camp (June 19-23)
- Coalition for Clean Air Awards (June 30)

The Community Partnering Program supported four educational projects to promote water conservation with Hands 4 Hope summer camp program, Friends of the Bernard Biological Station, Environmental Nature Center, and San Diego Children's Discovery Museum.

Sustainability, Resilience and Innovation



Sustainability, Resilience, Innovation and Environmental Planning

SRI Core Activities

General Manager's Environmental Listening Session

This month the General Manager and the Chief of SRI Officer introduced Metropolitan's Climate Adaptation Master Plan for Water (CAMP4W) to the region's environmental leaders. CAMP4W integrates Metropolitan's planning efforts on reliability, resilience, financial sustainability and affordability to ensure the continued delivery of reliable, high-quality water for generations to come. Staff reported on feedback and progress made from the previous February Environmental Listening Session as well as solicited input on the ongoing CAMP4W process. Metropolitan is committed to robust community and public engagement as our board, staff, and member agencies consider the pathways to a more equitable and resilient water future.

Member Agency Managers Monthly Meeting and Workshop

The Chief of Sustainability, Resilience and Innovation (SRI) Officer discussed the results of the first Member Agency Questionnaire associated with Metropolitan's CAMP4W at the Member Agency Manager Monthly meeting. The questionnaire surveyed agencies' definitions of reliability, resilience, financial sustainability, and affordability to come to a mutual understanding of the parameters that will guide the CAMP4W process. It was clear from the monthly meeting that member agencies desired more engagement on the CAMP4W, which leads to the scheduling of monthly Member Agency CAMP4W workshops. The June workshop previewed issues to be discussed at the CAMP4W Board Workshop including the IRP Needs Assessment and public engagement.

Climate Adaptation Master Plan for Water (CAMP4W): Member Agency Alignment and Gap Analysis Board Workshop

The Chief of SRI Officer helped lead and presented at the second CAMP4W Board Workshop: Member Agency Alignment and Gap Analysis. This meeting discussed the Draft CAMP4W Timeline and Framework integrating the Board's planning, policy and technical input, member agency manager involvement, and public engagement. WRM staff presented the IRP Needs Assessment to define the range of water supply needs for potential climate change scenarios and as a tool for evaluating water supply and storage solutions. The workshop's goal was to increase alignment of member agencies through the understanding of the Needs Assessment finding and through discussions draft CAMP4W Guiding Themes.

Sustainability Expo Roadshow

The Office of Sustainability, Resilience and Innovation was invited to bring the Sustainability Expo Roadshow in Metropolitan's District Safety Fairs during June and July that were hosted at Lake Mathews (6/1), Intake/Gene (6/7), Iron Mountain (6/14), Eagle Mountain (6/21), Diemer (6/28) and Jensen (7/10). Chief SRI Officer and staff presented SRI initiatives and Climate Adaptation Master Plan at the facilities. SRI staff listened and asked how SRI could add value to their facilities. Every site is different and unique.

Sustainability, Resilience and Innovation

(continued)



Sustainability Expo Roadshow at Lake Mathews



Sustainability Expo Roadshow at Iron Mountain

ZEV Consultant and Roadmap

SRI and the ZEV Project Team, composed of cross-organizational work groups and stakeholders, completed interviews with Gladstein, Neondross, and Associates (GNA), the consultant hired to assist Metropolitan's transition to zero emission vehicles. GNA will use the information gathered in the 11 interviews to develop a ZEV transition roadmap and implementation plan; the roadmap's scheduled completion date is August.

ZEV Executive Task Force SharePoint Site

SRI created a new SharePoint site ([Zero Emission Vehicle Executive Task Force \(sharepoint.com\)](https://sharepoint.com)) to share information on the progress of the ZEV Work Groups and ZEV Project Team as they navigate Metropolitan's transition to electric vehicles and equipment.

Electric Vehicle Demos

SRI worked with WSO and a transportation company for demos and ride-and-drives of a battery-electric cargo van and large truck at Lake Mathews on June 1. WSO employees were able to drive each vehicle and ask the vendor questions about vehicle capabilities and uses.



WSO Construction Services Unit staff preparing to drive a battery-electric truck and cargo van at Lake Mathews

Sustainability, Resilience and Innovation

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Green Procurement

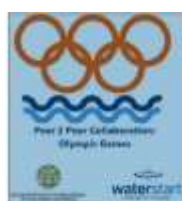
SRI Office resumed work on sustainable procurement policies; it had been on hold because Procurement was conducting end of fiscal year activities.

Innovation

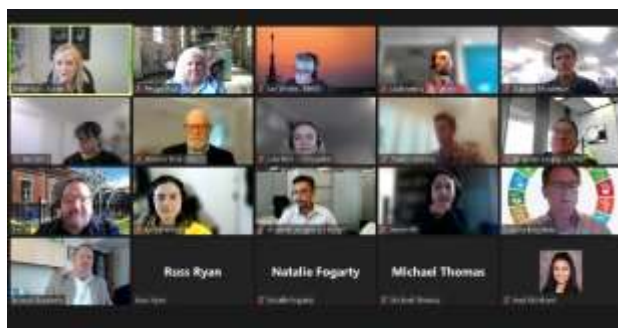
Innovation, Pilots, and Emerging Technologies

Olympics Peer 2 Peer Partnership with WaterStart, Metropolitan Water District, Paris Olympics, Los Angeles Olympics, Australian Olympics with Lessons Learned from Brazil and Japan Olympics

Metropolitan's SRI Innovation, Water Quality, Water Resources Management, Safety, Engineering, Operations, IT, and Bay Delta Teams continued our Olympics Peer 2 Peer Workshops with WaterStart and peer groups from Australia, Paris, LADWP, Los Angeles, Japan, and Brazil on June 15. Our second meeting included a presentation by Duncan Middleton from SEQ Water in Australia on *Water Quality Monitoring and Tools Used for The Commonwealth Games*. Duncan's in-depth presentation generated much discussion about preparations needed for the Olympics and events like the Super Bowl and the Commonwealth Games. Many areas were covered, and all groups shared new technologies being used, critical needs such as rapid bacterial testing, pilots being tested, and ideas for securing our water for future events.



Workshop #2-
Water Quality Monitoring,
cont.



Hybrid Water TAG 34 + NorCal TAG 31 Technology Approval Group (TAG) and Pure Water Tour

On June 27–28, Metropolitan's SRI team held our Hybrid Water TAG 34 + NorCal TAG 31 Technology Approval Group (TAG) and Pure Water Tour at Metropolitan with over 60 attendees. The Chief SRI Officer welcomed the group. Technology Approval Group (TAG) is an innovation forum of the world's leading end-users. Attendees included Metropolitan staff, Isle Technologies, technology presenters, Northern California Water Agencies, Metropolitan Member Agencies and Sub Agencies, Denver Water, LADWP, Albuquerque Water, Tucson Water, City of Santa Barbara, and Southern Nevada Water Authority, etc. The TAG model was first launched in the UK in 2005 and is led by Isle US. TAG accelerates the market uptake of "step-change" technologies by engaging the industry during the pre-commercial stages of development and by leveraging external investment from venture capital investors. Isle US

Sustainability, Resilience and Innovation

(continued)

currently operates in eight regions across the country. The group shared technology implementation successes and failures and evaluated technology presentations on smart pigging, an inline inspection tool for force mains and pressurized water and wastewater pipelines; filter-less, low-tech, continuous microplastic removal process; distributed acoustics for leak and intrusion monitoring: monitoring water pipelines with fiber optic cables that can be installed without disrupting operations; COSMIC RAY TECHNOLOGY: pre-localization of water leaks through detection of neutrons; and a highly accurate and stable augmented reality solution for fieldwork and asset management.



Achievement Rewards for College Scientists (ARCS) Foundation Scholars Event

SRI Innovation, Engineering, Operations, and LADWP WIT Teams participated in a University Research and Scholar event with Achievement Rewards for College Scientists (ARCS) Foundation. ARCS is a national nonprofit volunteer women's organization that promotes US competitiveness by providing financial awards to academically outstanding scholars studying to complete degrees in science, technology, engineering, mathematics (STEM), and health disciplines at 49 of the nation's leading research universities. Over 80 people attended the event in Los Angeles.

Environmental Planning Section

Core Business: Environmental Planning and Regulatory Compliance Support

Bay Delta Initiatives

Delta Conveyance Project

- Continued supporting preparation of the responses to comments for the draft environmental impact report (EIR) for cultural resources and tribal cultural resources impact categories on behalf of Public Water Agencies.

Delta Smelt Preservation and Native Species Preservation Project

- Completed responses to comments and the mitigation monitoring and reporting program (MMRP) and finalized the mitigated negative declaration (MND) for the project; the MND was adopted by the Board of Directors on June 13, 2023.

Webb Tract Multi-Benefit Mosaic Landscape Project

- Conducted kick-off meeting at Webb Tract with Bay Delta Initiatives staff and consulting biologists to initiate early spring surveys in support of environmental document preparation upon project funding.

Sustainability, Resilience and Innovation

(continued)



Ferry for access to Webb Tract



Site conditions at Webb Tract



Pumping facility at Webb Tract

Engineering Services Group

Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation Program

- Continued construction monitoring and mitigation compliance for the PCCP Lake Mathews Valve Storage Project and Second Lower Feeder Reaches 3A and 3B.
- Completed signoff of final specifications and drawings for the PCCP Sepulveda Feeder Urgent Carbon Fiber Rehabilitation Project.

Perris Valley Pipeline Project

- Continued oversight of project construction monitoring and mitigation compliance.



Construction contractor placing a liner for soil storage for Perris Valley Pipeline Project



Granular activated carbon (GAC) treatment plant to filter groundwater for Perris Valley Pipeline Project

Pure Water Southern California

- Participated in a second tribal consultation meeting with the Gabrieleño Band of Mission Indians-Kizh Nation.
- Initiated preparation of the project description for the draft EIR.
- Continued revising draft technical reports and biological surveys to capture alignment modifications in support of the draft EIR.

Weymouth Water Treatment Plant and La Verne Site Improvements Program

- Continued preparation of the administrative draft program EIR.
- Finalized the cultural resources, noise, traffic, and site access technical reports.

Sustainability, Resilience and Innovation

(continued)

Construction Monitoring

- Continued construction monitoring for Etiwanda Pipeline Relining, Orange County Feeder Relining Reach 3, Weymouth Basins 5–8 Rehabilitation, La Verne Shops Upgrades, Foothill Hydroelectric Seismic Upgrades, and Weymouth Battery Energy Storage System projects.

External Affairs Group

- Reviewed and provided input on proposed state budget trailer bills and Governor’s infrastructure package.
- Participated in California Council for Environmental and Economic Balance (CCEEB) Natural Resources Task Force (NRTF) monthly meeting.

Sustainability, Resiliency, and Innovation Office

- Continued assisting in Scope 3 emissions data collection efforts in support of the Climate Action Plan (CAP) monitoring and reporting, which includes development and implementation of the contractor’s construction emission log, development of the employee commute survey and net zero waste policies, and implementation of LED lighting inventory measures.

Water System Operations Group

- Provided environmental analysis and clearance for maintenance activities along 30 miles of the Rialto Feeder patrol road.
- Provided biweekly bird surveys at Jensen Plant filtration basins to ensure compliance with the Migratory Bird Treaty Act and the Fish and Game Code in support of operational activities.

Reserve Management

Lake Mathews Multiple Species Reserve

- Coordinated with CALFIRE for prescribed burns within the reserve north of Lake Mathews in late June.
- Completed installation of fencing along Harley John Road to prevent trespassing on the reserve.
- Mowed grassland habitat for fire and habitat management within the reserve south of Cajalco Road.
- Continued California gnatcatcher surveys on the reserve south of Cajalco Road.

Southwestern Riverside County Multi-Species Reserve

- The Reserve Management Committee approved the Annual Work Plan and Annual Operating Budget for FY 23/24 reserve management activities.
- Coordinated with CALFIRE for a prescribed burn south of Lake Skinner in late June.
- Conducted mowing and weed whipping for fire and habitat management along Reserve internal roads and the Lake Skinner entrance road and conducted invasive plant species removal for habitat management.
- Researchers continued white-tailed kite, cactus wren, Stephens’ kangaroo rat, and riparian bird surveys.
- The Alamos Schoolhouse interpretive center hosted approximately 200 visitors over the last month.
- Hosted a public outreach event, with state and federal wildlife agency staff providing education booths.
- Maintained brown-headed cowbird traps, bringing a total number of birds that have been captured to date for the year to 38. The brown-headed cowbird is a brood parasite that lays its eggs in the nests of other birds such as native and endangered bird species.

Sustainability, Resilience and Innovation

(continued)



State and Federal Wildlife Agency Staff Booths at the Nature Fest Public Outreach Event at the Southwestern Riverside County Multi-Species Reserve

External Document Reviews

- Reviewed 21 CEQA notices for external projects and prepared comment letters for those that may affect Metropolitan facilities and/or operations.

Real Property Support

- Provided CEQA analysis in support of two real property agreements and in support of a Calleguas Municipal Water District annexation project.



Metropolitan's Mission is to provide its service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

700 N. Alameda Street, Los Angeles, CA 90012
General Information (213) 217-6000
www.mwdh2o.com www.bewaterwise.com

General Manager: Adel Hagekhail
Office of the GM (213) 217-6139
OfficeoftheGeneralManager@mwdh2o.com



Metropolitan Cases

County of Butte, et al. v. Department of Water Resources (Sacramento County Superior Court)

On June 23, 2023, the California Supreme Court denied Butte and Plumas Counties' petition for review of the Court of Appeal's decision in favor of the Department of Water Resources (DWR) in the above-entitled case. As previously reported, the Counties' lawsuit challenged the environmental impact report (EIR) issued by DWR in conjunction with relicensing of the Lake Oroville hydroelectric facilities (Oroville Facilities) by the Federal Energy Regulatory Commission (FERC) and asserted numerous claims under the California Environmental Quality Act (CEQA).

While this effectively concludes the state court litigation related to the relicensing process, the Counties will have an opportunity to challenge the FERC license once it is issued by filing a federal lawsuit directly in the Ninth Circuit or the DC Circuit. However, it is our assessment that the Counties are unlikely to be successful in either venue. This decision by the California Supreme Court therefore represents another significant step toward obtaining a new 50-year license for the Oroville Facilities. To that end, the State Water Contractors sent a letter to FERC on June 23, requesting that the license be issued without any further delay. (See General Counsel's April 2023 Activity Report.)

Reese v. Metropolitan (Riverside County Superior Court)

On June 26, 2023, the parties attended a mediation; however, the parties did not reach agreement. On June 30, the Riverside County Superior Court set a Trial Setting Conference for March 20, 2024. The parties are engaged in discovery.

As previously reported, on October 31, 2022, employee Darren Reese filed a lawsuit alleging six causes of action against Metropolitan under the California Fair Employment and Housing Act: race discrimination; race harassment; gender discrimination; gender harassment; retaliation; and failure to prevent harassment,

discrimination, and retaliation. Plaintiff alleges that he was harassed and discriminated against based on his race and gender, he was retaliated against because of his complaints, and Metropolitan failed to take reasonable steps to prevent these occurrences. The complaint was served on Metropolitan on November 14, 2022 and Metropolitan filed its answer on December 14, 2022.

Alejandro Martinez v. Metropolitan (California Department of Industrial Relations)

On January 17, 2023, Mr. Martinez, an employee, filed a retaliation complaint with the California Department of Industrial Relations (DIR), and Metropolitan was served with the complaint on February 1, 2023. The complaint alleges Metropolitan engaged in unlawful retaliation in response to a safety complaint. This matter was set for mediation before the DIR on June 28, 2023. Metropolitan filed a position statement explaining it has not engaged in any unlawful retaliation. On June 28, Mr. Martinez, his union representative from AFSCME Local 1902, and Metropolitan held a mediation session with a DIR mediator. The parties agreed to continue potential settlement discussions concerning Mr. Martinez's complaint.

Sierra Club v. Cal. Dept. of Water Resources (consolidated with Department of Water Resources v. All Persons Interested, etc.) (Sacramento County Superior Court)

A four-day trial on the merits was held from May 15 through May 18, 2023. The court did not take the matter under submission as Judge Mennemeier ordered supplemental briefing, first on two issues, then adding a third on June 8. Unless further briefing is ordered, supplemental briefing concluded on June 30. At the conclusion of trial, Judge Mennemeier indicated he may order further oral argument, or he may set a case management conference after reviewing the supplemental briefs to announce his ruling and discuss preparation of a formal statement of decision.



These two cases concern DWR's adoption of bond resolutions authorizing issuance of revenue bonds to finance environmental review, planning, design, and, if a project is approved, construction of a new Delta conveyance facility. DWR filed a case seeking a judgment declaring the bonds to be valid, known as the validation action, and Sierra Club and others filed a case alleging various violations of CEQA. The cases were consolidated for all purposes.

Before trial, DWR succeeded in getting the CEQA claims and affirmative defenses

dismissed, as well as Delta Reform Act and public trust affirmative defenses.

Metropolitan and other supporting water contractors have worked closely with DWR throughout the case and joined in DWR's merits briefs and evidentiary objections. Although Metropolitan has retained special counsel to assist, the Legal Department has performed most of the work representing Metropolitan to date.

Other Matters

Finance

On June 21, 2022, Metropolitan issued \$258,410,000 of Water Revenue and Refunding Bonds, 2023 Series A (Bonds). The Bonds were issued to fund the acquisition and construction of capital improvements to Metropolitan's Water System; refund portions of a series of bonds originally issued in 2012; and prepay \$35,580,000 of outstanding Wells Fargo Short-Term Revolving Notes issued on June 13, 2023. During a 6-month process, Legal Department staff attorneys worked with Finance, Engineering, and Water Resources staff to prepare the official statement used to market the Bonds and assisted outside bond and

disclosure counsel with the drafting and negotiation of several contracts and closing certificates.

On June 30, 2023, Metropolitan issued \$38,400,000 of Tax-Exempt Flexible Rate Revolving Note, Series 2023 A-2 and \$18,000,000 of Taxable Flexible Rate Revolving Note, Series 2023 A-3 (together the Notes). The Notes were issued to fund Board-approved debt-financed projects for the Antelope Valley East Kern (AVEK) High Desert Water Banking Program and conservation program. Legal Department staff attorneys worked with and assisted outside bond counsel with the drafting and negotiation of several contracts and closing certificates.

Matters Received

<u>Category</u>	<u>Received</u>	<u>Description</u>	
Action in which MWD is a party and Government Code Claim	1	Complaint for Damages and Government Code claim for: (1) Discrimination on the Basis of Race, Color, and/or National Origin; (2) Retaliation; (3) Failure to Prevent Discrimination; (4) Failure to Promote; and (5) Unfair Business Practice, filed in Los Angeles County Superior Court, in the case <i>Encarnacion Gutierrez v. MWD</i> , Case No. 23STCV11052	
Government Code Claims	1	Claim relating to an accident involving an MWD vehicle	
Requests Pursuant to the Public Records Act	13	<u>Requestor</u> California Water Research	<u>Documents Requested</u> Correspondence between Lynda Smith and Delta Lead Scientist Dr. Laurel Larsen from January 1, 2023 to June 5, 2023



<u>Requestor</u>	<u>Documents Requested</u>
Colorado State University Graduate Student	Energy use data for MWD's five pump stations along the Colorado River Aqueduct
Deltek	Contract documents and bid results for the Request for Qualifications for Tunnel Design Engineering Consulting Services
Fugro	Prequalified List for Request for Qualifications for Tunnel Design Engineering Consulting Services
GHD	Proposals submitted in response to Request for Proposal for Desalination Research
Hernandez, Kroone & Associates	List of entities that had the contracts for Land Surveying, Mapping and Aerial Mapping On-Call Service
Jacobs	Proposals submitted in response to Request for Proposal for Pure Water Southern California Program - Conveyance Reaches 1 & 2 Through the Cities of Carson, Long Beach and Lakewood Design Services
Lowe's Home Improvement	Rebate data for devices purchased from Lowe's Stores
Metrohm USA	Configuration and summary of the PT study and results submitted for the bid process for Ion Chromatograph (IC) System with Dual Channels and Autosampler with Variable Wavelength Detector
Quantum Dynamics	Summary of the water audits and costs for water utilities serviced by MWD
Santa Clarita Valley Water Agency	Copy of MWD's purchasing policy
Stanford University Graduate Student	Data and MWD's policy on rationing water deliveries to its member agencies during periods of drought
Voice of San Diego	Copy of Chair Adan Ortega's Form 700

PLEASE NOTE

- ADDITIONS ONLY IN THE FOLLOWING TWO TABLES WILL BE SHOWN IN RED.
- ANY CHANGE TO THE *OUTSIDE COUNSEL AGREEMENTS* TABLE WILL BE SHOWN IN REDLINE FORM (I.E., ADDITIONS, REVISIONS, DELETIONS).



Bay-Delta and SWP Litigation

Consolidated DCP Revenue Bond Validation Action and CEQA Case

Sierra Club, et al. v. California Department of Water Resources (CEQA, designated as lead case)

DWR v. All Persons Interested (Validation)

Sacramento County Superior Ct.
(Judge Kenneth C. Mennemeier)

• Validation Action

- Metropolitan, Mojave Water Agency, Coachella Valley Water District, and Santa Clarita Valley Water Agency have filed answers in support
- Kern County Water Agency, Tulare Lake Basin Water Storage District, Oak Flat Water District, County of Kings, Kern Member Units & Dudley Ridge Water District, and City of Yuba City filed answers in opposition
- North Coast Rivers Alliance et al., Howard Jarvis Taxpayers Association, Sierra Club et al., County of Sacramento & Sacramento County Water Agency, CWIN et al., Clarksburg Fire Protection District, Delta Legacy Communities, Inc, and South Delta Water Agency & Central Delta Water Agency have filed answers in opposition
- Case ordered consolidated with the DCP Revenue Bond CEQA Case for pre-trial and trial purposes and assigned to Judge Earl for all purposes
- DWR's motions for summary judgment re CEQA affirmative defenses granted; cross-motions by opponents denied
- Dec. 9, 2022 DWR's motion for summary adjudication of Delta Reform Act and public trust doctrine affirmative defenses granted; NCRA's motion for summary judgment re same denied
- Trial on the merits held May 15-18, 2023
 - Supplemental briefing ordered on three issues with final brief due June 30, 2023

• CEQA Case

- Sierra Club, Center for Biological Diversity, Planning and Conservation League, Restore the Delta, and Friends of Stone Lakes National Wildlife Refuge filed a standalone CEQA lawsuit challenging DWR's adoption of the bond resolutions
- Alleges DWR violated CEQA by adopting bond resolutions before certifying a Final EIR for the Delta Conveyance Project
- Cases ordered consolidated for all purposes
- DWR's motion for summary judgment granted; Sierra Club's motion denied



Subject	Status
<p>SWP-CVP 2019 BiOp Cases</p> <p><i>Pacific Coast Fed'n of Fishermen's Ass'ns, et al. v. Raimondo, et al. (PCFFA)</i></p> <p><i>Calif. Natural Resources Agency, et al. v. Raimondo, et al. (CNRA)</i></p> <p>Federal District Court, Eastern Dist. of California, Fresno Division (Judge Thurston)</p>	<ul style="list-style-type: none"> SWC intervened in both <i>PCFFA</i> and <i>CNRA</i> cases Federal defendants reinitiated consultation on Oct 1, 2021 February 24, 2023 court approved the 2023 Interim Operations Plan proposed by federal defendants and state plaintiffs, denied all alternative proposed operations and extended the stay until December 31, 2023
<p>CESA Incidental Take Permit Cases</p> <p>Coordinated Case Name <i>CDWR Water Operations Cases, JCCP 5117</i> (Coordination Trial Judge Gevercer)</p> <p><i>Metropolitan & Mojave Water Agency v. Calif. Dept. of Fish & Wildlife, et al. (CESA/CEQA/Breach of Contract)</i></p> <p><i>State Water Contractors & Kern County Water Agency v. Calif. Dept. of Fish & Wildlife, et al. (CESA/CEQA)</i></p> <p><i>Tehama-Colusa Canal Auth., et al. v. Calif. Dept. of Water Resources (CEQA)</i></p> <p><i>San Bernardino Valley Municipal Water Dist. v. Calif. Dept. of Water Resources, et al. (CEQA/CESA/ Breach of Contract/Takings)</i></p> <p><i>Sierra Club, et al. v. Calif. Dept. of Water Resources (CEQA/Delta Reform Act/Public Trust)</i></p> <p><i>North Coast Rivers Alliance, et al. v. Calif. Dept. of Water Resources (CEQA/Delta Reform Act/Public Trust)</i></p> <p><i>Central Delta Water Agency, et. al. v. Calif. Dept. of Water Resources (CEQA/Delta Reform Act/Public Trust/ Delta Protection Acts/Area of Origin)</i></p> <p><i>San Francisco Baykeeper, et al. v. Calif. Dept. of Water Resources, et al. (CEQA/CESA)</i></p>	<ul style="list-style-type: none"> All 8 cases ordered coordinated in Sacramento County Superior Court Stay on discovery issued until coordination trial judge orders otherwise All four Fresno cases transferred to Sacramento to be heard with the four other coordinated cases Certified administrative records lodged March 4, 2022 State Water Contractors et al. granted leave to intervene in <i>Sierra Club, North Coast Rivers Alliance, Central Delta Water Agency, and San Francisco Baykeeper</i> cases by stipulation SWC, et al. granted leave to intervene as respondents in <i>Tehama-Colusa Canal Auth., et al. v. Calif. Dept. of Water Resources</i> CEQA case SWC's renewed motion to augment the administrative records granted in part; a court-appointed referee will review withheld records to determine if the deliberative process privilege applies



<p>CDWR Environmental Impact Cases Sacramento Superior Ct. Case No. JCCP 4942, 3d DCA Case No. C091771 (20 Coordinated Cases)</p> <p>Validation Action <i>DWR v. All Persons Interested</i></p> <p>CEQA 17 cases</p> <p>CESA/Incidental Take Permit 2 cases</p> <p>(Judge Arguelles)</p>	<ul style="list-style-type: none"> • Cases dismissed after DWR rescinded project approval, bond resolutions, decertified the EIR, and CDFW rescinded the CESA incidental take permit • January 10, 2020 – Nine motions for attorneys’ fees and costs denied in their entirety • Parties have appealed attorneys’ fees and costs rulings • May 11, 2022, court of appeal reversed the trial court’s denial of attorney fees and costs in an unpublished opinion • Opinion ordered published • Coordinated cases remitted to trial court for re-hearing of fee motions consistent with the court of appeal’s opinion • Sept.15, 2023 re-hearing on fee motions
<p>COA Addendum/ No-Harm Agreement</p> <p><i>North Coast Rivers Alliance v. DWR</i> Sacramento County Superior Ct. (Judge Rockwell)</p>	<ul style="list-style-type: none"> • Plaintiffs allege violations of CEQA, Delta Reform Act & public trust doctrine • USBR Statement of Non-Waiver of Sovereign Immunity filed September 2019 • Westlands Water District and North Delta Water Agency granted leave to intervene • Metropolitan & SWC monitoring • Deadline to prepare administrative record extended to Nov. 18, 2022
<p>Delta Plan Amendments and Program EIR 1 of 4 Consolidated Cases Sacramento County Superior Ct. remaining on appeal Court of Appeal for the Third App. Dist. Case No. C097948 <i>North Coast Rivers Alliance, et al. v. Delta Stewardship Council</i></p>	<ul style="list-style-type: none"> • Cases challenge, among other things, the Delta Plan Updates recommending dual conveyance as the best means to update the SWP Delta conveyance infrastructure to further the coequal goals • Allegations relating to “Delta pool” water rights theory and public trust doctrine raise concerns for SWP and CVP water supplies • Cases consolidated for pre-trial and trial under <i>North Coast Rivers Alliance v. Delta Stewardship Council</i> • SWC granted leave to intervene • Metropolitan supports SWC • Nov. 7, 2022 court ruled in favor of Delta Stewardship Council on all claims • Orders denying all claims and final judgments entered Nov. 22, 2022 • Notice of appeal filed in <i>North Coast Rivers Alliance, et al.</i> case



	<ul style="list-style-type: none"> • August 8, 2023 Appellant North Coast Rivers Alliance's appendix and opening brief due
<p>SWP Contract Extension Validation Action Court of Appeal for the Third App. Dist. Case No. C096316 <i>DWR v. All Persons Interested in the Matter, etc.</i></p>	<ul style="list-style-type: none"> • DWR seeks a judgment that the Contract Extension amendments to the State Water Contracts are lawful • Metropolitan and 7 other SWCs filed answers in support of validity to become parties • Jan. 5-7, 2022 Hearing on the merits held with CEQA cases, below • Final statement of decision in DWR's favor filed March 9, 2022 • Final judgment entered and served • C-WIN et al., County of San Joaquin et al. and North Coast Rivers Alliance et al. filed notices of appeal • Validation and CEQA cases consolidated on appeal • Briefing completed May 30, 2023
<p>SWP Contract Extension CEQA Cases Court of Appeal for the Third App. Dist. Case Nos. C096384 & C096304 <i>North Coast Rivers Alliance, et al. v. DWR</i> <i>Planning & Conservation League, et al. v. DWR</i></p>	<ul style="list-style-type: none"> • Petitions for writ of mandate alleging CEQA and Delta Reform Act violations filed on January 8 & 10, 2019 • Deemed related to DWR's Contract Extension Validation Action and assigned to Judge Culhane • Administrative Record completed • DWR filed its answers on September 28, 2020 • Metropolitan, Kern County Water Agency and Coachella Valley Water District have intervened and filed answers in the two CEQA cases • Final statement of decision in DWR's favor denying the writs of mandate filed March 9, 2022 • Final judgments entered and served • North Coast Rivers Alliance et al. and PCL et al. filed notices of appeal • Appeals consolidated with the validation action above



<p>Delta Conveyance Project Soil Exploration Cases</p> <p><i>Central Delta Water Agency, et al. v. DWR</i> Sacramento County Superior Ct. (Judge Chang)</p> <p><i>Central Delta Water Agency, et al. v. DWR (II)</i>, Sacramento County Super. Ct. (Judge Acquisto)</p>	<ul style="list-style-type: none"> • Original case filed August 10, 2020; new case challenging the second addendum to the CEQA document filed Aug. 1, 2022 • Plaintiffs Central Delta Water Agency, South Delta Water Agency and Local Agencies of the North Delta • One cause of action alleging that DWR's adoption of an Initial Study/Mitigated Negative Declaration (IS/MND) for soil explorations needed for the Delta Conveyance Project violates CEQA • March 24, 2021 Second Amended Petition filed to add allegation that DWR's addendum re changes in locations and depths of certain borings violates CEQA • DWR's petition to add the 2020 CEQA case to the <i>Department of Water Resources Cases</i>, JCCP 4594, San Joaquin County Superior Court denied • Hearing on the merits held Oct.13, 2022 • Dec. 2, 2022 ruling on the merits granting the petition with respect to two mitigation measures and denying on all other grounds • Dec. 23, 2022 court order directing DWR to address the two mitigation measures within 60 days while declining to order DWR to vacate the IS/MND • March 27, 2023 court entered judgment and issued a writ after ordering and considering supplemental briefing • May 5, 2023 court granted DWR's motion to discharge the writ and dismiss the case • May 18, 2023 Notice of Appeal filed • July 28, 2023 Hearing on motion for attorneys' fees
<p>Water Management Tools Contract Amendment</p> <p><i>California Water Impact Network et al. v. DWR</i> Sacramento County Superior Ct. (Judge Aquisto)</p> <p><i>North Coast Rivers Alliance, et al. v. DWR</i> Sacramento County Super. Ct. (Judge Aquisto)</p>	<ul style="list-style-type: none"> • Filed September 28, 2020 • CWIN and Aqualliance allege one cause of action for violation of CEQA • NCRA et al. allege four causes of action for violations of CEQA, the Delta Reform Act, Public Trust Doctrine and seeking declaratory relief • SWC motion to intervene in both cases granted • Dec. 20, 2022 DWR filed notice of certification of the administrative record and filed answers in both cases



San Diego County Water Authority v. Metropolitan, et al.

Cases	Date	Status
2014, 2016	Aug. 28, 2020	SDCWA served first amended (2014) and second amended (2016) petitions/complaints.
	Sept. 28	Metropolitan filed demurrers and motions to strike portions of the amended petitions/complaints.
	Sept. 28-29	Member agencies City of Torrance, Eastern Municipal Water District, Foothill Municipal Water District, Las Virgenes Municipal Water District, Three Valleys Municipal Water District, Municipal Water District of Orange County, West Basin Municipal Water District, and Western Municipal Water District filed joinders to the demurrers and motions to strike.
	Feb. 16, 2021	Court issued order denying Metropolitan's demurrers and motions to strike, allowing SDCWA to retain contested allegations in amended petitions/complaints.
	March 22	Metropolitan filed answers to the amended petitions/complaints and cross-complaints against SDCWA for declaratory relief and reformation, in the 2014, 2016 cases.
	March 22-23	Member agencies City of Torrance, Eastern Municipal Water District, Foothill Municipal Water District, Las Virgenes Municipal Water District, Three Valleys Municipal Water District, Municipal Water District of Orange County, West Basin Municipal Water District, and Western Municipal Water District filed answers to the amended petitions/complaints in the 2014, 2016 cases.
	April 23	SDCWA filed answers to Metropolitan's cross-complaints.
	Sept. 30	Based on the Court of Appeal's Sept. 21 opinion (described above), and the Board's Sept. 28 authorization, Metropolitan paid \$35,871,153.70 to SDCWA for 2015-2017 Water Stewardship Rate charges under the Exchange Agreement and statutory interest.
2017	July 23, 2020	Dismissal without prejudice entered.
2018	July 28, 2020	Parties filed a stipulation and application to designate the case complex and related to the 2010-2017 cases, and to assign the case to Judge Massullo's court.
	Nov. 13	Court ordered case complex and assigned to Judge Massullo's court.
	April 21, 2021	SDCWA filed second amended petition/complaint.
	May 25	Metropolitan filed motion to strike portions of the second amended petition/complaint.



Cases	Date	Status
2018 (cont.)	May 25-26	Member agencies City of Torrance, Eastern Municipal Water District, Foothill Municipal Water District, Las Virgenes Municipal Water District, Three Valleys Municipal Water District, Municipal Water District of Orange County, West Basin Municipal Water District, and Western Municipal Water District filed joinders to the motion to strike.
	July 19	Court issued order denying Metropolitan's motion to strike portions of the second amended petition/complaint.
	July 29	Metropolitan filed answer to the second amended petition/complaint and cross-complaint against SDCWA for declaratory relief and reformation.
	July 29	Member agencies City of Torrance, Eastern Municipal Water District, Foothill Municipal Water District, Las Virgenes Municipal Water District, Three Valleys Municipal Water District, Municipal Water District of Orange County, West Basin Municipal Water District, and Western Municipal Water District filed answers to the second amended petition/complaint.
	Aug. 31	SDCWA filed answer to Metropolitan's cross-complaint.
	April 11, 2022	Court entered order of voluntary dismissal of parties' WaterFix claims and cross-claims.
2014, 2016, 2018	June 11, 2021	Deposition of non-party witness.
	Aug. 25	Hearing on Metropolitan's motion for further protective order regarding deposition of non-party witness.
	Aug. 25	Court issued order consolidating the 2014, 2016, and 2018 cases for all purposes, including trial.
	Aug. 30	Court issued order granting Metropolitan's motion for a further protective order regarding deposition of non-party witness.
	Aug. 31	SDCWA filed consolidated answer to Metropolitan's cross-complaints in the 2014, 2016, and 2018 cases.
	Oct. 27	Parties submitted to the court a joint stipulation and proposed order staying discovery through Dec. 8 and resetting pre-trial deadlines.
	Oct. 29	Court issued order staying discovery through Dec. 8 and resetting pre-trial deadlines, while the parties discuss the prospect of settling some or all remaining claims and crossclaims.
	Jan. 12, 2022	Case Management Conference. Court ordered a 35-day case stay to allow the parties to focus on settlement negotiations, with weekly written check-ins with the court; and directed the parties to meet and confer regarding discovery and deadlines.



Cases	Date	Status
2014, 2016, 2018 (cont.)	Feb. 22	Court issued order resetting pre-trial deadlines as proposed by the parties.
	Feb. 22	Metropolitan and SDCWA each filed motions for summary adjudication.
	April 13	Hearing on Metropolitan's and SDCWA's motions for summary adjudication.
	April 18	Parties filed supplemental briefs regarding their respective motions for summary adjudication, as directed by the court.
	April 18	Court issued order resetting pre-trial deadlines as proposed by the parties.
	April 29	Parties filed pre-trial briefs.
	April 29	Metropolitan filed motions in limine.
	May 4	Court issued order granting Metropolitan's motion for summary adjudication on cross-claim for declaratory relief that the conveyance facility owner, Metropolitan, determines fair compensation, including any offsetting benefits; and denying its motion on certain other cross-claims and an affirmative defense.
	May 11	Court issued order granting SDCWA's motion for summary adjudication on cross-claim for declaratory relief in the 2018 case regarding lawfulness of the Water Stewardship Rate's inclusion in the wheeling rate and transportation rates in 2019-2020; certain cross-claims and affirmative defenses on the ground that Metropolitan has a duty to charge no more than fair compensation, which includes reasonable credit for any offsetting benefits, with the court also stating that whether that duty arose and whether Metropolitan breached that duty are issues to be resolved at trial; affirmative defenses that SDCWA's claims are untimely and SDCWA has not satisfied claims presentation requirements; affirmative defense in the 2018 case that SDCWA has not satisfied contract dispute resolution requirements; claim, cross-claims, and affirmative defenses regarding applicability of Proposition 26, finding that Proposition 26 applies to Metropolitan's rates and charges, with the court also stating that whether Metropolitan violated Proposition 26 is a separate issue; and cross-claims and affirmative defenses regarding applicability of Government Code section 54999.7, finding that section 54999.7 applies to Metropolitan's rates. Court denied SDCWA's motion on certain other cross-claims and affirmative defenses.
	May 13	Pre-trial conference; court denied Metropolitan's motions in limine.
	May 16	Court issued order setting post-trial brief deadline and closing arguments.
	May 16-27	Trial occurred but did not conclude.



Cases	Date	Status
2014, 2016, 2018 (cont.)	May 23, June 21	SDCWA filed motions in limine.
	May 26, June 24	Court denied SDCWA's motions in limine.
	June 3, June 24, July 1	Trial continued, concluding on July 1.
	June 24	SDCWA filed motion for partial judgment.
	July 15	Metropolitan filed opposition to motion for partial judgment.
	Aug. 19	Post-trial briefs filed.
	Sept. 14	Court issued order granting in part and denying in part SDCWA's motion for partial judgment (granting motion as to Metropolitan's dispute resolution, waiver, and consent defenses; denying motion as to Metropolitan's reformation cross-claims and mistake of fact and law defenses; and deferring ruling on Metropolitan's cost causation cross-claim).
	Sept. 21	Metropolitan filed response to order granting in part and denying in part SDCWA's motion for partial judgment (requesting deletion of Background section portion relying on pleading allegations).
	Sept. 22	SDCWA filed objection to Metropolitan's response to order granting in part and denying in part SDCWA's motion for partial judgment.
	Sept. 27	Post-trial closing arguments.
	Oct. 20	Court issued order that it will rule on SDCWA's motion for partial judgment as to Metropolitan's cost causation cross-claim simultaneously with the trial statement of decision.
	Dec. 16	The parties' filed proposed trial statements of decision.
	Dec. 21	SDCWA filed the parties' stipulation and proposed order for judgment on Water Stewardship Rate claims for 2015-2020.
	Dec. 27	Court entered order for judgment on Water Stewardship Rate claims for 2015-2020 as proposed by the parties.
	March 14, 2023	Court issued tentative statement of decision (tentatively ruling in Metropolitan's favor on all claims litigated at trial, except for those ruled to be moot based on the rulings in Metropolitan's favor)
	March 14	Court issued amended order granting in part and denying in part SDCWA's motion for partial judgment (ruling that Metropolitan's claims



		for declaratory relief regarding cost causation are not subject to court review).
	March 29	SDCWA filed objections to tentative statement of decision
	April 3	Metropolitan filed response to amended order granting in part and denying in part SDCWA's motion for partial judgment (requesting deletion of Background section portion relying on pleading allegations).
	April 25	Court issued statement of decision (ruling in Metropolitan's favor on all claims litigated at trial, except for those ruled to be moot based on the rulings in Metropolitan's favor)
All Cases	April 15, 2021	Case Management Conference on 2010-2018 cases. Court set trial in 2014, 2016, and 2018 cases on May 16-27, 2022.
	April 27	SDCWA served notice of deposition of non-party witness.
	May 13-14	Metropolitan filed motions to quash and for protective order regarding deposition of non-party witness.
	June 4	Ruling on motions to quash and for protective order.



Outside Counsel Agreements				
Firm Name	Matter Name	Agreement No.	Effective Date	Contract Maximum
Albright, Yee & Schmit, APC	Employment Matter	211923	05/23	\$60,000
Andrade Gonzalez LLP	MWD v. DWR, CDFW and CDNR Incidental Take Permit (ITP) CESA/CEQA/Contract Litigation	185894	07/20	\$250,000
Aleshire & Wynder	Oil, Mineral and Gas Leasing	174613	08/18	\$50,000
Atkinson Andelson Loya Ruud & Romo	Employee Relations	59302	04/04	\$1,277,187
	Delta Conveyance Project Bond Validation-CEQA Litigation	185899	09/21	\$250,000
	MWD Drone and Airspace Issues	193452	08/20	\$50,000
	Equal Employee Opportunity Commission Charge	200462	03/21	\$20,000
	DFEH Charge (DFEH Number 202102-12621316)	201882	07/01/21	\$25,000
	AFSCME Local 1902 in Grievance No. 1906G020 (CSU Meal Period)	201883	07/12/21	\$30,000
	AFSCME Local 1902 v. MWD, PERB Case No. LA-CE-1438-M	201889	09/15/21	\$20,000
	MWD MOU Negotiations**	201893	10/05/21	\$100,000
	DFEH Charge (DFEH Number 202109-14694608)	203460	02/22	\$35,000
Best, Best & Krieger	Navajo Nation v. U.S. Department of the Interior, et al.	54332	05/03	\$185,000
	Bay-Delta Conservation Plan/Delta Conveyance Project (with SWCs)	170697	08/17	\$500,000
	Environmental Compliance Issues	185888	05/20	\$100,000
	Grant Compliance Issues	211921	05/23	\$75,000
	Pure Water Southern California	207966	11/22	\$100,000



Firm Name	Matter Name	Agreement No.	Effective Date	Contract Maximum
Blooston, Mordkofsky, Dickens, Duffy & Prendergast, LLP	FCC and Communications Matters	110227	11/10	\$100,000
Brown White & Osborn LLP	HR Matter	203450	03/22	\$50,000
Buchalter, a Professional Corp.	Union Pacific Industry Track Agreement	193464	12/07/20	\$50,000
Burke, Williams & Sorensen, LLP	Real Property – General	180192	01/19	\$100,000
	Labor and Employment Matters	180207	04/19	\$75,000
	General Real Estate Matters	180209	08/19	\$200,000
	Rancho Cucamonga Condemnation Actions (Grade Separation Project)	207970	05/22	\$100,000
Law Office of Alexis S.M. Chiu*	Bond Counsel	200468	07/21	N/A
Cislo & Thomas LLP	Intellectual Property	170703	08/17	\$75,000
Cummins & White LLP	Board Advice	207941	05/22	\$10,000
Curls Bartling P.C.*	Bond Counsel	200470	07/21	N/A
Duane Morris LLP	SWRCB Curtailment Process	138005	09/14	\$615,422
Duncan, Weinberg, Genzer & Pembroke	Power Issues	6255	09/95	\$3,175,000
Ellison, Schneider, Harris & Donlan	Colorado River Issues	69374	09/05	\$175,000
	Issues re SWRCB	84457	06/07	\$200,000
Greines, Martin, Stein & Richland LLP	SDCWA v. MWD	207958	10/22	\$100,000
	Colorado River Matters	207965	11/22	\$100,000
Haden Law Office	Real Property Matters re Agricultural Land	180194	01/19	\$50,000
Hanna, Brophy, MacLean, McAleer & Jensen, LLP	Workers' Compensation	211926	06/23	\$100,000



Firm Name	Matter Name	Agreement No.	Effective Date	Contract Maximum
Hanson Bridgett LLP	SDCWA v. MWD	124103	03/12	\$1,100,000
	Finance Advice	158024	12/16	\$100,000
	Deferred Compensation/HR	170706	10/17	\$500,000
	Tax Issues	180200	04/19	\$50,000
	Alternative Project Delivery (ADP)	207961	10/22	\$250,000
	Faith v. MWD	207963	10/22	\$100,000
Hausman & Sosa, LLP	MOU Hearing Officer Appeal	201892	09/21	\$95,000
	MOU Hearing Officer Appeal	207949	07/22	\$25,000
Hawkins Delafield & Wood LLP*	Bond Counsel	193469	07/21	N/A
Horvitz & Levy	SDCWA v. MWD	124100	02/12	\$1,250,000
	General Appellate Advice	146616	12/15	\$100,000
	Colorado River	203464	04/22	\$100,000
Innovative Legal Services, P.C.	Employment Matter	211915	01/19/23	\$100,000
Internet Law Center	Cybersecurity and Privacy Advice and Representation	200478	04/13/21	\$100,000
	Systems Integrated, LLC v. MWD	201875	05/17/21	\$100,000
Amira Jackmon, Attorney at Law*	Bond Counsel	200464	07/21	N/A
Jackson Lewis P.C.	Employment: Department of Labor Office of Contract Compliance	137992	02/14	\$45,000
Jones Hall, A Professional Law Corp*	Bond Counsel	200465	07/21	N/A
Kegel, Tobin & Truce	Workers' Compensation	180206	06/19	\$250,000
Kronenberger Rosenfeld, LLP	Systems Integrated, LLC v. MWD	211920	04/23	\$50,000



Firm Name	Matter Name	Agreement No.	Effective Date	Contract Maximum
Kutak Rock LLP	Delta Islands Land Management	207959	10/22	\$10,000
Liebert Cassidy Whitmore	Labor and Employment	158032	02/17	\$229,724
	FLSA Audit	180199	02/19	\$50,000
Manatt, Phelps & Phillips	SDCWA v. MWD rate litigation	146627	06/16	\$4,400,000
	Raftelis-Subcontractor of Manatt, Agr. #146627: Per 5/2/22 Engagement Letter between Manatt and Raftelis, MWD paid Raftelis Financial Consultants, Inc.	Invoice No. 23949		\$56,376.64 for expert services & reimbursable expenses in SDCWA v. MWD
Meyers Nave Riback Silver & Wilson	OCWD v. Northrop Corporation	118445	07/11	\$2,300,000
	Pure Water Southern California	207967	11/22	\$100,000
	PFAS Compliance Issues	207968	11/14/22	\$100,000
Miller Barondess, LLP	SDCWA v. MWD	138006	12/14	\$600,000
Morgan, Lewis & Bockius	SDCWA v. MWD	110226	07/10	\$8,750,000
	Project Labor Agreements	200476	04/21	\$100,000
Musick, Peeler & Garrett LLP	Colorado River Aqueduct Electric Cables Repair/Contractor Claims	193461	11/20	\$1,700,000
	Arvin-Edison v. Dow Chemical	203452	01/22	\$100,000
	Semitropic TCP Litigation	207954	09/22	\$75,000
Nixon Peabody LLP*	Bond Counsel [re-opened]	193473	07/21	\$100,000
	Special Finance Project	207960	10/22	\$50,000
Norton Rose Fulbright US LLP*	Bond Counsel	200466	07/21	N/A



Firm Name	Matter Name	Agreement No.	Effective Date	Contract Maximum
Olson Remcho LLP	Government Law	131968	07/14	\$400,000
	Executive Committee/Ad Hoc Committees Advice	207947	08/22	\$60,000
	Public Records Act	207950	08/22	\$45,000
	Advice/Assistance re Proposition 26/Election Issues	211922	05/23	\$100,000
Paul Hastings LLP	MWD v. California Department of Fish and Wildlife	207969	3/23	\$100,000
Rains Lucia Stern St. Phalle & Silver, PC	Employment Matter	211919	4/23	\$60,000
Renne Public Law Group, LLP	ACE v. MWD (PERB Case No. LA-CE-1574-M)	203466	05/22	\$100,000
	ACE v. MWD (PERB Case No. LA-CE-1611-M)	207962	10/22	\$50,000
Ryan & Associates	Leasing Issues	43714	06/01	\$200,000
Seyfarth Shaw LLP	Claim (Contract #201897)	201897	11/04/21	\$200,000
	Claim (Contract #203436)	203436	11/15/21	\$350,000
	Claim (Contract #203454)	203454	01/22	\$160,000
	Claim (Contract #203455)	203455	10/21	\$175,000
	Reese v. MWD	207952	11/22	\$400,000
	General Labor/Employment Advice	211917	3/23	\$100,000
Sheppard Mullin Richter & Hampton	Rivers v. MWD	207946	07/22	\$100,000
Stradling Yocca Carlson & Rauth*	Bond Counsel	200471	07/21	N/A
Theodora Oringer PC	Construction Contracts - General Conditions Update	185896	07/20	\$100,000
Thompson Coburn LLP	NERC Energy Reliability Standards	193451	08/20	\$300,000



Van Ness Feldman, LLP	General Litigation	170704	07/18	\$50,000
	Colorado River MSHCP	180191	01/19	\$50,000
	Bay-Delta and State Water Project Environmental Compliance	193457	10/15/20	\$50,000
	Colorado River Issues	211924	05/23	\$100,000
Western Water and Energy	California Independent System Operator-Related Matters	193463	11/20/20	\$100,000

*Expenditures paid by Bond Proceeds/Finance

**Expenditures paid by another group



General Auditor's Report for June 2023

Summary

This report highlights significant activities of the Office of the General Auditor for the month ended June 30, 2023.

Audit & Advisory Services

Nine projects are in progress and six projects are in the reporting phase.

No final reports were issued during this period.

Additionally, one advisory services project is in process.

Other General Auditor Activities

1. General Auditor Business Plan for FY 2023/24

Completed. The business plan for the upcoming fiscal year was presented at the June Subcommittee on Audits and is pending July Board and FAIRP Committee approval. Meetings with 27 district managers were completed to facilitate the creation of the business plan.

2. Intake, Gene Camp, and Iron Mountain Visit

Gained an understanding of Desert Region Conveyance & Distribution system including pump plant operations, aqueduct maintenance, and control systems.

3. External Auditor Support

Macias Gini & O'Connell LLP has commenced communications with Metropolitan Finance and Information Technology staff and the General Auditor's office is providing assistance to the external auditor's work plan.

4. Audit Project Management System Upgrade

Staff and system administrator training is in process and the upgrade to TeamMate+ is expected in July 2023.

5. General Auditor Department Assessment

The new general auditor is conducting a department assessment that will result in a strategic plan driving future focus and optimal service delivery. The expected completion of this plan is August 2023.

6. Quality Assessment & Improvement Program

Professional standards require an external quality assessment of the General Auditor's function every five years. Coordination with the Institute of Internal Auditors is underway to contract this assessment. Surveys will be distributed to the Board and Metropolitan management and project work is expected to commence in August 2023.



Ethics Office Monthly Report

JUNE 2023

EDUCATION

Coordinated a presentation to the EOP Committee on a framework for ethical decision-making. Dr. Brian Green of the Markkula Center for Applied Ethics introduced directors to the concept and provided guidance for incorporating the framework into the Board's decision-making processes.

Provided Ethics Office overview for new hires at the New Employee Orientation.

COMPLIANCE

Continued management of the Form 700 annual filing season, which began January 1, 2023, and ended April 3, 2023. As of the date of this report, filings from 10 employees are pending. Staff continues efforts to obtain full compliance for Metropolitan.

Assisted Board members and employees with their Annual, Assuming Office, and Leaving Office Form 700 filings. Assistance included filing for multiple positions, troubleshooting the electronic filing system, and notifications of deadlines.

Monitored the status of past due Assuming Office and Leaving Office Form 700 filings. Sent notices to one current employee and one former employee; obtained compliance from one current employee and two former

employees.

ADVICE

Addressed 16 advice matters involving: conflicts of interest, outside employment, financial disclosure, gifts, and other ethics-related topics.

INVESTIGATIONS

Received five complaints involving the following allegations:

- Bullying and/or harassment
- Unsafe working conditions
- Prohibited outside employment
- Discrimination

Referred EEO-related complaints to the EEO Office.

ETHICS OFFICER FINDINGS

The Ethics Officer determined that a Metropolitan official misused the Metropolitan official seal in violation of Administrative Code section 7123(b).

The Ethics Officer determined that a supervisor did not retaliate against a subordinate employee for reporting workplace safety and misconduct concerns, and therefore did not violate Administrative Code section 7128.

ADVICE AND INVESTIGATIVE DATA

Advice Matters	16
Compliance Assistance	37
Complaints Received	5
Investigations Opened	0
Pending Investigations	9

MINUTES
REGULAR MEETING OF THE
BOARD OF DIRECTORS
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

June 13, 2023

53264 The Board of Directors of The Metropolitan Water District of Southern California met in a regular session on Tuesday, June 13, 2023.

Chair Ortega called the meeting to order at 1:01 p.m.

Chair Ortega announced that we do not have any Directors participating in the meeting utilizing AB 2449.

53265 The Meeting was opened with an invocation by Tana McCoy, City of Compton.

Chair Ortega welcomed Mary Mendoza, Vice Mayor of San Fernando; Sylvia Ballin, Metropolitan Former Director; and Charles Treviño, Upper San Gabriel Valley Municipal Water District Director

Chair Ortega welcomed Craig Parker, Assistant General Manager of Water Services at Anaheim Public Utilities, to participate in the Board meeting with the exception of voting and participating in closed session as the Member Agency Representative. Mr. Parker made brief remarks.

53266 The Pledge of Allegiance was given by Director Anthony Fellow, Upper San Gabriel Valley Municipal Water District.

Chair Ortega announced that Metropolitan will be hosting a number of events at Metropolitan facilities and on social media to showcase in the month of June, Pride Month, Juneteenth, Father's Day, and Safety Days.

53267 Board Secretary Fong-Sakai administered the roll call. Those responding present were: Directors Abdo, Ackerman, Armstrong, Camacho, Chacon, De Jesus, Dennstedt, Dick, Erdman, Fellow, Fong-Sakai, Garza, Gray (teleconference posted location), Jung, Kassakhian, Kurtz, Lefevre, Luna, McCoy, McMillan, Miller, Morris, Ortega, Petersen, Peterson, Phan (teleconference posted location), Pressman, Quinn, Ramos, Repenning, Seckel, Smith, and Sutley.

Those not responding were: Directors Alvarez, Atwater, Cordero, Faessel, and Goldberg.

Board Secretary Fong-Sakai declared a quorum present.

53268 Community Reflections: Frank Montes, Hispanic Coalition of Small Businesses.

Chair Ortega was presented with a Certificate of Appreciation and Support to Metropolitan from the Hispanic Coalition of Small Businesses. Chair Ortega thanked the Hispanic Coalition of Small Businesses Committee and Board Members Frank Montes, Dennise Mejia, Illary Archilla, Marco Tule, Michael Herrera, and Veronica Diaz.

53269 Chair Ortega invited members of the public to address the Board on matters within the Board's jurisdiction (in-person and via teleconference).

	Name	Affiliation	Item
1.	Caty Wagner	Sierra Club, California	EIA Committee Cancellation
2.	John Mendoza	City of Pomona	Stormwater Capture Program

Chair Ortega addressed the following: Other Matters and Reports.

53270 Chair Ortega asked if there were any changes to the report of events attended by Directors at Metropolitan's expense during the month of May as previously posted and distributed to the Board. Chair Ortega asked the Directors if there were any corrections on the item. No amendments were made.

53271 Chair Ortega referred to Chair's monthly report, which was previously posted and distributed to the Board. Chair Ortega asked the Directors if there were any questions on the item. None were made.

In addition, Chair Ortega presented Former Director Blois his resolution for his service on Metropolitan Board. Former Director Blois made brief remarks.

53272 General Manager Hagekhalil referred to the General Manager's monthly report, which was previously posted and distributed to the Board. In addition, General Manager Hagekhalil reported on the following:

1. Acknowledged National Safety and Pride Month and the events that Metropolitan will be hosting.
2. Reported on the \$38 million grants awarded to Metropolitan from the Urban Community Drought Relief Grant Program
3. Update on the Colorado River
4. Update on Metropolitan co-sponsorship position of Assemblymember Friedman's AB 1572
5. Update on Orange County Grand Jury report "Historic Rain, Yet Drought Remains."
6. Update on Los Angeles Conservation Corps spring luncheon and the Climate Resiliency Public Partner award to Metropolitan

53273 General Counsel Scully stated she had nothing to add to the written report.

53274 General Auditor Suzuki stated he had nothing to add to the written report.

53275 Ethics Officer Salinas stated he had nothing to add to the written report.

53276 Chair Ortega asked the Directors if there were any comments or discussions on the Approval of the Minutes of the Board of Directors Meeting for May 9, 2023. (Copies have been submitted to each Director, any additions, corrections, or omissions) (Agenda Item 7A). No amendments were made.

53277 Approval of Committee Assignments (Agenda Item 7B). Chair Ortega appointed Vice Chair Camacho to temporarily Chair the Subcommittee on Pure Water Southern California and Regional Conveyance, Director Chacon will remain a member of the committee.

Director Dennstedt will be a member of the Equity, Inclusion, and Affordability Committee

Directors Dick and Abdo were removed from the Ad hoc Committee Facilities Naming, and Directors Garza and McCoy were added to the committee. Vice Chair Camacho was named the Chair of the committee, and Directors Cordero and Fellow will remain members. The Committee will select a location to name in honor of Congresswoman Grace Napolitano.

Chair Ortega announced there will be an Ad hoc Committee on Annexation Policy, and he asked Directors to let him know if they wish to serve.

Chair Ortega called on Vice Chair Quinn to announce the membership of the Subcommittee on Demand Management and Conservation Programs and Priorities:

Vice Chair Quinn appointed Director Ramos as Vice Chair of the Subcommittee on Demand Management and Conservation Programs and Priorities

Chair Ortega called on the Committee Chairs to give a report on Consent Calendar Action Items and to hear recusals before any discussion on the items.

Committee Chair Erdman noted that Agenda Item 7-1 was deferred.

53278 A. amend the Capital Investment Plan for fiscal years 2022/2023 and 2023/2024 to include the Jensen Administration Building Column Panel Replacement, Skinner Chemical Storage Tank Replacement, and the upgrades to the Auld Valley and Red Mountain Control Structures; and b. Award a \$281,900 contract to MMJ Contracting Inc. to replace the GFRC panels in the entrance columns of the Jensen Administration Building, as set forth in Agenda Item 7-2 board letter.

53279 Approve up to \$1.894 million to purchase insurance coverage for Metropolitan's Property and Casualty Insurance Program to renew or replace all the expiring excess liability and specialty insurance policies and maintain the \$25 million self-insured retention for general liability coverage, as set forth in Agenda Item 7-3 board letter.

53280 Approve the Statement of Investment Policy for fiscal year 2023/2024; and delegate authority to the Treasurer to invest Metropolitan's funds for fiscal year 2023/2024, as set forth in Agenda Item 7-4 board letter.

53281 Authorize the General Manager to execute six lease/license amendments and two new license agreements for the installation and upgrade of telecommunication equipment and changes in the terms at existing telecommunication sites known as Edom Hill, Vidal Junction, Crossman Peak, Las Vegas Junction, Searchlight, Christmas Tree, and Black Peak, and to commence occupying a new site known as Super Nap, in Southern California, Southern Nevada, and Southern Arizona, as part of Metropolitan's Desert Microwave Project, as set forth in Agenda Item 7-5 board letter.

53282 Authorize the General Manager to grant a permanent 40-foot easement to Eastern Municipal Water District for water pipeline purposes northeast of Diamond Valley Lake in the city of Hemet within Assessor Parcel Numbers 464-250-002, 464-250-003, 454-270-020 and 454-270-032, as set forth in Agenda Item 7-6 board letter.

53283 By a two-thirds vote, authorize payment of up to \$932,800 for support of the Colorado River Board and Six Agency Committee for FY 2023/2024, as set forth in Agenda Item 7-7 board letter.

53284 Adopt the Mitigated Negative Declaration for the Delta Smelt and Native Species Preservation Project and take related CEQA actions, as set forth in Agenda Item 7-8 board letter.

53285 Authorize adding a \$500,000 line item to the fiscal year 2023/2024 Equal Employment Opportunity Office budget to cover outside legal services; and authorize an agreement with Meyers Nave in an amount not to exceed \$500,000 for ongoing legal advice in support of Equal Employment Opportunity Office activities and Equal Employment Opportunity related personnel and compliance matters, as set forth in Agenda Item 7-9 board letter.

Chair Ortega called for a vote to approve Consent Calendar Items 7A, 7B, 7-2 through 7-9 (**M.I. No. 53276 through 53285**).

Director Quinn moved, seconded by Director Garza that the Board approve the Consent Calendar Items 7A, 7B, 7-2 through 7-9 as follows:

The following is a record of the vote:

Record of Vote on Consent Item(s):		7A, 7B, 7-2 through 7-9							
Member Agency	Total Votes	Director	Present	Yes	Yes Vote	No	No Vote	Abstain	Abstain Vote
Anaheim	5627	Faessel							
Beverly Hills	4267	Pressman	x	x	4267				
Burbank	2893	Ramos	x	x	2893				
Calleguas Municipal Water District	12368	McMillan	x	x	12368				
Central Basin Municipal Water District	18216	Garza	x	x	9108				
		Chacon	x	x	9108				
			Subtotal:		18216				
Compton	599	McCoy	x	x	599				
Eastern Municipal Water District	10502	Armstrong	x	x	10502				
Foothill Municipal Water District	2290	Atwater							
Fullerton	2390	Jung	x	x	2390				
Glendale	3814	Kassakhian	x	x	3814				
Inland Empire Utilities Agency	14663	Camacho	x	x	14663				
Las Virgenes	2927	Peterson	x	x	2927				
Long Beach	6151	Cordero							
Los Angeles	75699	Sutley	x	x	15140				
		Petersen	x	x	15140				
		Quinn	x	x	15140				
		Luna	x	x	15140				
		Repenning	x	x	15140				
			Subtotal:		75699				
Municipal Water Dist. of Orange County	60913	Ackerman	x	x	15228				
		Seckel	x	x	15228				
		Dick	x	x	15228				
		Erdman	x	x	15228				
			Subtotal:		60913				
Pasadena	3716	Kurtz	x	x	3716				
San Diego County Water Authority	63232	Fong-Sakai	x	x	21077				
		Goldberg							
		Miller	x	x	21077				
		Smith	x	x	21077				
			Subtotal:		63232				
San Fernando	238	Ortega	x	x	238				
San Marino	770	Morris	x	x	770				
Santa Ana	3228	Phan	x	x	3228				
Santa Monica	4619	Abdo	x	x	4619				
Three Valleys Municipal Water District	8254	De Jesus	x	x	8254				
Torrance	3416	Lefevre	x	x	3416				
Upper San Gabriel Valley Mun. Wat. Dist.	12688	Fellow	x	x	12688				
West Basin Municipal Water District	25453	Alvarez							
		Gray	x	x	25453				
			Subtotal:		25453				
Western Municipal Water District	13541	Dennstedt	x	x	13541				
Total	362474				348406				
Present and not voting									
Absent	14068								

The motion to approve the Consent Calendar Items 7A, 7B, 7-2 through 7-9 (**M.I. No. 53276 through 53285**)* passed by a vote of 348,406 ayes; 0 noes; 0 abstain; 0 not voting; and 14,068 absent.

***Note: Individual vote tally for Item 7A**

Director Fong-Sakai abstained on Consent Calendar Item 7A due to the fact she was not in attendance at that meeting. The motion to approve the Consent Calendar Item 7A passed by a vote of 327,329 ayes; 0 noes; 21,077 abstain; 0 not voting; and 14,068 absent.

***Note: Individual vote tally for Item 7-6**

Director Armstrong recused himself on Consent Calendar Item 7-6. The motion to approve the Consent Calendar Item 7-6 passed by a vote of 337,904 ayes; 0 noes; 0 abstain; 10,502 not voting; and 14,068 absent.

***Note: Individual vote tally for Item 7-8**

Director Phan recused herself on Consent Calendar Item 7-8 due to the fact that the California Department of Fish and Wildlife are clients of her employer Rutan & Tucker, LLP. The motion to approve the Consent Calendar Item 7-8 passed by a vote of 281,946 ayes; 63,232 noes; 0 abstain; 3,228 not voting; and 14,068 absent.

Chair Ortega called on the Committee Chairs to give a report on Board Items and to hear recusals before any discussion on the items.

53286 Authorize on-call agreements with Kennedy Jenks Consultants Inc., Lee & Ro Inc., and Stantec Consulting Services Inc., in amounts not to exceed \$10 million each, for a maximum period of five years for engineering services, as set forth in Agenda Item 8-1 board letter.

Chair Ortega called for a vote to approve Board Item 8-1 (**M.I. No. 53286**)

Director Erdman moved, seconded by Director Camacho that the Board approve the Board Item 8-1 as follows:

The following is a record of the vote:

Record of Vote on Item:		8-1							
Member Agency	Total Votes	Director	Present	Yes	Yes Vote	No	No Vote	Abstain	Abstain Vote
Anaheim	5627	Faessel							
Beverly Hills	4267	Pressman	x	x	4267				
Burbank	2893	Ramos	x	x	2893				
Calleguas Municipal Water District	12368	McMillan	x	x	12368				
Central Basin Municipal Water District	18216	Garza	x	x	9108				
		Chacon	x	x	9108				
			Subtotal:		18216				
Compton	599	McCoy	x	x	599				
Eastern Municipal Water District	10502	Armstrong	x	x	10502				
Foothill Municipal Water District	2290	Atwater							
Fullerton	2390	Jung	x	x	2390				
Glendale	3814	Kassakhian	x	x	3814				
Inland Empire Utilities Agency	14663	Camacho	x	x	14663				
Las Virgenes	2927	Peterson	x	x	2927				
Long Beach	6151	Cordero							
Los Angeles	75699	Sutley	x	x	15140				
		Petersen	x	x	15140				
		Quinn	x	x	15140				
		Luna	x	x	15140				
		Repenning	x	x	15140				
			Subtotal:		75699				
Municipal Water Dist. of Orange County	60913	Ackerman	x	x	15228				
		Seckel	x	x	15228				
		Dickman	x	x	15228				
		Erdman	x	x	15228				
			Subtotal:		60913				
Pasadena	3716	Kurtz	x	x	3716				
San Diego County Water Authority	63232	Fong-Sakai	x	x	21077				
		Goldberg							
		Miller	x	x	21077				
		Smith	x	x	21077				
			Subtotal:		63232				
San Fernando	238	Ortega	x	x	238				
San Marino	770	Morris	x						
Santa Ana	3228	Phan	x	x	3228				
Santa Monica	4619	Abdo	x	x	4619				
Three Valleys Municipal Water District	8254	De Jesus	x	x	8254				
Torrance	3416	Lefevre	x	x	3416				
Upper San Gabriel Valley Mun. Wat. Dist.	12688	Fellow	x	x	12688				
West Basin Municipal Water District	25453	Alvarez							
		Gray	x						
			Subtotal:						
Western Municipal Water District	13541	Dennstedt	x	x	13541				
Total	362474				322183				
Present and not voting	26223								
Absent	14068								

The motion to approve the Board Item 8-1 (**M.I. No. 53286**) passed by a vote of 322,183 ayes; 0 noes; 0 abstain; 26,223 not voting; and 14,068 absent.

Directors Gray and Morris recused themselves on Board Item 8-1.

Director Gray left the meeting.

Director Erdman moved, seconded by Director Peterson to award a \$16,490,000 contract to J. F. Shea Construction Inc. for furnishing and installation of pre-engineered storage buildings at the Hinds, Eagle Mountain, and Iron Mountain pumping plants.

Director Camacho moved, seconded by Director Jung that the Board approve the Substitute Motion on Agenda Item 8-2 as follows

53287 Deferred awarding a contract for furnishing and installation of pre-engineered storage buildings at the Hinds, Eagle Mountain, and Iron Mountain pumping plants and directed staff to present additional value engineering information for the project at the July Engineering, Operations & Technology meeting and bring an action item back to the Board in August (Agenda Item 8-2).

The following Director(s) asked questions or made comments:

Director(s)

1. Camacho
2. Miller
3. Armstrong
4. Dick
5. Jung
6. Smith
7. Dennstedt
8. De Jesus
9. Seckel
10. Peterson
11. Pressman
12. Fong-Sakai
13. Erdman
14. Phan
15. Kurtz

Chair Ortega and Staff responded to the Directors' comments or questions.

Chair Ortega called for a vote to approve Substitute Motion **(M.I. No. 53287)**

Director Camacho moved, seconded by Director Jung that the Board approve the Substitute Motion on Agenda Item 8-2 as follows:

The following is a record of the vote:

Record of Vote on Item:		8-2 Substitute Motion							
Member Agency	Total Votes	Director	Present	Yes	Yes Vote	No	No Vote	Abstain	Abstain Vote
Anaheim	5627	Faessel							
Beverly Hills	4267	Pressman	x	x	4267				
Burbank	2893	Ramos	x	x	2893				
Calleguas Municipal Water District	12368	McMillan	x	x	12368				
Central Basin Municipal Water District	18216	Garza	x	x	9108				
		Chacon	x	x	9108				
			Subtotal:		18216				
Compton	599	McCoy	x	x	599				
Eastern Municipal Water District	10502	Armstrong	x	x	10502				
Foothill Municipal Water District	2290	Atwater							
Fullerton	2390	Jung	x	x	2390				
Glendale	3814	Kassakhian	x	x	3814				
Inland Empire Utilities Agency	14663	Camacho	x	x	14663				
Las Virgenes	2927	Peterson	x			x	2927		
Long Beach	6151	Cordero							
Los Angeles	75699	Sutley	x	x	15140				
		Petersen	x	x	15140				
		Quinn	x	x	15140				
		Luna	x	x	15140				
		Repenning	x	x	15140				
			Subtotal:		75699				
Municipal Water Dist. of Orange County	60913	Ackerman	x	x	15228				
		Seckel	x	x	15228				
		Dick	x	x	15228				
		Erdman	x	x	15228				
			Subtotal:		60913				
Pasadena	3716	Kurtz	x	x	3716				
San Diego County Water Authority	63232	Fong-Sakai	x	x	21077				
		Goldberg							
		Miller	x	x	21077				
		Smith	x	x	21077				
			Subtotal:		63232				
San Fernando	238	Ortega	x	x	238				
San Marino	770	Morris	x			x	770		
Santa Ana	3228	Phan	x			x	3228		
Santa Monica	4619	Abdo	x			x	4619		
Three Valleys Municipal Water District	8254	De Jesus	x	x	8254				
Torrance	3416	Lefevre	x	x	3416				
Upper San Gabriel Valley Mun. Wat. Dist.	12688	Fellow	x	x	12688				
West Basin Municipal Water District	25453	Alvarez							
		Gray							
			Subtotal:						
Western Municipal Water District	13541	Dennstedt	x			x	13541		
Total	362474				297868		25085		
Present and not voting									
Absent	39521								

The motion to approve Agenda Item 8-2 Substitute Motion (**M.I. No. 53287**) passed by a vote of 297,868 ayes; 25,085 noes; 0 abstain; 0 not voting; and 39,521 absent.

Director Chacon left the meeting.

Director Petersen left the meeting.

Director Quinn left the meeting.

53288 Express support, if amended, on two legislative bond proposals, Assembly Bill 1567 (Garcia) and Senate Bill 867 (Allen), to provide funding for water projects to address climate change impact, as set forth in Agenda Item 8-3 board letter.

Chair Ortega called for a vote to approve Board Item 8-3 (**M.I. No. 53288**)

Director Jung moved, seconded by Director Morris that the Board approve the Board Item 8-3 as follows:

The following is a record of the vote:

Record of Vote on Item:		8-3							
Member Agency	Total Votes	Director	Present	Yes	Yes Vote	No	No Vote	Abstain	Abstain Vote
Anaheim	5627	Faessel							
Beverly Hills	4267	Pressman	x	x	4267				
Burbank	2893	Ramos	x	x	2893				
Calleguas Municipal Water District	12368	McMillan	x	x	12368				
Central Basin Municipal Water District	18216	Garza	x	x	18216				
		Chacon							
		Subtotal:			18216				
Compton	599	McCoy	x	x	599				
Eastern Municipal Water District	10502	Armstrong	x	x	10502				
Foothill Municipal Water District	2290	Atwater							
Fullerton	2390	Jung	x	x	2390				
Glendale	3814	Kassakhian	x	x	3814				
Inland Empire Utilities Agency	14663	Camacho	x	x	14663				
Las Virgenes	2927	Peterson	x	x	2927				
Long Beach	6151	Cordero							
Los Angeles	75699	Sutley	x	x	25233				
		Petersen							
		Quinn							
		Luna	x	x	25233				
		Repenning	x	x	25233				
		Subtotal:			75699				
Municipal Water Dist. of Orange County	60913	Ackerman	x	x	15228				
		Seckel	x	x	15228				
		Dick	x	x	15228				
		Erdman	x	x	15228				
		Subtotal:			60913				
Pasadena	3716	Kurtz	x	x	3716				
San Diego County Water Authority	63232	Fong-Sakai	x	x	21077				
		Goldberg							
		Miller	x	x	21077				
		Smith	x	x	21077				
		Subtotal:			63232				
San Fernando	238	Ortega	x	x	238				
San Marino	770	Morris	x	x	770				
Santa Ana	3228	Phan	x	x	3228				
Santa Monica	4619	Abdo	x	x	4619				
Three Valleys Municipal Water District	8254	De Jesus	x	x	8254				
Torrance	3416	Lefevre	x	x	3416				
Upper San Gabriel Valley Mun. Wat. Dist.	12688	Fellow	x	x	12688				
West Basin Municipal Water District	25453	Alvarez							
		Gray							
		Subtotal:							
Western Municipal Water District	13541	Dennstedt	x	x	13541				
Total	362474				322953				
Present and not voting									
Absent	39521								

The motion to approve the Board Item 8-3 (**M.I. No. 53288**) passed by a vote of 322,953 ayes; 0 noes; 0 abstain; 0 not voting; and 39,521 absent.

Chair Ortega asked if any Directors requested to hear or discuss Item 8-4 in closed session. No requests were made.

53289 Authorize the General Manager to exercise discretion under Administrative Code Section 6101(k) to enter into a successor Memorandum of Understanding with the Supervisors' Association, as set forth in Agenda Item 8-4 board letter.

Director Chacon entered the meeting.

Director Petersen entered the meeting.

Director Jung left the meeting.

Director Lefevre left the meeting.

Chair Ortega called for a vote to approve Board Item 8-4 (**M.I. No. 53289**)

Director Ramos moved, seconded by Director Peterson that the Board approve the Board Item 8-4 as follows:

The following is a record of the vote:

Record of Vote on Item:		8-4							
Member Agency	Total Votes	Director	Present	Yes	Yes Vote	No	No Vote	Abstain	Abstain Vote
Anaheim	5627	Faessel							
Beverly Hills	4267	Pressman	x	x	4267				
Burbank	2893	Ramos	x	x	2893				
Calleguas Municipal Water District	12368	McMillan	x	x	12368				
Central Basin Municipal Water District	18216	Garza	x	x	9108				
		Chacon	x	x	9108				
		Subtotal:			18216				
Compton	599	McCoy	x	x	599				
Eastern Municipal Water District	10502	Armstrong	x	x	10502				
Foothill Municipal Water District	2290	Atwater							
Fullerton	2390	Jung							
Glendale	3814	Kassakhian	x	x	3814				
Inland Empire Utilities Agency	14663	Camacho	x	x	14663				
Las Virgenes	2927	Peterson	x	x	2927				
Long Beach	6151	Cordero							
Los Angeles	75699	Sutley	x	x	18925				
		Petersen	x	x	18925				
		Quinn							
		Luna	x	x	18925				
		Repenning	x	x	18925				
		Subtotal:			75699				
Municipal Water Dist. of Orange County	60913	Ackerman	x	x	15228				
		Seckel	x	x	15228				
		Dick	x	x	15228				
		Erdman	x	x	15228				
		Subtotal:			60913				
Pasadena	3716	Kurtz	x	x	3716				
San Diego County Water Authority	63232	Fong-Sakai	x	x	21077				
		Goldberg							
		Miller	x	x	21077				
		Smith	x	x	21077				
		Subtotal:			63232				
San Fernando	238	Ortega	x	x	238				
San Marino	770	Morris	x	x	770				
Santa Ana	3228	Phan	x	x	3228				
Santa Monica	4619	Abdo	x	x	4619				
Three Valleys Municipal Water District	8254	De Jesus	x	x	8254				
Torrance	3416	Lefevre							
Upper San Gabriel Valley Mun. Wat. Dist.	12688	Fellow	x	x	12688				
West Basin Municipal Water District	25453	Alvarez							
		Gray							
		Subtotal:							
Western Municipal Water District	13541	Dennstedt	x	x	13541				
Total	362474				317147				
Present and not voting									
Absent	45327								

The motion to approve the Board Item 8-4 (**M.I. No. 53289**)* passed by a vote of 317,147 ayes; 0 noes; 0 abstain; 0 not voting; and 45,327 absent.

53290 Chair Ortega announced Board Information Item 9-2, Ordinance No. 152 is located on Metropolitan's website.

Chair Ortega asked if there were questions or need for discussion for Board Information Items 9-1 and 9-2. No requests were made.

53291 Chair Ortega asked if there were any Other Matters Items. There were none.

Director Jung entered the meeting


53292 Chair Ortega asked if there were any Follow-Up Items. Chair Ortega announced that the June 13, 2023, Board meeting would be Vice Chair Repenning's last meeting and the asked that the Board take a group photo. General Manager Hagekhalil and Vice Chair Repenning made brief remarks.

Director Quinn entered the meeting.

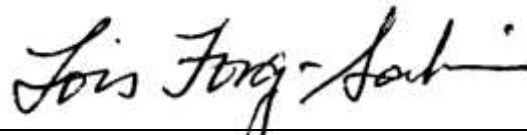
Chair Ortega thanked Mr. Parker for joining the Board today and presented him with a small gift of appreciation.

53293 Chair Ortega asked if there were any Future Agenda Items. Request to adjourn the meeting in honor of the late Former Los Angeles County Supervisor Gloria Molina.

53294 There being no objection, at 2:49 p.m., Chair Ortega adjourned the meeting in honor of the late Former Los Angeles County Supervisor Gloria Molina.



ADÁN ORTEGA
CHAIR OF THE BOARD



LOIS FONG-SAKAI
SECRETARY OF THE BOARD



● **Board of Directors**
Engineering, Operations, and Technology Committee

7/11/2023 Board Meeting

7-1

Subject

Authorize an increase of \$950,000 in change order authority for the contract with W.A. Chester LLC to terminate 6.9 kV power cables at all five Colorado River Aqueduct pumping plants; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

The 6.9 kV power cables are a critical infrastructure component that provides electrical power from the main switchgear buildings to the Colorado River Aqueduct (CRA) main pumps. In February 2019, Metropolitan's Board awarded a construction contract to remove and replace the original power cables at the five CRA pumping plants. During the first stage of the construction contract, staff determined that the contractor was not able to successfully perform the cable terminations to connect the cables to the pumps and power source for Pump Units 1 through 5 at each plant. Metropolitan subsequently directed the contractor to install "temporary" power cables for these pumps to ensure operation of the pump plants, deleted the remaining contract work, and terminated the contract. Metropolitan staff have successfully repaired 46 of the original 110 terminations for Pump Units 1 through 5 during 2020-2022. However, Metropolitan staff is focused on operation and maintenance activities and can no longer support the cable termination efforts. On January 13, 2023, Metropolitan solicited bids from skilled contractors to perform additional terminations and awarded a \$250,000 contract under the General Manager's authority to test a selected contractor's ability to perform the terminations. The contractor successfully completed an additional 24 terminations during the recent 2023 CRA shutdown. Based on this success, staff recommends that the change order authority for this construction contract be increased by \$950,000 so the contractor can complete the remaining work.

Details

Background

The CRA is a 242-mile-long conveyance system that transports water from the Colorado River to Lake Mathews. It consists of five pumping plants; 124 miles of tunnels, siphons, and reservoirs; 63 miles of canals; and 55 miles of conduits. The aqueduct was constructed in the late 1930s and was placed into service in 1941.

Each of the five CRA pumping plants has nine pumps and motors. Power is transmitted to the motors via 3-inch-diameter 6.9 kV cables, which run through a tunnel that connects each switch house to each pump house. The quantity of cables varies from nine to twenty-seven per plant and varies in length from approximately 200 to 650 feet. The 6.9 kV power cables are paper insulated lead covered (PILC) cables which consist of a copper core wrapped with oil-soaked paper strips, covered with a lead jacket. The oil-soaked paper provides the insulating properties for the cable. Hence the retention of oil in the cables is necessary to ensure the safe operation of the cables over many years of service. These cables were installed in four phases from 1939 through 1959. After 60-80 years of continuous service, regular cable testing by staff indicates that the power cables have deteriorated and require replacement.

After completion of a comprehensive study of rehabilitation options, replacement of the PILC cables in-kind was selected because of its excellent cable service life. Also, its smaller size allows the cable to be pulled through existing conduits within the pump house walls, greatly simplifying construction and reducing the duration that the pumps would be out of service. Other cables, sized to carry an equivalent amount of power to the pumps, have a

reduced service life, typically 40 years, and are larger in diameter, which would have required extensive modification to the existing pump house to route the cables to the pumps. As part of the study, staff compiled a list of successful recent work by both PILC cable and termination manufacturers. In addition, the contract documents required bidders have recent work experience installing PILC cable.

In February 2019, Metropolitan's Board awarded a \$16,452,832 construction contract to Baker Electric Inc. to remove and replace the 6.9 kV PILC power cables for all nine pump units at the five CRA pumping plants and rehabilitate the cable tunnels with improved lighting, ventilation, and cooling systems. The construction contract work was sequenced so that the contractor had to complete the removal, installation, and start-up of the first five pump units before the contractor could proceed to work on the remaining units. This sequence ensured a minimum 5-pump flow availability for water deliveries at all times during construction.

As the contractor began terminating the new cables at the pumps and switchgear locations for the first five pump units, oil was detected to be leaking from the terminated cables. The specification for the terminations required a leak-free final product based on the use of specified materials and installation practices. Metropolitan informed the contractor that their work on the terminations was defective. In an attempt to resolve the issue, Metropolitan worked collaboratively with the contractor to identify an approach to the termination methodology that would allow the contractor to correct the deficiencies. After numerous attempts, the contractor failed to successfully install any leak-free terminations. To ensure that Metropolitan would have power to operate the CRA pumps, Metropolitan directed the contractor to install temporary power cables while a solution was implemented. Metropolitan continued to work closely with the contractor; however, due to the contractor's inability to repair the leaking terminations, Metropolitan deleted the remaining work and terminated the contract. Baker Electric Inc. subsequently filed a lawsuit against Metropolitan, which is currently ongoing.

Following the contract termination, Metropolitan brought a consultant on-board to determine the cause of the failures. After an assessment, the consultant concluded that the leaks were likely due to installation error. To minimize delays, Metropolitan decided to perform the terminations using its own forces under the supervision of a trained installer with experience in such terminations. To date, Metropolitan forces have successfully completed terminations of the pump units at Iron Mountain, Gene, and Intake pumping plants with a 74 percent success rate.

Staff assessed the option of continuing the termination work with in-house staff. However, Metropolitan staff is focused on operation and maintenance activities and can no longer support the cable termination efforts. Therefore, a specialized contractor was needed to perform the outstanding terminations at Hinds and Eagle Mountain pumping plants and repair the leaks observed at the other three plants. Staff prepared contract specifications to solicit bids for the remaining work.

Specification No. 2061 for the termination of cables was advertised on January 13, 2023. Two bids were received and opened on January 20, 2023. The bid from The Hild Corporation dba Industrial High Voltage did not meet the qualification requirements detailed in the specifications and was deemed nonresponsive. The bid from W.A. Chester LLC (Chester) complied with the requirements of the specification. A contract was awarded under the General Manager's authority to Chester for an amount not to exceed \$250,000. The initial contract was structured as a pilot effort to allow Chester to demonstrate that they could successfully perform the PILC terminations. Chester successfully completed the first two units at Hinds Pumping Plant during the recent 2023 CRA shutdown. Based on these successful results, Metropolitan directed Chester to terminate the remaining two units at the Hinds Pumping Plant by exercising the General Manager's change order authority of \$250,000 on this contract. To date, approximately \$330,000 has been expended under this contract with Chester, and power cables for four pump units at Hinds Pumping Plant have been terminated with a 96 percent success rate.

Staff now recommends moving forward with Chester to complete the PILC power cable terminations for the remaining pump units at Eagle Mountain Pumping Plant as well as repairing any minor leaks on terminations that were previously completed by Metropolitan forces. In total, 64 terminations will be either installed or repaired by Chester under this expanded contract.

Budget Impacts

In accordance with the April 2022 action on the biennial budget for fiscal years 2022/23 and 2023/24, the General Manager will authorize staff to proceed with repairing and terminating 6.9 kV power cables at all five CRA pumping plants. Based on the current Capital Investment Plan (CIP) expenditure forecast, funds for work to

be performed pursuant to this action during the current biennium are available within the CIP Appropriation for Fiscal Years 2022/23 and 2023/24 (Appropriation No. 15508). This project has been reviewed in accordance with Metropolitan's CIP prioritization criteria and was approved by Metropolitan's CIP evaluation team to be included in the CRA Reliability Program. Approval of this board action to increase the contract's change order authority will lead to the expenditure of \$1.49 million in budgeted capital funds. All expenditures will be incurred in the current biennium and have been previously authorized.

As previously reported, the original contract for performance of this work is the subject of litigation in the matter of *Baker Electric, Inc. v. Metropolitan Water District of Southern California*. Metropolitan has filed a cross-complaint against Baker Electric and will seek recovery of costs incurred in connection with this repair work.

CRA 6.9 kV Power Cables Termination – Increase in Change Order Authority (Contract No. 2061)

The original value of this contract was \$250,000. Per Metropolitan's Administrative Code, the General Manager has the authority to execute change orders for this contract up to a maximum of \$250,000. To date, \$250,000 in change orders have been executed, for a total contract amount value of \$500,000; approximately \$330,000 has been expended under this contract. To complete the remaining work, staff recommends that the change order authority be increased by \$950,000 for a new maximum change order amount of \$1,200,000. With the increase in change order authority, the total contract value will be \$1,450,000.

The scope of the additional work consists of terminating the power cables on four pump units (24 cable terminations) at Eagle Mountain Pumping Plant and repair of approximately 16 leaking cable terminations which are located at other plants. The planned work includes: (1) removal of the leaking terminations; (2) preparation of the cable; and (3) installation of Metropolitan-furnished termination kits. Metropolitan force activities will include shutting down and isolating the pumps to be worked on, providing safe access for the contractor by de-energizing and grounding existing electrical equipment, and testing and start-up of the new equipment. The remaining work will start in fall 2023 with completion in spring 2024 since the termination of these cables is not recommended in extremely hot summer weather.

This action authorizes an increase in the General Manager's authority to execute change orders from \$250,000 to an aggregate amount not to exceed \$1,200,000 for repairing and terminating 6.9kV power cables at all five pumping plants.

A total of \$1.49 million has been budgeted for this work. In addition to the amount of the added contract work described above, other funds to be allocated include \$190,000 for Metropolitan force activities as described above; \$175,000 for construction management and inspection; \$100,000 for procurement of cable termination kits; \$15,000 for technical support during construction and responding to requests for information; and \$60,000 for contract administration, project controls, and project management. **Attachment 1** provides the allocation of the required funds.

Alternatives Considered

Staff considered several alternatives for the re-termination of the 6.9 kV power cables, including training of additional Metropolitan staff or hiring temporary employees to perform the work. However, the skills required to perform this work are highly specialized, making it challenging to find experienced, qualified individuals to perform the work successfully. The selected alternative will ensure completion of the work by qualified specialists in the most cost-effective and expeditious manner.

Summary

This action authorizes an increase of \$950,000 in the General Manager's authority to execute change orders for Contract No. 2061 with W.A. Chester LLC for repairing and terminating 6.9 kV pump motor power cables at all five CRA pumping plants. See **Attachment 1** for the Allocation of Funds and **Attachment 2** for the Location Map.

Project Milestone

May 2024 – Construction completion

Policy

Metropolitan Water District Administrative Code Section 8121: General Authority of the General Manager to Enter Contracts

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

By Minute Item 51494, dated February 12, 2019, the Board awarded a \$16,452,832 contract to Baker Electric, Inc. to replace the 6.9 kV power cables at all five CRA pumping plants.

By Minute Item 52778, dated April 12, 2022, the Board appropriated a total of \$600 million for projects identified in the Capital Investment Plan for Fiscal Years 2022/2023 and 2023/2024.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is in furtherance of a project that was previously determined to be exempt under Class 1 (Section 15301) and Class 2 (Section 15302) of the State CEQA Guidelines on February 12, 2019. With the current board action, there is no substantial change proposed since the original project was first approved in 2019. Hence, the project fully complies with CEQA and the State CEQA Guidelines. Accordingly, no further CEQA documentation is necessary for the Board to act on the proposed action.

CEQA determination for Option #2:

None required

Board Options

Option #1

Authorize an increase of \$950,000 in change order authority for the contract with W.A. Chester LLC to terminate 6.9 kV power cables at all five CRA pumping plants.

Fiscal Impact: Expenditure of \$1.49 million in capital funds. All funds will be incurred in the current biennium and have been previously authorized.

Business Analysis: This option will allow the timely completion of all remaining cable termination work and removal of the temporary power cables which interfere with pump house maintenance activities.

Option #2

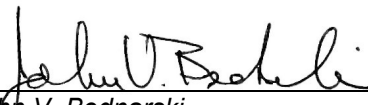

Do not authorize an increase in change order authority.

Fiscal Impact: Additional costs would likely be incurred in the future as additional contract(s) will be needed to complete the work.

Business Analysis: This option is unlikely to result in lower costs for the extra work performed and would delay the project's completion.

Staff Recommendation

Option #1

 _____ John V. Bednarski Manager/Chief Engineer Engineering Services	6/20/2023 _____ Date
 _____ Adel Hagekhalil General Manager	6/29/2023 _____ Date

Attachment 1 – Allocation of Funds**Attachment 2 – Location Map**

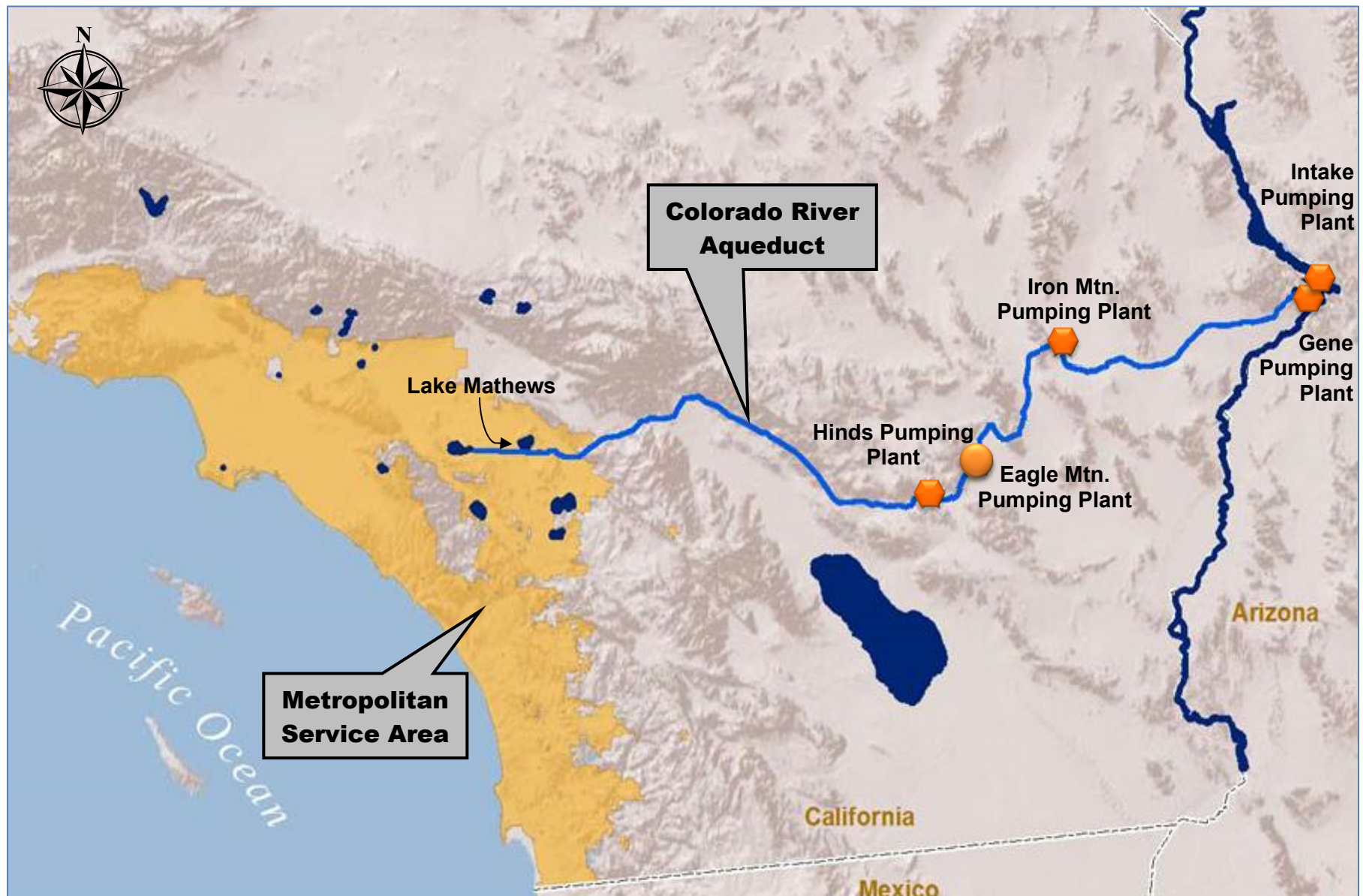
Ref# es12686500

Allocation of Funds for CRA 6.9 kV Motor Power Cable Terminations

	Current Board Action (July 2023)
Labor	
Studies & Investigations	\$ -
Final Design	-
Owner Costs (Program mgmt., Contract admin.)	60,000
Submittals Review & Record Drwgs.	15,000
Construction Inspection & Support	175,000
Metropolitan Force Construction	190,000
Materials & Supplies	90,000
Incidental Expenses	10,000
Professional/Technical Services	-
Right-of-Way	-
Equipment Use	-
Contracts	-
W.A. Chester LLC	950,000
Remaining Budget	-
Total	\$ 1,490,000

The total amount expended to date to install the 6.9 kV power cables at all five CRA pumping plants is approximately \$23.4 million. The total estimated cost to complete the installation of the 6.9kV power cables at all five plants, including the amount appropriated to date, funds allocated for the work described in this action, and future construction costs, is anticipated to range from \$44 million to \$45 million.

Location Map





Engineering, Operations, & Technology Committee

Change Order Authority Increase for Termination of CRA Motor Power Cables

Item 7-1

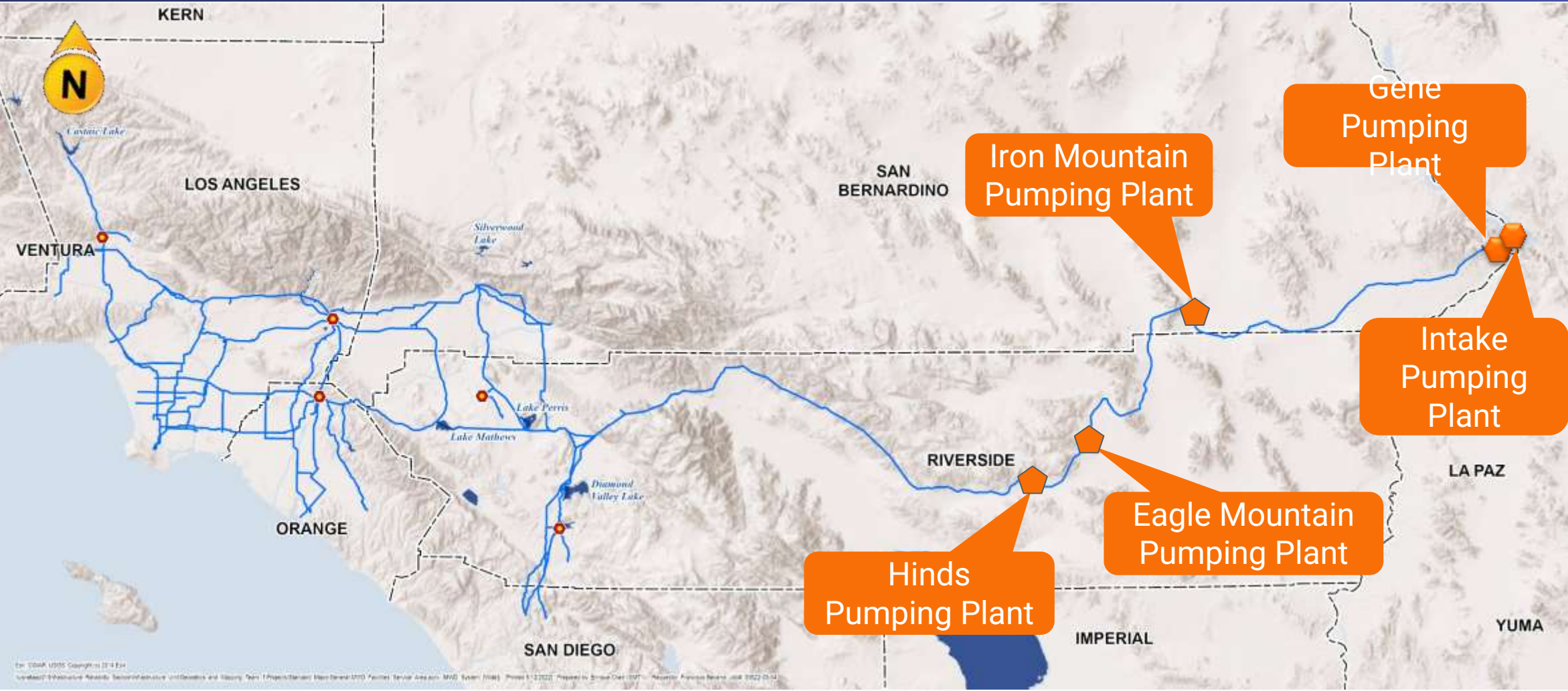
July 10, 2023

Change Order Authority CRA 6.9kV Motor Power Cables Termination

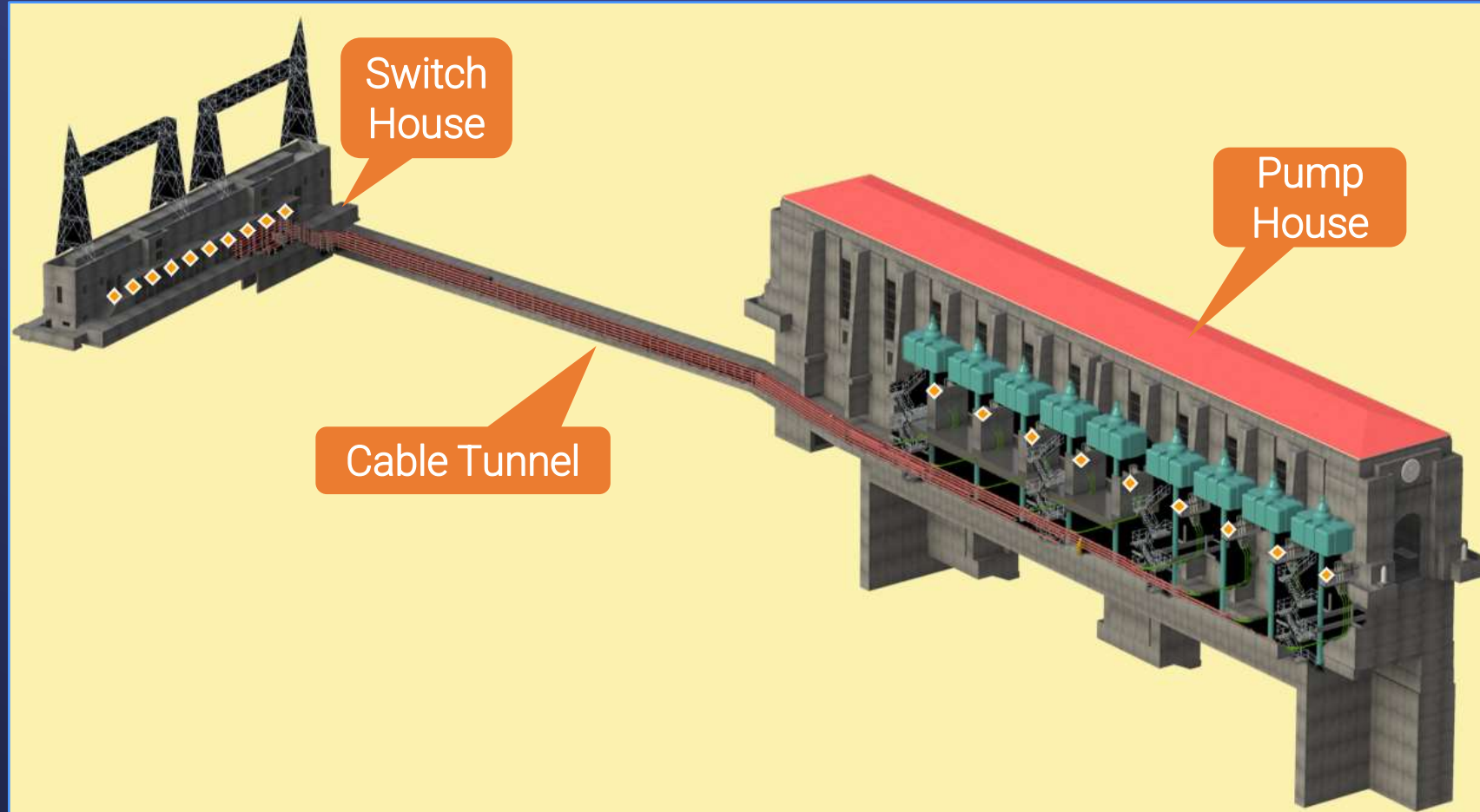
Current Action

- Authorize an increase of \$950,000 in change order authority for the contract to terminate 6.9kV power cables at all five Colorado River Aqueduct pump plants

Project Location



Background



- Installed in the 1930s
- Provide power to main pump motors
- Cables have begun to deteriorate & lose insulative properties

CRA 6.9kV Motor Power Cables Termination



Leaking Termination

Background

- February 2019 – Contract awarded to Baker Electric Inc.
 - Remove & replace power cables
 - Rehabilitate cable tunnels
- Completed 110 of 198 terminations
 - Oil leaks detected in all terminations
 - 0% success rate
- Metropolitan worked closely with contractor to resolve the leaks
- Contractor directed to install temporary cables to power the pumps
- Contract terminated

CRA 6.9kV Motor Power Cables Termination



Temporary cables

Background

- Metropolitan staff began terminating the cables
- Completed 62 of 110 terminations
 - 46 terminations successful (74% success rate)
- Staff redeployed to focus on O&M activities
- Multiple options considered to find qualified termination contractors
 - Proceeded with bid solicitation

CRA 6.9kV Motor Power Cables Termination



W.A. Chester LLC
Terminated Cable

Contract Scope

- Jan. 2023 - Contract awarded to W.A. Chester LLC
- Contract amount - \$250,000
- Contract scope
 - De-termination of existing leaking terminations
 - Re-termination of cables using Metropolitan furnished termination kits
- Contract structured as a pilot project

Change Order Authority

CRA 6.9kV Motor Power Cables Termination

Change Order Authority Limits

- Change order authority determined by Admin. Code (Section 8123)
- GM authority to execute change orders is the larger of:
 - 5% of the original contract amount
 - \$250,000
- Board approves any increase in authority
- Change Order Authority – CRA termination of motor power cables project
 - Remaining work for units 1 to 5 exceeds current change order authority



Application of heat to the termination kit



Switch house cable installation

Current Contract Status

- February 2023 – 24 cable terminations completed by W.A. Chester LLC at Hinds Plant
 - 23 terminations successful (96% success rate)
- Upcoming Work
 - October 2023 – Terminate 24 cables at Eagle Mountain Plant
 - January to March 2024 – Repair approx. 16 cable terminations at all five CRA pump plants

Change Order Authority Increase

Contract No. 2061

- Original contract value: \$250,000
- Current change order authority: \$250,000
- Change orders executed to date: \$80,000
- Amount expended to date under contract \$330,000

Requested Action

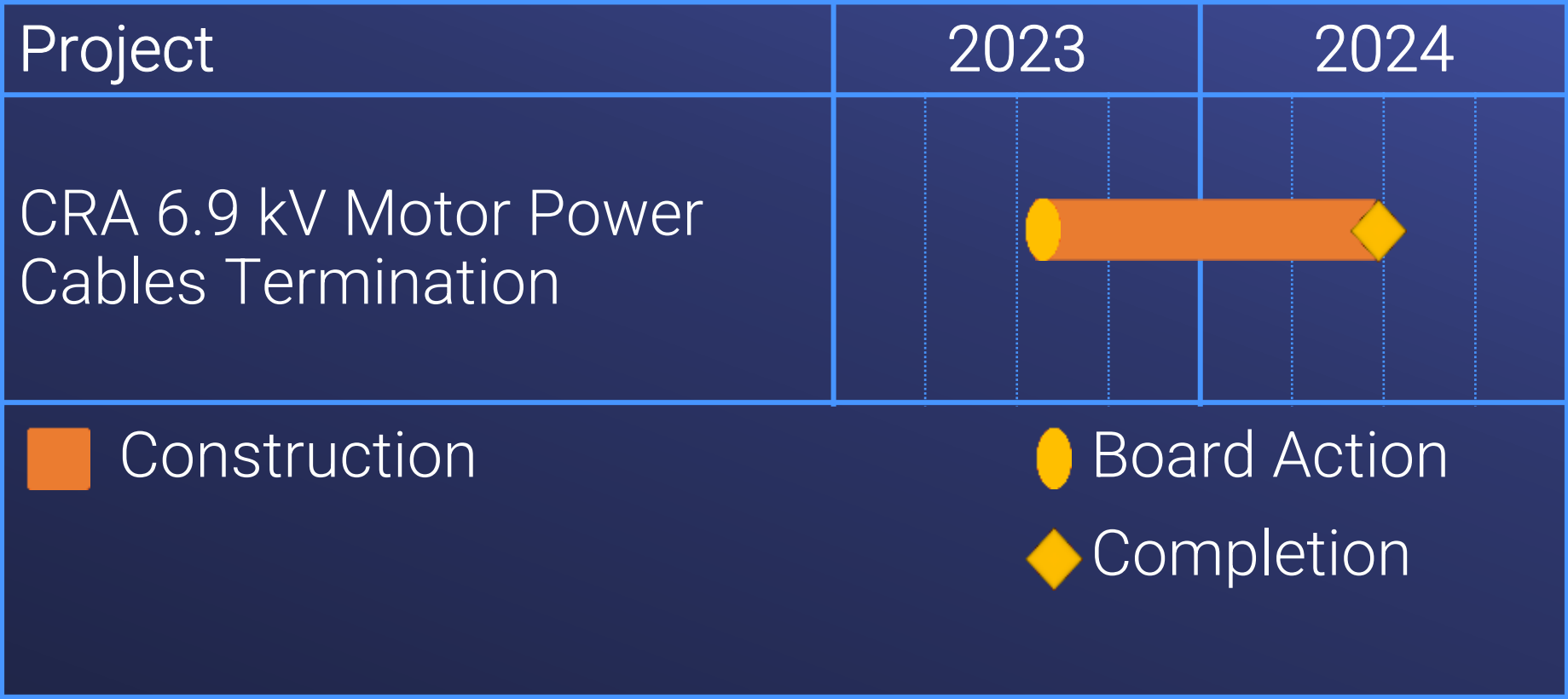
- Increase change order authority by: \$950,000
- New change order authority: \$1,200,000

CRA 6.9kV Motor Power Cables Termination

Alternatives

- Alternatives to execute the work
 - Train additional Metropolitan staff to perform the terminations
 - Hire temporary employees to perform the terminations
 - Re-advertise to get competitive bids for work
- Selected Alternative
 - Use current contractor to complete change order work
 - Work completed in a timely & cost-effective manner
 - Takes advantage of reduced CRA flows in 2023/2024

Project Schedule



CRA 6.9kV Motor Power Cables Termination

Approach for Units 6-9

- Evaluate performance of cable termination of Units 1-5 over two summers
- Advertise contract for Units 6-9 in late 2024
 - Pull out old cables/pull in new cables
 - Install temporary cables to allow operation of units
- Issue specialty contract for cable terminations
 - Prequalified contractor
 - Likely a time & materials contract

Board Options

- Option #1
Authorize an increase of \$950,000 in change order authority for the contract with W.A. Chester LLC to terminate 6.9 kV power cables at all five CRA pumping plants.
- Option #2
Do not authorize an increase in change order authority.

Staff Recommendation

- Option #1





• **Board of Directors**
Engineering, Operations, and Technology Committee

7/11/2023 Board Meeting

7-2

Subject

Authorize an increase of \$2 million to an agreement with Jacobs Engineering Group Inc. for a new not-to-exceed total amount of \$2.65 million for final design of the first stage of security upgrades for the Colorado River Aqueduct Region; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

Metropolitan safeguards critical infrastructure and personnel through a multi-layered combination of physical barriers and security systems, contracted security guard services, and employee awareness. A comprehensive assessment has identified the need to enhance existing security measures at the five Colorado River Aqueduct (CRA) pumping plants and the Camino Electrical Switching Station. The planned improvements are consistent with Metropolitan's latest security and technology standards for essential facilities. The work will be conducted in two stages. This action authorizes an amendment to an existing agreement for final design services for Stage 1 upgrades to the security systems at all five CRA pumping plants and the Camino Switching Station.

Details

Background

The CRA is a 242-mile-long conveyance system that transports water from the Colorado River to Lake Mathews. It consists of five pumping plants; 124 miles of tunnels, siphons, and reservoirs; 63 miles of canals; and 44 miles of cut-and-cover conduits. The aqueduct was constructed in the 1930s and was placed into service in 1941. Metropolitan's Camino Electrical Switching Station is located in a remote area approximately 25 miles west of Needles, California. The Camino Substation transmits power from Hoover Dam via two power lines; one power line extends to the Gene and Intake pumping plants, and the other line extends to Iron Mountain, Eagle Mountain, and Hinds pumping plants.

When the CRA desert facilities were constructed over 80 years ago, the desert region was undeveloped. Since then, significant development has taken place in the vicinity of the Metropolitan's desert facilities. In 2019, a comprehensive security assessment of the five CRA pumping plants and the Camino Electrical Switching Station was completed. The assessment resulted in numerous recommendations for security upgrades at these facilities.

Examples of the issues at each of the five CRA pumping plants include security fencing and entry checkpoints. Upgraded security entry checkpoints and enhanced perimeter control are needed at each of the pump plants to properly control ingress and egress and control unauthorized public access. Additionally, the pumping plants have limited video surveillance equipment; and existing card readers at plant entrances are outdated and near the end of their service life. Security upgrades were also recommended for the Camino Electrical Switching Station, as this facility is critical for the operation of the CRA system.

In February 2022, the Board authorized a consultant agreement for preliminary design to upgrade the security infrastructure in the CRA region. Preliminary design for the security improvements is complete, and staff recommends proceeding with final design in two stages. Stage 1, which is the subject of this action, includes design activities related to the installation of cameras, motion detectors, and card readers at the five pumping plants and the Camino Substation. Additionally, Stage 1 design work at the Iron Mountain Pumping Plant will

address upgrades of perimeter fencing with access gates at patrol routes; a permanent guard station at the plant's main entrance; and physical security measures, including facility signage, access control, and roadway improvements. Stage 2 activities will include the provision of similar physical security measures at the remaining four CRA pumping plants and the Camino Substation. The approach will prioritize replacement of digital security components in the CRA region, which are rapidly approaching the end of their useful life, address the physical risks at Iron Mountain Pumping Plant, and allow staff to incorporate lessons learned at the remaining pumping plants and the Camino Switching Station. Staff will return to the Board at a later date for final design of Stage 2 security improvements at the remaining five sites. Staff will also return to the Board as necessary to award construction contract(s) for the Stage 1 and Stage 2 security improvements.

Budget Impact

In accordance with the April 2022 action on the biennial budget for fiscal years 2022/23 and 2023/24, the General Manager will authorize staff to proceed with the action described herein, pending board authorization of the increase to the existing agreement described below. Based on the current Capital Investment Plan (CIP) expenditure forecast, funds for work to be performed pursuant to this action during the current biennium are available within the CIP Appropriation for Fiscal Years 2022/23 and 2023/24 (Appropriation No. 15525). An expenditure of \$3.3 million is anticipated for the Stage 1 final design phase of this project. All costs will be incurred in the current biennium and have been previously authorized. This project has been reviewed in accordance with Metropolitan's CIP prioritization criteria and was approved by Metropolitan's CIP evaluation team to be included in the CRA Reliability Program.

Stage 1 Security Upgrades for the CRA Region – Final Design

Planned security upgrades for all six sites include the installation of high-resolution cameras with 24/7 video recording capabilities, radar detectors with enhanced capability of land and aerial threat detection, and card readers for improved access control. In addition, Stage 1 design work will include physical security improvements at Iron Mountain Pumping Plant, such as upgraded perimeter fencing, crash-rated entry gates with controlled ingress and egress, permanent guard stations to accommodate around-the-clock staffing, LED lighting, remote speakers, and facility signage.

Planned final design activities will be conducted by a consultant as described below. Metropolitan staff will coordinate final design with the facility's users and provide consultant oversight and project management.

A total of \$3.3 million is required for this work. Allocated funds include \$2,000,000 for the final design activities by Jacobs Engineering Group Inc., as described below; \$15,000 for review of biological and cultural resources by Socal Bio Environmental LLC, under an existing agreement; \$50,000 for potholing services to confirm the location of existing electrical ductbanks; and \$75,000 for constructability review. The potholing services and constructability review will be performed by specialty firms under contracts planned to be executed under the General Manager's Administrative Code authority to award construction contracts of \$250,000 or less. Allocated funds for Metropolitan staff activities include \$273,000 for technical oversight to review consultant's work, record drawing updates for consultant use, and constructability review activities; \$417,000 for survey and mapping, environmental documentation, project management and project controls; and \$470,000 for remaining budget. **Attachment 1** provides the allocation of the required funds.

Final design for Stage 1 work will be performed by Jacobs Engineering Group Inc. Engineering Services' performance metric target range for final design with construction more than \$3 million is 9 to 12 percent. For this project, the performance metric goal for final design is 11.7 percent of the total construction cost. The total estimated cost for design is \$2.273 million, which includes \$2 million for Jacobs Engineering and \$273,000 for Metropolitan staff. The estimated cost of construction for Stage 1 of this project is anticipated to range from \$19.5 million to \$21.5 million.

Engineering Services (Jacobs Engineering Group Inc.) – Amendment to Agreement

Jacobs Engineering will provide final design services under an existing board-authorized agreement for the Stage 1 security upgrades. The planned final design activities for Jacobs Engineering will include:

- (1) development of final design drawings and specifications; (2) technical assistance through bidding;
- (3) participation in a constructability review; and (4) preparation of an engineer's cost estimate.

Jacobs Engineering was originally prequalified to provide engineering support services via Request for Qualifications 1215 and completed the preliminary design for security upgrades in the CRA region under an existing agreement.

This action authorizes an increase of \$2 million to the existing agreement with Jacobs Engineering for a new not-to-exceed total of \$2.65 million to perform final design. For this agreement, Metropolitan has established a Small Business Enterprise participation level of 10 percent. Jacobs Engineering has agreed to meet this level of participation. The planned subconsultants for this work are listed in **Attachment 2**.

Alternatives Considered

Alternatives considered for completing final design of the Stage 1 security upgrades for the CRA Region included assessing the availability and capability of in-house Metropolitan staff to conduct this work. Metropolitan's staffing strategy for utilizing consultants and in-house Metropolitan staff has been: (1) to assess current work assignments for in-house staff to determine the potential availability of staff to conduct this work; and (2) for long-term rehabilitation projects, when resource needs exceed available in-house staffing or require specialized technical expertise.

After assessing the current workload for in-house staff, the relative priority of this project, and the specialized technical expertise required, staff recommends the use of a professional services agreement to complete the subject project. This approach will allow for the completion of not only this program, but also other budgeted capital projects within their current schedules.

Summary

This action authorizes an increase of \$2 million to an existing agreement with Jacobs Engineering for a new not-to-exceed amount of \$2.65 million for final design of Stage 1 security upgrades at all five CRA pumping plants and the Camino Electrical Switching Station, along with final design of additional perimeter security improvements at Iron Mountain Pumping Plant. See **Attachment 1** for the Allocation of Funds, **Attachment 2** for the List of Subconsultants, and **Attachment 3** for the Location Map.

Project Milestone

March 2024 – Completion of final design for Stage 1 security upgrades for the CRA region

Policy

Metropolitan Water District Administrative Code Section 8121: General Authority of the General Manager to Enter Contracts

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

By Minute Item 52701, dated February 8, 2022, the Board authorized an agreement with Jacobs Engineering Group Inc. for preliminary design to improve physical security at the CRA pumping plants.

By Minute Item 52778, dated April 12, 2022, the Board appropriated a total of \$600 million for projects identified in the Capital Investment Plan for Fiscal Years 2022/2023 and 2023/2024.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA because it involves only feasibility or planning studies for possible future actions which the Board has not approved, adopted or funded (Section 15262 of the State CEQA Guidelines). In addition, the proposed action is categorically exempt under the provisions of CEQA and the State CEQA Guidelines because the proposed action involves basic data collection and research activities which do not result in a serious or major disturbance to an environmental resource, which may be strictly for information gathering purposes, or as part of a study leading to an action which a public agency has not yet approved, adopted, or funded (Class 6, Section 15306 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Authorize an increase of \$2 million to an existing agreement with Jacobs Engineering Group Inc., for a new not-to-exceed amount of \$2.65 million for final design of the first stage of security upgrades at all five CRA pumping plants and the Camino Electrical Switching Station.

Fiscal Impact: Expenditure of \$3.3 million in capital funds. All funds will be incurred in the current biennium and have been previously appropriated.

Business Analysis: This option will bring the CRA region facilities' security features up to the latest industry and Metropolitan standards.

Option #2

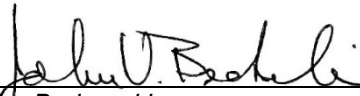
Do not proceed with the project at this time.

Fiscal Impact: None

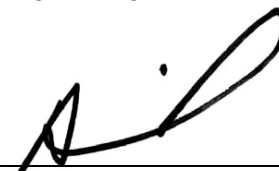
Business Analysis: This option would forego an opportunity to enhance the site security in the CRA region and improve protection for critical infrastructure and personnel.

Staff Recommendation

Option #1



John Bednarski
Manager/Chief Engineer
Engineering Services
6/20/2023
Date



Adel Hagekhalil
General Manager
6/21/2023
Date

Attachment 1 – Allocation of Funds

Attachment 2 – Listing of Subconsultants

Attachment 3 – Location Map

Ref# es12695499

Allocation of Funds for Stage 1 Security Upgrades for the CRA Region

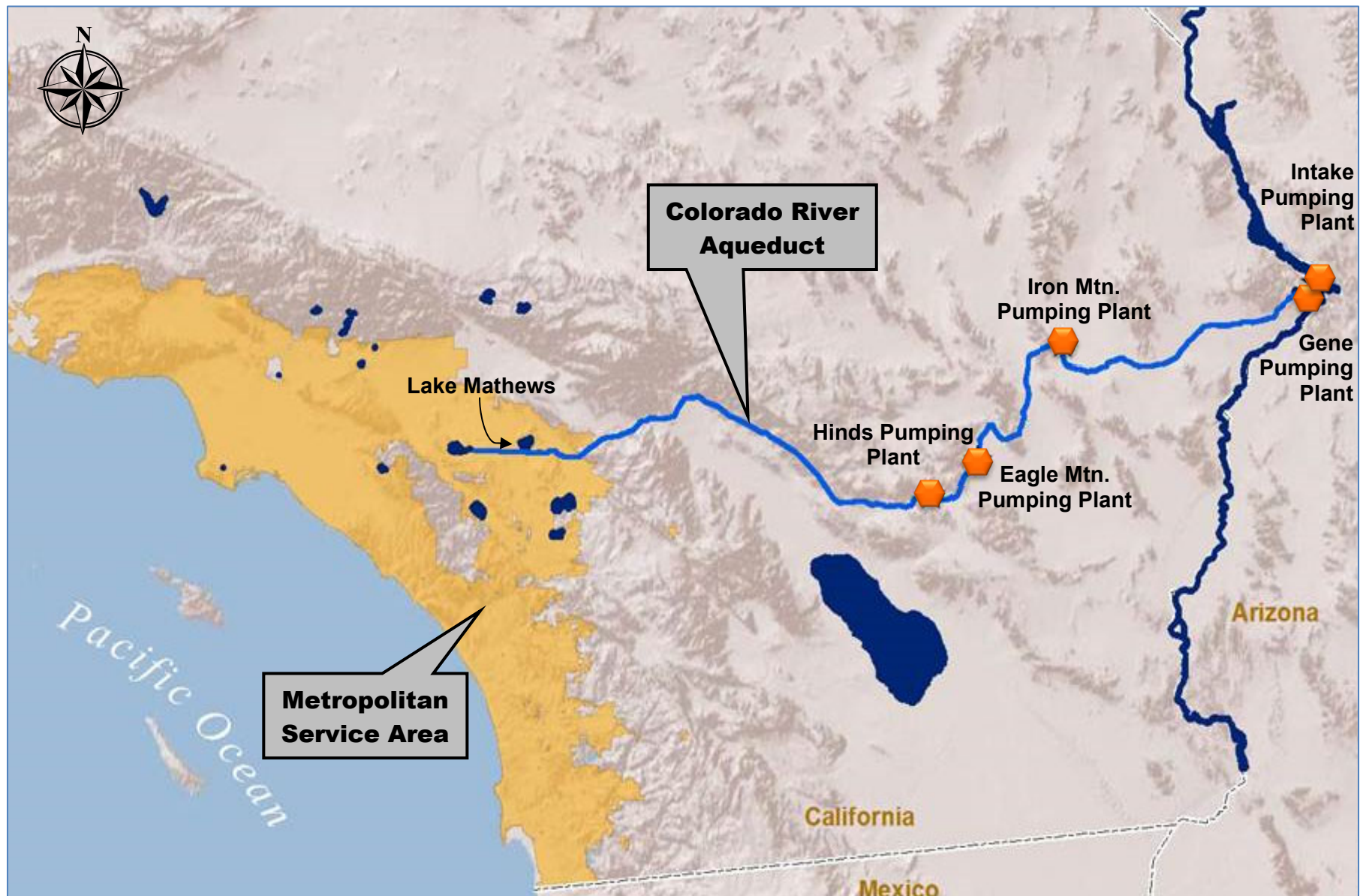
	Current Board Action (July 2023)
Labor	
Investigations & Conceptual Design	\$ -
Final Design	273,000
Owner Costs (Program mgmt., envir. documentation)	417,000
Submittals Review & Record Drwgs.	-
Construction Inspection & Support	-
Metropolitan Force Construction	-
Materials & Supplies	-
Incidental Expenses	-
Professional/Technical Services	-
Jacobs Engineering Group, Inc.	2,000,000
Socal Bio Environmental, LLC	15,000
Geotechnical Services Consultant	50,000
Constructability Consultant	75,000
Right-of-Way	-
Equipment Use	-
Contracts	-
Remaining Budget	470,000
Total	\$ 3,300,000

The total amount expended to date for Security Upgrades for the CRA Region is approximately \$824,000. The total estimated cost to complete the Security Upgrades for the CRA Region, including the amount appropriated to date, funds allocated for the work described in this action, and future construction costs, is anticipated to range from \$40 million to \$55 million.

The Metropolitan Water District of Southern California
Subconsultants for Agreement with Jacobs Engineering Group Inc.

Subconsultant and Location	Service Category; Specialty
Gillis and Panichapan Architects Inc. Costa Mesa, California	Architectural Design
DRP Engineering Inc. Alhambra, California	Electrical and Instrumentation/Controls CAD Design

Location Map





Engineering, Operations, & Technology Committee

Colorado River Aqueduct Region Security Improvements

Item 7-2

July 10, 2023

CRA Region Security Improvements

Current Action

- Authorize an increase of \$2 million to an agreement with Jacobs Engineering Group Inc. for new not-to-exceed total amount of \$2.65 million for final design of the first stage of security upgrades for the Colorado River Aqueduct Region

The map illustrates the California State Water Project's route from the Sierra Nevada mountains to the Central Valley. Key components labeled include the Camino Switching Station, Intake Pumping Plant, Iron Mountain Pumping Plant, Gene Pumping Plant, Eagle Mountain Pumping Plant, Hinds Pumping Plant, and Diamond Valley Lake. Major California cities shown are Kern, Los Angeles, Ventura, Orange, San Diego, San Bernardino, Riverside, Imperial, Mohave, La Paz, and Yuma. A north arrow is located in the top left corner.

Background

- Desert facilities constructed in remote locations over 80 years ago
 - Existing security infrastructure needs to be upgraded at six facilities
- Recommended Security Improvements
 - Enhance entry checkpoints & perimeter security at each facility
 - Upgrade security cameras & card readers to meet current security standards



Iron Mountain Pumping Plant



Camino Electrical Switching Station

Approach to Implementation

- Conduct final design in 2 stages
- Stage 1 design activities
 - Installation of cameras, motion detectors & card readers at the 5 pumping plants & Camino Switching Station
 - Improvements to physical security measures at Iron Mtn. pumping plant
 - Perimeter fencing, entry checkpoint, guard station, roadway improvements & signage
- Stage 2 design activities
 - Physical security measures at remaining four pumping plants

CRA Region Security Improvements

Alternatives Considered

- Utilize in-house Metropolitan staff to conduct final design activities
 - Limited availability of staff to conduct work
 - Work requires specialized technical expertise
- Selected Alternative – Use consultant to develop final design
 - Consultant retained for security expertise
 - Metropolitan staff to provide technical input

Jacobs Engineering Group Inc. Agreement



Guard Station (Example)



Crash-rated Gate (Example)

- Prequalified under RFQ 1215
 - Completed preliminary design
- Scope of Work:
 - Develop final design drawings & specifications
 - Prepare cost estimate
 - Permitting & bidding support
- Amendment amount: \$2,000,000
- NTE amount: \$2,650,000
- SBE participation level: 10%

CRA Region Security Improvements

Metropolitan – Scope of Work

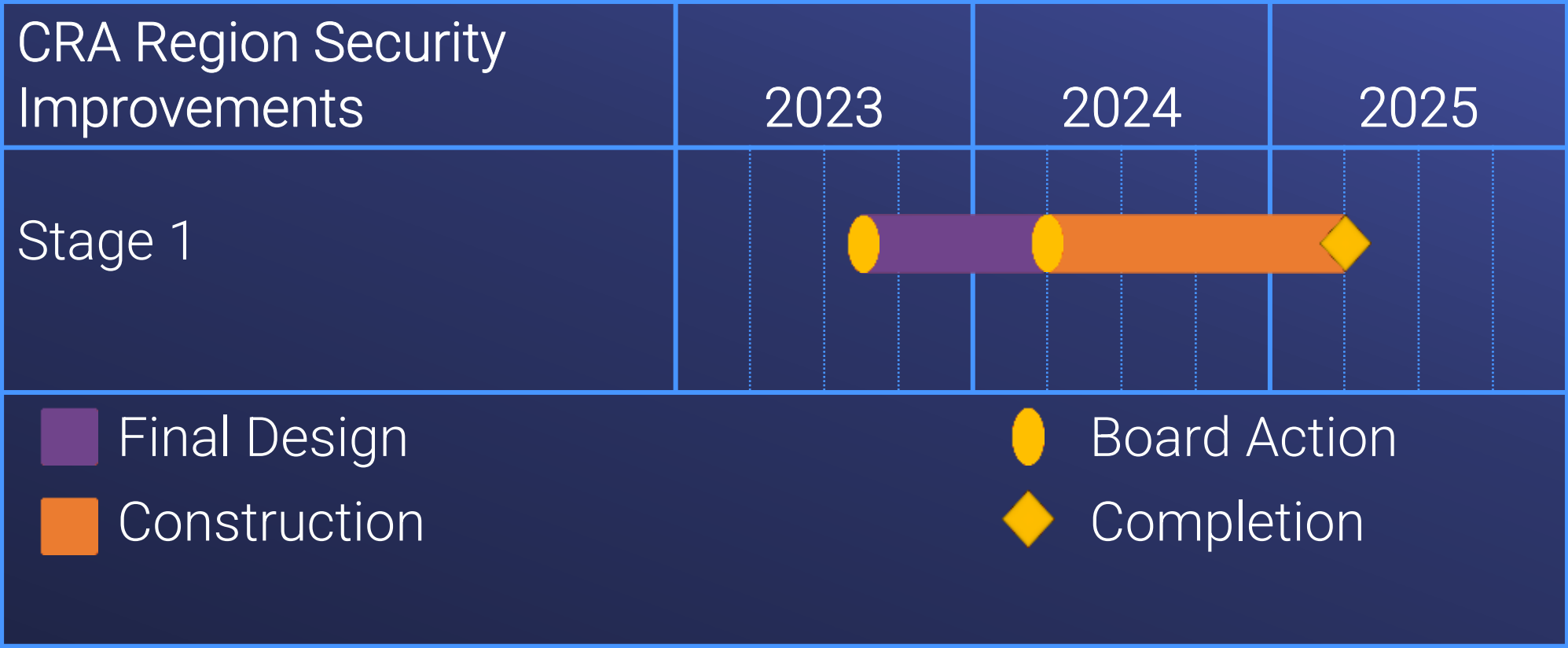
- Perform site survey & mapping
- Provide technical input & review consultant design work
- Conduct constructability review & support activities
- Perform project management & environmental assessment oversight

Allocation of Funds

CRA Region Security Improvements

Metropolitan Labor	
Final Design	\$ 273,000
Owner Costs (Proj. Mgmt., Contract Admin., Envir. Support)	417,000
Professional/Technical Services	
Jacobs Engineering Group Inc.	2,000,000
SoCal Bio Environmental LLC	15,000
Geotechnical Services Consultant	50,000
Constructability Consultant	75,000
Remaining Budget	470,000
<hr/>	
Total \$ 3,300,000	

Project Schedule



Board Options

- Option #1

Authorize an increase of \$2 million to an existing agreement with Jacobs Engineering Group Inc., for a new not-to-exceed amount of \$2.65 million for final design of the first stage of security upgrades at all five CRA pumping plants and the Camino Electrical Switching Station.

- Option #2

Do not proceed with the project at this time.

Staff Recommendation

- Option #1





● **Board of Directors**
Engineering, Operations, and Technology Committee

7/11/2023 Board Meeting

7-3

Subject

Award a \$452,886 contract to Best Contracting Services Inc. for replacement of the administration and warehouse building roofs at the Lake Mathews site; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

Metropolitan regularly maintains and repairs the roofs at its facilities to ensure that the buildings' interior workspaces remain in safe conditions during inclement weather and are suitable for their intended functions. The administration and warehouse buildings at the Lake Mathews Reservoir site have been in operation since the 1970s, and the original metal roofing system at each of these buildings has deteriorated and needs to be replaced. This action awards a construction contract to replace the existing roofing systems of the administration and warehouse buildings at the Lake Mathews site.

Details

Background

The Lake Mathews site serves as the central location for Metropolitan force construction staff, equipment, and supplies. These resources provide construction and maintenance capabilities for projects requiring rapid response or specialized expertise throughout Metropolitan's service area. Several buildings support these efforts. The administration building provides essential offices, breakroom, and restrooms, while the warehouse building provides central storage of materials and equipment to support Metropolitan's construction activities. The current administration and warehouse buildings have been in operation since the 1970s. The existing metal roofing systems, installed on each building at the time of their original construction, have exceeded their service life and show significant signs of deterioration and leakage. Staff regularly makes repairs to the roofs of each building following weather events. Staff recommends replacement of the roofs on these two buildings.

Final design to replace both building roofing systems is now complete, and staff recommends moving forward with award of a construction contract at this time.

Budget Impact

In accordance with the April 2022 action on the biennial budget for fiscal years 2022/23 and 2023/24, the General Manager authorized staff to proceed with the roof replacement of the administration and warehouse buildings at the Lake Mathews Reservoir site, pending board award of the construction contract described below. Based on the current Capital Investment Plan (CIP) expenditure forecast, funds for the work to be performed pursuant to this action during the current biennium are available within the CIP Appropriation for Fiscal Years 2022/23 and 2023/24 (Appropriation No. 15525). This project anticipates an expenditure of \$770,000 in capital funds. All expenditures will be incurred in the current biennium and have been previously authorized. This project has been reviewed in accordance with Metropolitan's CIP prioritization criteria and was approved by Metropolitan's CIP Evaluation Team to be included in the System Reliability Program.

Lake Mathews Administration and Warehouse Building Roof Replacement – Construction

The scope of the construction contract consists of the replacement of approximately 8,000 square feet of roofing material on the administration and warehouse buildings combined. The work includes removing the existing

metal roofing system, installing a new metal roofing system, and replacing ventilators. Metropolitan staff will relocate roof-mounted equipment and provide support during construction.

A total of \$770,000 has been budgeted for this work. In addition to the amount of the contract described below, other funds to be allocated include \$64,000 for construction inspection; \$50,000 for Metropolitan construction activities as described above; \$63,000 for submittals review, technical support during construction, responding to requests for information, and preparation of record drawings; \$71,000 for contract administration, environmental monitoring, and project management; and \$69,114 for the remaining budget.

Attachment 1 provides the allocation of the required funds. The total estimated cost of the Administration and Warehouse Building Roof Replacement project, including the amount allocated to date and funds allocated for the work described in this action, is \$1,010,000.

Award of Construction Contract (Best Contracting Services Inc.)

Specification No. 2051 to replace the administration and warehouse building roofing systems at Lake Mathews was advertised for bids on May 5, 2023. As shown in **Attachment 2**, three bids were received and opened on June 8, 2023. The low bid from Best Contracting Services Inc. in the amount of \$452,886 complies with the requirements of the specifications. The other two bids were \$510,000 and \$883,000, while the engineer's estimate for this project was \$450,000. For this contract, Metropolitan established a Small Business Enterprise participation level of at least 25 percent of the bid amount. Best Contracting Services Inc. has agreed to meet this level of participation. The subcontractors for this contract are listed in **Attachment 3**.

This action awards a \$452,886 contract to Best Contracting Services Inc. to replace the roofing systems on the administration and warehouse buildings at the Lake Mathews Reservoir site. As described above, Metropolitan staff will perform construction management and inspection. Engineering Services' performance metric target range for construction management and inspection of projects with construction less than \$3 million is 12 to 15 percent. For this project, the performance metric goal for inspection is 12.7 percent of the total construction cost (\$502,886), which includes the construction contract (\$452,886) and Metropolitan construction (\$50,000).

Alternatives Considered

Staff considered continuing to make temporary repairs to portions of the roofs where leakage was observed. However, past repairs have not prevented the development of new leaks in subsequent rainy seasons. The recurrence of leaks is an indication that the nearly 50-year-old roof systems are beyond their service life. The current approach replaces the entire roof systems in order to maintain long-term operational reliability and provide the best value to Metropolitan.

Summary

This action awards a \$452,886 contract to Best Contracting Services Inc. to replace the roofing systems of the administration and warehouse buildings at the Lake Mathews Reservoir site. See **Attachment 1** for the Allocation of Funds, **Attachment 2** for the Abstract of Bids, **Attachment 3** for the listing of Subcontractors for Low Bidder, and **Attachment 4** for the Location Map.

Project Milestone

March 2024 – Completion of construction

Policy

Metropolitan Water District Administrative Code Section 8121: General Authority of the General Manager to Enter Contracts

Metropolitan Water District Administrative Code Section 8140: Competitive Procurement

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

By Minute Item 52778, dated April 12, 2022, the Board appropriated a total of \$600 million for projects identified in the Capital Investment Plan for Fiscal Years 2022/23 and 2023/24.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is categorically exempt under the provisions of CEQA and the State CEQA Guidelines. The proposed action involves repair, maintenance, permitting, leasing, or minor alterations of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use, or replacement or reconstruction of existing structures and facilities that will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structures replaced. Accordingly, the proposed action qualifies for Class 1 and Class 2 (Sections 15301 and 15302 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Award a \$452,886 contract to Best Contracting Services Inc. to replace the roofs of the administration and warehouse buildings at the Lake Mathews site.

Fiscal Impact: Expenditure of \$770,000 in capital funds. All expenditures will be incurred in the current biennium and have been previously authorized.

Business Analysis: This option will protect Metropolitan's assets and sustain the operations of Lake Mathews site facilities.

Option #2

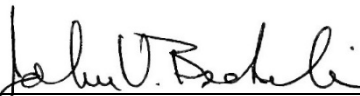

Do not proceed with the project at this time.

Fiscal Impact: None

Business Analysis: Under this option, staff would continue with temporary localized repairs to the existing roof and interior damage as needed prior and subsequent to inclement weather events, which may lead to increased annual repair costs.

Staff Recommendation

Option #1

 _____ John V. Bednarski Manager/Chief Engineer Engineering Services	6/16/2023 Date
 _____ Adel Hagekhalil General Manager	6/27/2023 Date

Attachment 1 – Allocation of Funds

Attachment 2 – Abstract of Bids

Attachment 3 – Subcontractors for Low Bidder

Attachment 4 – Location Map

Ref# es12695334

Allocation of Funds for Lake Mathews Administration and Warehouse Building Roof Replacement

	Current Board Action (July 2023)
Labor	
Studies & Investigations	\$ -
Final Design	-
Owner Costs (Program mgmt., envir. monitoring)	71,000
Submittals Review & Record Drwgs.	63,000
Construction Inspection & Support	64,000
Metropolitan Force Construction	50,000
Materials & Supplies	-
Incidental Expenses	-
Professional/Technical Services	-
Right-of-Way	-
Equipment Use	-
Contracts	-
Best Contracting Services Inc.	452,886
Remaining Budget	69,114
Total	\$ 770,000

The total amount expended to date for the roof replacements of the administration and warehouse buildings at the Lake Mathews site is approximately \$240,000. The total estimated cost to complete the roof replacements, including the amount appropriated to date and funds allocated for the work described in this action, is \$1,010,000.

The Metropolitan Water District of Southern California

Abstract of Bids Received on June 8, 2023, at 2:00 P.M.

Specifications No. 2051

Lake Mathews Administration and Warehouse Roof Replacement

The scope of work consists of replacing approximately 8,000 square feet of roofing material on the Lake Mathews administration and warehouse buildings, which includes removal of the existing metal roofing system and installation of a new metal roofing system, insulation, and ventilators.

Engineer's estimate: \$450,000

Bidder and Location	Total	SBE \$	SBE %	Met SBE¹
Best Contracting Services Inc. Gardena, CA	\$452,886	\$119,222	26.3%	Yes
AME Builders Inc. Pomona, CA	\$510,100	-	-	-
Facility Builders & Erectors Inc. Anaheim, CA	\$883,476	-	-	-

¹ Small Business Enterprise (SBE) participation level established at 25% for this contract.

The Metropolitan Water District of Southern California
Subcontractors for Low Bidder
Specifications No. 2051
Lake Mathews Administration and Warehouse Building Roof Replacement

Low bidder: Best Contracting Services Inc.

Subcontractor	Service Category; Specialty
Klondike Roof Construction Service Ontario, CA	Demolition/Abatement
G & C Equipment Corporation Gardena, CA	Roofing Material Supplier





Engineering, Operations, & Technology Committee

Lake Mathews Administration and Warehouse Building Roof Replacement

Item 7-3

July 10, 2023

Lake Mathews Administration and Warehouse Roof Replacement

Current Action

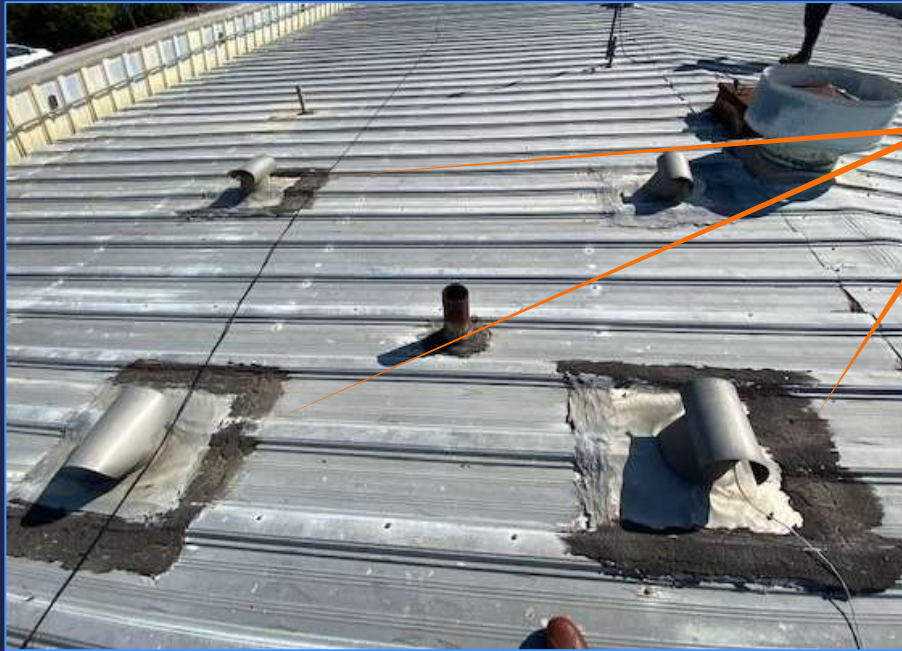
- Award a \$452,886 contract to Best Contracting Services Inc. for replacement of the administration and warehouse building roofs at the Lake Mathews site

Lake Mathews Site



Background

- Lake Mathews is the central location for Metropolitan's force construction staff, equipment, & materials to support construction activities
- Metal roofing systems nearly 50 years old
- Roof deterioration & leakage observed



Deteriorating Metal Roof & Temporary
Roof Repairs

Temporary
Localized
Repairs



Deteriorating Metal Roof &
Temporary Roof Repairs

Lake Mathews Administration and Warehouse Roof Replacement

Alternatives Considered

- Perform localized roof repairs when leakage occurs
 - Past repairs have not prevented new leaks in subsequent inclement weather events
- Selected alternative
 - Replace the entire roof on the two buildings to maintain long-term operational reliability

Scope of Work

- Contractor
 - Replace approximately 8,000 sq. ft. of existing metal roofing system
 - Remove & replace ventilators
- Metropolitan
 - Relocate roof-mounted equipment
 - Provide construction inspection, technical review of submittals, & project management



Remove & Replace Warehouse Building
Metal Roof & Ventilators



Metropolitan Force Construction

Bid Results

Specifications No. 2051

Bids Received	June 8, 2023
No. of Bidders	3
Lowest Responsible Bidder	Best Contracting Services Inc.
Low Bid	\$452,886
Range of Other Bids	\$510,000 to \$883,000
Engineer's Estimate	\$450,000
SBE Participation*	26.3%

*SBE (Small Business Enterprise) participation level set at 25%

Allocation of Funds

Lake Mathews Administration & Warehouse Roof Replacement

Metropolitan Labor

Owner Costs (Proj. Mgmt., Contract Admin., Envir. Support)	\$ 71,000
Construction Inspection & Support	64,000
Construction	50,000
Submittals Review, Tech. Support, Record Dwgs.	63,000

Contracts

Best Contracting Services Inc.	452,886
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Remaining Budget	69,114
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Total	\$ 770,000
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Project Schedule



Board Options

- Option #1

Award a \$452,886 contract to Best Contracting Services Inc. to replace the roofs of the administration and warehouse buildings at the Lake Mathews site.

- Option #2

Do not proceed with the project at this time.

Staff Recommendation

- Option #1





● **Board of Directors**
Engineering, Operations, and Technology Committee

7/11/2023 Board Meeting

7-4

Subject

Award a \$349,527.80 procurement contract to TechnoFlo Systems Inc. for 50 magnetic flowmeters to comply with surface water diversion regulations on Metropolitan's Delta Island properties; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

Surface water is diverted for agricultural use on several islands that Metropolitan owns in the Sacramento-San Joaquin Bay Delta. California Senate Bill 88 requires these surface diversions to be accurately measured. This action will award a \$349,527.80 procurement contract to purchase 50 magnetic flowmeters for the surface water diversion points on four Delta Island properties. Installation of this equipment, under a future contract, will bring Metropolitan into full compliance with surface water diversion measurement regulations.

Details

Background

In 2016, Metropolitan purchased five islands in the Sacramento-San Joaquin Bay Delta (Delta). Metropolitan currently owns Bouldin Island, Bacon Island, Webb Tract, and a portion of Holland Tract. These islands are currently leased for agricultural use.

At numerous locations along the Delta Islands' perimeter, pipeline siphons divert water to the islands' interior for various uses. California Senate Bill 88 (CA SB-88) requires water rights holders who divert ten acre-feet of water per year or more under a permit or license to install and maintain a device or employ a method capable of measuring the rate of direct surface water diversion, rate of collection to storage, and rate of withdrawal or release from storage. As owner of the Delta properties, Metropolitan must comply with this regulation.

From 2016 through 2021, Metropolitan participated in a meter device experimentation phase of this project under the Office of the Delta Watermaster Consortium with other Delta water diverters. For five years, Metropolitan, the four local Reclamation Districts overseeing the Delta Islands, and the Office of the Delta Watermaster Consortium tested and experimented with various flow meters for accuracy and reliable measurements of flows within the gravity siphons. Through this work, it was determined that TechnoFlo Systems Inc. (TechnoFlo) is the only vendor that supplies the meters approved by the Office of the Delta Watermaster for accurate flow measurement under siphon gravity flow conditions. TechnoFlo's pricing includes free technical support, troubleshooting, and low-cost replacement parts.

Metropolitan received approval from the Office of the Delta Watermaster and is implementing a 5-year plan for a Phased Measurement Implementation (PPMI) to install flow measurement devices at unmeasured active diversion points on the Delta Island properties. Four phases have previously been completed under the PPMI, and approximately 38 flow meters have been installed. Phase 5, the project's final phase, will install an additional 50 flow meter devices on the remaining siphons on the Delta properties, bringing Metropolitan into full compliance with CA SB-88 regulations. The meters supplied by TechnoFlo under this board action for Phase 5 are the same type of meter that was installed under Phases 3 and 4 of the project.

Since only a single flow meter supplier is approved by the Office of the Delta Watermaster, a sole source procurement contract is recommended to be awarded to TechnoFlo. Metropolitan Administrative Code

Section 8140(1)d states the competitive bidding requirements may be waived if competitive procurement could not produce an advantage or it is impracticable to obtain what is required subject to the competitive procurement provisions because of the unique, exploratory, or experimental nature of the work. A sole source memorandum has been certified by the General Manager's designee for the contract and signed by Metropolitan Executive Management. Staff recommends proceeding with the meter procurement for Phase 5 at this time.

Budget Impact

In accordance with the April 2022 action on the biennial budget for fiscal years 2022/23 and 2023/24, the General Manager authorized staff to proceed with Delta Infrastructure Phase 5 project, pending board approval of the contract described below. Based on the current Capital Investment Plan (CIP) expenditure forecast, funds for the work to be performed pursuant to this action during the current biennium are available within the CIP Appropriation for Fiscal Years 2022/23 and 2023/24 (Appropriation No. 15525). This project anticipates an expenditure of \$516,000 in capital funds. All project expenditures will be incurred in the current biennium and have been previously authorized. This project has been reviewed in accordance with Metropolitan's CIP prioritization criteria and was approved by Metropolitan's CIP Evaluation Team to be included in the System Flexibility/Supply Reliability Program.

Delta Properties Infrastructure Improvements Phase 5 - Procurement

Planned activities include procurement of the new flow meters. Metropolitan staff will review submittals from the vendor and provide technical support, administer the procurement contract, and provide project management. Metropolitan staff will return to the Board at a later date to award a contract to install the flowmeters.

A total of \$516,000 has been budgeted for this work. In addition to the amount of the contract described below, other funds to be allocated include \$61,000 for contract administration, technical support, and project management; \$105,000 for procurement of flow meter telemetry (to be provided by separate vendor); and \$472.20 in remaining budget. **Attachment 1** provides the allocation of the required funds. The total estimated cost of the project, including the amount allocated to date and funds allocated for the work described in this action, is approximately \$900,000 to \$1.2 million.

Award of Procurement Contract (TechnoFlo)

This action awards a sole source procurement contract to TechnoFlo in the amount of \$349,527.80 to supply 50 flow meters. TechnoFlo is the only vendor that can supply the needed flow meters to comply with current surface water diversion regulations as approved by the Office of the Delta Watermaster. As a procurement contract, there are no subcontracting opportunities.

Alternatives Considered

Metropolitan worked with the Delta Measurement Experimentation Consortium (Consortium), the Reclamation Districts (RD), and RD Engineers in testing various alternative water measuring devices on Delta agricultural siphons on its four islands/tracts. Metropolitan tested various equipment, including different meter types, power sources, data loggers, water level and internal pressure sensors, telemetry communication devices, installation approaches, security/protection fencing, and maintenance techniques.

The equipment was tested for accuracy, ease of installation, operational compatibility, maintenance issues, power considerations, and other matters essential to the certification of each flow device. A total of 22 flow meters from nine different manufacturers were tested. TechnoFlo was the only meter supplier approved by the Office of the Delta Watermaster to meet the regulatory requirements of Senate Bill CA SB-88 for fixed meter installations. The recommended alternative will bring Metropolitan into compliance with the regulations.

Summary

This action awards a \$349,527.80 procurement contract to TechnoFlo for the procurement of 50 flow meters for the Delta Islands. See **Attachment 1** for the Allocation of Funds and **Attachment 2** for the Location Map.

Project Milestone

October 2023 – Delivery of flow meters and components

Policy

Metropolitan Water District Administrative Code Section 8121: General Authority of the General Manager to Enter Contracts

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

Metropolitan Water District Administrative Code Section 8140(1)d: Sole Source Procurement

By Minute Item 52778, dated April 12, 2022, the Board appropriated a total of \$600 million for projects identified in the Capital Investment Plan for Fiscal Years 2022/2023 and 2023/2024.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is categorically exempt under the provisions of CEQA and the State CEQA Guidelines. In particular, the proposed action consists of procurement and modification of existing public facilities consisting of the future installation of meters with negligible or no expansion of existing or former use and no possibility of significantly impacting the physical environment. Accordingly, this proposed action qualifies as a Class 1 Categorical Exemption (Section 15301 of the State CEQA Guidelines).

CEQA determination for Option #1:

None required

Board Options

Option #1

Award a \$349,527.80 procurement contract to TechnoFlo Systems Inc. for 50 flow meters to comply with surface water diversion regulations on Metropolitan's Delta Island properties.

Fiscal Impact: Expenditure of \$516,000 in capital funds. All expenditures will be incurred in the current biennium and have been previously authorized.

Business Analysis: This option is needed to meet current surface water diversion regulations.

Option #2

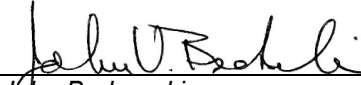

Do not proceed with the project at this time.

Fiscal Impact: None

Business Analysis: This option will forgo an opportunity to bring Metropolitan into compliance with current surface water diversion regulations.

Staff Recommendation

Option # 1

 John Bednarski Manager/Chief Engineer Engineering Services	6/16/2023 Date
 Adel Hagekhalil General Manager	6/27/2023 Date

Attachment 1 – Allocation of Funds

Attachment 2 – Location Map

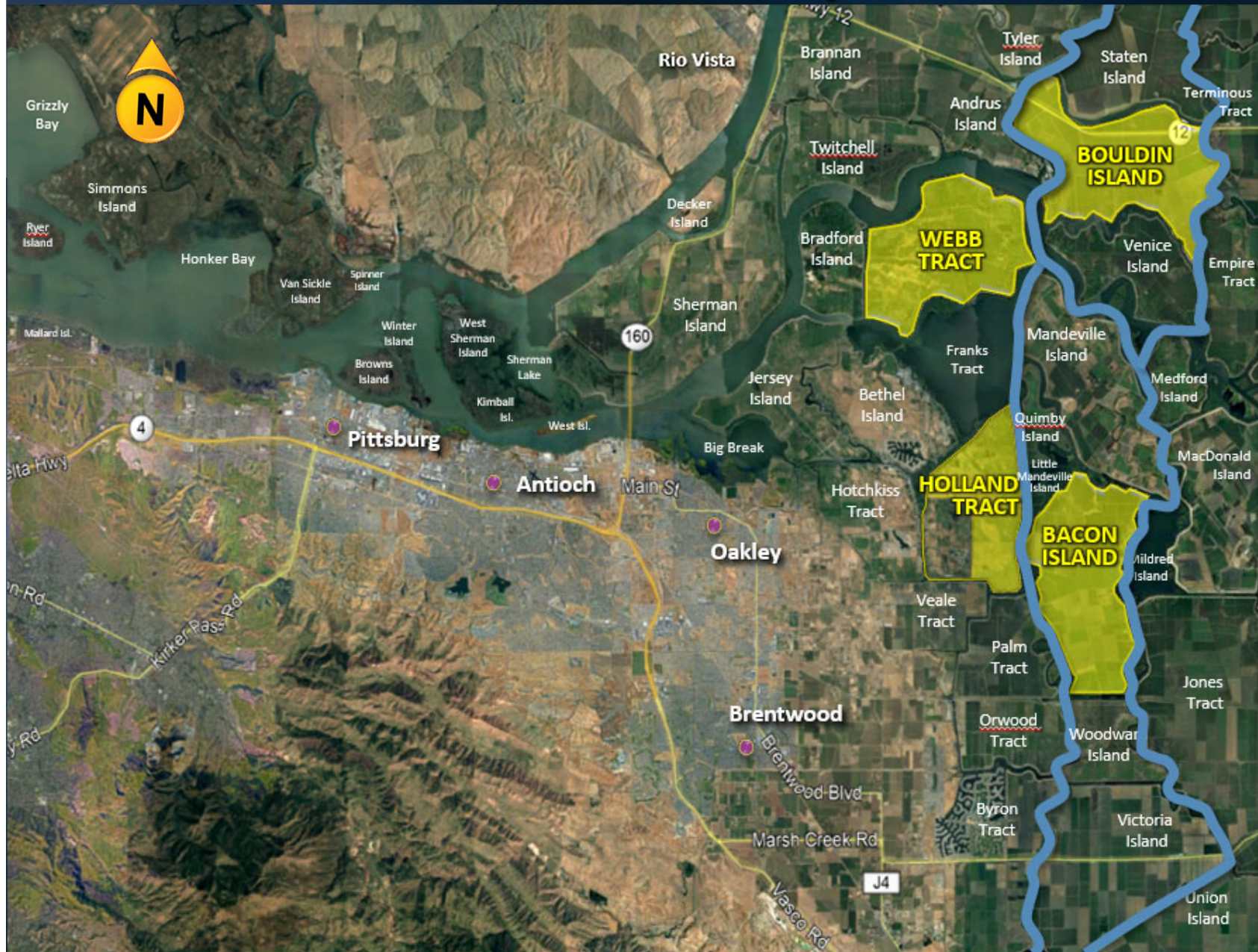
Ref# es12691191

Allocation of Funds for Delta Properties Infrastructure Improvements

	Current Board Action (Jul. 2023)
Labor	
Studies & Investigations	\$ -
Final Design	-
Owner Costs (Program mgmt., contract admin.)	61,000
Submittals Review & Record Drwgs.	-
Construction Inspection & Support	-
Metropolitan Force Construction	-
Materials & Supplies	105,000
Incidental Expenses	-
Professional/Technical Services	-
Right-of-Way	-
Equipment Use	-
Contracts	-
TechnoFlo Systems Inc.	349,527.80
Remaining Budget	472.20
Total	\$ 516,000

The total amount expended to date on the Delta Properties Infrastructure Improvements is approximately \$75,000. The total estimated cost to complete the installation of the meters, including the amount appropriated to date, funds allocated for the work described in this action, and future construction costs, is anticipated to range from \$900,000 to \$1.2 million.

Location Map





Engineering, Operations, & Technology Committee

Delta Infrastructure Improvements

Item 7-4

July 10, 2023

Delta Infrastructure Improvements

Current Action

- Award a \$349,527.80 procurement contract to TechnoFlo Systems Inc. for 50 magnetic flowmeters to comply with surface water diversion regulations on Metropolitan's Delta Island properties

Delta Islands

Delta Infrastructure Improvements

- 2016 purchase
- 31 sq. mi.; 20,400 acres
- Bouldin/Bacon Islands
- Webb/Holland Tracts

July 10, 2023



Delta Infrastructure Improvements

Background

- California Senate Bill 88
- SWRCB Process
 - Introduced (2015)
 - Regulation Adopted (Jan-2016)
 - Office of Administrative Law Approved (Mar-2016)
- Bill Requirements
 - Measure both diversions & water use at the prescribed frequency & accuracy
 - Annual measurement reporting to SWRCB

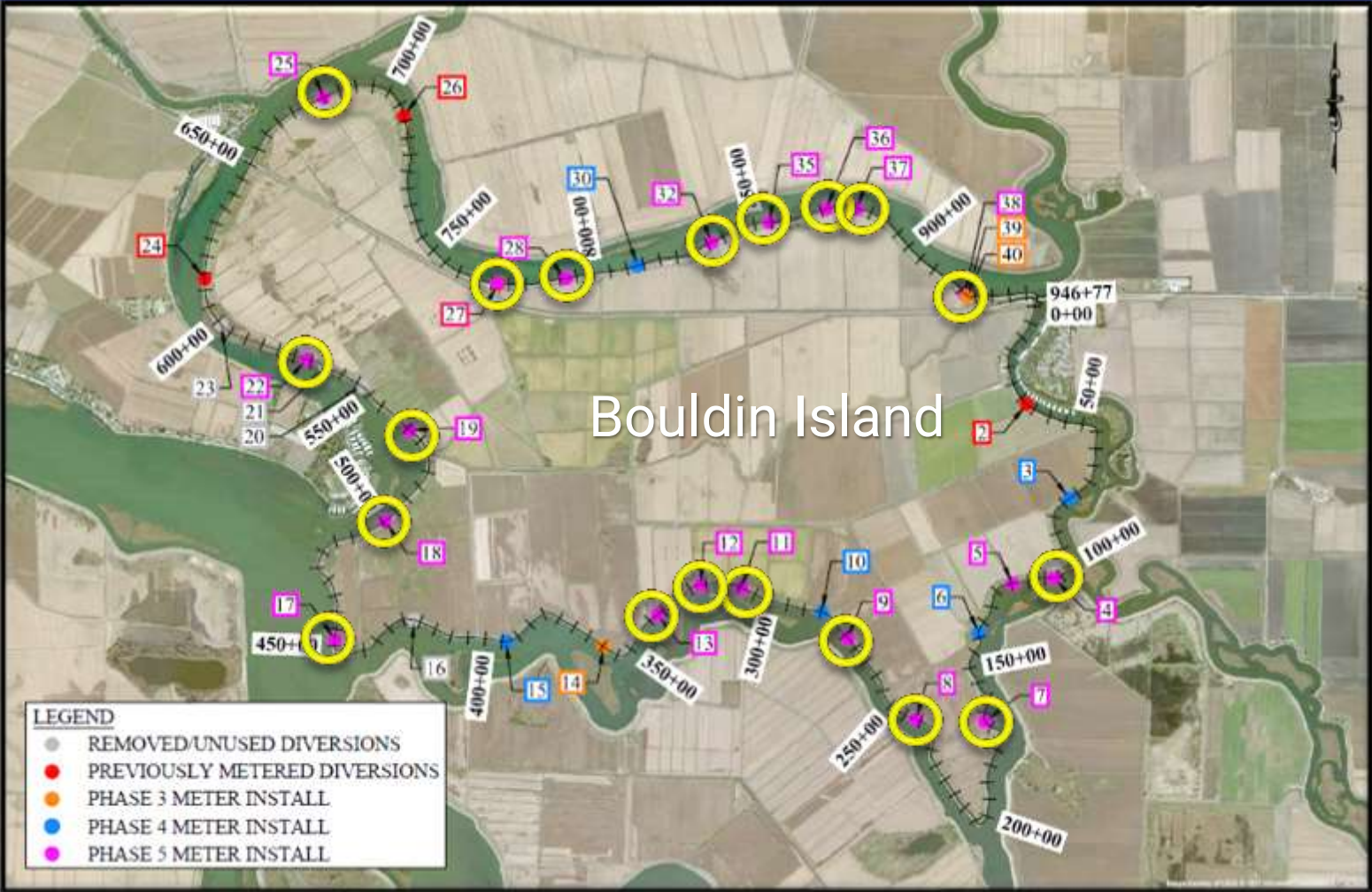
Delta Infrastructure Improvements

Project Background

- Meter Diversion Installation Phases
 - Experiment/Phases 1 – 4 (38 meters, 2016 – 2022)
 - Phase 5 – Remaining 50 meters (Subject to Board Action)
- Prequalified
 - TechnoFlo Systems Flange Magnetic (3" – 24" diameters)

Bouldin Island

Delta Infrastructure Improvements



Phases

Experiment/ Phases 1 - 4

Phase 5

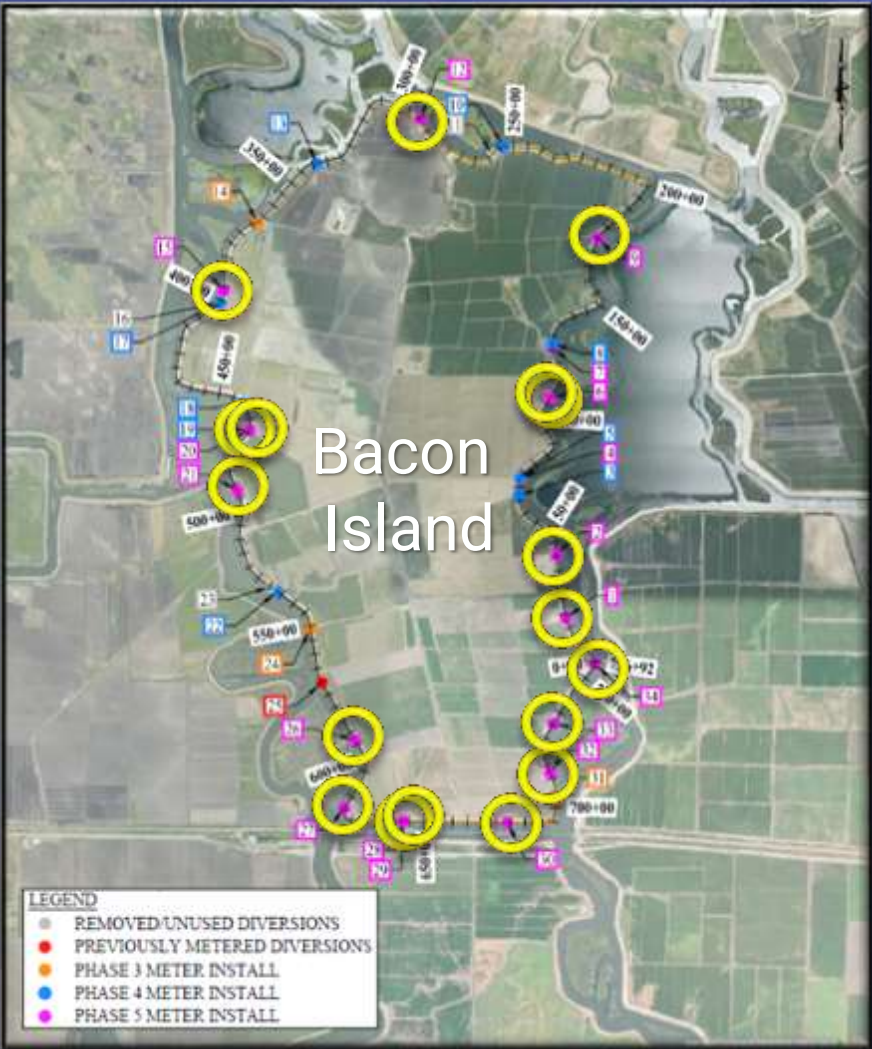
Meter Status

12 meters (Installation Completed)

19 meters (Subject Board Approval)

Bacon Island

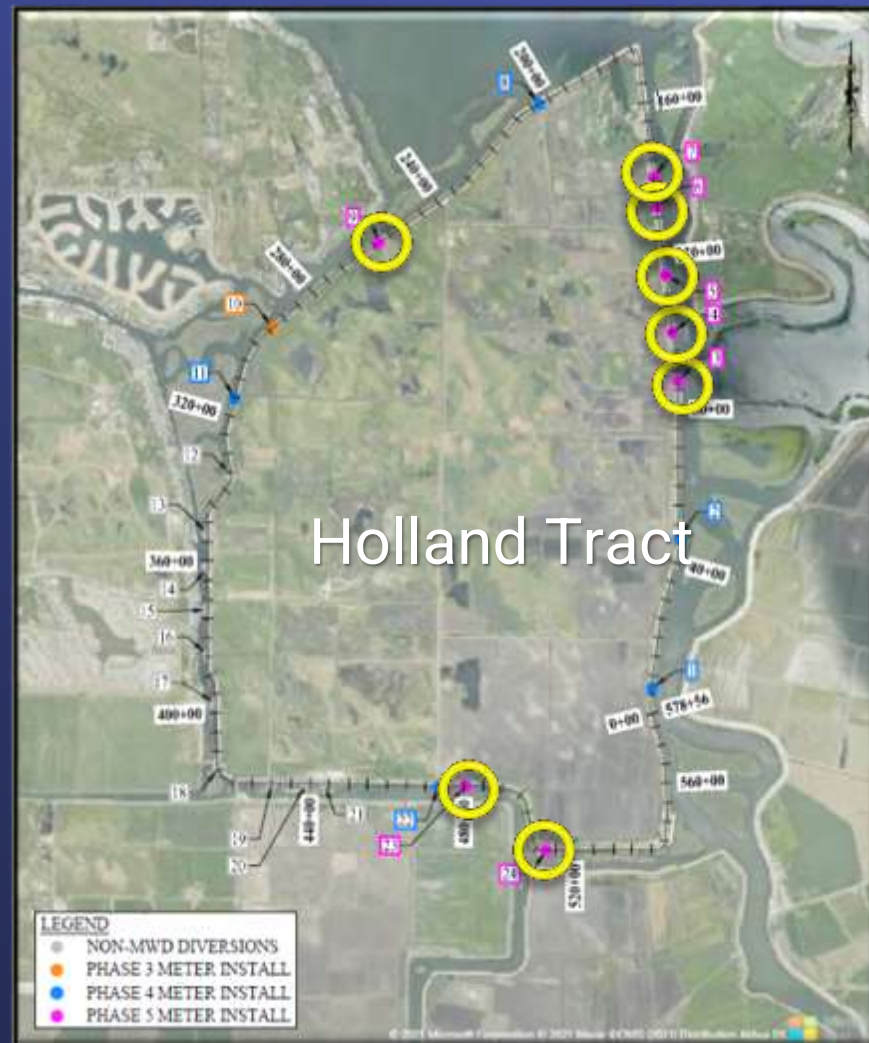
Delta Infrastructure Improvements



Phases	Meter Status
Experiment/Phases 1 - 4	13 meters (Installation Completed)
Phase 5	18 meters (Subject Board Approval)

Holland Tract

Delta Infrastructure Improvements



Phases

Experiment/Phases 1 - 4

Phase 5

Meter Status

6 meter (Installation Completed)

8 meters (Subject Board Approval)

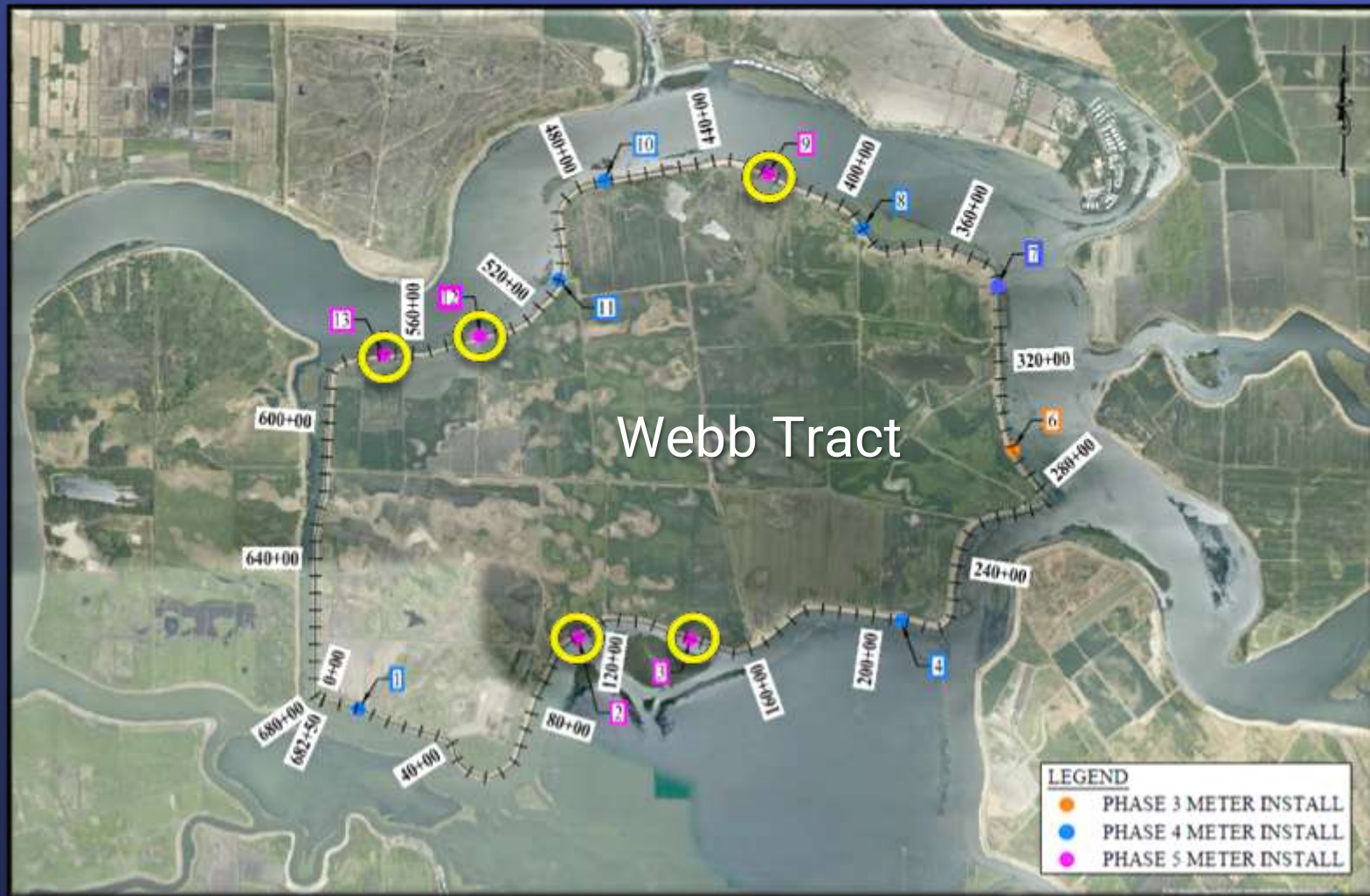
Webb Tract

Delta Infrastructure Improvements

Siphon (water side)



Siphon (land side)



Phases

Experiment/ Phases 1 - 4

Phase 5

Meter Status

7 meters installed

5 meters (Pending Board Approval)

Delta Infrastructure Improvements

Alternatives Considered

- Various equipment tested for accuracy, ease of installation/maintenance, & operational compatibility
- Including meter types, power sources, data loggers, sensors, telemetry communication devices
- 22 flow meters from 9 manufacturers tested
- Selected option – Award procurement contract to TechnoFlo Systems Inc.
 - Only supplier that meets regulatory requirements of Senate Bill CA SB-88
 - Brings Metropolitan into full compliance with current regulations

Delta Infrastructure Improvements



Flange Magnetic Meter
(typical)

Award of Procurement Contract

- Sole source procurement
- Negotiated with TechnoFlo Systems Inc.
- No advantage in competitive procurement
- Metropolitan Admin. Code Section 8140(1)(d)
- Contract amount: NTE \$349,527.80
- Consistent with unit price paid for earlier phases
- Includes technical support & troubleshooting

Allocation of Funds

Delta Infrastructure Improvements Phase 5

Procurement Contract – TechnoFlo Systems	\$349,527.80
Metropolitan Labor	
Program Mgmt. & Contract Admin.	\$ 61,000.00
Additional Materials - Telemetry	\$105,000.00
Remaining Budget	\$ 472.20
<hr/>	
Total	\$ 516,000.00

Project Schedule



Board Options

- Option #1

Award a \$349,527.80 procurement contract to TechnoFlo Systems Inc. for 50 flow meters to comply with surface water diversion regulations on Metropolitan's Delta Island properties.

- Option #2

Do not proceed with the project at this time.

Staff Recommendation

- Option #1





● **Board of Directors**

Finance, Audit, Insurance, and Real Property Committee

7/11/2023 Board Meeting

7-5

Subject

Adopt Ordinance No. 152 determining that the interests of Metropolitan require the use of revenue bonds in the aggregate principal amount of \$500 million to finance a portion of capital expenditures and waive the full reading of Ordinance No. 152 (two-thirds vote of the Board); the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

The Board's adoption of Ordinance No. 152 (**Attachment 1**) would allow Metropolitan to issue an aggregate principal amount not-to-exceed \$500 million of revenue bonds to fund a portion of board-approved capital expenditures. Funding a portion of capital expenditures with revenue bonds instead of exclusively using operating revenues is consistent with sound financial policy. Bond financing enables Metropolitan to (1) accelerate spending for certain projects, which offsets rising inflationary pressures; and (2) spread large capital expenditures over time so future rate payors share in the cost burden for capital investments (generational equity). Adopting Ordinance No. 152 is a prerequisite to the Board approving separate resolutions authorizing specific revenue bond transactions with an aggregate principal amount up to \$500 million. Ordinance No. 152 does not alone authorize the issuance of any specific revenue bond.

The Metropolitan Water District Act (MWD Act) authorizes Metropolitan to finance capital expenditures through use of revenue bonds, so long as the voters within Metropolitan's service area have previously approved such a financing mechanism, and so long as the Board, by a two-thirds vote, determines that the interests of the district require use of revenue bonds to finance capital expenditures, the costs of which will be too great to be paid out of the district's ordinary annual income and revenue (operating revenues). The voters approved such a financing mechanism in 1974, and this letter proposes that the Board find that the current interests of Metropolitan require the issuance of revenue bonds to finance a portion of capital expenditures in the aggregate principal amount of \$500 million.

The \$500 million figure represents an estimate of revenue bond financing currently anticipated for several fiscal years. As it has in the past, the Board may also approve other capital expenditures not anticipated in the adopted budget, the capital investment plan, or the ten-year financial forecast, and capital expenditures may exceed the projections in an adopted biennial budget.

Details

The MWD Act provides that Metropolitan may borrow money, incur indebtedness and issue bonds or other such indebtedness. The Board has utilized this method of financing since voters approved the use of long-term revenue bonds as an alternative to pay-as-you-go financing in 1974. Metropolitan has a manageable debt load, which has declined in recent years, compared to overall assets.

The MWD Act has three prerequisites for the issuance of revenue bonds, which include bonds, notes, loans or other evidences of indebtedness, to finance capital expenditures: (1) voter approval of the issuance and sale of revenue bonds; (2) the adoption of an ordinance determining that the interests of Metropolitan require the use of revenue bonds to finance a portion of capital expenditures; and (3) the adoption of a resolution authorizing the issuance of a specific series of revenue bonds. The first prerequisite was satisfied in 1974, and is discussed further below. The proposed Ordinance No. 152 would satisfy the second prerequisite to issue revenue bonds.

Subsequent Board action, through the adoption of revenue bond resolutions, will be required to issue revenue bonds up to the aggregate principal amount of \$500 million authorized under Ordinance No. 152.

As referenced above, in 1974, the voters in Metropolitan's service area approved the use of long-term revenue bonds as an alternative to funding capital expenditures exclusively with operating revenues. The MWD Act also requires that the Board, by a two-thirds vote, authorize the issuance of revenue bonds by adopting an ordinance finding the interests of the district require the use of revenue bonds for the purposes set forth in Section 237 of the MWD Act, the cost of which will be too great to be paid out of operating revenues. Section 237 provides for the use of revenue bonds for financing the acquisition, construction, or completion of capital projects "necessary or convenient to carry out the objects or purposes of the district," including "any preliminary and incidental expenses." This letter proposes that the Board determine the interests of Metropolitan require the use of revenue bonds in the aggregate principal amount of \$500 million to finance a portion of capital expenditures, consistent with the current biennial budget, projected capital expenditures for the current biennial period, and the approved capital expenditure forecasts.

Revenue bonds are required because the Board anticipated certain capital expenditures in the capital investment plan in the last adopted biennial budget, and the costs of planned capital expenditures exceed the amount to be generated from operating revenues in all years of the Ten-Year Financial Forecast. Without revenue bonds to fund capital expenditures, either rates must increase more than expected or fewer capital projects than are planned can go forward. The interests of Metropolitan require the issuance of revenue bonds, as contemplated in the board-adopted biennial budget for FY 2022/23 and 2023/24, to support funding of the projects in the capital investment plan and the average rate increases contemplated in the Ten-Year Financial Forecast.

A balanced approach to financing future capital expenditures with both operating revenues and revenue bond proceeds will also help mitigate increases in water rates, provide financial flexibility, and support sound revenue bond debt service and fixed charge coverage ratios. These factors will help Metropolitan maintain strong bond credit ratings, which provide tangible benefits to ratepayers in the form of reduced debt service costs. Strong credit ratings provide better access to capital markets, lower interest rates, and better terms on a broad range of debt products. Prudent financial management policies have resulted in bond ratings of AAA from Standard & Poor's, Aa1 from Moody's, and AA+ from Fitch Ratings for Metropolitan's senior lien revenue bonds.

Ordinance No. 152 would provide the foundational authorization to allow for the Board's consideration of revenue bond issuances to finance any capital expenditures approved by the Board. The \$500 million authority proposed in Ordinance No. 152 is based on an estimate of revenue bond financing anticipated for several fiscal years.

Additionally, from time to time, when expenditures are necessary or convenient to carry out the purposes of the district, the Board may approve capital expenditures other than, or in addition to, those contemplated by the then-current capital investment plan and may also approve the issuance of revenue bonds authorized by this Ordinance No. 152 to finance all or a portion of those capital expenditures.

The MWD Act requires ordinances to be introduced on a day prior to the time of the Board's adoption of the ordinance. Ordinance No. 152 was introduced at the Board's regular meeting in June. General law cities typically require the reading of the full text of an ordinance unless the full reading is waived. Following a process that is similar to a general law city, Option #1 waives the full reading of Ordinance No. 152.

Policy

Metropolitan Water District Act Section 61: Ordinances, Resolutions and Orders

Metropolitan Water District Act Section 63: Roll Call on Ordinances

Metropolitan Water District Act Section 64: Ordinances; Introduction; Adoption

Metropolitan Water District Act Section 65: Ordinances – Effective Date

Metropolitan Water District Act Section 123: Borrowing, Limitation

Metropolitan Water District Act Section 237: Revenue Bond Purposes. The ordinance in this item is subject to a two-thirds vote requirement.

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

By Minute Item 52790, dated April 12, 2022, the Board approved the FY 2022/23 and 2023/24 biennial budget, approved appropriations and funding of capital expenditures, and approved a Ten-Year Financial Forecast.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA (State CEQA Guidelines Section 15378(b)(4) and 15378(b)(5)) because it involves the creation of government funding mechanisms or other government fiscal activities which do not involve any commitment to any specific project which may result in a direct or indirect physical impact on the environment and organizational or administrative activities and general policy and procedure making that would not result in a direct or indirect physical change to the environment.

CEQA determination for Option #2:

None required

Board Options

Option #1

Adopt Ordinance No. 152, determining that the interests of Metropolitan require the use of revenue bonds in the aggregate principal amount of \$500 million to finance a portion of Metropolitan's capital expenditures and waive the full reading of Ordinance No. 152 (two-thirds vote of the Board). (**Attachment 1.**)

Fiscal Impact: Adoption of Option #1 will have no direct financial impact to Metropolitan but will allow the Board to take future actions to finance a portion of Metropolitan's capital expenditures with revenue bonds. Future board action is required for approval of future revenue bonds.

Business Analysis: Option #1 will enable the Board to authorize the issuance of revenue bonds, through future adoption of revenue bond resolutions, to finance future capital expenditures.

Option #2

Do not adopt Ordinance No. 152.

Fiscal Impact: Option #2 may have a negative financial impact on Metropolitan by precluding the use of revenue bond proceeds to fund a portion of capital expenditures. The Board may not consider the approval of future revenue bond issues, without making the determinations in the proposed Ordinance No. 152.

Metropolitan may have to use additional reserves to fund capital costs, and/or increase water rates higher than projected in the Ten-Year Financial Forecast.

Business Analysis: Option #2 will reduce Metropolitan's financial flexibility by precluding the use of revenue bond proceeds to finance future capital expenditures. Metropolitan may have to curtail funding capital projects.

Staff Recommendation

Option #1



Katano Kasaine
Assistant General Manager/
Chief Financial Officer
6/30/2023
Date



Adel Hagekhalil
General Manager
6/30/2023
Date

Attachment 1 - Ordinance Of The Board Of Directors Of The Metropolitan Water District Of Southern California Determining That The Interests Of The District Require The Use Of Revenue Bonds In The Aggregate Principal Amount Of \$500,000,000 To Finance A Portion Of Capital Expenditures

Ref# cfo12686828

THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA

ORDINANCE 152

ORDINANCE OF THE BOARD OF DIRECTORS
OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
DETERMINING THAT THE INTERESTS OF THE DISTRICT REQUIRE THE USE OF
REVENUE BONDS IN THE AGGREGATE PRINCIPAL AMOUNT OF \$500,000,000 TO
FINANCE A PORTION OF CAPITAL EXPENDITURES

The Board of Directors of The Metropolitan Water District of Southern California (the “Board”) hereby finds that:

1. Pursuant to Chapter 1.6 of Part 5 of the Metropolitan Water District Act (California Statutes 1969, Chapter 209, as amended, hereinafter sometimes referred to as the “Act”), the Board of The Metropolitan Water District of Southern California (the “District”), on March 12, 1974, adopted Ordinance No. 126, calling a special election to be held within the District on June 4, 1974, for the purpose of submitting to the qualified voters of said District the following proposition:

To permit use of long-term bonds backed by water revenues as an alternative to pay-as-you-go financing, shall the Board of Directors of the Metropolitan Water District of Southern California be authorized to issue and sell revenue bonds under Chapter 1.6, Part 5, Metropolitan Water District Act?

2. Said election was duly and regularly held, and said proposition received the affirmative vote and assent of a majority of all of the qualified voters of the District voting on said proposition, and therefore the Board is authorized to issue and sell revenue bonds under Chapter 1.6 of Part 5 of the Act.

3. Revenue bonds means bonds, notes, loans, or other obligations or evidences of indebtedness, as provided for in the Act and California Government Code.

4. The ability to ensure a reliable supply of high-quality water for the District’s 26 member agencies depends upon the District’s ongoing ability to fund operations and maintenance, maintain and augment local and imported water supplies, fund replacements and refurbish existing infrastructure, and invest in system improvements.

5. Ordinance 151 was adopted by the Board on September 15, 2020, finding that the interests of Metropolitan require the use of revenue bonds in the aggregate principal amount of \$500,000,000 to fund a portion of the District’s capital investment plan expenditures, the cost of which is too great to be paid out of the ordinary annual income and revenue of the District.

6. Of the \$500,000,000 aggregate principal amount of revenue bonds authorized under Ordinance 151, all but \$167.935 million have been issued.

7. On April 12, 2022, the Board approved a biennial budget for FY 2022/23 and FY 2023/24, containing capital expenditures of \$300 and \$300 million, respectively, of which 55 percent is anticipated to be funded by debt proceeds.

8. On April 12, 2022, the Board approved a ten-year financial forecast for FY 2022/23 through FY 2031/32 (the “Ten-Year Financial Forecast”), forecasting annual capital expenditures of \$300 million for FY 2022/23 and FY 2023/24 and increasing from \$372 million up to \$1,202 million in FY 2024/25 through FY 2030/31, of which some portion of each year is anticipated to be funded by debt proceeds. The Ten-Year Financial Forecast provides an estimated forecast of future capital expenditures.

9. On April 12, 2022, the Board approved the use of \$270 million in operating revenues to partially fund the capital investment plan for FY 2022/23 and FY 2023/24. The capital investment plan identifies the capital priorities of the District for the fiscal years of the adopted budget.

10. In order to fully fund the capital investment plan and board-approved bond-financed projects for the Antelope Valley East Kern (AVEK) High Desert Water Banking Program and conservation program adopted by the Board on April 12, 2022, \$463.9 million in revenue bonds would be required in FY 2022/23 and FY 2023/24. As of June 30, 2023, Metropolitan has issued \$228.22 million of revenue bonds to support its capital improvement program. To support the remaining budget authorization of revenue bonds totaling \$235.68 million, a capacity of \$167.935 million under Ordinance 151 is currently available. This Ordinance would provide support for these bond issues and provide capacity for debt issued in future years.

11. Debt financing in future FYs of the Ten-Year Financial Forecast is assumed at amounts ranging from \$165 million to \$1,002 million per fiscal year.

12. The Board may, from time to time, approve capital expenditures other than or in addition to those contemplated by the capital investment plan at the time of the then-current biennial budget.

13. From time to time, capital projects that have been undertaken are delayed, redesigned, or deferred by the District for various reasons.

14. This Ordinance would support future board actions for debt financing over several years for capital expenditures approved by the Board as provided in the then-current biennial budget, capital investment plan, ten-year financial forecast, and as otherwise approved by the Board, which collectively would not exceed \$500,000,000.

15. Using debt to finance a portion of capital expenditures will provide the District with additional financial flexibility to fund capital expenditures that are necessary or convenient to carry out the purposes of the District while mitigating increases in water rates and charges.

16. This Ordinance was introduced at the regular meeting of the Board held on June 13, 2023.

NOW, THEREFORE, the Board of Directors of the District, DOES HEREBY RESOLVE, DETERMINE AND ORDER as follows:

The interests of The Metropolitan Water District of Southern California require the use of revenue bonds in the aggregate principal amount of \$500,000,000 to finance a portion of the District's capital expenditures, the cost of which is too great to be paid out of the ordinary annual income and revenue of the District.

I HEREBY CERTIFY that the foregoing is a full, true and correct copy of an Ordinance adopted by a two-thirds (2/3) vote of the total vote of the Board of Directors of The Metropolitan Water District of Southern California at its meeting held on July 11, 2023.

Secretary of the Board of Directors
of the Metropolitan Water District
of Southern California



- Board of Directors

Finance, Audit, Insurance, and Real Property Committee

7/11/2023 Board Meeting

7-6

Subject

Review and consider the Lead Agency's adopted Mitigated Negative Declaration and take related CEQA actions, and adopt resolution for 114th Fringe Area Annexation to Eastern Municipal Water District and Metropolitan

Executive Summary

This action grants final approval for the 114th Fringe Area Annexation requested by Eastern Municipal Water District (EMWD) and authorizes collecting Metropolitan's water standby charge and ad valorem tax. This request meets Metropolitan's policy and procedures for annexation. Due to some property owners declining to annex, there will be a couple of small window areas left over if the 114th Fringe Area gets approved. Both EMWD and Metropolitan staff believe that providing a reliable water service to the majority of the residences is important, and Metropolitan's interests will not be adversely affected by the small remaining windows. This annexation request consists of approximately 108.56 acres, with 11.81 as public roads leaving a net area of 96.75 acres as the basis for the annexation charge (**Attachment 1**). The new water demand from Metropolitan is estimated as 53.23 acre-feet per year (AFY). EMWD meets the demand management measures in the agency's Water Use Efficiency Statement of Compliance (**Attachment 2**). The charge for this annexation, if completed in 2023, is \$665,156.25, which includes a \$5,000 processing fee.

Details

Background

On March 14, 2023, EMWD's board of directors adopted Resolution No. 2023-057, requesting formal terms and conditions for annexation and collection of water standby charges for the proposed 114th Fringe Area annexation. The proposed annexation will extend the service area of Metropolitan and EMWD to the 108.56-acre property. The annexation area is in the Los Alamos Hills Area, located east of the 215 Freeway and south of Clinton Keith Road in Riverside County, within the city of Murrieta. The annexing area is within a neighborhood of 50 parcels with 36 property owners requesting access to the public water system from EMWD and Metropolitan. The annexing area includes 108.56 acres with 11.81 acres of public roads, leaving a net area of 96.75 acres, and the property identified as APNs 900-050-(007, 008, & 025), 900-370-(003,004,005,006,007,008, 009, 010, 011,012,013,015,016,017,021 & 022), 900-380-(001, 002, 003, 005, 006, 008, 009, 010, 011, 012, 013, 014, 015, 016, 017, & 018), and 908-010-001. EMWD has been working with the property owners in this area for a couple of years, and there were a number of property owners who did not wish to receive municipal water service from EMWD and Metropolitan at this time, leaving window areas within the proposed service area. EMWD felt it was more beneficial to move forward with the annexation for those property owners requesting service than to deny everyone based on a small number of property owners. The property owners not interested in the current annexation may do so at a later date and pay the necessary processing and annexation fees at that time. Staff believes that Metropolitan's interests will not be adversely affected by this action.

The proposed area after annexation will be served by EMWD as the local water purveyor and will be eligible for imported water through EMWD and Metropolitan after completion. The charge for this annexation is \$665,156.25, which includes the \$5,000 processing fee collected at the time of the initial annexation request; the balance is payable prior to completion. The annexation charge is calculated based on the 2023 per-acre fee of \$6,875. If the annexation is not completed in the calendar year 2023, the fee would be based on the then-current annexation rate pursuant to Section 3300 of Metropolitan's Administrative Code. Pursuant to Section 3107 of

Metropolitan's Administrative Code, EMWD submitted an acceptable Water Use Efficiency Statement of Compliance for this annexation project (**Attachment 2**). The projected water demand from Metropolitan is estimated to be 53.23 AFY. Completion of this annexation would be subject to such terms and conditions as may be fixed by Metropolitan's Board in granting final consent to such annexation, including the Local Agency Formation Commission conditioning approval of the proposed annexation upon a requirement that all previously established and collected taxes, benefit assessments, or property-related fees or charges be established and collected on parcels being annexed to Metropolitan. This action adopts a resolution consenting to EMWD's request for annexation with the standby charge as set forth in (**Attachment 3**). Upon completion of the annexation, the lands within the 114th Fringe Area annexation will be subject to Metropolitan's ad valorem property tax in the current amount of 0.0035 percent of the assessed valuation of each parcel and Metropolitan's water standby charge collected on behalf of EMWD in the current amount of \$6.94 per acre, or per a parcel of less than one acre.

Policy

Metropolitan Water District Administrative Act Section 350: Annexation of Corporate Area of Agency

Metropolitan Administrative Code Section 3100: Request for Annexation

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

Pursuant to the provisions of CEQA and the State CEQA Guidelines, EMWD, acting as the Lead Agency, adopted the Los Alamos Hills Water System Project (also known as 114th Fringe Area Annexation) Mitigated Negative Declaration (MND) on March 15, 2023, for the annexation process. Metropolitan, as Responsible Agency under CEQA, is required to certify that it has reviewed and considered the information in the 2023 MND and adopt the Lead Agency's findings prior to approval of the formal terms and conditions for the annexation. The environmental documentation is in **Attachment 4**.

CEQA determination for Option #2:

None required

Board Options

Option #1

Review and consider the Lead Agency's adopted Mitigated Negative Declaration and take related CEQA actions, and adopt resolution for 114th Fringe Area Annexation to Eastern Municipal Water District and Metropolitan.

Fiscal Impact: Receipt of annexation fee of \$665,156.25 for the annexation area and water sales revenue from the newly annexed territory

Business Analysis: This annexation will provide the ability for water service and associated benefits to the property owners. The initial fixed and variable costs will be borne by the local water supplier and property owners, including processing, infrastructure, and the cost of raw and treated water. This annexation helps to meet Metropolitan's member agency request.

Option #2

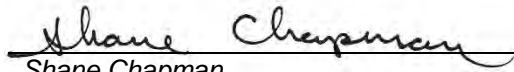
Decline the request for the proposed 114th Fringe Area Annexation.

Fiscal Impact: Unrealized annexation fee and water sales revenue from non-annexed areas

Business Analysis: The subject area will not receive the direct benefits of water supplied through EMWD and Metropolitan.

Staff Recommendation

Option #1


Shane Chapman
Asst. General Manager/Operations

7/3/2023

Date


Adel Hagekhalil
General Manager

7/6/2023

Date

Attachment 1 – Map and Legal Description**Attachment 2 – Water Use Efficiency Statement of Compliance****Attachment 3 – Annexation Resolution****Attachment 4 – 114th Fringe Area Environmental Documentation**

Ref# FAIRP 12693285

EXHIBIT "A"**EASTERN MUNICIPAL WATER DISTRICT****114TH FRINGE AREA ANNEXATION****LEGAL DESCRIPTION**

THOSE PORTIONS OF SECTIONS 2 AND 11, TOWNSHIP 7 SOUTH, RANGE 3 WEST, SAN BERNARDINO MERIDIAN, IN THE CITY OF MURRIETA, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE CENTERLINE OF LOS ALAMOS ROAD (WIDTH VARIES) WITH THE CENTERLINE OF CELIA ROAD (WIDTH 60.00 FEET IN FULL WIDTH) PER TRACT NO. 23342-1 ON FILE IN BOOK 235 OF MAPS AT PAGES 42 THROUGH 59, INCLUSIVE THEREOF, RECORDS OF SAID RIVERSIDE COUNTY, CALIFORNIA, SAID INTERSECTION BEING ON A CURVE, CONCAVE TO THE NORTHWEST, HAVING A RADIUS OF 1600.00 FEET, A RADIAL LINE FROM SAID POINT BEARS NORTH 42°35'15" WEST;

1) THENCE NORTHEASTERLY ALONG SAID CENTERLINE OF LOS ALAMOS ROAD AND ALONG SAID CURVE, TO THE LEFT, THROUGH A CENTRAL ANGLE OF 12°29'51", AN ARC DISTANCE OF 348.99 FEET;

2) THENCE NORTH 34°54'55" EAST ALONG SAID CENTERLINE OF LOS ALAMOS ROAD, A DISTANCE OF 70.08 FEET TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE SOUTHEAST, HAVING A RADIUS OF 1600.00 FEET, A RADIAL LINE FROM SAID POINT BEARS SOUTH 55°00'56" EAST;

3) THENCE NORTHEASTERLY ALONG SAID CENTERLINE AND ALONG SAID CURVE, TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 19°20'24", AN ARC DISTANCE OF 540.07 FEET TO THE BEGINNING OF A REVERSE CURVE, CONCAVE TO THE NORTHWEST, HAVING A RADIUS OF 1600.00 FEET, A RADIAL LINE FROM SAID POINT BEARS NORTH 35°40'32" WEST;

4) THENCE NORTHEASTERLY ALONG SAID CENTERLINE AND ALONG SAID CURVE, TO THE LEFT, THROUGH A CENTRAL ANGLE OF 6°48'14", AN ARC DISTANCE OF 190.00 FEET;

5) THENCE LEAVING SAID CENTERLINE NORTH 9°16'35" WEST ALONG THE SOUTHERLY PROLONGATION OF THE EASTERLY BOUNDARY AND ALONG THE EASTERLY BOUNDARY OF SAID TRACT NO. 23342-1, A DISTANCE OF 989.14 FEET;

EXHIBIT "A"**EASTERN MUNICIPAL WATER DISTRICT****114TH FRINGE AREA ANNEXATION**

6) THENCE ALONG THE SOUTHEASTERLY BOUNDARY OF SAID TRACT, NORTH 65°42'28" EAST, A DISTANCE OF 557.19 FEET TO A POINT ON THE WESTERLY LINE OF LOT 89 (OPEN SPACE) OF TRACT NO. 26262 ON FILE IN BOOK 268 OF MAPS AT PAGES 33 THROUGH 42, INCLUSIVE THEREOF, RECORDS OF SAID RIVERSIDE COUNTY;

7) THENCE SOUTH 0°25'22" EAST ALONG SAID WESTERLY LINE OF LOT 89, A DISTANCE OF 458.72 FEET TO A POINT ON THE SOUTH LINE OF SAID SECTION 2;

8) THENCE CONTINUING ALONG SAID WESTERLY LINE, AND IT'S SOUTHERLY PROLONGATION, OF LOT 89 SOUTH 0°41'38" WEST, A DISTANCE OF 428.72 FEET TO A POINT ON SAID CENTERLINE OF LOS ALAMOS ROAD;

9) THENCE NORTH 47°27'40" EAST ALONG SAID CENTERLINE, A DISTANCE OF 339.43 FEET TO AN INTERSECTION WITH THE NORTHWESTERY PROLONGATION OF THE NORTHEASTERLY LINE OF LOT 16 OF TRACT NO. 4447 ON FILE IN BOOK 78 OF MAPS AT PAGES 59 AND 60, RECORDS OF SAID RIVERSIDE COUNTY, CALIFORNIA;

10) THENCE SOUTH 42°32'20" EAST ALONG SAID PROLONGATION AND ALONG SAID NORTHEASTERLY LINE, A DISTANCE OF 303.00 FEET TO THE SOUTHWESTERLY CORNER OF LOT 17 OF SAID TRACT NO. 4447;

11) THENCE NORTH 47°27'40" EAST ALONG THE SOUTHEASTERLY LINE OF SAID LOT 17, A DISTANCE OF 360.04 FEET TO THE SOUTHEASTERLY CORNER OF SAID LOT 17;

12) THENCE NORTH 42°32'20" WEST ALONG THE NORTHEASTERLY LINE OF SAID LOT 17 AND ALONG THE NORTHWESTERLY PROLONGATION THEREOF TO AN INTERSECTION WITH SAID CENTERLINE OF LOS ALAMOS ROAD, DISTANCE OF 303.00 FEET;

13) THENCE NORTH 47°27'40" EAST ALONG SAID CENTERLINE, A DISTANCE OF 607.41 FEET TO THE BEGINNING OF A TANGENT CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 1000.00 FEET;

14) THENCE NORTHEASTERLY ALONG SAID CENTERLINE AND ALONG SAID CURVE, TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 19°39'05", AN ARC DISTANCE OF 342.98 FEET;

15) THENCE NORTH 67°06'45" EAST ALONG SAID CENTERLINE, A DISTANCE OF 120.74 FEET TO AN ANGLE POINT THEREON;

EXHIBIT "A"**EASTERN MUNICIPAL WATER DISTRICT****114TH FRINGE AREA ANNEXATION**

16) THENCE NORTH 0°48'12" WEST ALONG SAID CENTERLINE, A DISTANCE OF 7.83 FEET TO AN ANGLE POINT THEREON;

17) THENCE NORTH 68°32'18" EAST ALONG SAID CENTERLINE, A DISTANCE OF 151.11 FEET TO THE BEGINNING OF A TANGENT CURVE, CONCAVE TO THE NORTHWEST, HAVING A RADIUS OF 300.00;

18) THENCE NORTHEASTERLY ALONG SAID CENTERLINE AND ALONG SAID CURVE, TO THE LEFT, THROUGH A CENTRAL ANGLE OF 22°44'00", AN ARC DISTANCE OF 119.03 FEET;

19) THENCE NORTH 45°48'18" EAST ALONG SAID CENTERLINE, A DISTANCE OF 122.74 FEET TO A POINT THEREON;

20) THENCE LEAVING SAID CENTERLINE SOUTH 44°11'42" EAST, AT A RIGHT ANGLE, A DISTANCE OF 50.00 FEET TO THE NORTHEASTERLY CORNER OF PARCEL 1 OF PARCEL MAP 7506, ON FILE IN BOOK 25 OF PARCEL MAPS, AT PAGE 74 THEREOF, RECORDS OF SAID RIVERSIDE COUNTY;

21) THENCE SOUTH 0°41'34" EAST ALONG THE EASTERLY LINE OF SAID PARCEL 1, A DISTANCE OF 408.35 FEET TO THE SOUTHEASTERLY CORNER THEREOF;

22) THENCE NORTH 88°45'01" WEST ALONG THE SOUTHERLY LINE OF SAID PARCEL 1 AND ALONG THE WESTERLY PROLONGATION THEREOF TO A POINT OF INTERSECTION WITH THE CENTERLINE OF MASON AVENUE, A DISTANCE OF 364.63 FEET;

23) THENCE SOUTH 0°48'12" EAST ALONG SAID CENTERLINE OF MASON AVENUE, A DISTANCE OF 215.26 FEET TO AN INTERSECTION WITH THE EASTERLY PROLONGATION OF THE SOUTHERLY LINE OF LOT 19 OF SAID TRACT NO. 4447;

24) THENCE SOUTH 89°09'11" WEST ALONG SAID SOUTHERLY LINE, A DISTANCE OF 441.32 FEET TO THE NORTHWESTERLY CORNER OF LOT 20 AND ON THE EASTERLY LINE OF LOT 18 OF SAID TRACT;

25) THENCE SOUTH 4°54'34" EAST ALONG SAID EASTERLY LINE, A DISTANCE OF 260.62 FEET TO THE SOUTHEASTERLY CORNER OF SAID LOT 18 AND THE NORTHWESTERLY CORNER OF LOT 21 OF SAID TRACT;

EXHIBIT "A"**EASTERN MUNICIPAL WATER DISTRICT****114TH FRINGE AREA ANNEXATION**

26) THENCE NORTH 89°10'16" EAST ALONG THE NORTHERLY LINE OF SAID LOT 21, AND ALONG THE EASTERLY PROLONGATION THEREOF, A DISTANCE OF 422.66 FEET TO THE INTERSECTION WITH SAID CENTERLINE OF MASON AVENUE;

27) THENCE SOUTH 0°59'42" WEST ALONG SAID CENTERLINE AND ALONG THE EASTERLY LINE OF LOT 40 OF SAID TRACT, A DISTANCE OF 971.75 FEET TO THE SOUTHEASTERLY CORNER THEREOF, SAID CORNER ALSO BEING AN ANGLE POINT ON THE BOUNDARY OF SAID TRACT;

28) THENCE SOUTH 83°34'57" WEST ALONG SAID BOUNDARY OF SAID TRACT, A DISTANCE OF 417.79 FEET TO THE SOUTHWESTERLY CORNER OF LOT 39 THEREOF;

THENCE CONTINUING ALONG SAID BOUNDARY THE FOLLOWING FIVE (5) COURSES:

29) THENCE SOUTH 59°17'42" WEST, A DISTANCE OF 264.61 FEET;

30) THENCE SOUTH 57°29'18" WEST, A DISTANCE OF 243.56;

31) THENCE SOUTH 46°00'20" WEST, A DISTANCE OF 246.75 FEET;

32) THENCE SOUTH 33°14'37" WEST, A DISTANCE OF 239.29 FEET;

33) THENCE SOUTH 16°43'55" WEST, A DISTANCE OF 220.81 FEET TO THE SOUTHEASTERLY CORNER OF LOT 34 OF SAID TRACT;

34) THENCE NORTH 81°32'16" WEST ALONG THE SOUTHERLY LINE OF SAID LOT 34 AND ALONG THE NORTHWESTERLY PROLONGATION THEREOF, A DISTANCED OF 449.99 FEET TO A POINT OF INTERSECTION WITH THE CENTERLINE OF MARY PLACE, SAID POINT BEING ON A NON-TANGENT CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 500.00 FEET, A RADIAL LINE FROM SAID POINT BEARS SOUTH 81°30'00" EAST;

35) THENCE SOUTHERLY AND SOUTHEASTERLY ALONG SAID CENTERLINE AND ALONG SAID CURVE, TO THE LEFT, THROUGH A CENTRAL ANGLE OF 46°18'16", AN ARC DISTANCE OF 404.08 FEET;

36) THENCE SOUTH 37°17'19" EAST ALONG SAID CENTERLINE, A DISTANCE OF 130.52 FEET TO THE BEGINNING OF A TANGENT CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 500.00 FEET;

EXHIBIT "A"**EASTERN MUNICIPAL WATER DISTRICT****114TH FRINGE AREA ANNEXATION**

37) THENCE SOUTHEASTERLY AND SOUTHERLY ALONG SAID CENTERLINE AND ALONG SAID CURVE, TO THE RIGHT, THROUGH A CENTRAL ANGLE 38°34'57", AN ARC DISTANCE OF 336.70 FEET;

38) THENCE SOUTH 0°49'27" WEST ALONG SAID CENTERLINE, A DISTANCE OF 62.80 FEET TO A POINT OF INTERSECTION WITH THE WESTERLY PROLONGATION OF THE NORTHERLY LINE OF PARCEL 1 OF PARCEL MAP 8638, ON FILE IN BOOK 33 OF PARCEL MAPS, AT PAGE 89 THEREOF, RECORDS OF SAID RIVERSIDE COUNTY;

39) THENCE SOUTH 89°20'14" EAST ALONG SAID PROLONGATION AND ALONG SAID NORTHERLY LINE, A DISTANCE OF 425.28 FEET TO THE NORTHEASTERLY CORNER THEREOF;

40) THENCE SOUTH 0°49'27" WEST ALONG THE EASTERLY LINE OF SAID PARCEL 1, A DISTANCE OF 209.37 FEET TO THE SOUTHEASTERLY CORNER THEREOF;

41) THENCE NORTH 89°20'14" WEST ALONG THE SOUTHERLY LINE OF SAID PARCEL 1 AND ALONG THE WESTERLY PROLONGATION THEREOF, A DISTANCE OF 425.28 FEET TO A POINT OF INTERSECTION WITH SAID CENTERLINE OF MARY PLACE;

42) THENCE SOUTH 0°49'27" WEST ALONG SAID CENTERLINE, A DISTANCE OF 870.09 FEET TO THE SOUTHEASTERLY CORNER OF LOT 7 OF SAID TRACT 4447, SAID CORNER BEING THE MOST SOUTHERLY CORNER OF SAID BOUNDARY OF TRACT 4447;

43) THENCE NORTH 47°06'24" WEST ALONG SAID BOUNDARY, A DISTANCE OF 1828.46 FEET TO THE SOUTHWESTERLY CORNER OF LOT 3 OF SAID TRACT;

44) THENCE NORTH 0°29'04" EAST ALONG THE WESTERLY LINE OF SAID LOT 3, A DISTANCE OF 208.00 FEET TO THE NORTHWESTERLY CORNER THEREOF;

45) THENCE NORTH 86°26'39" EAST ALONG THE NORTHERLY LINE OF SAID LOT 3 AND ALONG THE EASTERLY PROLONGATION THEREOF TO A POINT OF INTERSECTION WITH THE CENTERLINE OF CELIA ROAD, A DISTANCE OF 371.52 FEET, SAID POINT BEING ON A NON-TANGENT CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 300.00 FEET, A RADIAL LINE FROM SAID POINT BEARS NORTH 86°28'52" EAST;

46) THENCE NORTHERLY ALONG SAID CENTERLINE AND ALONG SAID CURVE, TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 3°59'49", AN ARC DISTANCE OF 20.93 FEET;

EXHIBIT "A"**EASTERN MUNICIPAL WATER DISTRICT****114TH FRINGE AREA ANNEXATION**

47) THENCE NORTH 0°28'41" EAST ALONG SAID CENTERLINE, A DISTANCE OF 417.89 FEET TO THE BEGINNING OF A TANGENT CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 300.00 FEET;

48) THENCE NORTHWESTERLY ALONG SAID CENTERLINE AND ALONG SAID CURVE, TO THE LEFT, THROUGH A CENTRAL ANGLE OF 41°00'11", AN ARC DISTANCE OF 214.69 FEET;

49) THENCE NORTH 40°31'30" WEST ALONG SAID CENTERLINE, A DISTANCE OF 95.46 FEET TO THE **POINT OF BEGINNING**.

EXCEPTING THEREFROM LOT 27 OF SAID TRACT NO. 4447 TOGETHER WITH A PORTION OF SAID MARY PLACE DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE CENTERLINE OF SAID MARY PLACE WITH THE SOUTHEASTERLY PROLONGATION OF THE SOUTHWESTERLY LINE OF SAID LOT 27;

50) THENCE NORTH 62°03'14" WEST ALONG SAID PROLONGATION AND ALONG SAID SOUTHWESTERLY LINE, A DISTANCE OF 376.25 FEET TO THE NORTHWESTERLY CORNER OF SAID LOT 27;

51) THENCE NORTH 40°44'02" EAST ALONG THE NORTHWESTERLY LINE OF SAID LOT 27, A DISTANCE OF 311.37 FEET TO AN ANGLE POINT THEREON;

52) THENCE NORTH 47°27'40" EAST ALONG SAID NORTHWESTERLY LINE, A DISTANCE OF 57.07 FEET TO THE MOST NORTHERLY CORNER OF SAID LOT 27;

53) THENCE SOUTH 54°28'03" EAST ALONG THE NORTHEASTERLY LINE OF SAID LOT 27 AND ALONG THE SOUTHEASTERLY PROLONGATION THEREOF, A DISTANCE OF 303.78 FEET TO AN INTERSECTION WITH SAID CENTERLINE OF MARY PLACE, SAID INTERSECTION BEING ON A NON-TANGENT CURVE CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 1,500.00 FEET, A RADIAL LINE FROM SAID POINT BEARS SOUTH 54°31'05" EAST;

54) THENCE SOUTHWESTERLY ALONG SAID CENTERLINE AND ALONG SAID CURVE, TO THE LEFT, THROUGH A CENTRAL ANGLE OF 7°35'00", AN ARC DISTANCE OF 198.53 FEET;

EXHIBIT "A"**EASTERN MUNICIPAL WATER DISTRICT****114TH FRINGE AREA ANNEXATION**

55) THENCE SOUTH 27°53'55" WEST ALONG SAID CENTERLINE, A DISTANCE OF 119.36 FEET TO THE **POINT OF BEGINNING**.

GROSS AREA = 4,843,819.49 SQ.FT. (111.20 ACRES ±)
 LOT 27 AREA = 115,098.88 SQ. FT. (2.64 ACRES ±)
 ROAD AREA = 514,904.40 SQ. FT. (11.82 ACRES ±)
 NET AREA = 4,213,816.21 SQ. FT. (96.74 ACRES ±)

SEE PLAT ATTACHED HERETO AS EXHIBIT "B" AND MADE A PART HEREOF..

PREPARED UNDER MY SUPERVISION


 JASON ARDERY, L.S. 9329

05/25/2023

Date

Prepared By: L.B.

Checked By: 

The Metropolitan Water District
 of Southern California
 Geodetics & Mapping Team
 ANNEXATION - CONDITIONAL REV
 Reviewer: B.G. Date: 05/26/2023



b

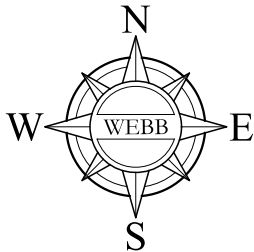
EXHIBIT "B"

EASTERN MUNICIPAL WATER DISTRICT

114TH FRINGE AREA ANNEXATION

THIS EXHIBIT IS TO BE ATTACHED TO THE LEGAL DESCRIPTION

GROSS AREA = 4,728,720.61 SQ. FT. (111.20 ACRES ±)
 LOT 27 AREA = 115,098.88 SQ. FT. (2.64 ACRES ±)
 ROAD AREA = 514,904.40 SQ. FT. (11.82 ACRES ±)
 NET AREA = 4,213,816.21 SQ. FT. (96.74 ACRES ±)



SEC 2, T7S, R3W, SBM

SHEET 2

SEC 11, T7S, R3W, SBM

SHEET 3

SHEET 4

SHEET 5

BASIS OF BEARINGS
SEE SHEET 5

LEGEND

ANNEXATION
BOUNDARY

N.A.P.

NOT A PART OF
ANNEXATION

1"=800'



800 0 800

The Metropolitan Water District
of Southern California

Geodetics & Mapping Team

ANNEXATION - CONDITIONAL REV

Reviewer: B.G. Date: 05/26/2023

VICINITY MAP &
INDEX MAP

SIGNATURE

05/25/2023

DATE

SEC. 2 & 11, T7S, R3W, S.B.M. CITY OF MURRIETA, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

ALBERT A.
WEBB
ASSOCIATES

H:\2022\22-0143\Drawings\Mapping\LAFCO\22-143 LAFCO.dwg

THIS PLAT IS SOLELY AN AID IN LOCATING THE PARCEL(S) IN THE ATTACHED DOCUMENT.
ALL PRIMARY CALLS ARE LOCATED IN THE WRITTEN DOCUMENT.

SHEET 1 OF 5

W.O.
22-0143

SCALE: 1"=800'

DRWN BY LB
CHKD BY

DATE 1/21/23
DATE 05/25/2023

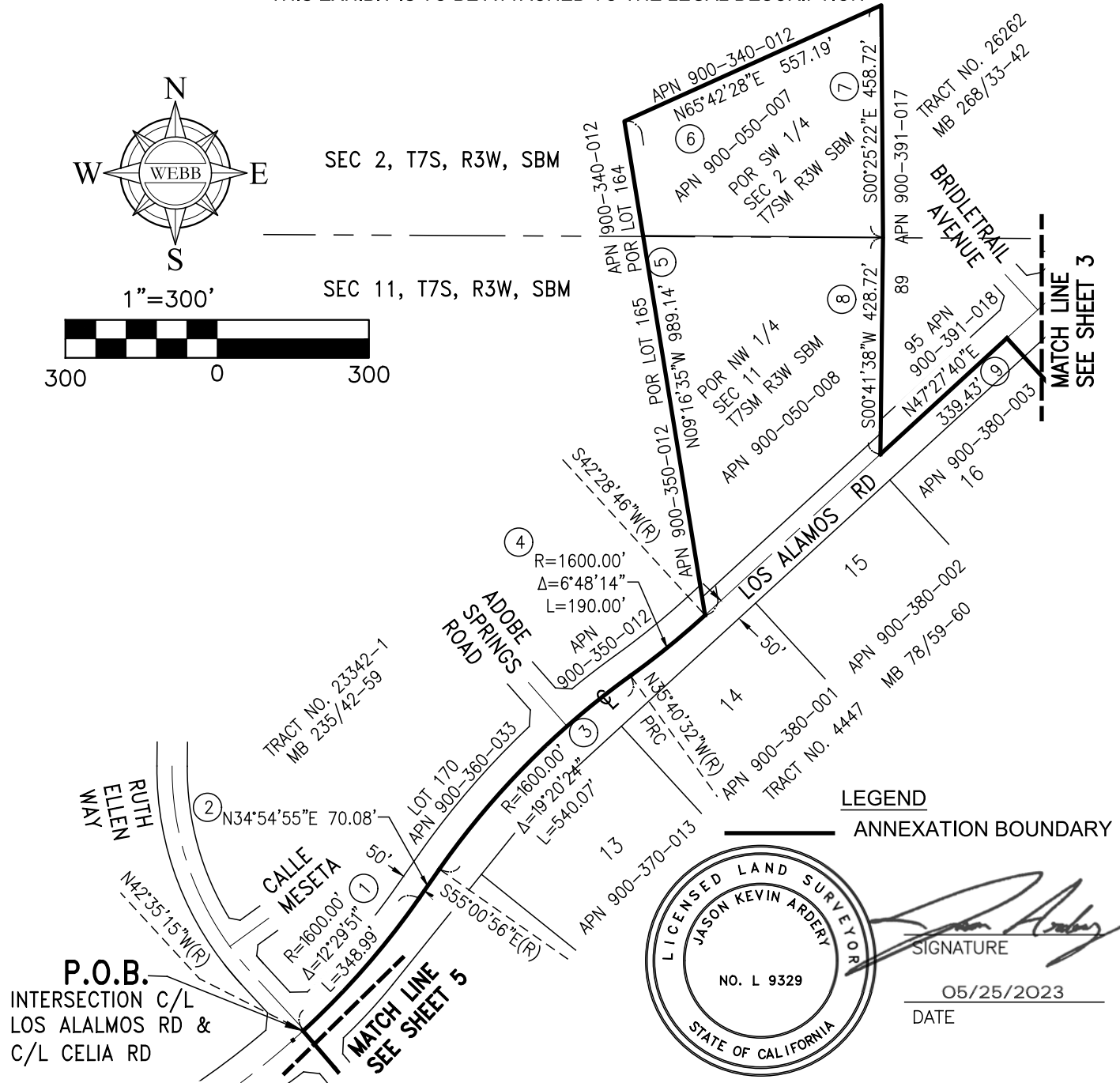
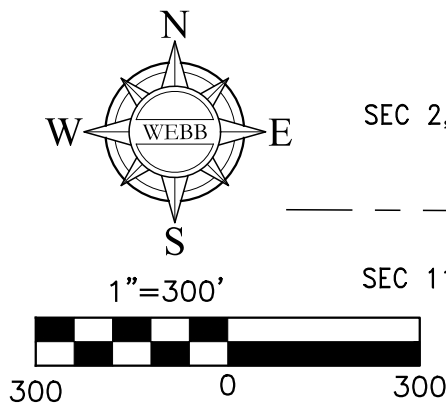
SUBJECT: ANNEXATION TO EMWD & MWD

EXHIBIT "B"

EASTERN MUNICIPAL WATER DISTRICT

114TH FRINGE AREA ANNEXATION

THIS EXHIBIT IS TO BE ATTACHED TO THE LEGAL DESCRIPTION



SEC. 2 & 11, T7S, R3W, S.B.M. CITY OF MURRIETA, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

ALBERT A.
WEBB
ASSOCIATES

H:\2022\22-0143\Drawings\Mapping\LAFCO\22-143 LAFCO.dwg

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SHEET 2 OF 5

W.O.
22-0143

SCALE: 1"=300'

DRWN BY LB
CHKD BY

DATE 1/21/23
DATE 05/25/2023

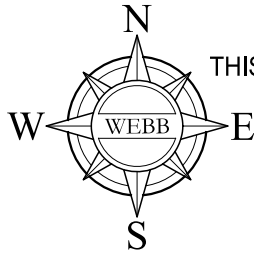
SUBJECT: ANNEXATION TO EMWD & MWD

EXHIBIT "B"

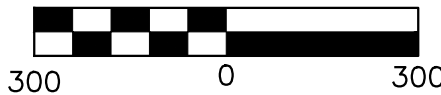
EASTERN MUNICIPAL WATER DISTRICT

114TH FRINGE AREA ANNEXATION

THIS EXHIBIT IS TO BE ATTACHED TO THE LEGAL DESCRIPTION



1"=300'



LEGEND

ANNEXATION
BOUNDARY

SIGNATURE

05/25/2023

DATE

SEC. 2 & 11, T7S, R3W, S.B.M. CITY OF MURRIETA, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

ALBERT A.
WEBB
ASSOCIATES

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SHEET 3 OF 5

W.O.
22-0143

SCALE: 1"=300'

DRWN BY LB
CHKD BYDATE 1/21/23
DATE 05/25/2023

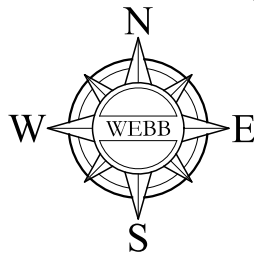
SUBJECT: ANNEXATION TO EMWD & MWD

EXHIBIT "B"

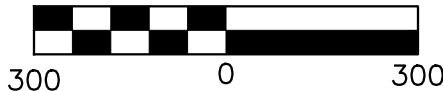
EASTERN MUNICIPAL WATER DISTRICT

114TH FRINGE AREA ANNEXATION

THIS EXHIBIT IS TO BE ATTACHED TO THE LEGAL DESCRIPTION



1"=300'



P.O.B.
EXCEPTION
INTERSECTION C/L
MARY PLACE &
SE'LY PROLONGATION
LOT 27

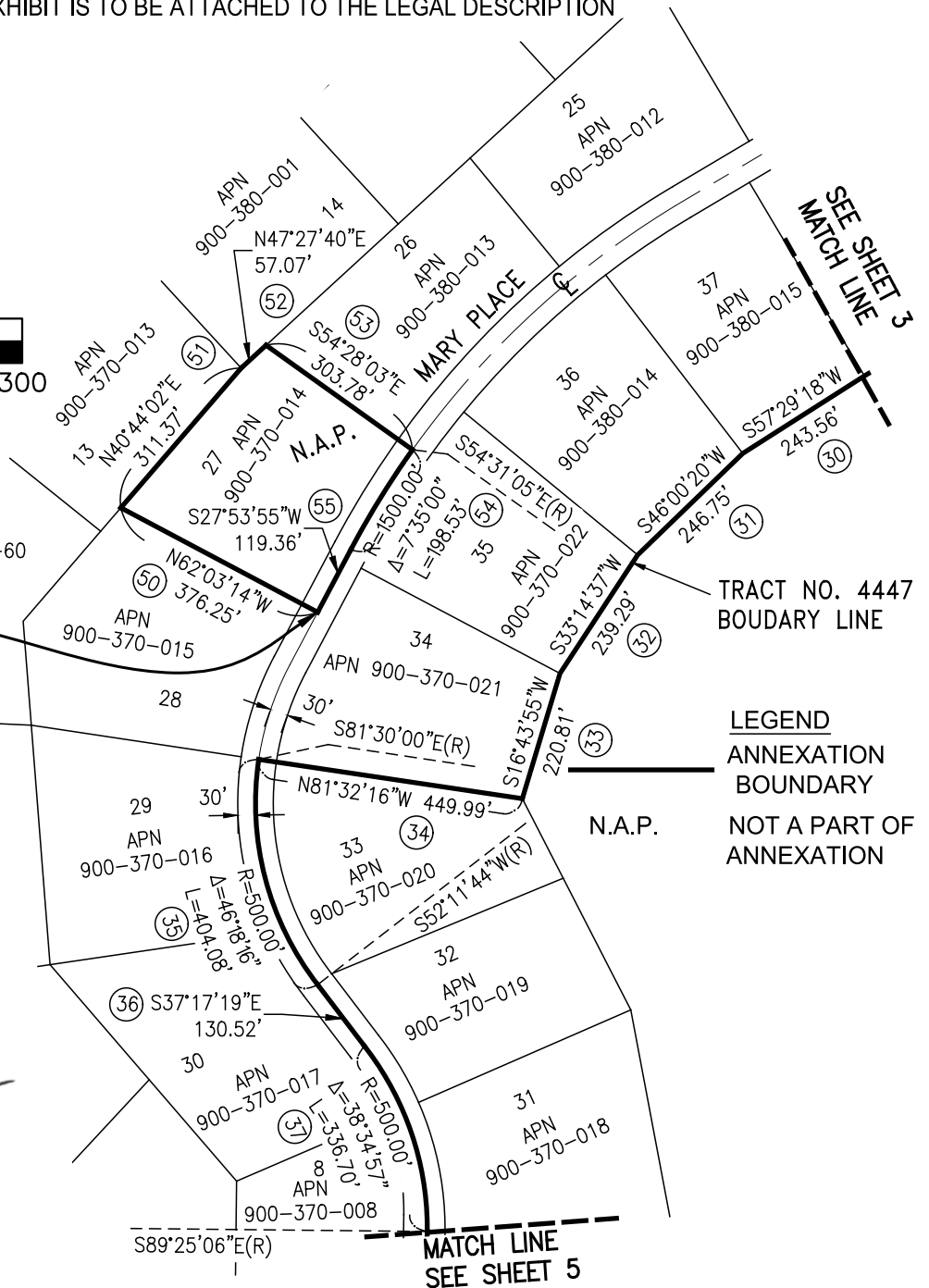
MB 78/59-60



SIGNATURE

05/25/2023

DATE



LEGEND
ANNEXATION
BOUNDARY
NOT A PART OF
ANNEXATION

SEC. 2 & 11, T7S, R3W, S.B.M. CITY OF MURRIETA, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

ALBERT A.
WEBB
ASSOCIATES

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SHEET 4 OF 5

W.O.
22-0143

SCALE: 1"=300

DRWN BY LB
CHKD BY

DATE 1/21/23
DATE 05/25/2023

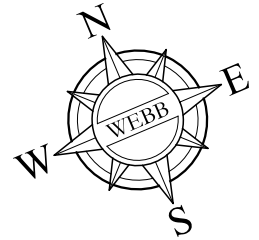
SUBJECT: ANNEXATION TO EMWD & MWD

EXHIBIT "B"

EASTERN MUNICIPAL WATER DISTRICT

114TH FRINGE AREA ANNEXATION

THIS EXHIBIT IS TO BE ATTACHED TO THE LEGAL DESCRIPTION



P.O.B.

INTERSECTION C/L
LOS ALAMOS RD &
C/L CELIA RD

MATCH LINE
SEE SHEET 2

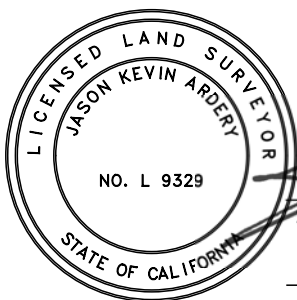
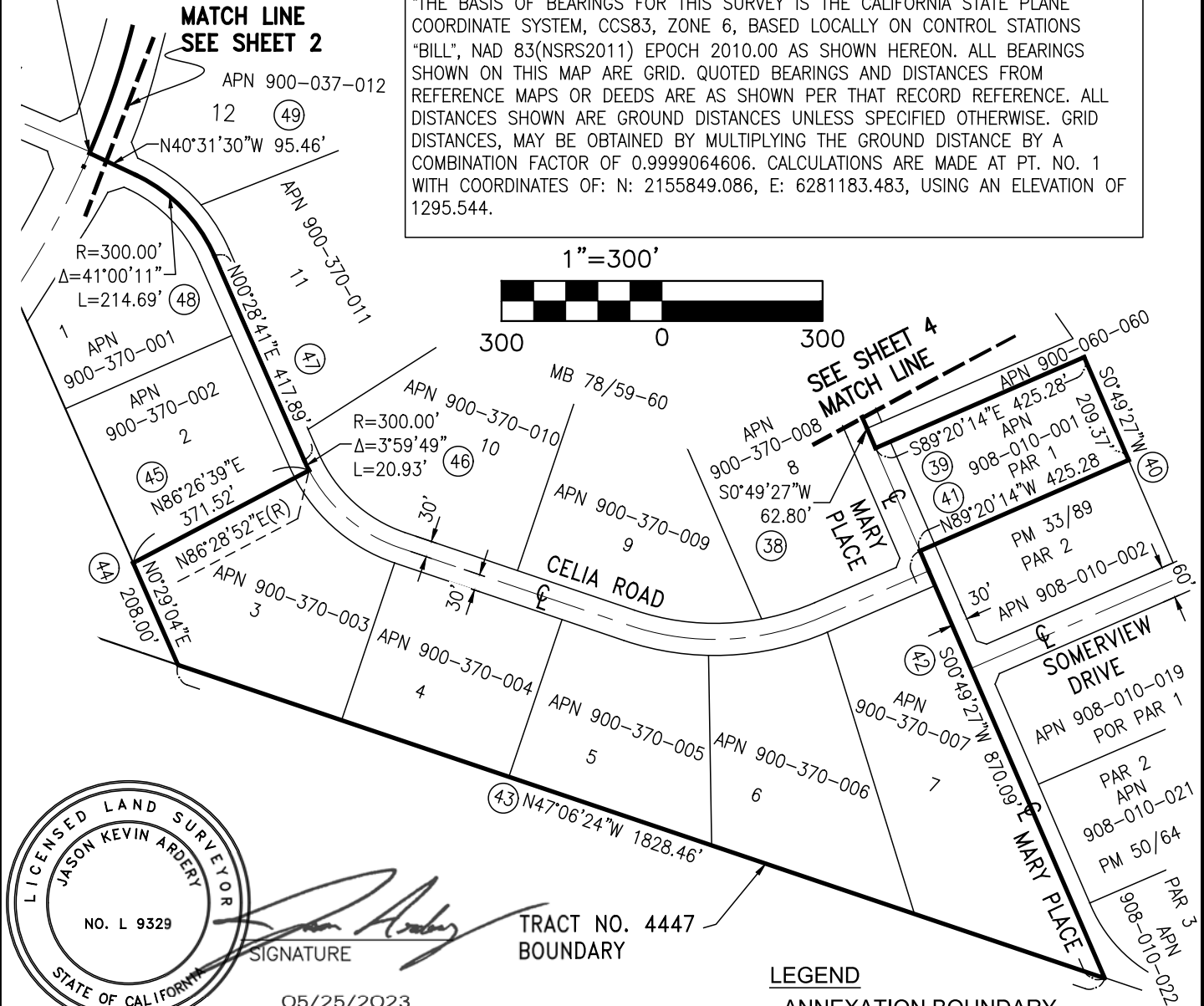
BASIS OF BEARINGS

"THE BASIS OF BEARINGS FOR THIS SURVEY IS THE CALIFORNIA STATE PLANE COORDINATE SYSTEM, CCS83, ZONE 6, BASED LOCALLY ON CONTROL STATIONS "BILL", NAD 83(NSRS2011) EPOCH 2010.00 AS SHOWN HEREON. ALL BEARINGS SHOWN ON THIS MAP ARE GRID. QUOTED BEARINGS AND DISTANCES FROM REFERENCE MAPS OR DEEDS ARE AS SHOWN PER THAT RECORD REFERENCE. ALL DISTANCES SHOWN ARE GROUND DISTANCES UNLESS SPECIFIED OTHERWISE. GRID DISTANCES, MAY BE OBTAINED BY MULTIPLYING THE GROUND DISTANCE BY A COMBINATION FACTOR OF 0.9999064606. CALCULATIONS ARE MADE AT PT. NO. 1 WITH COORDINATES OF: N: 2155849.086, E: 6281183.483, USING AN ELEVATION OF 1295.544.

1"=300'



SEE SHEET 4
MATCH LINE



SIGNATURE

05/25/2023

DATE

TRACT NO. 4447
BOUNDARY

LEGEND

ANNEXATION BOUNDARY

SEC. 2 & 11, T7S, R3W, S.B.M. CITY OF MURRIETA, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

ALBERT A.

WEBB

ASSOCIATES

H:\2022\22-0143\Drawings\Mapping\LAFCO\22-143 LAFCO.dwg

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SHEET 5 OF 5

W.O.
22-0143

SCALE: 1"=300'

DRWN BY LB
CHKD BY

DATE 1/21/23
DATE 05/25/2023

SUBJECT: ANNEXATION TO EMWD & MWD

**Documentation for Annexation of Territory to
The Metropolitan Water District of Southern California (MWD)
Water Use Efficiency Compliance Statement
Member Agency Annexation**

A. General Information

<p>Description of Annexing Area</p> <p>The subject project is located at northwest portion of the City of Murrieta, generally bounded by I-215 on the west, primarily south of Los Alamos Road, east of Mason Road and surrounding Mary Place in Riverside County.</p>	<p>Member Agency: Eastern Municipal Water District Annexation Name: 114th Fringe Area (Los Alamos Hills Area – Murrieta, CA) Water Use:</p> <p>Annexing Water Demand: 53.23 AFY Imported Water Demand: 53.23 AFY Percent MWD Supplied: 100%</p> <p>Development Plans:</p> <p>The subject annexation consists of approximately 101 acres of developed and undeveloped property. Additionally, the area consists of 50 residential lots with 46 of the lots currently developed and the remaining 4 are undeveloped. 36 of the 50 parcel owners expressed their desire to receive municipal water service from EMWD and MWD. No additional development is known at this time.</p> <p>Zoning: Rural Residential</p> <p>Address: N/A APN: 900-050-007, 900-050-008, 900-050-025, 900-050-029, 900-060-001, 900-060-002, 900-320-001, 900-370-001, 900-370-002, 900-370-003, 900-370-004, 900-370-005, 900-370-006, 900-370-007, 900-370-008, 900-370-009, 900-370-010, 900-370-011, 900-370-012, 900-370-013, 900-370-014, 900-370-015, 900-370-016, 900-370-017, 900-370-018, 900-370-019, 900-370-020, 900-370-021, 900-370-022, 900-380-001, 900-380-002, 900-380-003, 900-380-004, 900-380-005, 900-380-006, 900-380-007, 900-380-008, 900-380-009, 900-380-010, 900-380-011, 900-380-012, 900-380-013, 900-380-014, 900-380-015, 900-380-016, 900-380-017, 900-380-018, and 908-010-001</p> <p>Additional Water Agencies Involved in Annexation: 1. N/A</p>
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B. Member Agency Water Use and Efficiency Plans

(1) Annual Water Use.

<p>1. Does your agency minimize annual water demand and peak demands by incorporating water conservation measures throughout the service area?</p> <p>Please describe such conservation measures in the service area.</p> <p>MWD Administrative Code § 3107 (a)(1)(i)</p>	<p>Member Agency Response <input checked="" type="radio"/> Yes <input type="radio"/> No (circle one)</p> <p>Description:</p> <p>EMWD minimizes annual water demand by incorporating water conservation measures into new development plans and service agreements. Since 2009, residential and landscape customers have participated in a budget-based tiered rate program that assigns individualized indoor and outdoor water budgets based on each account's persons per household, landscape area, conservation factor, and billing period. The conservation factor is an evapotranspiration (ET) factor based on the development's connection date that determines what percentage of the reference evapotranspiration rate will be used to calculate the outdoor budget. ET rates are continuously monitored and recorded across EMWD's entire service region and are specific to the customer's location. Accounts with meters installed on or before 2010 are assigned an ET factor of at most 0.8; accounts connected between 2010 and May 2015 receive an ET factor of 0.7; accounts connected on or after June 2015 receive an ET factor of 0.5. EMWD has measured over 608 million square feet of landscape through onsite audits, Geographic Information Systems (GIS), or customer variance requests. As of January 2018, the daily allocation used to calculate the indoor budget has been reduced from 60 gallons per person per day to 55 gallons per person per day. All water use surpassing the total water budget is charged at a significantly higher rate. All new development must submit a Landscape Plan Check Application and consent to a Landscape Irrigation Water Budget Agreement in order to ensure that all individually metered landscape/irrigation projects comply with EMWD's Landscape/Irrigation Ordinance 72. Furthermore, new development must also submit a Site Usage Analysis form that clearly displays the accurate landscape square footage broken down into functional turf and non-functional turf. This information is used to ensure that no account will receive a water budget that exceeds the District's maximum budget limits. In addition to all of the above, article 6 of EMWD's Administrative Codes puts into action many more conservation policies, practices, and procedures. Developers must adhere to State and local plumbing and landscaping codes. All customers are prohibited from hosing down driveways and other hard surfaces except for health or sanitary reasons and then only by use of a hand-held container. Additionally, customers are:</p> <ul style="list-style-type: none"> • Required to repair faucets, toilets, and other potential sources of water leaks within 48 hours of the occurrence, • Water outdoors between 9 pm and 6 am only and are prohibited from producing run-off or over watering and from watering during rain • Prohibited from allowing water to run while washing vehicles, • Prohibited from using decorative fountains unless they are equipped with a recycling system, and, • Limited to no more than 15 minutes of watering per day per station if using an unattended irrigation system or watering device.
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Penalties for water inefficiency are enforced through the tier rate budgets and through other additional fines. For commercial, multi family, and landscape accounts, such fines include an initial warning, followed by a final written notice, which may then be followed by a surcharge of \$100 added to the customer's bill if a third violation occurs within 12 months of the first notice. A fourth violation and any subsequent violations could incur an additional \$200 surcharge to the customer's water bill. For single family residential accounts, the surcharges are \$25 for the third violation, and \$50 for the fourth violation and subsequent violations. The revenue derived from the surcharges and other fines explained in article 6 is used to support water use efficiency programs and rebates.

EMWD has initiated a long-term campaign to encourage all customers to use water wisely. A staff of conservation and education specialists provides public education programs, landscape irrigation workshops, student education programs, and conservation related campaigns. EMWD sponsors workshops on California-friendly plants to promote landscaping using drought tolerant plants and has a comprehensive Water Waste Program to report/correct the wasteful use of water. The New Residential Development Campaign is targeted at new residential customers and consists of a welcome letter, a quarterly newsletter containing seasonal tips and ideas for water conservation, and a survey. EMWD's new development conservation programs, including residential water surveys, water-wise landscape/irrigation workshops, high-efficiency washing machine rebates, moisture sensors, CII programs, etc. are offered to all of our customers, including new development and subagencies. These programs are promoted via bill stuffers, EMWD's website, newspaper articles, and homeowners' association meetings and civic associations, etc.

In 2019, the District launched its WaterWise Plus program, a comprehensive and forward-thinking program designed to assist customers and partner agencies with finding new and cost-effective ways to become more water efficient. The program integrates existing water use efficiency-based programs with long-term solutions that are promoted regardless of drought conditions. These programs help customers make lifestyle changes to their water use habits resulting in becoming more efficient with their water use, gaining a better understanding of their water usage, and making them better able to manage their monthly bills.

In 2021, the District launched its Landscapes for Living program, designed to assist residential customers to become more water efficient. The program integrates home consultations with a landscape expert, free direct installation of smart irrigation controllers and high efficiency nozzles, landscape design assistance, and staff support to assist customers who want to apply for water saving rebates through the MWD.

These programs are promoted via bill stuffers, EMWD's website, newspaper articles, and homeowners' association meetings and civic associations, etc.

	<p>Supporting Documentation: (Attach supporting documents or web links)</p> <p>Administrative Code Article 6 - Water Conservation (pg 362)</p> <p>EMWD Rebate Information</p>
<p>2. Does your service area maximize use of groundwater, local surface water, and recycled waste water supplies to minimize annual water demand on MWD?</p> <p>Please describe such maximizing uses in the service area.</p> <p>MWD Administrative Code § 3107 (a)(1)(ii)</p>	<p>Member Agency Response <input checked="" type="radio"/> Yes <input type="radio"/> No (circle one)</p> <p>Description:</p> <p>EMWD operates storage facilities, groundwater facilities, and promotes conservation to minimize annual water demands on MWD. Currently, EMWD's potable supply system includes 80 tanks with over 203 million gallons of storage capacity. Tank levels are adjusted based on demand forecasting, allowing this storage to serve as a buffer against peak demands on MWD's system.</p> <p>The District has also developed significant local supplies to reduce EMWD's need for imported water. EMWD operates 14 potable wells and an additional 13 brackish wells, which provide influent for the District's three operational desalination plants. The District proactively manages its groundwater basins in order to ensure the continued availability of a highly reliable and economic water supply. Efforts include the diversion of surface water (up to 5,760 AF annually, depending on availability), and a groundwater recharge program. EMWD currently plans to enhance and optimize its groundwater programs with a groundwater banking and storm water capture program along with an indirect potable reuse project.</p> <p>EMWD has initiated a long-term campaign to encourage all customers to use water wisely. EMWD sponsors workshops on California-friendly plants to promote landscaping using drought tolerant plants and has a comprehensive Water Waste Program to report/correct the wasteful use of water. The New Residential Development Campaign is targeted at new residential customers and consists of a welcome letter, a quarterly newsletter containing seasonal tips and ideas for water conservation, and a survey. EMWD's conservation programs, which include residential water surveys, water-wise landscape/irrigation workshops, high-efficiency washing machine rebates, moisture sensors, CII programs, etc., are offered to all of our customers, including new development and subagencies. These programs are promoted via bill stuffers, EMWD's website, newspaper articles, and homeowners' association meetings and civic associations, etc. With grant funding from United States Bureau of Reclamation (USBR), MWD, and CA Department of Water Resources (DWR) Prop 84, EMWD has removed 6 Million square feet of non-functional turf. Additionally, EMWD has invested greatly in producing easily accessible educational resources. In partnership with 4 other Inland Empire agencies, EMWD has published a region specific landscape guidebook that takes any Inland Empire resident through each step of creating a water efficient landscape. With chapters such as "Design Inspiration," "How to Garden," "Landscape Elements," and "Design It Yourself," this guidebook</p>

was designed to be an all-inclusive workbook for a resident without landscaping experience.

EMWD minimizes annual water demand by incorporating water conservation measures into new development plans and service agreements. EMWD enforces local and state landscape ordinances through the use of budget based tiered rates. Since 2009, residential and landscape customers have participated in a budget-based tiered rate program that assigns individualized indoor and outdoor water budgets based on each account's persons per household, landscape area, conservation factor, and billing period. The conservation factor is an ET factor based on the development's connection date that determines what percentage of the reference evapotranspiration rate will be used to calculate the outdoor budget. Evapotranspiration rates are continuously monitored and recorded across EMWD's entire service region and are specific to the customer's location. Effective January 2018, all customer water budgets were lowered to more closely reflect current water efficiency trends and a mix of conventional turf and drought-tolerant landscaping, decreasing from 100 percent to 80 percent ET. Accounts with meters installed on or before 2010 are assigned an ET factor of at most 0.8; accounts connected between 2010 and May 2015 receive an ET factor of 0.7; accounts connected on or after June 2015 receive an ET factor of 0.5. EMWD has measured over 608 million square feet of landscape through onsite audits, GIS, or customer variance requests. As of January 2018, the daily allocation used to calculate the indoor budget has been reduced from 60 gallons per person per day to 55 gallons per person per day. All water use surpassing the total water budget is charged at a significantly higher rate.

Supporting Documentation: (Attach supporting documents or web links)

[EMWD Water Wide Landscaping Resources](#)
[Administrative Code Article 6 - Water Conservation \(pg 362\)](#)
[Groundwater Management Plan, Hemet/San Jacinto](#)
[Groundwater Management Plan, West San Jacinto](#)
[Water Budgets and Tiered Rates](#)

3. Does your service area construct and operate local storage and groundwater production facilities as required by California Water Code Sections 10700-10710 (Groundwater Resources)?

Please describe such construction and operations in the service area.

MWD Administrative Code § 3107 (a)(1)(iii)

Member Agency Response ☒ Yes ☐ No (circle one)

Description:

EMWD has invested significantly in the development of local water supplies. The District currently operates 14 wells producing potable groundwater, with an additional 13 wells that pump brackish groundwater as influent into three reverse osmosis desalination plants. Recycled water is produced from four regional water reclamation facilities that collect wastewater from both EMWD's retail and wholesale service area. EMWD also has a permit allowing the District to divert up to 5,760 acre-feet (AF) of San Jacinto River flows annually (when available). Diverted water is captured at the District's Grant Avenue Ponds for the purpose of recharging the local groundwater basin.

In 2021, local sources accounted for roughly 54% of EMWD's retail water supply portfolio. This total includes over 14,950 AF of native, potable groundwater, over

	<p>7,650 AF of desalinated groundwater, and nearly 50,100 AF of recycled water.</p> <p>Future local supply projects that are in various stages of planning and/or construction include:</p> <ul style="list-style-type: none"> • Groundwater banking and stormwater capture programs (Santa Ana River Conservation and Conjunctive Use Program / Enhanced Recharge and Recovery Program), and • An indirect potable reuse project (Purified Water Replenishment). • A groundwater development project in the Moreno Valley/Perris North area (Perris North Contamination Prevention and Remediation Program). <p>In addition, EMWD is completing an accelerated retrofit program geared towards expanding the availability of recycled water within its service area.</p> <p>Supporting Documentation: (Attach supporting documents or web links)</p> <p>Brochure - Maximizing Resources Brochure - Salinity Management Program Administrative Code Article 6 – Recycled Water Use (pg 369) Groundwater Management Plan, Hemet/San Jacinto Groundwater Management Plan, West San Jacinto EMWD Construction Projects</p>
<p>4. Does your agency condition all new territory to be consistent with all applicable city, county, and state laws?</p> <p>MWD Administrative Code § 3107 (a)(1)(iv)</p>	<p>Member Agency Response: <input checked="" type="radio"/> Yes / <input type="radio"/> No (circle one)</p> <p>Description:</p> <p>EMWD minimizes annual water demand by incorporating water conservation measures into new development plans and service agreements. EMWD enforces local and state landscape ordinances through the use of budget based tiered rates. Since 2009, residential and landscape customers have participated in a budget-based tiered rate program that assigns individualized indoor and outdoor water budgets based on each account's persons per household, landscape area, conservation factor, and billing period. The conservation factor is an ET factor based on the development's connection date that determines what percentage of the reference evapotranspiration rate will be used to calculate the outdoor budget. Evapotranspiration rates are continuously monitored and recorded across EMWD's entire service region and are specific to the customer's location. Effective January 2018, all customer water budgets were lowered to more closely reflect current water efficiency trends and a mix of conventional turf and drought-tolerant landscaping, decreasing from 100 percent to 80 percent ET. Accounts with meters installed on or before 2010 are assigned an ET factor of at most 0.8; accounts connected between 2010 and May 2015 receive an ET factor of 0.7; accounts connected on or after June 2015 receive an ET factor of 0.5. EMWD has measured over 608 million square feet of landscape through onsite audits, GIS, or customer variance requests. As of January 2018, the daily allocation used to calculate the indoor budget has been reduced from 60 gallons per person per day to 55 gallons per person per day. All water use surpassing the total water budget is charged at a significantly higher rate.</p>

(2) Recycled Water.

<p>5. Does your service area use recycled water in accordance with California Water Code Sections 13550-13557 (Water Reuse)?</p> <p>Please describe such recycled water use in the service area.</p> <p>MWD Administrative Code § 3107 (a)(2)</p>	<p>Member Agency Response: <u>Yes</u>/No (circle one)</p> <p>Description:</p> <p>EMWD has an extensive recycled water system with integrated supply, conveyance and storage facilities creating four stabilized service zones throughout its service area. The system consists of four operating regional water reclamation facilities producing 47 MGD of recycled water, more than 250 miles of pipeline, 19.5 MG of elevated service level storage, 7,600 AF of seasonal storage pond capacity, 9 pond pump stations and 5 inline booster stations. EMWD has over 500 recycled water service connections and sells approximately 36,300 acre feet of recycled water per year, ranking EMWD among the top water recycling agencies in California. Recycled water customers include agricultural, parks, schools, common area landscape, environmental and industrial. EMWD maintains a Mandatory Use Policy for new development and works closely with land use agencies and the development community to selectively condition new projects. Developments that are serviced by EMWD and meet the Recycled Water Facilities and Service Guidelines adopted by EMWD's Board of Directors as required in Water Code sections 13550 are conditioned for recycled water use and construction of local pipelines thereby expanding the recycled water distribution system. EMWD supports existing potable water landscape customers wishing to retrofit to recycled water through the Accelerated Retrofit Program (ARP). The ARP provides technical design and permitting support, new service connections and funding assistance to help customers complete recycled water retrofits which maintains green recreational areas for our community while reducing the use of valuable imported potable supplies.</p> <p>Supporting Documentation: (Attach supporting documents or web links)</p> <p>EMWD' Recycled Water Service</p>
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(3) Local Resources.

<p>6. Has your agency established measures to sustain a seven-to 21-day interruption in service, as required by MWD Administrative Code Section 4503(b)?</p> <p>MWD Administrative Code § 3107 (a)(3)</p>	<p>Member Agency Response: <u>Yes</u>/No (circle one)</p> <p>Description:</p> <p>EMWD would be able to sustain a 7-day interruption in service as described in MWD's Administrative Code Section 4503.</p> <p>Significant, mandatory water conservation efforts would be required to sustain a 7-day and 21-day interruption. Such efforts include communication outreach through automated customer service systems as well as our Public and Governmental Affairs Department. EMWD has a diverse portfolio of water supply including 203 MG of elevated storage, 13 brackish and 14 potable active wells, two Microfiltration and three brackish water desalters. Domestic well production and desalter production capacity exceeds 30 Million Gallons per Day.</p>
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	<p>Supporting Documentation: (Attach supporting documents or web links)</p> <p>Administrative Code Article 10 - Water Shortage Contingency Plan (pg 387)</p> <p>Disaster Preparedness Link</p> <p>Draft Hazard Mitigation Plan</p>
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C. Reporting to the District

<p>7. Has your agency incorporated conservation measures in the new territory?</p> <p>Please describe such measures.</p> <p>MWD Administrative Code § 3107(b)(1)</p>	<p>Member Agency Response <input checked="" type="radio"/> Yes <input type="radio"/> No (circle one)</p> <p>Description:</p> <p>All new development must submit a Landscape Plan Check Application and consent to a Landscape Irrigation Water Budget Agreement in order to ensure that all individually metered landscape/irrigation projects comply with EMWD's Landscape/Irrigation Ordinance 72. Furthermore, new development must also submit a Site Usage Analysis form that clearly displays the accurate landscape square footage broken down into functional turf and non-functional turf. This information is used to ensure that no account will receive a water budget that exceeds the District's maximum budget limits. In addition to all of the above, article 6 of EMWD's Administrative Codes puts into action many more conservation policies, practices, and procedures. Developers must adhere to State and local plumbing and landscaping codes. All customers are prohibited from hosing down driveways and other hard surfaces except for health or sanitary reasons and then only by use of a hand-held container. Additionally, customers are:</p> <ul style="list-style-type: none"> • Required to repair faucets, toilets, and other potential sources of water leaks within 48 hours of the occurrence, • Water outdoors between 9 pm and 6 am only and are prohibited from producing run-off or over watering and from watering during rain • Prohibited from allowing water to run while washing vehicles, • Prohibited from using decorative fountains unless they are equipped with a recycling system, and, • Limited to no more than 15 minutes of watering per day per station if using an unattended irrigation system or watering device. <p>Penalties for water inefficiency are enforced through the tier rate budgets and through other additional fines. For commercial, multi family, and landscape accounts, such fines include an initial warning, followed by a final written notice, which may then be followed by a surcharge of \$100 added to the customer's bill if a third violation occurs within 12 months of the first notice. A fourth violation and any subsequent violations could incur an additional \$200 surcharge to the customer's water bill. For single family residential accounts, the surcharges are \$25 for the third violation, and \$50 for the fourth violation and subsequent violations. The revenue derived from the surcharges and other fines explained in article 6 is used to support water use efficiency programs and rebates.</p> <p>EMWD has initiated a long term campaign to encourage all customers to use water wisely. A staff of conservation and education specialists provides public education programs, landscape irrigation workshops, student education programs, and conservation related campaigns. EMWD sponsors workshops on California-friendly plants to promote landscaping using drought tolerant plants and has a comprehensive Water Waste Program to report/correct the wasteful use of water. The New Residential Development Campaign is targeted at new residential customers and</p>
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	<p>consists of a welcome letter, a quarterly newsletter containing seasonal tips and ideas for water conservation, and a survey. EMWD's new development conservation programs, including residential water surveys, water-wise landscape/irrigation workshops, high-efficiency washing machine rebates, moisture sensors, CII programs, etc. are offered to all of our customers, including new development and subagencies.</p> <p>In 2019, the District launched its WaterWise Plus program, a comprehensive and forward-thinking program designed to assist customers and partner agencies with finding new and cost-effective ways to become more water efficient. The program integrates existing water use efficiency-based programs with long-term solutions that are promoted regardless of drought conditions. These programs help customers make lifestyle changes to their water use habits resulting in becoming more efficient with their water use, gaining a better understanding of their water usage, and making them better able to manage their monthly bills.</p> <p>In 2021, the District launched its Landscapes for Living program, designed to assist residential customers to become more water efficient. The program integrates home consultations with a landscape expert, free direct installation of smart irrigation controllers and high efficiency nozzles, landscape design assistance, and staff support to assist customers who want to apply for water saving rebates through the MWD.</p> <p>These programs are promoted via bill stuffers, EMWD's website, newspaper articles, and homeowners' association meetings and civic associations, etc.</p> <p>Supporting Documentation: (Attach supporting documents or web links) Administrative Code Article 6 - Water Conservation (pg 362)</p> <p>EMWD Rebate Information</p>
<p>8. What is your agency's total annual production of local water supplies including, but not limited to, recycled water, groundwater, and local surface water use?</p> <p>MWD Administrative Code § 3107(b)(2)</p>	<p>Member Agency Response: 72,729 AF</p> <p>Description: During Calendar Year 2021, EMWD produced 72,729 AF of local water through its groundwater, desalter, and recycled water facilities.</p> <p>Form of Documentation: 2015 Urban Water Management Plan (UWMP)</p>
<p>9. Has your agency established resources to sustain a seven-to 21-day interruption in service, as required by MWD Administrative Code Section 4503(b)?</p> <p>Please describe such resources, as applicable to your agency's facilities, as specified in MWD Administrative Code §§ 3107(b)(3).</p> <p>MWD Administrative Code § 3107(b)(3)</p>	<p>Member Agency Response: <input checked="" type="radio"/> Yes / <input type="radio"/> No (circle one)</p> <p>Description:</p> <p>EMWD would be able to sustain a 7-day interruption in service as described in MWD's Administrative Code Section 4503.</p> <p>Significant, mandatory water conservation efforts would be required to sustain a 7-day and 21-day interruption. Such efforts include communication outreach through automated customer service systems as well as our Public and Governmental Affairs Department. EMWD has a diverse portfolio of water supply including 203 MG of elevated storage, 13 brackish and 14 potable active wells, two Microfiltration and three brackish water desalters. Domestic well</p>

	<p>production and desalter production capacity exceeds 38 Million Gallons per Day.</p> <p>Form of Documentation: 2020 Urban Water Management Plan (UWMP)</p>
<p>10. Has your agency submitted a current Urban Water Management Plan (UWMP) to the reporting agency?</p> <p>MWD Administrative Code § 3107(b)(4)(i)</p>	<p>Member Agency Response: <u>Yes</u>/No (circle one)</p> <p>Description:</p> <p>EMWD's 2020 Urban Water Management Plan (UWMP) is an update to the 2015 UWMP and was prepared in response to Water Code Sections 10610 through 10656 of the Urban Water Management Planning Act. It was adopted in June 2021 and has been submitted to the reporting agency. Included in the plan is detailed information about EMWD's water demand, supply and reliability for the next 25 years.</p> <p>Form of Documentation: 2020 Urban Water Management Plan (UWMP)</p>
<p>11. Does your agency's most current UWMP include a narrative description addressing the nature and extent of each water demand management measure implemented over the past 5 years, as required by California Water Code Section 10631(f)?</p> <p>MWD Administrative Code § 3107(b)(4)(ii)</p>	<p>Member Agency Response: <u>Yes</u>/No (circle one)</p> <p>Description:</p> <p>The 2020 Urban Water Management Plan provides a narrative description addressing the nature and extent of each water demand measure implemented over the past 5 years. This includes narratives on EMWD's implementation of the water waste prevention ordinances, metering with commodity rates for all new connections and retrofit of existing connections, public information programs, retail conservation pricing, school education programs, water loss control programs, and all other demand management measures described in Chapter 9 of the 2015 UWMP. EMWD is a member of the California Water Efficiency Partnership (CalWEP) and the Alliance for Water Efficiency (AWE), which supports the implementation of demand management measures and related legislative and regulatory requirements.</p> <p>Form of Documentation: 2020 Urban Water Management Plan (UWMP)</p>
<p>12. Does your agency's most current UWMP adequately address California Water Code requirements?</p> <p>MWD Administrative Code § 3107(b)(4)(iii)</p>	<p>Member Agency Response: <u>Yes</u>/No (circle one)</p> <p>Description:</p> <p>Chapter 1 of the 2020 Urban Water Management Plan addresses California Water Code requirements. This 2020 UWMP was developed to incorporate all requirements, under the guidance of DWR's 2020 UWMPs Guidebook for Urban Water Suppliers. A checklist to document compliance of this 2020 UWMP with the Act and the CWC is provided in Appendix A. This UWMP includes all required DWR standardized tables within relevant chapters and they are compiled in Appendix B. Within the UWMP chapters, DWR's standardized tables include the DWR assigned table number in the first row of the table.</p>

	<p>Form of Documentation: Link to the UWMP 2020 Urban Water Management Plan (UWMP)</p>
<p>13. What is the status of implementing the water plans, projects, and programs described in the UWMP to implement California Water Code Section 10620 et seq.?</p> <p>MWD Administrative Code § 3107(b)(5)</p>	<p>Member Agency Response: <u>Active</u></p> <p>Description:</p> <p>EMWD continues to advance the water supply projects and programs described in Chapter 6 of the 2020 UWMP.</p> <p>EMWD has invested significantly in the development of local water supplies. The District currently operates 14 wells producing potable groundwater, with an additional 13 wells that pump brackish groundwater as influent into three reverse osmosis desalination plants. Recycled water is produced from four regional water reclamation facilities that collect wastewater from both EMWD's retail and wholesale service area. EMWD also has a permit allowing the District to divert up to 5,760 acre-feet (AF) of San Jacinto River flows annually (when available). Diverted water is captured at the District's Grant Avenue Ponds for the purpose of recharging the local groundwater basin.</p> <p>In 2021, local sources accounted for roughly 54% of EMWD's retail water supply portfolio. This total includes nearly 14,950 AF of potable groundwater, over 7,650 AF of desalinated groundwater, and over 50,100 AF of recycled water.</p> <p>Future local supply projects that are in various stages of planning and/or construction include:</p> <ul style="list-style-type: none"> • Groundwater banking and stormwater capture programs (Santa Ana River Conservation and Conjunctive Use Program / Enhanced Recharge and Recovery Program), and • An indirect potable reuse project (Purified Water Replenishment). • A groundwater development project in the Moreno Valley/Perris North area (Perris North Contamination Prevention and Remediation Program). <p>In addition, EMWD is completing an accelerated retrofit program geared towards expanding the availability of recycled water within its service area.</p> <p>EMWD has initiated a long term campaign to encourage all customers to use water wisely. A staff of conservation and education specialists provides public education programs, landscape irrigation workshops, student education programs, and conservation related campaigns. EMWD sponsors workshops on California-friendly plants to promote landscaping using drought tolerant plants and has a comprehensive Water Waste Program to report/correct the wasteful use of water. The New Residential Development Campaign is targeted at new residential customers and consists of a welcome letter, a quarterly newsletter containing seasonal tips and ideas for water conservation, and a survey. EMWD's new development conservation programs, including residential water surveys, water-wise landscape/irrigation workshops, high-efficiency washing machine rebates, moisture sensors, CII programs, etc. are offered to all of our customers, including new development and subagencies. In 2019, the District</p>

launched its WaterWise Plus program, a comprehensive and forward-thinking program designed to assist customers and partner agencies with finding new and cost-effective ways to become more water efficient. The program integrates existing water use efficiency-based programs with long-term solutions that are promoted regardless of drought conditions. These programs help customers make lifestyle changes to their water use habits resulting in becoming more efficient with their water use, gaining a better understanding of their water usage, and making them

the District launched its Landscapes for Living program, designed to assist

Form of Documentation:

[2015 Urban Water Management Plan \(UWMP\)](#)

MWD

MWD Employee Name: _____

File Date: _____

MWD Employee Name: William J. McDermott

Review Date: 4/24/2023

Notes:

MWD Member Agency

The following member agency assures compliance with the provisions of Metropolitan's Water Use Efficiency Guidelines for the next five years as indicated in Metropolitan's Administrative Code § 3107 and shall report to Metropolitan regarding such compliance.

Agency Name: Eastern Municipal Water District Date: 4/14/23

Member Agency Representative Name: Chris Teague

Notes:

RESOLUTION XXXX

RESOLUTION OF THE BOARD OF DIRECTORS OF
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
CONSENTING TO EASTERN MUNICIPAL WATER DISTRICT'S
114TH FRINGE AREA ANNEXATION
AND FIXING THE TERMS AND
CONDITIONS OF THE ANNEXATION TO
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

WHEREAS, the Board of Directors of the Eastern Municipal Water District (EMWD), a municipal water district situated in the county of Riverside, state of California, pursuant to Resolution No. 2023-057, in accordance with the provisions of the Metropolitan Water District Act (MWD Act), has applied to the Board of Directors of The Metropolitan Water District of Southern California (Metropolitan) for consent to annex thereto certain uninhabited territory situated in the county of Riverside referred to as 114th Fringe Area Annexation, more particularly described in an application to the Riverside County Local Agency Formation Commission (LAFCO), concurrently with 114th Fringe Area Annexation thereof to EMWD, such annexation to Metropolitan to be upon such terms and conditions as may be fixed by the Board of Directors of Metropolitan;

WHEREAS, the owners, (Property owner) of Riverside County Assessor Parcel Numbers 900-050-(007,008 & 025), 900-370-(003,004,005,006,007,008, 009, 010, 011,012,013,015,016,017,021 & 022), 900-380-(001,002,003,005,006,008,009,010,011,012,013,014,015,016,017,018), and 908-010-001 (Property) have applied for annexation into the EMWD and Metropolitan service areas;

WHEREAS, completion of said 114th Fringe Area Annexation shall be contingent upon approval by LAFCO;

WHEREAS, Metropolitan requests that LAFCO condition its approval of 114th Fringe Area Annexation upon a requirement that Metropolitan's existing and established taxes, benefit assessments, or property-related fees or charges in place in the service area are levied or fixed and collected on the parcels being annexed to the agency; these taxes, benefit assessments, or property-related fees or charges are identified below;

WHEREAS, Metropolitan has levied and collected ad valorem taxes on parcels within the territory of EMWD. Such charges for fiscal year 2022/23 are described in Resolution 9317, adopted by Metropolitan's Board on August 16, 2022;

WHEREAS, since fiscal year 1992-93, Metropolitan has levied and collected water standby charges pursuant to Section 134.5 of the MWD Act on parcels within the territory of EMWD. Such charges for fiscal year 2023/24 are described in Resolution 9342, adopted by Metropolitan's Board on April 11, 2023;

WHEREAS, upon 114th Fringe Area Annexation, the parcel will be within Metropolitan's service area, Metropolitan water will be available to such parcels and such parcels will receive the benefit of the projects provided in part with proceeds of Metropolitan's water standby charges;

WHEREAS, pursuant to the provisions of the California Environmental Quality Act (CEQA), EMWD, acting as Lead Agency, adopted the Los Alamos Hills Water System Project (also known as 114th Fringe Area Annexation) Mitigated Negative Declaration on March 15, 2023 (also known as 114th Fringe Area Annexation), and approved the Project for the development of the proposed annexation parcels. Metropolitan, as Responsible Agency under CEQA, reviewed and considered the information contained in the MND prior to approval of the formal terms and conditions for the 114th Fringe Area Annexation; and

WHEREAS it appears to this Board of Directors that such application should be granted, subject to the terms and conditions hereinafter set forth;

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of Metropolitan, acting as Responsible Agency, reviewed and considered the information in the 2023 MND prior to approval of the final terms and conditions for the 114th Fringe Area Annexation; and subject to the following terms and conditions, does hereby grant the application of the governing body of EMWD for consent to annex 114th Fringe Area Annexation, to Metropolitan and does hereby fix the terms and conditions of such annexation.

Section 1. Annexation of said area to EMWD shall be made concurrently with annexation thereof to Metropolitan, and all necessary certificates, statements, maps, and other documents required to be filed by or on behalf of EMWD to effectuate 114th Fringe Area Annexation shall be filed on or before December 31, 2025.

Section 2. Prior to filing a request for a Certificate of Completion of 114th Fringe Area Annexation proceeding with LAFCO, EMWD shall submit a certified copy of LAFCO's resolution approving 114th Fringe Area Annexation to EMWD, and shall pay to Metropolitan \$665,156.25 for its annexation fee, if annexation is completed by December 31, 2023. If the annexation is completed during subsequent calendar years, the annexation charge will be calculated based on the then-current rate, in accordance with Metropolitan's Administrative Code Section 3300.

Section 3. a. Metropolitan shall be under no obligation to provide, construct, operate, or maintain feeder pipelines, structures, connections, and other facilities required for the delivery of water to said area from works owned and operated by Metropolitan.

b. EMWD shall not be entitled to demand that Metropolitan deliver water to EMWD for use, directly or indirectly, within said area, except for domestic or municipal use therein.

c. The delivery of all water by Metropolitan, regardless of the nature and time of use of such water shall be subject to the water service regulations, including rates and charges promulgated from time to time by Metropolitan.

d. Except upon the terms and conditions specifically approved by the Board of Directors of Metropolitan, water sold and delivered by Metropolitan shall not be used in any manner which intentionally or avoidably results in the direct or indirect benefit of areas outside Metropolitan, including use of such water outside Metropolitan or use thereof within Metropolitan in substitution for other water outside Metropolitan.

Section 4. LAFCO has conditioned approval of 114th Fringe Area Annexation upon a requirement that Metropolitan levy or fix and collect all previously established and collected taxes, benefit assessments, or property-related fees or charges on parcels being annexed to the agency.

Section 5. Such charges, which are subject to change over time, include but are not limited to:

a. Metropolitan's ad valorem tax on properties located within the territory of EMWD is in the amount of 0.0035 percent of the assessed value of each parcel. Metropolitan shall levy the ad valorem tax in the amount, at the same time and in the same manner as ad valorem tax on other properties located within the territory of EMWD. Such charges for fiscal year 2023/24 are described in Resolution 9317, adopted by Metropolitan's Board on August 16, 2022.

b. Metropolitan's water standby charge on properties located within the territory of EMWD in the amount of \$6.94 per an acre, or per a parcel of less than one acre. Metropolitan shall levy the water standby charge in the amount, at the same time and in the same manner as the water standby charge on other properties located within the territory of EMWD. Such charges for fiscal year 2023/24 are described in Resolution 9342, adopted by Metropolitan's Board on April 11, 2023.

Section 6. That the General Manager is hereby authorized and directed to take all necessary action to secure the collection of the ad valorem taxes and water standby charges by the appropriate county officials, including payment of the reasonable cost of collection.

Section 7. That the Board of Directors of Metropolitan, acting as Responsible Agency, reviewed and considered the information in the 2023 MND prior to approval of the final terms and conditions for the 114th Fringe Area Annexation; and subject to the following terms and conditions, does hereby grant the application of the governing body of EMWD for consent to annex the 114th Fringe Area Annexation to Metropolitan and does hereby fix the terms and conditions of such annexation.

Section 8. That the General Manager and General Counsel are hereby authorized to do all things necessary and desirable to accomplish the purposes of this resolution, including, without limitation, the commencement of defense of litigation.

Section 9. That if any provision of this resolution or the application to any member agency, property or person whatsoever is held invalid, that invalidity shall not affect the other provisions or applications of this resolution which can be given effect without the invalid portion or application, and to that end the provisions of this resolution are severable.

BE IT FURTHER RESOLVED that the Board Executive Secretary is directed to transmit forthwith to the governing body of EMWD a certified copy of this resolution.

I HEREBY CERTIFY that the foregoing is a full, true and correct copy of a resolution adopted by the Board of Directors of The Metropolitan Water District of Southern California, at its meeting held on June 13, 2023.

Secretary of the Board of Directors
of The Metropolitan Water District
of Southern California

Notice of Determination**Appendix D****To:**☒ Office of Planning and Research

U.S. Mail:

P.O. Box 3044

Sacramento, CA 95812-3044

Street Address:

1400 Tenth St., Rm 113

Sacramento, CA 95814

From:Public Agency: Eastern Municipal Water DistrictAddress: 2270 Trumble RoadP.O. Box 8300, Perris, CA 92570Contact: Joseph BroadheadPhone: 951-928-3777 ext 4545☒ County ClerkCounty of: RiversideAddress: 2724 Gateway DriveRiverside, CA 92507

Lead Agency (if different from above):

Address:

Contact:

Phone:

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.State Clearinghouse Number (if submitted to State Clearinghouse): 2023010460Project Title: Los Alamos Hills Water System ProjectProject Applicant: Eastern Municipal Water DistrictProject Location (include county): Portions of Los Alamos Rd, Celia Rd, Mason Rd, Mary Pl and Ellen Way; City of**Project Description:**

The project consists of annexation of up to 50 parcels totaling 171.91 acres ("Los Alamos Hills") to Eastern Municipal Water District's water service area, as well as construction/operation of 10,685 linear feet of 8- and 12-inch water pipeline with fire hydrants within city street rights-of-way to provide potable water to landowners that opt to connect.

This is to advise that the Eastern Municipal Water District has approved the above
☒ Lead Agency or ☐ Responsible Agency

described project on March 15, 2023 and has made the following determinations regarding the above
 (date)
 described project.

1. The project ☐ will ☒ will not have a significant effect on the environment.
2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
☒ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures ☒ were ☐ were not made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan ☒ was ☐ was not adopted for this project.
5. A statement of Overriding Considerations ☐ was ☒ was not adopted for this project.
6. Findings ☐ were ☒ were not made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at:

Eastern Municipal Water District, 2270 Trumble Road, Perris, CA 92572

Signature (Public Agency): Joe Broadhead Title: Principal Water Resources Specialist

Date: March 15, 2023

Date Received for filing at OPR: _____



7/11/2023 Board Meeting
2023 ENVIRONMENTAL DOCUMENT FILING FEE
CASH RECEIPT
DFW 753.5a (REV. 01/01/23) Previously DFG 753.5a

7-6

Attachment 4, Page 2 of 256

SEE INSTRUCTIONS ON REVERSE. TYPE OR PRINT CLEARLY.		RECEIPT NUMBER: 23-70257
LEAD AGENCY EASTERN MUNICIPAL WATER DISTRICT		STATE CLEARINGHOUSE NUMBER (if applicable) 2023010460
LEAD AGENCY EMAIL STRATTONH@EMWD.ORG	DATE 03/15/2023	
COUNTY/STATE AGENCY OF FILING RIVERSIDE	DOCUMENT NUMBER E-202300295	
PROJECT TITLE LOS ALAMOS HILLS WATER SYSTEM PROJECT		
PROJECT APPLICANT NAME EASTERN MUNICIPAL WATER DISTRICT	PROJECT APPLICANT EMAIL STRATTONH@EMWD.ORG	PHONE NUMBER (951) 928-3777
PROJECT APPLICANT ADDRESS 2270 TRUMBLE ROAD,	CITY PERRIS	STATE CALI
	ZIP CODE 92570	
PROJECT APPLICANT (Check appropriate box) <input type="checkbox"/> Local Public Agency <input type="checkbox"/> School District <input checked="" type="checkbox"/> Other Special District <input type="checkbox"/> State Agency <input type="checkbox"/> Private Entity		
CHECK APPLICABLE FEES:		
<input type="checkbox"/> Environmental Impact Report (EIR)	\$3,839.25	\$
<input checked="" type="checkbox"/> Mitigated/Negative Declaration (MND)(ND)	\$2,784.00	\$ 2,764.00
<input type="checkbox"/> Certified Regulatory Program (CRP) document - payment due directly to CDFW	\$1,305.25	\$
<input type="checkbox"/> Exempt from fee		
<input type="checkbox"/> Notice of Exemption (attach)		
<input type="checkbox"/> CDFW No Effect Determination (attach)		
<input type="checkbox"/> Fee previously paid (attach previously issued cash receipt copy)		
<input type="checkbox"/> Water Right Application or Petition Fee (State Water Resources Control Board only)		
<input checked="" type="checkbox"/> County documentary handling fee	\$850.00	\$ 50.00
<input type="checkbox"/> Other		\$
PAYMENT METHOD: <input type="checkbox"/> Cash <input checked="" type="checkbox"/> Credit <input type="checkbox"/> Check <input type="checkbox"/> Other		
TOTAL RECEIVED		\$ 2,814.00
SIGNATURE X <i>C. Sandoval</i>	AGENCY OF FILING PRINTED NAME AND TITLE Deputy Cassandra Sandoval	



Lead Agency: EASTERN MUNICIPAL WATER DIST.
ATTN: JOSEPH BROADHEAD
Address: 2270 TRUMBLE ROAD
PERRIS, CA. 92570

FILED / POSTED

County of Riverside
Peter Aldana
Assessor-County Clerk-Recorder

E-202300295
03/15/2023 02:06 PM Fee: \$ 2814.00
Page 1 of 2

Removed: By Deputy


Project Title

LOS ALAMOS HILLS WATER SUPPLY SYSTEM

Filing Type

- ☐ Environmental Impact Report
☒ Mitigated/Negative Declaration
☐ Notice of Exemption
☐ Other:

Notes

Mitigation, Monitoring, and Reporting Program

The California Environmental Quality Act (CEQA) requires the adoption of feasible mitigation measures to reduce the severity and magnitude of potentially significant environmental impacts associated with project development. In order to ensure that the mitigation measures and project revisions identified in an Environmental Impact Report (EIR) or Mitigated Negative Declaration (MND) are implemented, the Lead Agency is required to adopt a program for monitoring and reporting on the measures it has imposed to mitigate or avoid significant effects (CEQA Guidelines Section 15097[a]). The CEQA Guidelines require that a Mitigation Monitoring and Reporting Program (MMRP) be adopted upon certification of an EIR or adoption of an MND to ensure mitigation measures identified in the EIR or MND are implemented.

According to CEQA Guidelines Section 15097(c), "reporting" generally consists of a written compliance review that is presented to the decision-making body or authorized staff person. A report may be required at various stages during project implementation or upon completion of the mitigation measure. "Monitoring" is generally an ongoing or periodic process of project oversight. This program identifies, at a minimum, the entity responsible for the monitoring, what is to be monitored, how the monitoring shall be accomplished, and the monitoring and reporting schedule.

The MMRP assigns responsibility for monitoring mitigation measures incorporated into the Los Alamos Hills Water System Project (project). Under this program, the Eastern Municipal Water District (District), and the construction contractor under the direction of the District, would be responsible for the implementation and monitoring of these measures before, during, and immediately following construction phases of the project unless otherwise stated herein, in accordance with CEQA Guidelines Section 15097. A record of the MMRP will be maintained at the District office, located at 2270 Trumble Road, Perris, California 92570.

The Initial Study/MND (State Clearinghouse Number 2023010460) analyzed the potential environmental effects of the project and identified measures to mitigate potentially significant impacts associated with construction of the project. The MMRP table presented below documents the mitigation measures to be implemented by the District.

Mitigation, Monitoring, and Reporting Program Incorporated into the Project			
Mitigation Measure	Timing of Verification	Responsible for Verification	Status/ Date/ Initials
Biological Resources			
<p>BIO-1: Coastal California Gnatcatcher</p> <p>Project construction should be conducted outside the coastal California gnatcatcher breeding season, which is March 1 to August 15. If construction must take place during the coastal California gnatcatcher breeding season, a qualified biologist (possessing a valid Endangered Species Act Section 10(a)(1)(A) Recovery Permit) shall survey Riversidean sage scrub adjacent to the project site for the presence of the coastal California gnatcatcher. Surveys for coastal California gnatcatcher shall be conducted pursuant to the protocol survey guidelines established by the U.S. Fish and Wildlife Service (USFWS) within the breeding season prior to the commencement of any construction. If the protocol survey concludes that no coastal California gnatcatchers are present or all work is constructed outside of the breeding season (August 16 to February 28), no additional mitigation measures would be necessary. If coastal California gnatcatchers are present, then the following additional mitigation conditions must be met:</p> <ol style="list-style-type: none"> Between March 1 and August 15, no construction activities shall occur within any portion of the project site where construction activities would result in noise levels exceeding 60 A-weighted decibels [dB(A)] hourly average (or ambient, whichever is higher) at the edge of occupied coastal California gnatcatcher habitat. An analysis showing that noise generated by construction activities would not exceed 60 dB(A) hourly average at the edge of occupied habitat must be completed by a qualified acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by District at least two weeks prior to the commencement of construction activities. Prior to the commencement of construction activities during the breeding season, areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist; or At least two weeks prior to the commencement of construction activities during the breeding season, under the direction of a qualified acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities will not exceed 60 dB(A) hourly average (or ambient, whichever is higher) at the edge of habitat occupied by the coastal California gnatcatcher. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring shall be conducted at the edge of the occupied habitat area to ensure that noise levels do not exceed the noise threshold. If 	Prior to Construction and During Construction	District/ Qualified Biologist	

Mitigation, Monitoring, and Reporting Program Incorporated into the Project			
Mitigation Measure	Timing of Verification	Responsible for Verification	Status/ Date/ Initials
<p>the noise attenuation techniques implemented are determined inadequate by the qualified acoustician or biologist, then the associated construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (August 16); or</p> <p>c. Prior to construction during the breeding season, the District shall prepare an MSHCP Consistency Analysis for review by the Western Riverside County Regional Conservation Authority and obtain incidental take coverage for coastal California gnatcatcher via the Participating Special Entity process. The proposed project would pay any necessary mitigation fees for impacts to 7.91 acres prior to construction.</p>			
<p>BIO-2: Migratory and Nesting Birds</p> <p>Construction should be conducted outside the nesting season, which is generally defined as January 15 to August 31. If construction must take place during the nesting season, a qualified biologist shall perform a pre-construction survey for nesting birds. The nesting bird survey shall occur no more than seven days prior to the start of construction. Additionally, raptors (birds of prey) are known to begin nest building in January or February. If construction is to occur between January 1 and February 15, a nesting raptor survey will be conducted within the project area, including a 500-foot buffer. If active bird nests are confirmed to be present during the pre-construction survey, a buffer zone will be established by a qualified biologist until a qualified biologist has verified that the young have fledged or the nest has otherwise become inactive.</p>	Prior to Construction and During Construction	District/ Qualified Biologist	
<p>BIO-3: Aquatic Resources</p> <p>The applicant for the proposed project shall avoid indirect impacts to potentially jurisdictional features with best management practices (BMPs), such as the use of silt fences, fiber rolls, and/or gravel bags, implemented. No equipment maintenance or fueling should be performed within or near the non-vegetated channel where petroleum products or other pollutants from the equipment may enter this area.</p>	During Construction	District/ Qualified Biologist	
Geology and Soils			

Mitigation, Monitoring, and Reporting Program Incorporated into the Project			
Mitigation Measure	Timing of Verification	Responsible for Verification	Status/ Date/ Initials
GEO-1: Paleontological Monitor Excavation shall be monitored by a qualified paleontologist. If paleontological resources are encountered, the paleontological monitor shall have the authority to temporarily halt or redirect work while the paleontological resources are documented and assessed. If significant deposits are found, additional data recovery shall be conducted, as necessary, in order to adequately mitigate project impacts. The fossil collection and all associated documentation shall be legally transferred to a qualified repository within Riverside County. Full-time paleontological monitoring can be reduced to part-time inspections or ceased entirely if determined adequate by the qualified paleontologist.	During Construction	District/ Qualified Paleontologist	
Noise			
NOI-1: Construction Noise Reduction Measures <ul style="list-style-type: none"> District shall require its contractor to implement the following actions relative to construction noise: District shall conduct construction activities between 7:00 a.m. and 8:00 p.m. on weekdays in accordance with the City of Murrieta Municipal Code, Section 16.30.130(A). Prior to construction, the District in coordination with the construction contractor, shall provide written notification to all properties within 50 feet of the proposed project facilities informing occupants of the type and duration of construction activities. Notification materials shall identify a method to contact the District's program manager with noise concerns. Prior to construction commencement, the District program manager shall establish a noise complaint process to allow for resolution of noise problems. This process shall be clearly described in the notifications. Stationary noise-generating equipment shall be located as far from sensitive receptors as possible. Such equipment shall also be oriented to minimize noise that would be directed toward sensitive receptors. Whenever possible, other non-noise generating equipment (e.g., roll-off dumpsters) shall be positioned between the noise source and sensitive receptors. Equipment and staging areas shall be located as far from sensitive receptors as possible. At the staging location, equipment and materials shall be kept as far from adjacent sensitive receptors as possible. Construction vehicles and equipment shall be maintained in the best possible working order; operated by an experienced, trained operator; and shall utilize the best available noise control techniques 	Prior to Construction and During Construction	District/ Construction Contractor	

Mitigation, Monitoring, and Reporting Program Incorporated into the Project			
Mitigation Measure	Timing of Verification	Responsible for Verification	Status/ Date/ Initials
<p>(including mufflers, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds).</p> <ul style="list-style-type: none">• Unnecessary idling of internal combustion engines shall be prohibited. In practice, this would require turning off equipment if it would idle for five or more minutes.• Electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment, where feasible.• The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.			



Final
Initial Study/Mitigated Negative Declaration
Los Alamos Hills Water System Project
Murrieta, California

Prepared for
Eastern Municipal Water District
2270 Trumble Road
Perris, CA 92572-8300

Prepared by
RECON Environmental, Inc.
3111 Camino del Rio North, Suite 600
San Diego, CA 92108
P 619.308.9333

March 8, 2023

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APPENDICES (Under Separate Cover)

A:	Air Quality Calculations, RECON Environmental, Inc.
B:	Biological Resources Survey Report, RECON Environmental, Inc.
C:	Archaeological Resources Survey Report, RECON Environmental, Inc.
D:	Geotechnical Report, ADD, Inc.

**Initial Study/Environmental Checklist and
Mitigated Negative Declaration for the
Los Alamos Hills Water System Project,
Murrieta, California**

Letters of Comment and Responses

The following letters of comment were received during the public review period (January 24, 2023, to February 23, 2020) of the Draft Initial Study/Environmental Checklist and Mitigated Negative Declaration (IS/MND). A copy of each comment letter along with corresponding staff responses is included here. The comments received did not affect the conclusions of the document and no changes to the text of the Draft IS/MND were required. In accordance with Public Resources Code Section 21081.6., Chapter 7 of this Final IS/MND contains the Mitigation Monitoring and Reporting Program.

Letter	Author	Page Number
A	Augustine Band of Cahuilla Indians	RTC-2
B	Bob Landwehr	RTC-3

Letter A



AUGUSTINE BAND OF CAHUILLA INDIANS
 PO Box 846 84-481 Avenue 54 Coachella CA 92236
 Telephone: (760) 398-4722
 Fax (760) 369-7161
 Tribal Chairperson: Amanda Vance
 Tribal Vice-Chairperson: Victoria Martin
 Tribal Secretary: Jeremy Martin

Date: 07/01/2023

Dear Joseph Broadhead,
 Principal Water Resources Specialist-CEQA

Subject: Notice of Inten to Adopt a Mitigated Negative Declaration Los Alamos Hills Water System Project

Thank you for the opportunity to offer input concerning the development of the above-identified project. We appreciate your sensitivity to the cultural resources that may be impacted by your project and the importance of these cultural resources to the Native American peoples that have occupied the land surrounding the area of your project for thousands of years. Unfortunately, increased development and lack of sensitivity to cultural resources have resulted in many significant cultural resources being destroyed or substantially altered and impacted. Your invitation to consult on this project is greatly appreciated.

At this time, we are unaware of specific cultural resources that may be affected by the proposed project, however, in the event, you should discover any cultural resources during the development of this project please contact our office immediately for further evaluation.

Very truly yours,

A handwritten signature in cursive script that reads "Jeremy Martin".

Jeremy Martin, Tribal Secretary
 Augustine Band of Cahuilla Indians

A-1

The District appreciates the knowledge and input of the Augustine Band of Cahuilla Indians regarding the importance and sensitivity of cultural resources. While our record search, survey and consultation did not suggest that sensitive cultural resources are present or would be impacted along the pipeline alignments, in the unlikely and unexpected event that human remains are encountered during construction, the proposed project would follow the requirements of Health & Safety Code §7050.5 and Public Resources Code § 5097.98. Conformance with these regulations would include contacting the County Coroner. If the remains are determined to be of Native American origin, the Most Likely Descendant (MLD), as identified by the Native American Heritage Commission (NAHC), will be contacted to determine proper treatment and disposition of the remains.

Letter B

February 22, 2023

Joseph Broadhead
Principal Water Resource Specialist
Eastern Municipal Water District
P.O. Box 8300
Perris, CA 92572

RECEIVED 03/01/23

Re: IS/MND Los Alamos Hills Water System Project

Dear Mr. Broadhead,

B-1 The Los Alamos Hills Water System Project is not in compliance with the relevant provisions of CEQA guidelines.

The City of Murrieta is a responsible agency working in partnership with the lead agency, Eastern Municipal Water District on the Los Alamos Hills Water System Project. The City of Murrieta is funding the project. "Around September 2021, City staff met with representatives from Eastern Municipal Water District (EMWD) to begin discussions about providing water infrastructure to a portion of the Los Alamos area." Murrieta City Council Meeting Agenda Report, August 16, 2022

B-2 1) The IS/MND makes no mention of the fire hydrants promised for the project and subsequently fails to address erosion control in a post fire event or potential downstream flooding from a severed hydrant that could expose people or structure to significant risks.

"In addition to the 49 parcels mentioned above, other properties would also benefit from the installation of the water line because fire hydrants would be placed at regular intervals along the new loop system. The presence of fire hydrants will greatly improve fire suppression capabilities and may ultimately

1/20

B-1 The District's Los Alamos Hills project is in full compliance with the relevant provisions of the California Environmental Quality Act (CEQA) and the CEQA Guidelines. Section 12 on page 13 of the Los Alamos Hills Water System Project (Project) Draft Initial Study/Mitigated Negative Declaration (IS/MND) identifies the City of Murrieta (City) as a Responsible Agency. Project funding is provided from the American Rescue Plan Act (ARPA) through the City of Murrieta.

B-2 The project description has been updated on page 10 to confirm that fire hydrants would be included per the District's Engineering Standards, Specifications, and Drawings, B-356. Please see additions made to the Project Description (page 10).

Since there are essentially no curb and gutters within the project area, fire hydrants would be installed with two bollards and a small concrete pad. Fire hydrants would be located at property lines and at low points in lieu of a blow off, where possible. Typically, for new residential development, fire hydrant spacing is determined by the fire authority with jurisdiction for the review and is included in the conditions of approval for the development. For example, Riverside County Ordinance 787.2 indicates that fire hydrants are to be located near street intersections and the minimum fire hydrant spacing is to be 350 feet for new development. National Fire Protection Association Standard 24 has similar requirements for new development. Since there is no new development to be approved in conjunction with this project, coordination with the City of Murrieta and the associated fire authority would be required to determine fire hydrant spacing and locations. A 350-foot minimum spacing should be anticipated.

Erosion control for a post-fire event and the potential for downstream flooding from a severed fire hydrant are not reasonably foreseeable environmental impacts associated with the installation of water lines and fire hydrants. The courts have noted that although CEQA mandates consideration of "reasonably foreseeable indirect physical changes in the environment," a change that is "speculative or unlikely to occur" is not reasonably foreseeable (CEQA Guidelines § 15064.).

result in improved Insurance Service Office ratings." Murrieta City Council Meeting Agenda Report, August 16, 2022

"WHEREAS, in addition to the 49 parcels mentioned above, other properties would also benefit from the installation of the water line because fire hydrants would be placed at regular intervals along the new loop system. The presence of fire hydrants will greatly improve fire suppression capabilities and may ultimately result in improved Insurance Service Office ratings;" City of Murrieta Resolution 22-4604, August 16, 2022

"Additionally, there was a recent fire that could have been extinguished with a municipal water system in place." EMWD Los Alamos Hills Certified Milling Response, Public and Governmental Affairs, December 6, 2022

B-3 2) EMWD and the City of Murrieta failed to provide notice to parcel owners affected by the Los Alamos Hills Water System Project of the opportunity to participate.

"Public participation is an essential part of the CEQA process. Each public agency should include provisions in its CEQA procedures for wide public involvement, formal and informal, consistent with its existing activities and procedures, in order to receive and evaluate public reactions to environmental issues related to the agency's activities. Such procedures should include, whenever possible, making environmental information available in electronic format on the Internet, on a web site maintained or utilized by the public agency." 15201 PUBLIC PARTICIPATION

Our family's first notification for this CEQA project was an EMWD letter dated September 29, 2022. We received a second EMWD letter dated October 11, 2022 inviting our attendance to a town hall meeting scheduled the following day on October 13th, 2022. We were unable to attend the town hall meeting due to a previously committed engagement. There was NO "early September 2022" or

2/20

B-3 The District has exceeded the requirements for CEQA public noticing by utilizing three of the four suggested methods contained in the CEQA Guidelines (CEQA Guidelines § 15072), which requires that a notice of intent to adopt an IS/MND shall be publicized by at least one of the following four procedures to allow the public the review period provided under State CEQA Guidelines Section 15105:

(1) Publication at least once in a newspaper with general circulation.

The District published the Notice of Intent in the Press-Enterprise, a newspaper with general circulation in the project area on January 24, 2023.

(2) Posting of notice by the District on and off the site in the area where the project is to be located.

Posting of notices on and off the site was not practical for a pipeline project of this nature and was not undertaken.

(3) Direct mailing to the owners and occupants of property contiguous to the parcel or parcels on which the project is located. Owners of such property shall be identified as shown on the latest equalized assessment roll.

The District mailed copies of the Notice of Intent to all properties within the proposed annexation area on Wednesday, January 24, 2023.

(4) The alternatives for providing public notice outlined herein shall not preclude the District from providing additional notice by other means if the District so desires, nor shall the requirements of this section preclude the District from providing the public notice at the same time and in the same manner as public notice required by any other laws for the project.

The District posted the Notice of Intent on the District's website on Wednesday, January 24, 2023 (<https://www.emwd.org/post/notice-intent-adopt-mitigated-negative-declaration-los-alamos-hills-water-system-project>). The District also filed the Notice of Intent with Riverside County and the State Clearinghouse.

"early October 2022" letter as EMWD claimed at its EMWD Board of Directors meeting on November 16, 2022. Or is "For full annexation to be considered it will require a minimum 75% commitment from property owners" true.

B-4 Information from the town hall meeting on October 13, 2022 was posted on the EMWD web page. An Annexation Application Costs estimate for individual parcel owners based on a 3-acre parcel was \$39,950 or \$13,317 average per acre. (Annexation costs for a single family home on a 10-acre parcel would be \$133,170)

Upon viewing the Murrieta City Council Meeting on August 16, 2022, City Council Member Christi White read verbatim from the City Council Meeting Agenda Report, "As currently proposed, 49 adjacent parcels could benefit from the installation of a water line loop that would connect to existing EMWD infrastructure on Ruth Ellen Way. However, this area is not currently within EMWD's district boundaries. Thus, to connect to the future waterline, each property would first need to annex into the Metropolitan Water District and EMWD. Fortunately, annexation costs are eligible for funding through ARPA."

EMWD Board President Philip Paule and EMWD Deputy General Manager Nick Kanetis spoke about the project at the city council meeting. "Committed to move it forward aggressively and can find creative ways to move it forward rapidly." Also in attendance was EMWD Public Affairs Manager Roxanne Rountree.

No one at the meeting disagreed or refuted that annexation costs are eligible for funding through ARPA.

Our family and perhaps others affected by the Los Alamos Hills Water System Project were unaware of the August 16, 2022 Murrieta City Council meeting. We were not given the opportunity to voice support for the ARPA funds to cover our annexation costs; later estimated by EMWD at \$39,950. Nor were we able to request our governmental decision makers to use the ARPA funds to cover water meters and back-flow devices that appear to qualify per the 2017 Drinking Water

3/20

B-4 The IS/MND was not on the agenda or discussed at the City of Murrieta meetings referenced in this comment. The Eastern Municipal Water District does not control items discussed at the City of Murrieta, which is a separate governmental entity. The District prepared the IS/MND to address environmental impacts associated with the District's proposed annexation and pipeline project, which will be considered by the District's Board of Directors on March 15, 2023.

State Revolving Fund Eligibility Handbook, or discuss any other concerns about the project. We didn't know about the City Council Meeting.

A one-day notice for a town hall meeting/workshop to parcel owners affected by this CEQA project, after both agencies have worked on this project for over one year, which included public hearings, is contrary to the meaning of 'public participation' as described in 15201.

- B-5 3) Eastern Municipal Water District and the City of Murrieta approved the Los Alamos Hills Water System Project prior to considering the IS/MND.

"(a) Before granting any approval of a project subject to CEQA, every lead agency or responsible agency shall consider a final EIR or negative declaration or another document authorized by these guidelines to be used in the place of an EIR or negative declaration. See the definition of 'approval' in Section 15352." 15004 – TIME OF PREPARATION

"(a) 'Approval' means the decision by a public agency which commits the agency to a definite course of action in regard to a project intended to be carried out by any person. The exact date of approval of any project is a matter determined by each public agency according to its rules, regulations, and ordinances. Legislative action in regard to a project often constitutes approval.

(b) With private projects, approval occurs upon the earliest commitment to issue or the issuance by the public agency of a discretionary contract, grant, subsidy, loan, or other form of financial assistance, lease, permit, license, certificate, or other entitlement for use of the project." 15352 – APPROVAL

On July 6, 2022 at 9:00, the EMWD Board voted to "Approve and Authorize Interagency Agreement with the City of Murrieta and Agreement with Albert A. Webb Associates (\$193,877) for the Los Alamos Hills Water Facilities Project, and Additional Appropriation in the Amount of \$355,000".

4/20

- B-5 The District has not yet taken action to approve or deny the Los Alamos annexation and water pipeline project. Prior discussions between the District and the City regarding the provision of water infrastructure to the Los Alamos Hills community helped define the project, which is the subject of the IS/MND. The Board is being asked to adopt the CEQA document for that project, and to advance the project.

On August 16, 2022 the Murrieta City Council unanimously voted for the "Approval of the Interagency Financial Contribution Agreement with Eastern Municipal Water District for the Water District Infrastructure in the Los Alamos Region". "Agreement. District hereby agrees to construct water system infrastructure within Los Alamos Hills (hereinafter, the "Subject Facilities") for purposes of serving approximately 48 privately owned properties within said area. City hereby represents and warrants to District that it has secured and shall contribute a minimum of \$3 million of funding toward District's construction of the Subject Facilities and shall endeavor to identify and contribute other potential and additional sources of funding received or otherwise made available for District costs, fees and expenses incurred in connection with District's construction of said water infrastructure as more fully described herein."

The Los Alamos Hills Water System INTERAGENCY FINANCIAL CONTRIBUTION AGREEMENT does not stipulate to CEQA compliance. 15004(b)(4)(A)

On November 16, 2022 at 9:00, the EMWD Board voted to "Adopt Proposed Resolution of the Board of Directors of Eastern Municipal Water District setting a time and place for a public hearing regarding authorization of the Los Alamos Hills Water System Financial Program". EMWD Assistant Chief Financial Officer Thomas Hays announced at this meeting that EMWD had already received \$1.5 million from the City of Murrieta for the Los Alamos Hills Water System Project.

On December 7, 2022 at 9:00, the EMWD Board approved "Public Hearing to Adopt Proposed Resolution of the Board of Directors of Eastern Municipal Water District establishing the Los Alamos Hills Water System Financing Program for participants' annexation cost and connection fees".

On December 13, 2022, EMWD held the first Notary Signing Event at no cost for parcel members wishing to participate in EMWD's financing program.

On January 10, 2023, EMWD hosted the final Notary Signing Event. "This will be the final opportunity to partner at no cost on the annexation application. It will

5/20

also be the last opportunity to receive the 30-year financing option for the project. If you choose to postpone your decision, you will be required to file your own LAFCO application and those application fees must be paid by the resident. These fees are approximately \$20,000, which are subject to increase."

On January 24, 2023, EMWD posted the IS/MND for the Los Alamos Hills Water System Project indicating 36 parcel agreements.

The Los Alamos Hills Water System Annexation and Connection Fee Financing Agreement does not stipulate CEQA compliance. 15004(b)(4)(B)

B-6

4). Providing adequate public safety is the primary role of government; especially in a *Very High Fire Hazard Severity Zone* with congested traffic and growing number of Electrical Vehicle Fires.

The Los Alamos Hills Water System Project is located in a "Very High Fire Hazard Severity Zone." Parcel owners were evacuated for the Liberty Fire on December 7, 2017. Ted and Kathy's house (next to the Sports Park) burned to the ground on March 7, 2020 due to the absence of fire hydrants. As indicated in the IS/MND both paved and dirt roads in the Los Alamos loop have adjacent vegetation. The vegetation can become a fuel load for fire as experienced during the Liberty Fire.

Electric Vehicle (EV) fires are increasing in frequency as California has mandated higher thresholds for EV production. Fire personnel have described fighting an EV fire is like trying to extinguish a trick birthday candle. Even with an adequate water supply from a hydrant, EV fires can burn for hours. Absent an adequate water supply for fighting an EV fire can result in dire cascading consequences.

To now abandon the installation of fire hydrants as road usage has become congested is contrary to providing adequate public safety in our rural/residential community located in a *Very High Fire Hazard Severity Zone* with a history of fires

6/20

B-6

The IS/MND stated that the Project is located within a Very High Fire Hazard Severity Zone (Section 4.9 (g); page 59). As noted previously, fire hydrants would be included in installation of the proposed water lines, which would provide firefighters much-needed access to water in the event of fire in the project area upon completion.

Again, contrary to what was stated and written at the Murrieta City Council meeting: "Fortunately, annexation costs are eligible for funding through ARPA."

Los Alamos Hills parcel owners are yet again short-changed by the Los Alamos Hills Water System Project who had been promised adequate fire protection and lower fire insurance rates.

Kind Regards,


Bob Lapowehr
27951 Celia Road
Murrieta, CA 92563

APN: 900-370-001, Parcel #46 on the first map & Parcel #1 on others

Supporting Documentation

- Murrieta City Council Meeting Agenda Report, August 16, 2022
- "Car crash shears fire hydrant on Whitewood", forces road closure
- "Murrieta geyser shoots 125 feet into air after hydrant struck"
- Murrieta Fire Dispatch, March 12, 2000
- EMWD Action/Info Item 5567, July 6, 2022
- EMWD Action/Info Item 5741, November 16, 2022
- EMWD Action/Info Item 5840, December 7, 2022
- Best practices for electric vehicle fires, Fire Rescue 1
- "Video of multiple air tankers working the Liberty Fire"
- "Congestion Ahead" Los Alamos Road sign east of Ruth Ellen Road

7/20

- ☒ City Council
- ☐ Redevelopment Services Agency
- ☐ Community Services District
- ☐ Fire District
- ☐ Library Board
- ☐ Financing Authority
- ☐ Housing Authority



City Council Meeting Agenda Report

Subject: Approval of Interagency Financial Contribution Agreement with Eastern Municipal Water District for Water Infrastructure in the Los Alamos Region

Date: August 16, 2022

Prepared by: Ivan Holler, Assistant City Manager

Approved by: Kim Summers, City Manager

RECOMMENDATION

1. Adopt Resolution No. 22-4894 entitled: *A Resolution of the City Council of the City of Murree, Fiscal Year 2022/23 Operating Budget to Increase Appropriations To Fund The City's Obligation Under an Interagency Financial Contribution Agreement with Eastern Municipal Water District;*
2. Approve the attached Interagency Financial Contribution Agreement with Eastern Municipal Water District to utilize American Relief Plan Act (ARPA) funding for water infrastructure in the Los Alamos region; and
3. Authorize the City Manager to execute the Agreement and make any non-substantive changes and/or updates and to undertake actions necessary to implement the Agreement.

PRIOR ACTION/NOTE

On February 22, 2022, the City Council held a workshop and received public input on the use of Coronavirus State and Local Fiscal Recovery Funds, as established by ARPA. Staff provided preliminary recommendations for funding that included approximately \$10.6 million for water and sewer infrastructure (non-action).

On April 19, 2022, the City Council adopted a Resolution accepting ARPA grant funding, approved a Spending Plan for the City's allocation of the ARPA funds and amended the City's Operating Budget and Capital Improvement Plan in accordance with the Spending Plan (Vote: 5-0).

CITY COUNCIL GOAL

Maintain a high performing organization that values fiscal sustainability, transparency, accountability, and organizational efficiency.

BACKGROUND

In May 2021, the United States Department of Treasury announced the availability of funds from the American Rescue Plan Act of 2021 (ARPA), related to COVID-19 recovery efforts. Subsequently, in July 2021, staff briefed the City Council on potential uses of ARPA funds, including to provide water and sewer infrastructure to areas of the City that presently rely on individual wells for potable water, and treat-septic systems for wastewater disposal.

8/20

Page 2, Approval of Interagency Financial Contribution Agreement with Eastern Municipal Water District for Water Infrastructure in the Los Alamos Region



After reviewing the Final Rule from the United States Department of Treasury on uses for ARPA funds and the Drinking Water State Revolving Fund Eligibility Handbook, staff determined that two areas of the City would be eligible to utilize ARPA funds to provide municipal water and sewer service. One of those areas is along a portion of Los Alamos, generally to the south of the Los Alamos Sports Park. This area is primarily zoned for large lot residential uses. Unlike other similarly zoned locations, several wells serving properties in this area have dried-up and are no longer capable of providing potable water to the existing homes. As a result, some residents have resorted to trucking water onto their property to provide for daily needs. Hence, the lack of adequate potable water in this area is a legitimate public health and safety concern.

Around September 2021, City staff met with representatives from Eastern Municipal Water District (EMWD) to begin discussions about providing water infrastructure to a portion of the Los Alamos area. At the City's request, in November 2021, EMWD staff prepared a conceptual layout to install water infrastructure to several parcels in the Los Alamos area. The study area generally runs along the south side of Los Alamos to the properties along both sides of Mary Place, from Ruth Ellen Way on the west to Markon Road on the east (Exhibit A). As currently proposed, 49 adjacent parcels could benefit from the installation of a water line loop that would connect to existing EMWD infrastructure on Ruth Ellen Way. However, this area is not currently within EMWD's district boundaries. Thus, to connect to the main waterline, each property would first need to annex into the Metropolitan Water District and EMWD. Fortunately, annexation costs are eligible for funding through ARPA.

In addition to the 49 parcels mentioned above, other properties would also benefit from the installation of the water line because fire hydrants would be placed at regular intervals along the new loop system. The presence of fire hydrants will greatly improve fire suppression capabilities and may ultimately result in improved Insurance Service Office ratings.

EMWD prepared a preliminary cost estimate of approximately \$3.2 million for the planning, design, and construction of the water infrastructure. Final costs may be substantially higher as annexation costs were not included in the preliminary cost estimate.

In February 2022, the City Council held a workshop and received public input on the use of ARPA funds. Staff provided preliminary recommendations for funding projects that included approximately \$10.6 million for water and sewer infrastructure. In April 2022, the City Council approved a resolution accepting ARPA funds in the amount of \$16,463,101. That amount included the recommended allocation of \$10.6 million for water and sewer projects. Staff further recommended allocating up to \$3 million out of the \$10.6 million to provide water infrastructure to the Los Alamos area, based on EMWD's preliminary cost estimate.

Although the total cost of providing water infrastructure for the Los Alamos area will exceed \$3 million, EMWD has agreed to initially cover any additional costs. Ultimately, EMWD would recover those additional costs through the formation of a benefit assessment district, or other similar financing mechanism. Most recently, on July 6, 2022, the EMWD Board approved a draft Interagency Financial Contribution Agreement to plan, design, and construct water infrastructure in the Los Alamos area, utilizing up to \$3,000,000 of ARPA funds from the City. This Agreement will allow properties in the Los

9/20

Page 3, Approval of Interagency Financial Contribution Agreement with Eastern Municipal Water District for Water Infrastructure in the Los Alamos Region



Los Alamos Hills area the ability to receive municipal water services, as part of a financial partnership and support between EMWD and the City, through the contribution of ARPA funds allocated by the City.

Staff recommends that the City Council also approve the Draft Interagency Financial Contribution Agreement with Eastern Municipal Water District.

ARPA funds must be expended by December 31, 2026.

FISCAL IMPACT

The cost for this Agreement to the City is \$3,000,000 and will be funded by ARPA. These funds need to be established in the FY 2022/23 Operating Budget to realize the ARPA grant revenue and expenditures related to this Agreement. The following appropriations are requested as a part of this action:

SEWER/ARPA - Los Alamos Hills Water	Description	05	06	Percent
Revenue	Transfer to City	274950-42222	274950-42222	100.00%
Revenue	Transfer to City	274950-42222	274950-42222	100.00%
Expenditure	Transfer to City	274950-42222	274950-42222	100.00%
Expenditure	Transfer to City	274950-42222	274950-42222	100.00%
Transfer Out	Transfer to City	274950-42222	274950-42222	100.00%
Transfer In	Transfer to City	274950-42222	274950-42222	100.00%

ATTACHMENTS

1. Resolution No. 22-4804 and Exhibit A - Los Alamos Hills
2. Los Alamos Hills Water System Interagency Financial Contribution Agreement with EMWD

10/20

267

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MURR ETA FIRE Dispatch



Captain Todd Brummett removes an American flag from the front of a burning home.
(Photo by Dan Finnerty)

IN THE FIELD REPORTING

By Dan Finnerty
MFR's In-house Photographer

On Saturday, March 7, Murrieta Fire & Rescue responded to a residential structure fire along Lily Avenue Road, just west of Ruth Ellen Way. The first arriving units reported a large, single-story home with smoke and fire showing from the roof. Firefighters arriving on scene quickly deployed an attack line and working to knock down the flames.

Due to water supply constraints (there are no fire hydrants in the area) and strong winds pushing the heat further into the structure, the fire proved to be too much for their efforts, and within a few minutes, the entire house was fully ablaze. The incident was upgraded to a second alarm, and nearly a dozen fire engine companies from Murrieta and surrounding communities arrived at the scene to assist.

(Cont'd on Page 5)

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Check back next week for updated articles



Murrieta Fire & Rescue • 44445 Canyon Road, Murrieta, CA 92562 • (951) 341-4444 • www.murrietafire.com

March 12, 2020



1	Fires
1	Emergency No. 4 fire
1	EMS
1	Traffic Collisions
1	Technical Rescue
1	Hot/Mat
1	Service Calls
1	Life/Rescue
1	Good Intent
1	Cancelled Calls
1	Alarm Activations
1	Motor/Vehicle/Personnel
1	Other Complaint
1	Total Calls

MFR Call - 2019 YEAR-END	2019	MFR	NPPA
Measurable	0:01:00	85.7%	91.0%
Alarm Handling	0:01:35	91.7%	91.4%
Turnout	0:05:48	92.5%	95.9%
Total Response	0:07:54	94.9%	92.6%

FIRE CALL - 2019 YEAR-END	2019	MFR	NPPA
Measurable	0:01:35	92.7%	95.7%
Alarm Handling	0:01:35	92.7%	95.7%
Turnout	0:06:12	95.5%	99.7%
Total Response	0:10:54	98.6%	95.7%

FIRE PREVENTION/COMMUNITY RISK	2019
Competition - Fire and Police Department	
Planning - Design Reviews	0
Plan Submittals	17
New Construction Inspections	7
Plans & Inspection Revenue	\$11,762
Inspection and Safety Inspections	
Inspections	58
Re-Inspections	58
Number of Violations	62
Repeat Fire Inspection Revenue	\$1,286
Code Enforcement	1
Public Education	
Public Education Programs	0
Public Education Activities	35
Investigations	2
Community Risk	
Weekly LPI	95
Weekly SAR	95

13/20

FIRE DISPATCH

By Jot Famagelle



IN THE FIELD REPORTING

By Jot Famagelle

MFR Volunteer Photographer



In the Field Reporting (cont'd from Page 1)

As firefighters deployed additional hose lines and worked to contain the fire, fellow fire photographer Ryan Ponis and I noticed an American flag blowing in the wind near the front door of the home. We caught the attention of Murrieta Fire Captain Todd Bradstreet, who quickly removed the flag and handed it off to me.

I began rolling the flag into the wooden pole and turned around to find a safe place that I could lean it. When I turned back around, I was met by a woman approaching me with her arms stretched and her eyes welled with tears. I handed the flag off to her and returned to my photo-taking duties, but the moment was not lost on me. It was one of those brief moments that brings a glimmer of hope amidst a tragedy, and I was happy to be there to witness it.

Unfortunately, the home was destroyed in the incident, and the family lost virtually all of their possessions. Thankfully, however, no one was injured, and several good Samaritans were able to rescue most of the family's pets from the home as the fire was rapidly growing.

It's common to hear "well, possessions can be replaced, but people/pets cannot." And while this is true, victims of fires and other tragedies will usually tell you that it's impossible to replace the memories and feelings that accompany those possessions. I am hopeful that the preservation of their flag gave the family a new memory for a cherished possession, which they can hopefully use to help start rebuilding their lives.


As always, I want to call out the wonderful job performed by all first responders at the scene today, including Murrieta Fire and Rescue, CAL FIRE/Riverside County Fire Department, the Murrieta Police Department, and AMR Riverside County, among others. Although the home was a total loss, the efforts of these heroes helped overcome some extreme challenges today, including the deployment of a multi-engine relay supply hose line that was over 3,000 feet long, to bring in water from the closest hydrant to the incident. There is no doubt that their efforts helped preserve the life and safety of everyone at this scene, and prevented the situation from becoming much worse.



Send someone to call with The Counseling Group: (951) 864-4233

14/20

202307, 1:18 PM
Agencies and Audiences Emergency Agreement with the City of Murrieta and Agreement with Albert A. Webb Associates (\$193,877)



Eastern Municipal Water District
California

Action/Info Item
5567

Approved
for 8-3-2023 6:00 AM

Approve and Authorize Interagency Agreement with the City of Murrieta and Agreement with Albert A. Webb Associates (\$193,877) for the Los Alamos Hills Water Facilities Project, and Additional Appropriation in the Amount of \$355,000

Information

Department:

Planning-Engineering-Construction Branch

Sponsors:

Category:

Action/Info Item

Meeting Workflows:

Board Meeting Workflow

Attachments

Proposed

Exhibit A – Location Map

Exhibit B – Interagency Agreement

Exhibit C – Consultant Proposal

Exhibit D – Cost Estimate Presentation

Background

Los Alamos Hills is a rural residential community located within a northeasterly portion of the City of Murrieta (City) as illustrated in Exhibit A. This area of the City is not currently annexed into the service areas of Eastern Municipal Water District (EMWD) or the Metropolitan Water District of Southern California (MWD) and property owners within this area rely solely on privately owned pumping wells for their water supply.

The proposed project will help address potential drywell conditions (failure or over pumping of privately owned wells) and lack of a reliable water supply, as experienced by some residents in the past. The City has reached out to EMWD and offered \$3 million in American Rescue Plan Act funding available to support the construction of water infrastructure for the Los Alamos Hills community.

On March 16, 2022, staff requested a proposal from Albert A. Webb Associates (WEBB) to advance a feasibility assessment to define the scope and cost of a water infrastructure extension to the Los Alamos Hills community. This work was authorized (PAR 2022-025) by staff and a total of \$52,800 was appropriated to advance this phase of the project.

Having completed an initial feasibility assessment, EMWD is prepared to accept the City's offer of funding and construct the required water infrastructure extension to this community. The designation of roles, cooperative responsibilities, financial participation, and timing has been outlined in an Interagency Agreement that is in the mutual interests of both EMWD and the City for efficient engineering design and construction of the project. The proposed Interagency Agreement is attached as Exhibit B.

The proposed water infrastructure extension would be a looped water system extending from the adjacent 1508 pressure zone. The proposed project would serve approximately 49 properties within the community that front Los Alamos Road, Celis Road, Mary Place, and Mason Road. This will be achieved by installation of approximately 5,723 linear feet of 8-inch diameter pipeline, 4,040 linear feet of 12-inch diameter pipeline, and related appurtenant work.

https://www.emwd.org/Online/Online_1.aspx?file=emwd%20Water%20Extension%20to%20Los%20Alamos%20Hills.pdf

15/12

2023/05/23 11:14 AM

Adopt Proposed Resolution of the Board of Directors of Eastern Municipal Water District Setting a Time and Place for a Public Hearing



Eastern Municipal Water District

California

Action/Info Item

5741

Approved

May 23, 2023 9:00 AM

Adopt Proposed Resolution of the Board of Directors of Eastern Municipal Water District Setting a Time and Place for a Public Hearing Regarding Authorization of the Los Alamos Hills Water System Financing Program

Information

Department:

Category:

Finance

Action/Info Item

Sponsors:

Meeting Workflows

Board Meeting Workflow

Attachments

Proposed

Exhibit A - Location Map

Exhibit B - Los Alamos Hills Community Parcel Map

Exhibit C - Los Alamos Hills Looped Water System Diagram

Exhibit D - Los Alamos Hills Water System Financing Agreement

Exhibit E - Resolution

Presentation

Background

Located within Eastern Municipal Water District's (EMWD) greater service area boundary is an approximate 1,000-acre area not annexed into the service area of EMWD or the Metropolitan Water District (MWD). This area is commonly referred to as the "Keyhole" and is located in the city of Murietta, east of Interstate 215, north of Murietta Hot Springs Road, and west of Highway 78, as depicted on the attached location map (Exhibit A). Property owners within this area rely on privately owned pumping wells for water supply. Over the years, there have been inquiries from property owners regarding the possibility of obtaining water service from EMWD, but plans have not yet advanced due to complexities related to the long processing times and costs to annex into MWD and EMWD service areas, along with the costs to extend facilities to this area.

In early 2022, following concerns expressed by certain residents within the Keyhole who were experiencing drywell conditions and expressing concerns of having a lack of reliable water supply, the City of Murietta (City) reached out to EMWD to explore the possibility of extending EMWD's water system to a residential community known as Los Alamos Hills that includes approximately 50 properties (171.8 acres) fronting Los Alamos Road, Celia Road, Mary Place, and Mason Avenue, as depicted in the Los Alamos Hills Community parcel map (Exhibit B). In support of the potential extension of EMWD's water system and potential annexation of these properties, the City of Murietta committed to providing approximately \$3.0 million of American Rescue Plan Act (ARPA) funding available for water infrastructure.

On July 6, 2022, EMWD's Board of Directors approved entering into an interagency Financial Contribution Agreement with the City for reimbursement of \$3.0 million for the Los Alamos Hills Water Facilities Project, and the City Council of the City of Murietta adopted a resolution approving the action on August 16, 2022.

The proposed water infrastructure extension includes a looped water system extending from the adjacent 1508 pressure zone and will be achieved by installation of approximately 6,720 linear feet of 8-inch diameter pipeline, 4,040 linear feet of 12-inch diameter pipeline, and related auxiliary work, as described in the Los Alamos Hills Looped Water System Diagram (Exhibit C).

<https://board.emwd.org/Claims/Details.aspx?MeetingID=1986&WaterResourceID=25&AGID=1&ClaimID=5741>

16/20

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Best practices for electric vehicle fires

Wear full PPE and SCBA on all vehicle fires. (Protect any fall from heavy materials including steel, aluminum and concrete masonry. But fire also causes plastics and synthetics that can off-gas cyanide and carcinogens as well as sulfur, acid, carbon monoxide, copper, lithium or cobalt.)

Watch for unexpected hazards. Vehicle fires can also cause an unexpected fuel or power system or fire trap explosion and destruction. For vehicle, a ruptured fuel tank or the system or some exotic controls kept in the trunk. That's why the good SCBA are always essential to firefighter safety.

Identify the type of vehicle involved – unknown vehicle, EV, HEV, PHEV, etc. While carefully approaching the vehicle, firefighters need to identify whether it's a plug-in hybrid or a battery-powered vehicle. Most manufacturers place an emblem on the trunk and sides that indicates it's a powered by fuel rather than gasoline. However, finding the emblem in the dark can be difficult.

Use a thermal imaging camera to help with the 360 sweep. The recommendation is to use a TIC if available, to scan any electric vehicle at risk if the battery is overheating or burning.

Establish an appropriate incident command structure. Have an incident commander, safety officer and accountability officer at minimum, with a 200-degree view of the scene to observe any critical changes in conditions.

Establish unified command (fire, ambulance, police, etc.). Once identified, firefighters must size-up the emergency and establish priorities (rescue, extinguishment, protection, patient care). Isolate the vehicle from any hidden dangers and wait handling the emergency according to the state's protocol.

Stabilize the vehicle. Fully stabilize the vehicle in the same manner as you would for an extraction (e.g., chocks, cribbing).

Power down, if possible. Electric and hybrid vehicles can generate an electric shock that in some cases can surpass 400 or more volts than an energized fire hydrant.

Secure a large, continuous and sustainable water supply. This is ideally done in front for hydrants or multiple water tenders.

Use a large volume of water. Use a nozzle stream 2 1/2 inch or greater (1 1/2 inch for best to suppress and clock the fire and the battery).

Consider that this could be a controlled fire, extinguished and noxious incident. During incidents such as the one in Indianapolis when EVs needed a water attack until the priority can include not only the fire but also vehicle extractions, and depending where the EV becomes more fractured, there can be a considerable amount of hazardous material from the battery (explosion) and lithium salt cells that are drawn about the scene.

Have sufficient fire personnel and apparatus on scene for an extended operation. Crews will be used in moving the battery's heat or possible re-ignition.

Share information during incident. When turning the vehicle over to a tow or moving company, safety should be preserved on the hazards. If possible, follow the vehicle to the storage area, and place the battery-powered vehicle in a location away from other vehicles, buildings or communities.

FIRE RESCUE

18/20

2023/11/13 2:00 PM

View of multiple air tankers working the Liberty Fire near Murrieta, CA - Fire Season

Video of multiple air tankers working the Liberty Fire near Murrieta, CA

9/9 Content | December 7, 2017 | Photo video

047, 046-146, C-130, California, DC-10, Liberty Fire, MHPFS



Above: The Liberty Fire east of Murrieta, California, December 7, 2017. Screenshot from the KTLA video.

(Originally published at 7 p.m. PST December 7, 2017)

KTLA shot some excellent stabilized video from a helicopter Thursday of the Liberty Fire that has burned about 300 acres northeast of Murrieta, California. This is a new fire that erupted this afternoon 17 miles north of another new fire, the [Lilac Fire](#) south of Temecula which was 3,000 acres at 7 p.m. PST.

<https://www.kctv.com/2017/12/07/video-of-multiple-air-tankers-working-the-liberty-fire-near-murrieta-cal/>

19/20



Mitigation, Monitoring, and Reporting Program

The California Environmental Quality Act (CEQA) requires the adoption of feasible mitigation measures to reduce the severity and magnitude of potentially significant environmental impacts associated with project development. In order to ensure that the mitigation measures and project revisions identified in an Environmental Impact Report (EIR) or Mitigated Negative Declaration (MND) are implemented, the Lead Agency is required to adopt a program for monitoring and reporting on the measures it has imposed to mitigate or avoid significant effects (CEQA Guidelines Section 15097[a]). The CEQA Guidelines require that a Mitigation Monitoring and Reporting Program (MMRP) be adopted upon certification of an EIR or adoption of an MND to ensure mitigation measures identified in the EIR or MND are implemented.

According to CEQA Guidelines Section 15097(c), "reporting" generally consists of a written compliance review that is presented to the decision-making body or authorized staff person. A report may be required at various stages during project implementation or upon completion of the mitigation measure. "Monitoring" is generally an ongoing or periodic process of project oversight. This program identifies, at a minimum, the entity responsible for the monitoring, what is to be monitored, how the monitoring shall be accomplished, and the monitoring and reporting schedule.

The MMRP assigns responsibility for monitoring mitigation measures incorporated into the Los Alamos Hills Water System Project (project). Under this program, the Eastern Municipal Water District (District), and the construction contractor under the direction of the District, would be responsible for the implementation and monitoring of these measures before, during, and immediately following construction phases of the project unless otherwise stated herein, in accordance with CEQA Guidelines Section 15097. A record of the MMRP will be maintained at the District office, located at 2270 Trumble Road, Perris, California 92570.

The Initial Study/MND (State Clearinghouse Number 2023010460) analyzed the potential environmental effects of the project and identified measures to mitigate potentially significant impacts associated with construction of the project. The MMRP table presented below documents the mitigation measures to be implemented by the District.

Mitigation, Monitoring, and Reporting Program Incorporated into the Project			
Mitigation Measure	Timing of Verification	Responsible for Verification	Status/ Date/ Initials
Biological Resources			
<p>BIO-1: Coastal California Gnatcatcher</p> <p>Project construction should be conducted outside the coastal California gnatcatcher breeding season, which is March 1 to August 15. If construction must take place during the coastal California gnatcatcher breeding season, a qualified biologist (possessing a valid Endangered Species Act Section 10(a)(1)(A) Recovery Permit) shall survey Riversidean sage scrub adjacent to the project site for the presence of the coastal California gnatcatcher. Surveys for coastal California gnatcatcher shall be conducted pursuant to the protocol survey guidelines established by the U.S. Fish and Wildlife Service (USFWS) within the breeding season prior to the commencement of any construction. If the protocol survey concludes that no coastal California gnatcatchers are present or all work is constructed outside of the breeding season (August 16 to February 28), no additional mitigation measures would be necessary. If coastal California gnatcatchers are present, then the following additional mitigation conditions must be met:</p> <ol style="list-style-type: none"> Between March 1 and August 15, no construction activities shall occur within any portion of the project site where construction activities would result in noise levels exceeding 60 A-weighted decibels [dB(A)] hourly average (or ambient, whichever is higher) at the edge of occupied coastal California gnatcatcher habitat. An analysis showing that noise generated by construction activities would not exceed 60 dB(A) hourly average at the edge of occupied habitat must be completed by a qualified acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by District at least two weeks prior to the commencement of construction activities. Prior to the commencement of construction activities during the breeding season, areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist; or At least two weeks prior to the commencement of construction activities during the breeding season, under the direction of a qualified acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities will not exceed 60 dB(A) hourly average (or ambient, whichever is higher) at the edge of habitat occupied by the coastal California gnatcatcher. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring shall be conducted at the edge of the occupied habitat area to ensure that noise levels do not exceed the noise threshold. If 	Prior to Construction and During Construction	District/ Qualified Biologist	

Mitigation, Monitoring, and Reporting Program Incorporated into the Project			
Mitigation Measure	Timing of Verification	Responsible for Verification	Status/ Date/ Initials
<p>the noise attenuation techniques implemented are determined inadequate by the qualified acoustician or biologist, then the associated construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (August 16); or</p> <p>c. Prior to construction during the breeding season, the District shall prepare an MSHCP Consistency Analysis for review by the Western Riverside County Regional Conservation Authority and obtain incidental take coverage for coastal California gnatcatcher via the Participating Special Entity process. The proposed project would pay any necessary mitigation fees for impacts to 7.91 acres prior to construction.</p>			
<p>BIO-2: Migratory and Nesting Birds</p> <p>Construction should be conducted outside the nesting season, which is generally defined as January 15 to August 31. If construction must take place during the nesting season, a qualified biologist shall perform a pre-construction survey for nesting birds. The nesting bird survey shall occur no more than seven days prior to the start of construction. Additionally, raptors (birds of prey) are known to begin nest building in January or February. If construction is to occur between January 1 and February 15, a nesting raptor survey will be conducted within the project area, including a 500-foot buffer. If active bird nests are confirmed to be present during the pre-construction survey, a buffer zone will be established by a qualified biologist until a qualified biologist has verified that the young have fledged or the nest has otherwise become inactive.</p>	Prior to Construction and During Construction	District/ Qualified Biologist	
<p>BIO-3: Aquatic Resources</p> <p>The applicant for the proposed project shall avoid indirect impacts to potentially jurisdictional features with best management practices (BMPs), such as the use of silt fences, fiber rolls, and/or gravel bags, implemented. No equipment maintenance or fueling should be performed within or near the non-vegetated channel where petroleum products or other pollutants from the equipment may enter this area.</p>	During Construction	District/ Qualified Biologist	
Geology and Soils			

Mitigation, Monitoring, and Reporting Program Incorporated into the Project			
Mitigation Measure	Timing of Verification	Responsible for Verification	Status/ Date/ Initials
GEO-1: Paleontological Monitor Excavation shall be monitored by a qualified paleontologist. If paleontological resources are encountered, the paleontological monitor shall have the authority to temporarily halt or redirect work while the paleontological resources are documented and assessed. If significant deposits are found, additional data recovery shall be conducted, as necessary, in order to adequately mitigate project impacts. The fossil collection and all associated documentation shall be legally transferred to a qualified repository within Riverside County. Full-time paleontological monitoring can be reduced to part-time inspections or ceased entirely if determined adequate by the qualified paleontologist.	During Construction	District/ Qualified Paleontologist	
Noise			
NOI-1: Construction Noise Reduction Measures <ul style="list-style-type: none"> District shall require its contractor to implement the following actions relative to construction noise: District shall conduct construction activities between 7:00 a.m. and 8:00 p.m. on weekdays in accordance with the City of Murrieta Municipal Code, Section 16.30.130(A). Prior to construction, the District in coordination with the construction contractor, shall provide written notification to all properties within 50 feet of the proposed project facilities informing occupants of the type and duration of construction activities. Notification materials shall identify a method to contact the District's program manager with noise concerns. Prior to construction commencement, the District program manager shall establish a noise complaint process to allow for resolution of noise problems. This process shall be clearly described in the notifications. Stationary noise-generating equipment shall be located as far from sensitive receptors as possible. Such equipment shall also be oriented to minimize noise that would be directed toward sensitive receptors. Whenever possible, other non-noise generating equipment (e.g., roll-off dumpsters) shall be positioned between the noise source and sensitive receptors. Equipment and staging areas shall be located as far from sensitive receptors as possible. At the staging location, equipment and materials shall be kept as far from adjacent sensitive receptors as possible. Construction vehicles and equipment shall be maintained in the best possible working order; operated by an experienced, trained operator; and shall utilize the best available noise control techniques 	Prior to Construction and During Construction	District/ Construction Contractor	

Mitigation, Monitoring, and Reporting Program Incorporated into the Project			
Mitigation Measure	Timing of Verification	Responsible for Verification	Status/ Date/ Initials
<p>(including mufflers, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds).</p> <ul style="list-style-type: none">• Unnecessary idling of internal combustion engines shall be prohibited. In practice, this would require turning off equipment if it would idle for five or more minutes.• Electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment, where feasible.• The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.			

1.0 Introduction

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared in accordance with relevant provisions of the California Environmental Quality Act (CEQA) of 1970, as amended, and the CEQA Guidelines, as revised. This IS/MND evaluates the environmental effects of the proposed Los Alamos Hills Water System Project (proposed project).

The IS/MND includes the following components:

- A Draft MND and the formal findings made by the Eastern Municipal Water District (District or EMWD) that the proposed project would not result in any significant effects on the environment, as identified in the CEQA IS Checklist.
- A detailed project description.
- The CEQA IS Checklist, which provides standards to evaluate the potential for significant environmental impacts from the proposed project and is adapted from Appendix G of the CEQA Guidelines. The proposed project is evaluated in 21 environmental issue categories to determine whether the proposed project's environmental impacts may be significant in any category. Brief discussions are provided that further substantiate the proposed project's anticipated environmental impacts in each category.

Because the proposed project fits into the definition of a "project" under Public Resources Code Section 21065 requiring discretionary approvals by the District, and because it could result in a significant effect on the environment, the proposed project is subject to CEQA review. The IS Checklist was prepared to determine the appropriate environmental document to satisfy CEQA requirements: an Environmental Impact Report (EIR), a Mitigated Negative Declaration (MND), or a Negative Declaration (ND). The analysis in this IS Checklist supports the conclusion that the proposed project may result in significant environmental impacts, but (1) revisions in the project plans or proposals made by or agreed to by the applicant before a proposed MND and IS are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and (2) there is no substantial evidence, in light of the whole record before the District, that the proposed project as revised may have a significant effect on the environment; therefore, an MND has been prepared.

This IS/MND will be circulated for 30 days for public and agency review, during which time individuals and agencies may submit comments on the adequacy of the environmental review. Following the public review period, the District's Board will consider any comments received on the IS/MND when deciding whether to adopt the MND.

2.0 Project Description

1. Project Name:

Los Alamos Hills Water System Project ("proposed project")

2. Lead Agency:

Eastern Municipal Water District
2270 Trumble Road
Perris, CA 92570

3. Contact Person and Phone Number:

Joseph Broadhead
Principal Water Resource Specialist – CEQA/NEPA
Eastern Municipal Water District
2270 Trumble Road
Perris, CA 92572-8300
(951) 928-3777
broadhej@emwd.org

4. Project Location:

The proposed project is located in the city of Murrieta, California. The project area encompasses approximately 171 acres and is located near Los Alamos Road (Figures 1, 2, and 3). There are 50 rural residential parcels within the project area and 45 of those lots are developed with a residential structure. Los Alamos Road, Mason Avenue, Mary Place, and Celia Road connect back into the existing pipeline along Ruth Ellen Way and Los Alamos Road.

5. Project Applicant/Sponsor:

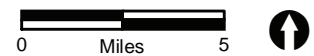
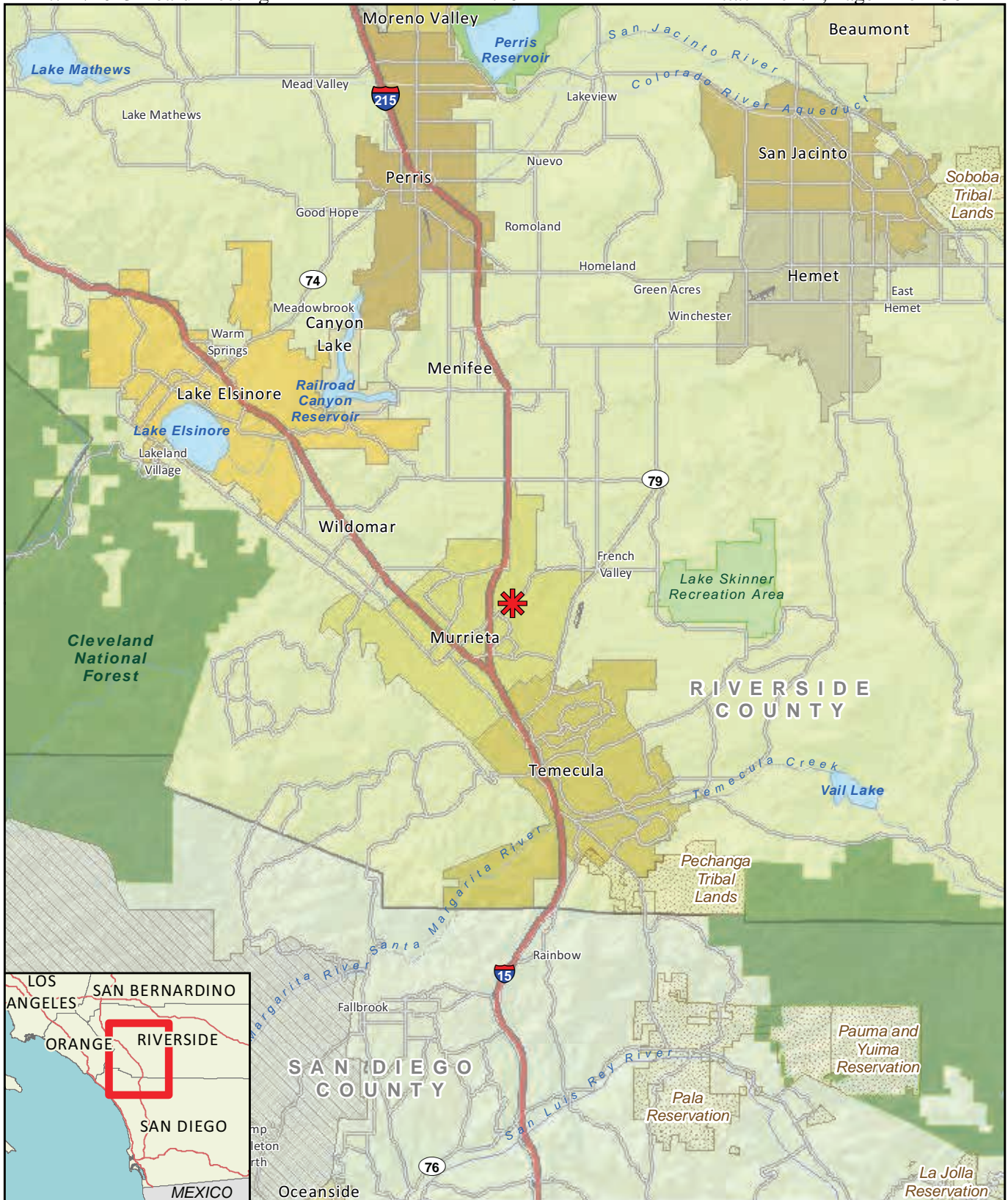
Eastern Municipal Water District
2270 Trumble Road
Perris, CA 92572-8300

6. General Plan Designation:

The project area is designated as Large Lot Residential in the City of Murrieta (City) General Plan (General Plan). The area surrounding the proposed project is also designated as Large Lot Residential in the General Plan.

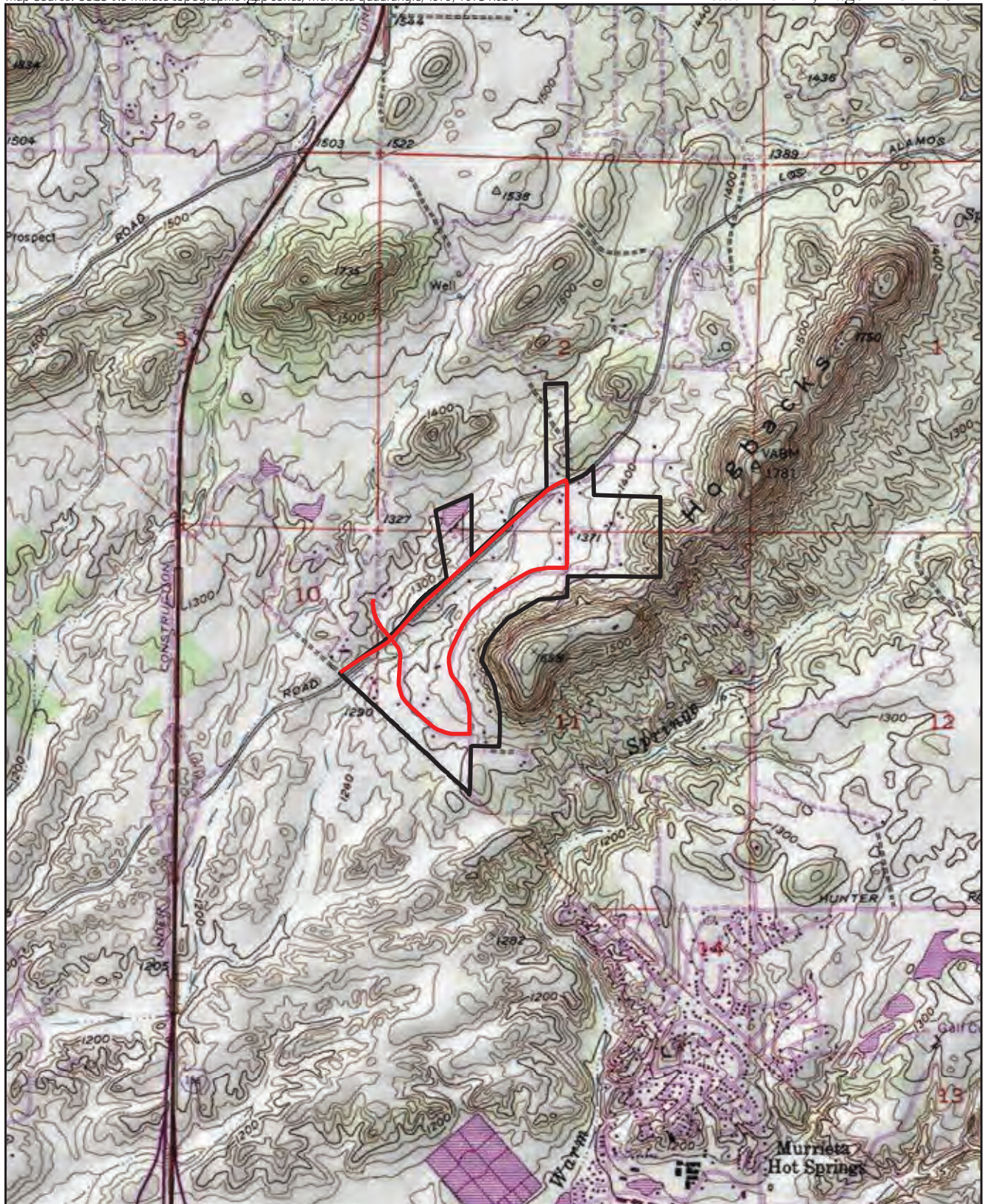
7. Zoning:

The project area and surroundings are zoned as Rural Residential (RR).



 Project Location

FIGURE 1
Regional Location



Project Area
 Project Site

0 Feet 2,000





0 Feet 600



— Pipeline Alignment

FIGURE 3

Pipeline Location on Aerial Photograph



8. Project Background

The project area, as shown in Figure 4, is outside both the Eastern Municipal Water District (District) and the Metropolitan Water District of Southern California (MWD) service areas. Properties in this area currently rely on private wells for potable water. The project area is within the MWD's sphere of influence and is proposed to be annexed into both the District's service area and MWD's service area to receive potable water.

The project area is currently a subset of the "Keyhole Area", an approximately 1,000-acre area located outside District and MWD service areas (see Figure 4). The adjacent 96th Fringe Annexation properties have been annexed, water pipelines connected, and are now eligible for water service.

9. Proposed Project Description:

The proposed project consists of the annexation of properties within the community known as Los Alamos Hills within the city of Murrieta, and the construction of 10,685 +/- linear feet of water pipeline to service the annexed properties. Los Alamos Hills includes approximately 50 properties (171.9 acres) fronting Los Alamos Road, Celia Road, Mary Place, and Mason Avenue. The area considered for annexation is referred to in this document as the "project area" (see Figure 4). Forty-five of the 50 parcels in the project area are currently developed with residential structures. Currently, owners of 36 of the 50 properties have opted to annex to the District (Figure 5).

A dual-annexation process is required to annex properties into MWD and EMWD service areas. The application to annex is done through MWD and the Riverside Local Agency Formation Commission (LAFCO). EMWD will serve as the applicant for the annexation processes into MWD and EMWD services areas, as well as the LAFCO process. It is anticipated that all fees and costs for LAFCO, the dual-annexation processes and connection fees would be advanced by EMWD with repayment of the annexation costs and connection fees to be made by residents of Los Alamos Hills that opt to proceed with annexation. District water service to the project area would be allowed once annexation is approved by the District, MWD, and LAFCO.

The "project site" is that portion of the project area where impacts could occur due to pipeline construction. The project site consists of those portions of Los Alamos Road, Celia Road, Mason Road, Mary Place, and Ruth Ellen Way within the project area. The project site is located entirely within city roadway rights-of-way, a portion of which is paved and a portion unpaved.

As shown in Figure 6, project site plan, the following are the proposed pipeline segments and sizing:

- Los Alamos Road: 12-inch pipeline, from Celia Road to Mason Avenue (approximately 3,350 linear feet)
- Celia Road: 8-inch pipeline, Mary Place to Mason Road (approximately 2,000 linear feet)
- Mason Road: 8-inch pipeline, Mary Place to Los Alamos Road (approximately 1,260 linear feet)
- Mary Place: 8-inch pipeline, Celia Road to Mason Avenue (approximately 3,400 linear feet)
- Ruth Ellen Way: 12-inch pipeline, Los Alamos Road to the northern property line of Rail Ranch Elementary School (approximately 675 linear feet)

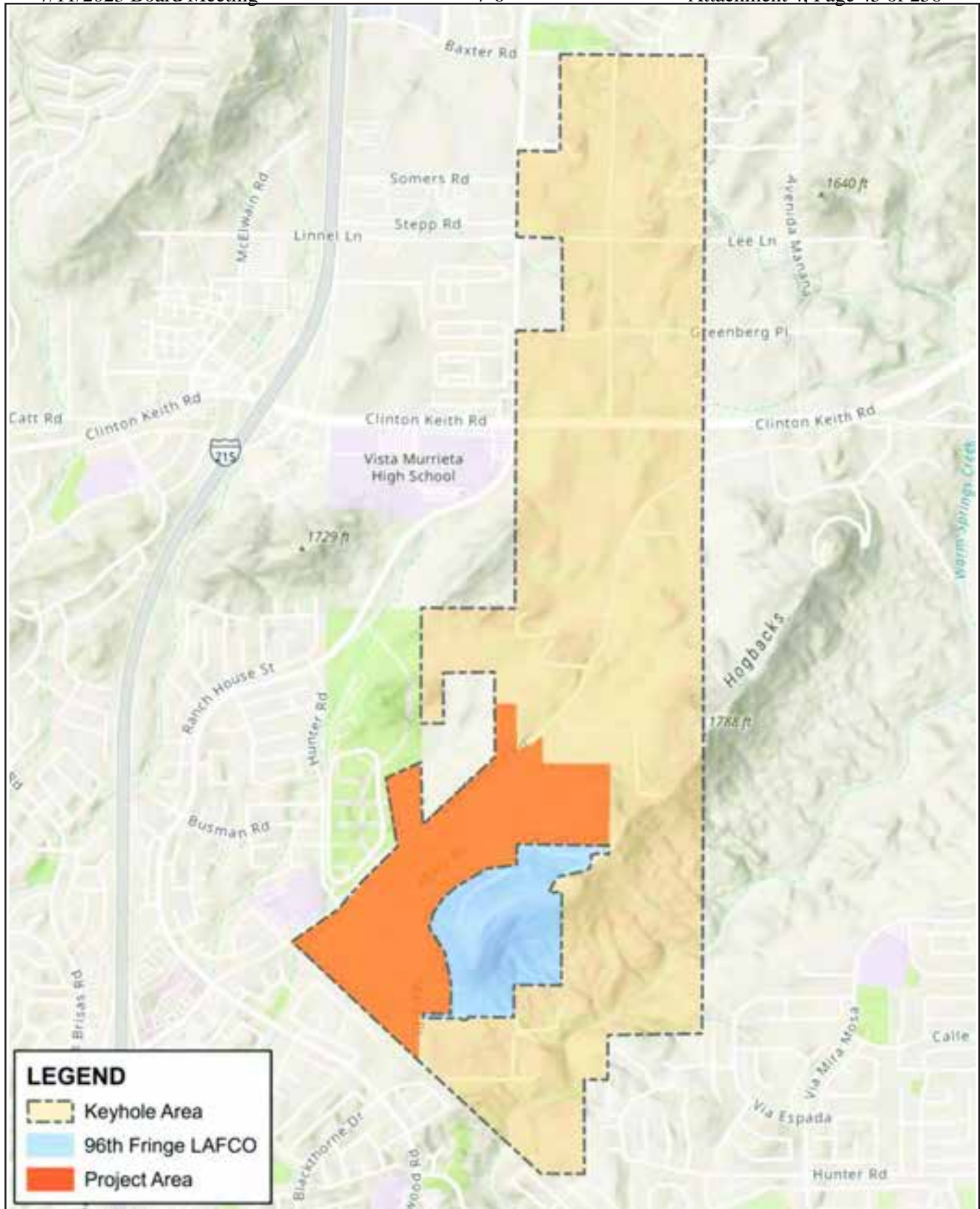
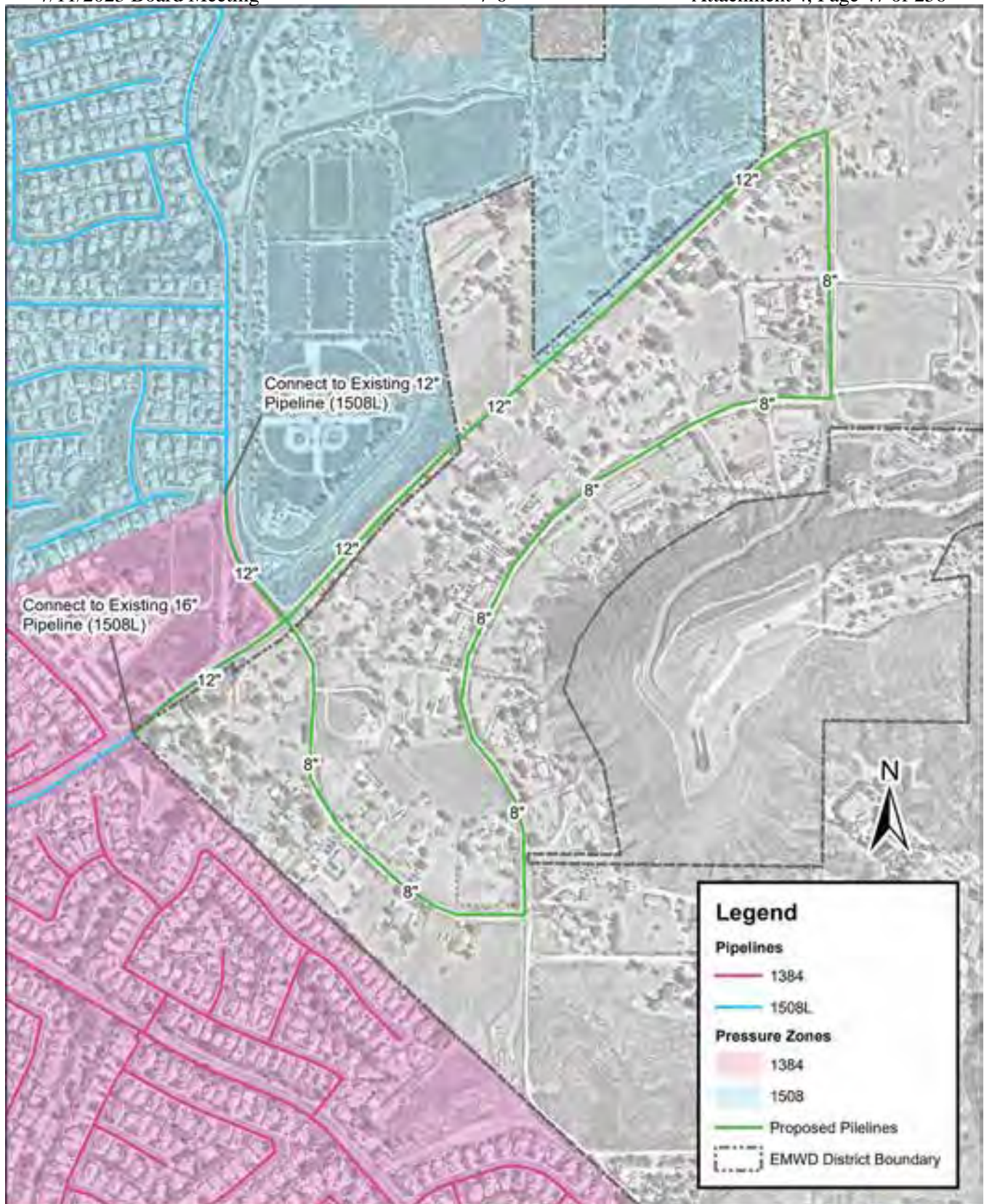


FIGURE 4
Project Area



FIGURE 5
Current Los Alamos Hills Parcel Annexations



The proposed pipeline alignment is designed to avoid conflict with existing utilities and existing culverts beneath the roadways. Construction of the proposed pipeline involves open trench excavation estimated at 4 feet wide and 6 feet deep. The trench cross-sections are presented in Figures 7 and 8. Up to 200 linear feet of pipeline could be constructed each day. Construction of trenches would be in the roadway above any drainage culverts. If there is not enough depth from pavement to install the pipelines above the drainage culverts, construction of the pipeline would require a tunnel beneath the culverts. Total estimated volume of material to be excavated is approximately 20,031 cubic yards, which may be reused onsite as trench backfill; however, this would not be determined until excavation begins. Therefore, it is conservatively assumed that all of the material would be hauled offsite for disposal. Total construction time is conservatively estimated to be approximately 5 months, with construction occurring between the hours of 7:00 a.m. to 8:00 p.m. No night construction would occur.

Construction of the pipeline is anticipated to require use of the construction equipment shown in Table 1.

Table 1 Estimated Construction Equipment	
Equipment	Number Required for Pipeline
Air Compressor	2
Concrete Industrial Saw	1
Excavator	1
Generator Set	2
Off-Highway Truck	1
Signal Boards	4
Sweeper/Scrubber	1
Tractors/Loaders/Backhoes	2
Pavers	1

After construction is complete, all pipeline construction areas would be restored to pre-construction conditions (i.e., no permanent disturbance footprint). The width of resurfacing would be up to the nearest lane line or gutter in accordance with the City's requirements. Unpaved and paved roads would be replaced to original conditions.

The project would also include lateral connections, water meters, back flow devices and fire hydrants. Water service laterals and meters would be installed to parcels opting into annexation following annexation and pipeline construction. Private service lateral easements would be required for lots in the project area not fronting on the project site roadways.

Fire hydrants would be provided per EMWD Std Dwg B-362. Since there are essentially no curb and gutters within the project area, fire hydrants would be installed with two bollards and a small concrete pad. Fire hydrants would be located at property lines and at low points in lieu of a blow off, where possible. Typically, for new residential development, fire hydrant spacing is determined by the fire authority with jurisdiction for the review and is included in the conditions of approval for the development. For example, Riverside County Ordinance 787.2 indicates that fire hydrants are to be located near street intersections and the minimum fire hydrant spacing is to be 350 feet for new development. National Fire Protection Association Standard 24 has similar requirements for new development. Since there is no new development to be approved in conjunction with this project, coordination with the City of Murrieta and the associated fire authority would be required to determine fire hydrant spacing and locations. A 350-foot minimum spacing should be anticipated.

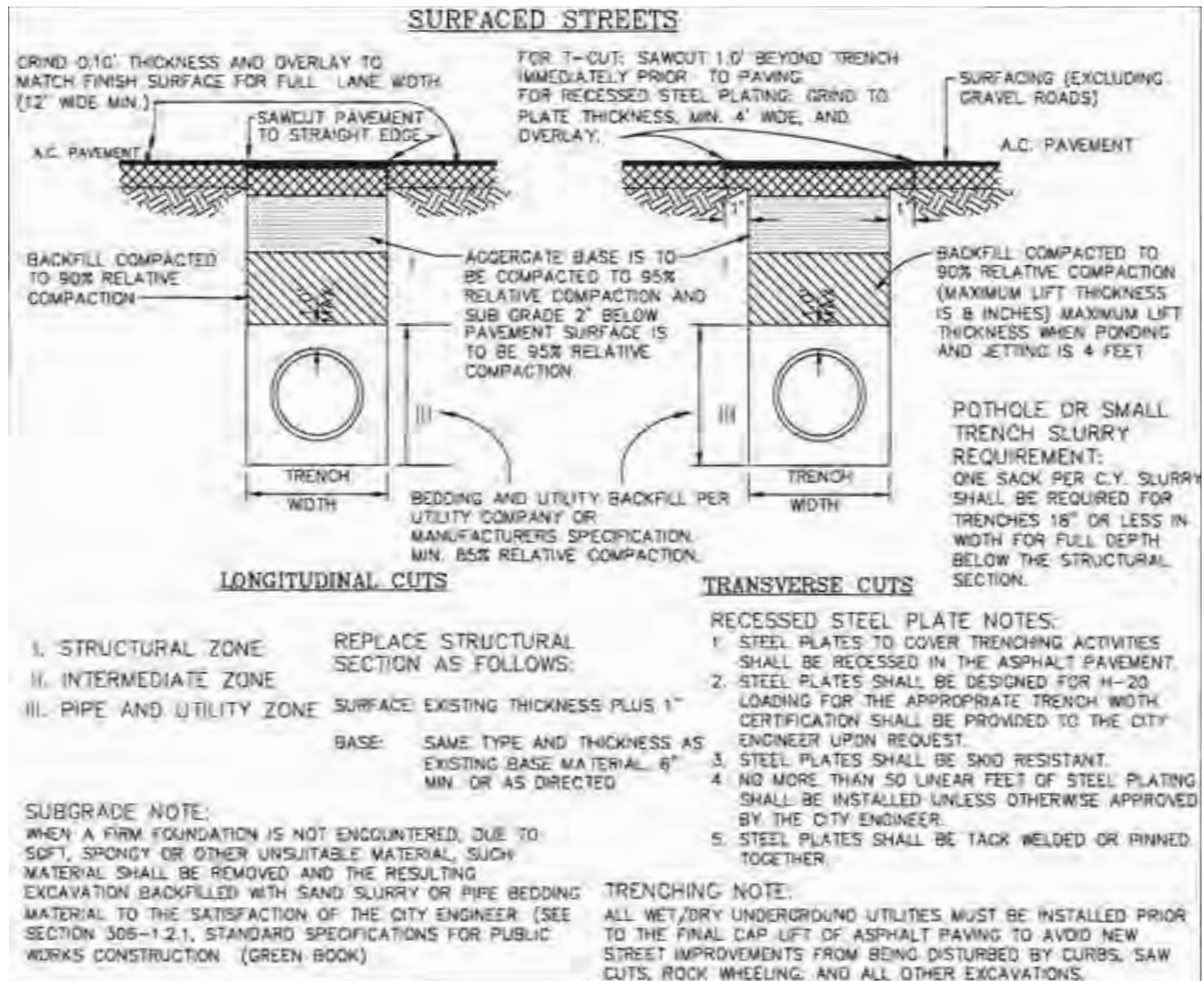
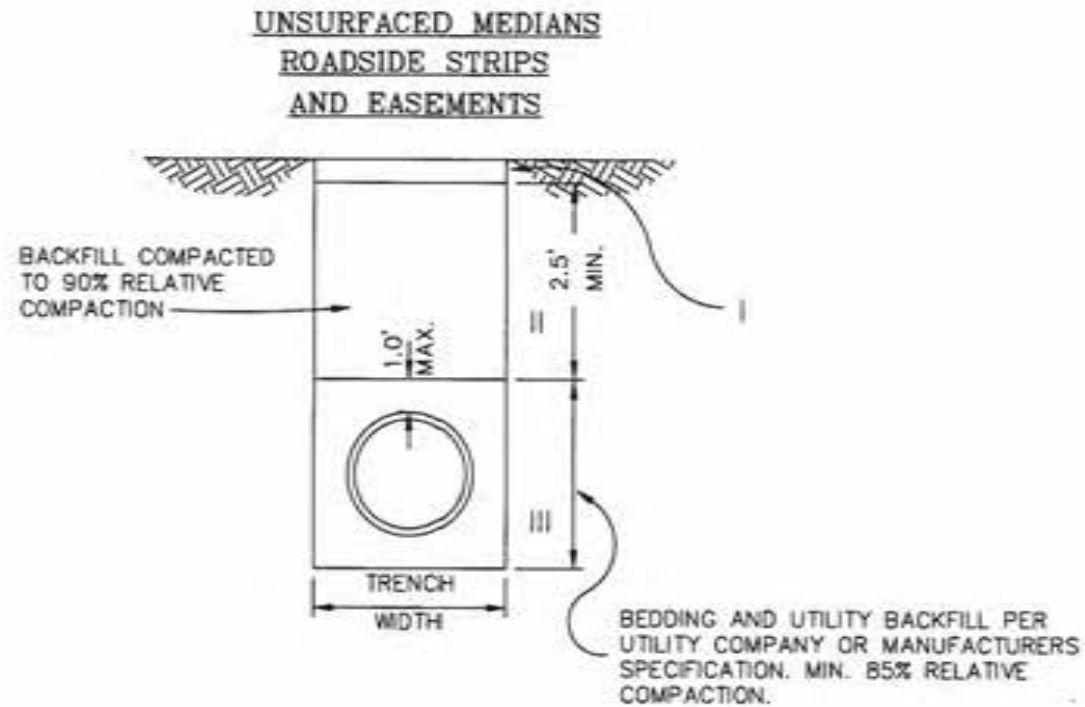


FIGURE 7
Utility Trench Backfill and
Surfaced Street Restoration



- I. STRUCTURAL ZONE
- II. INTERMEDIATE ZONE
- III. PIPE AND UTILITY ZONE

REPLACE STRUCTURAL SECTION AS FOLLOWS:

SURFACE: 3" MINIMUM DG SURFACE IF WITHIN 12' OF PAVED SURFACE OR WITHIN ROADWAY SHOULDER

BASE: SAME TYPE AND THICKNESS AS EXISTING BASE MATERIAL, 6" MIN. OR AS DIRECTED

SUBGRADE NOTE:
WHEN A FIRM FOUNDATION IS NOT ENCOUNTERED, DUE TO SOFT, SPONGY OR OTHER UNSUITABLE MATERIAL, SUCH MATERIAL SHALL BE REMOVED AND THE RESULTING EXCAVATION BACKFILLED WITH SAND SLURRY OR PIPE BEDDING MATERIAL TO THE SATISFACTION OF THE CITY ENGINEER. (SEE SECTION 306-1.2.1, STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREEN BOOK))

FIGURE 8
Utility Trench Backfill and Unsurfaced
Median/Roadside Strip/Easement Restoration

10. Surrounding Land Use(s) and Project Setting:

The project site is located within city roadway rights-of-way and consists of those portions of Los Alamos Road, Celia Road, Mason Road, Mary Place, and Ruth Ellen Way within the project area. The northern portion of the project site along Ruth Ellen Way proposes to connect to an existing 12-inch water pipeline and the point of connection is located next to the Los Alamos Hills Sports Park to the east, the Rail Ranch School, as well as an existing tract residential development to the west. There are three parcels that are included in the project site that are located north of Los Alamos Road (see Figure 3). The majority of the area to the east and south of the project site consists of single-family residential rural development with scattered undeveloped lots (Photographs 1 through 4).

The project site is located approximately 1.2 miles east of I-215. The project site is in the U.S. Geological Survey (USGS) Murrieta quadrangle, Township 7 South, Range 3 West (USGS 1979; see Figure 2).

The proposed project is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) plan area (County of Riverside 2003). No components of the proposed project are within or adjacent to any existing or proposed criteria areas or reserves defined in the MSHCP.

11. Required Approvals:

District adoption of this MND, and approval of the annexation/pipeline project.

12. Other Required Agency Approvals or Permits Required:

- LAFCO approval of District annexation
- MWD approval of District annexation
- Encroachment Permit from the City of Murrieta
- Notice of Intent/Storm Water Pollution Prevention Plan (NOI/SWPPP) from Regional Water Quality Control Board for construction of a linear pipeline

13. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

On October 7, 2022, the District sent consultation notification letters to Native American tribes on the District's Master List pursuant to the requirements of Assembly Bill 52 (AB 52) pertaining to government-to-government consultation regarding the project. Six Native American tribes were contacted but to date none have responded to consultation requests.



PHOTOGRAPH 1
Overview of Ruth Ellen Way, Looking North from
Los Alamos Road Intersection



PHOTOGRAPH 2
Overview of Los Alamos Road, Looking Northeast from Eastern Boundary of
Los Alamos Hills Sports Park Equestrian Trail



PHOTOGRAPH 3

End of Pavement at the Intersection of Mason Avenue and Mary Place,
Looking West from East Side of Mason Avenue where it Transitions to
Los Alamos Heights Road



PHOTOGRAPH 4

Overview of Celia Road with Drainage Ditch, Looking South from Celia Road,
Approximately 500 feet South of Intersection with Los Alamos Road

14. Summary of Environmental Factors Potentially Affected:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- | | | |
|--|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input checked="" type="checkbox"/> Geology/Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials |
| <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources |
| <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Wildfire | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

3.0 Draft Mitigated Negative Declaration

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION shall be prepared.
- ☒ I find that, although the proposed project might have a significant effect on the environment, there would not be a significant effect in this case because revisions in the project have been made, or agreed to, by the project proponent. A MITIGATED NEGATIVE DECLARATION shall be prepared.
- ☐ I find that the proposed project might have a significant effect on the environment and/or deficiencies exist relative to the City's General Plan Quality of Life Standards, and the extent of the deficiency exceeds the levels identified in the City's Environmental Quality Regulations pursuant to Zoning Code Article 47, Section 33-924 (b), and an ENVIRONMENTAL IMPACT REPORT shall be required.
- ☐ I find that the proposed project might have a "potentially significant impact" or "potentially significant unless mitigated impact" on the environment, but at least one effect: (a) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (b) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT shall be required, but it shall analyze only the effects that remain to be addressed.
- ☐ I find that, although the proposed project might have a significant effect on the environment, no further documentation is necessary because all potentially significant effects: (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project.

Joe Broadhead
Signature

Joe Broadhead
Printed Name

1/24/23
Date

Principal Water Resources Specialist
Title

4.0 Initial Study Checklist

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved. A "No Impact" answer should be explained where it is based on project specific factors as well as general standards.
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or (mitigated) negative declaration. Section 15063(c)(3)(D).
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
 - a. The significance criteria or threshold, if any, used to evaluate each question; and
 - b. The mitigation measure identified, if any, to reduce the impact to less than significant.

4.1 Aesthetics

Would the proposed project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. Less Than Significant Impact

Construction of the water pipeline within the project site could temporarily alter the scenic composition of the project area with the addition of construction vehicles and equipment being used. The project site/pipeline alignment is comprised of both paved and unpaved ground, either bare or with existing disturbed vegetation. Recreational uses and vacant lands are located to the north of the project area, residential development surrounds the east, south, and west of the project

area. Given that Murrieta is surrounded by rolling hillsides and steep mountain slopes, distant vistas of surrounding significant visual features are afforded from within the City. Distant vistas to the north and east can be viewed from the project area. Construction activities along the pipeline alignment would include grubbing/land clear phase, soil hauling, excavation/trenching, staging areas, utility placement, back fill and paving, which could temporarily change the scenic composition of the project area; however, the distant scenic vistas would not be affected. Upon completion of construction, all proposed improvements would be located underground within existing paved and unpaved streets and would not be visible. Therefore, pipeline construction would not have a substantial adverse effect on a scenic vista. Impacts would be less than significant.

b. No Impact

There are no designated State Scenic Highways within the City; therefore, the project area is not visible from a State Scenic Highway. The closest officially designated scenic highway to the project area is State Route 74. The official designation for State Route 74 begins at the west boundary of the San Bernardino National Forest and State Route 111 and ends at Palm Desert, which is approximately 26 miles east of the project area (California Department of Transportation [Caltrans] 2022). Therefore, the proposed project would not substantially damage any scenic resources within a state scenic highway. No impact would occur.

c. Less Than Significant Impact

The project area is characterized by rural residential development with recreational uses and undeveloped lands located to the north of the project area. Construction activities associated with the pipeline portion of the proposed project (e.g., presence of construction vehicles, excavated materials, laydown areas) would create short-term visual effects for the surrounding residential areas. All construction-related visual impacts would be removed following construction. Project implementation would not adversely affect the quality of public views of the project area and its surroundings and impacts would be less than significant.

d. Less Than Significant Impact

Construction of the water pipeline would be limited to daytime hours Monday through Friday and is not anticipated to require lighting. In the event that construction lighting is required, it would be properly shielded and pointed downwards to avoid spillover effects onto neighboring properties, consistent with Murrieta Municipal Code (MMC) Section 16.18.100(C). Once project construction is complete, any temporary lighting that was required would be removed. Furthermore, the water pipeline loop would be located underground and would not include any permanent aboveground components. Therefore, the proposed project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area, and impacts would be less than significant.

4.2 Agriculture and Forestry Resources

Would the proposed project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act Contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 1220[g]), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104[g])?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not directly result in development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. No Impact

The project site is not located on land classified as "Farmland of Local Importance" by the Farmland Mapping and Monitoring Program (California Department of Conservation 2018). Furthermore, the proposed loop water pipeline would be installed within existing roads that would have no potential for conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses. No impact would occur.

b. No Impact

Physical changes resulting from the proposed project include the construction of a pipeline loop below ground within existing road ROWs. Neither the project site nor surrounding properties are zoned for agricultural uses, nor are they subject to a Williamson Act contract. No impact would occur.

c. No Impact

The project site does not contain any forest or timberland as defined by Public Resources Code Section 12220[g], Public Resources Code Section 4526, or Government Code Section 51104(g) and is not zoned as forest or timberland. No impact would occur.

d. No Impact

The project site does not contain any forest or timberland as defined by Public Resources Code Section 12220[g], Public Resources Code Section 4526, or Government Code Section 51104(g). No impact would occur.

e. No Impact

There are no agricultural uses or forestlands in the vicinity of the project site. Therefore, the proposed project would not result in conversion of farmland or forest land. No impact would occur.

4.3 Air Quality

Would the proposed project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not directly result in development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. Less Than Significant Impact

The proposed project is located within the South Coast Air Basin (Basin) under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). Air districts are tasked with regulating emissions to ensure that air quality in the Basin does not exceed National or California Ambient Air Quality Standards (NAAQS and CAAQS). NAAQS and CAAQS represent the maximum levels of background pollution considered safe, with an adequate margin of safety, to protect the public health and welfare. NAAQS and CAAQS have been established for six common pollutants of concern known as criteria pollutants, which include ozone, carbon monoxide (CO), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), lead (Pb), and respirable particulate matter (PM₁₀ and PM_{2.5}).

The Basin is currently classified as a federal non-attainment area for ozone and PM_{2.5} and a state non-attainment area for ozone, PM₁₀, and PM_{2.5}. The regional air quality plan, the 2016 Air Quality Management Plan (AQMP), outlines measures to reduce emissions of ozone and PM_{2.5}. Whereas reducing PM concentrations is achieved by reducing emissions of PM_{2.5} to the atmosphere, reducing ozone concentrations is achieved by reducing the precursors of photochemical formation of ozone, volatile organic compounds (VOC), and oxides of nitrogen (NO_x).

Growth forecasting for the AQMP is based in part on the land uses established by local general plans. Thus, if a project is consistent with land use as designated in the local general plan, it can normally be considered consistent with the AQMP. Projects that propose a different land use than is identified in the local general plan may also be considered consistent with the AQMP if the proposed land use is less intensive than buildout under the current designation. For projects that propose a land use that is more intensive than the current designation, analysis that is more detailed is required to assess conformance with the AQMP.

The project area and surroundings are designated as Civic/Institutional, Specific Plan, and Rural Residential in the Murrieta General Plan 2035 and are zoned as Civic/Institutional (C/I) (Parks and Recreation (PR), Open Space (OS), and Rural Residential (RR). The proposed project would be consistent with land use designations, as it would supply water for existing residential uses. As described in Section 4.3b below, pipeline construction and operation (inspection and maintenance trips) would not result in significant air quality impacts. The proposed project does not include growth-generating components, but rather would provide water service to existing and planned development. As such, the proposed project would be consistent with growth projections contained in the Murrieta General Plan 2035 and AQMP forecasts. Based on these considerations and pursuant to SCAQMD guidelines, project-related emissions are accounted for in the AQMP. Therefore, the proposed project would not conflict with or obstruct implementation of the applicable air quality plan, and impacts would be less than significant.

b. Less Than Significant Impact

Regional Significance Thresholds

NAAQS and CAAQS have been established for six criteria pollutants (ozone, CO, SO₂, NO₂, lead, and PM). As described in Section 4.3a above, the SCAQMD is the air pollution control agency responsible for protecting the people and the environment of the Basin from the effects of air pollution. Accordingly, the District evaluates project air quality emissions based on the quantitative emission thresholds originally established in the SCAQMD's CEQA Air Quality Handbook (SCAQMD 1993). SCAQMD's daily significance thresholds for impacts to regional air quality are shown in Table 2.

Table 2 SCAQMD Air Quality Significance Thresholds – Mass Daily Thresholds		
Pollutant	Emissions (pounds)	
	Construction	Operational
Oxides of Nitrogen (NO _x)	100	55
Volatile Organic Compounds (VOC)	75	55
Coarse Particulate Matter (PM ₁₀)	150	150
Fine Particulate Matter (PM _{2.5})	55	55
Oxides of Sulfur (SO _x)	150	150
Carbon Monoxide (CO)	550	550
Lead (Pb)	3	3
SOURCE: SCAQMD Air Quality Significance Thresholds (SCAQMD 2015).		

Emissions that would result from construction of the water pipeline component of the proposed project would be subject to the rules and regulations of SCAQMD. The SCAQMD rules applicable to the proposed project may include the following:

- **Rule 401, Visible Emissions.** This rule establishes the limit for visible emissions from stationary sources.
- **Rule 402, Nuisance.** This rule prohibits the discharge of air pollutants from a facility that cause injury, detriment, nuisance, or annoyance to the public or damage to business or property.
- **Rule 403, Fugitive Dust.** This rule requires fugitive dust sources to implement best available control measures for all sources and prohibits all forms of visible particulate matter from crossing any property line. SCAQMD Rule 403 is intended to reduce PM₁₀ emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust.
- **Rule 431.2, Sulfur Content of Liquid Fuels.** The purpose of this rule is to limit the sulfur content in diesel and other liquid fuels for the purpose of reducing the formation of oxides of sulfur (SO_x) and particulates during combustion and of enabling the use of add-on control devices for diesel-fueled internal combustion engines. The rule applies to all refiners, importers, and other fuel suppliers such as distributors, marketers, and retailers, as well as to users of diesel, low-sulfur diesel, and other liquid fuels for stationary-source applications in the SCAQMD. The rule also affects diesel fuel supplied for mobile sources.
- **Rule 1110.2, Emissions from Gaseous- and Liquid-Fueled Engines.** This rule applies to stationary and portable engines rated at greater than 50 horsepower. The purpose of Rule 1110.2 is to reduce NO_x, VOC, and CO emissions from engines. Emergency engines, including those powering standby generators, are generally exempt from the emissions and monitoring requirements of this rule because they have permit conditions that limit operation to 200 hours or less per year as determined by an elapsed operating time meter.
- **Rule 1113, Architectural Coatings.** This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.

Pipeline construction would result in short-term emissions associated with construction. Operation of the pipeline would result in emissions related to minor vehicle/equipment use associated with routine inspection and maintenance; however, these operational emissions would be negligible. Therefore, this analysis focuses on emissions associated with construction activities. Construction emissions associated with pipeline construction were modeled using the Sacramento Metropolitan Air Quality Management District's (SMAQMD) Roadway Construction Emissions Model (RCEM) Version 9.0.1 (SMAQMD 2022). The RCEM is a spreadsheet-based model that is able to use basic project information (e.g., total construction months, project type, total project area) to estimate a construction schedule and quantify exhaust emissions from heavy-duty construction equipment, haul trucks, and worker commute trips associated with linear construction projects. Version 9.0.1 of the model incorporates the most currently approved 2017 Emission Factor (EMFAC2017)¹ model and Off-Road emissions factors model. Although RCEM was developed by SMAQMD, it is appropriate for use in the SCAQMD jurisdiction because it is applicable for all statewide construction projects that involve construction equipment that is subject to California Air Resources Board (CARB) construction equipment emissions standards and incorporates statewide emission factor models (EMFAC2017 and Off-Road). RCEM calculates fugitive dust, exhaust, and off-gas emissions from grubbing/land clearing, grading/excavation, drainage/utilities/sub-grade, and paving activities associated with construction projects that are linear in nature (e.g., road or levee construction, pipeline installation, transmission lines). Construction is expected to begin in the fall of 2023 and last approximately five months.

The pipeline alignment would consist of a total of approximately 10,685 linear feet. The total project site along the pipeline alignment was calculated assuming a conservative trench width of 5 feet and a depth of 10 feet. Excavated soil would likely be replaced in the trench once the new pipeline is replaced; however, to be conservative, hauling was included in the analysis. Hauling emissions associated with asphalt removal were calculated assuming a total of 244 cubic yards of asphalt export (5,275 feet of paved road, 5 feet wide, and 3 inches deep). Hauling emissions associated with soil removal were calculated assuming all the excavated soil would be hauled, for a total of 19,787 cubic yards of soil export (10,685 feet long, 5 feet wide, and 10 feet deep). Asphalt hauling was modeled over the duration of the 0.25-month grubbing/land clear phase, and soil hauling was modeled over the duration of the 2.25-month grading/excavation phase. Modeled construction equipment includes a backhoe, loader, excavator, sweeper, paver, two generators, air compressor, concrete saw,

¹The 2021 Emission Factor (EMFAC2021) model was released in January 2021; however, EMFAC2021 has not yet been approved for use by the U.S. Environmental Protection Agency (U.S. EPA). EMFAC2017 is the most recent version of the model approved by the U.S. EPA, and was therefore used in this analysis. Use of EMFAC2021 would not result in emissions that are substantially different than those calculated in this analysis, particularly since the main source of emissions would be construction equipment which are calculated using the Off-Road emissions factor model methodologies incorporated into RCEM.

water truck, and signal boards along with dump trucks used for hauling, utility trucks, and employee vehicles. Construction would require up to 10 workers per day.

The maximum daily construction emissions are summarized in Table 3. Appendix A contains the RCEM calculations for this pipeline project. Appendix A also contains detailed calculations showing how the project size and hauling quantities were calculated.

Table 3 Maximum Daily Construction Emissions (pounds per day)						
	Pollutant					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Grubbing/Land Clearing	2.93	23.83	31.00	0.06	3.35	1.54
Grading/Excavation	2.96	27.35	31.45	0.08	3.47	1.60
Drainage/Utilities/Sub-Grade	2.93	23.21	30.92	0.06	3.33	1.53
Paving	0.48	3.40	5.01	0.01	0.19	0.15
Maximum Daily Emissions	2.96	27.35	31.45	0.08	3.47	1.60
<i>SCAQMD Threshold</i>	<i>75</i>	<i>100</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
Significant Impact?	No	No	No	No	No	No
ROG = reactive organic gases; NO _x = nitrogen oxides; CO = carbon monoxide; SO _x = sulfur oxides; PM ₁₀ = particulate matter less than 10 microns; PM _{2.5} = particulate matter less than 2.5 microns						

Construction emissions were compared to the significance thresholds shown in Table 2 to assess the significance of the air quality emissions resulting from pipeline construction. These thresholds are designed to provide limits below which project emissions would not significantly change regional air quality.

As shown in Table 3, maximum daily construction emissions associated with the pipeline construction are projected to be less than the applicable thresholds for all criteria pollutants, including emissions for ozone precursors (reactive organic compounds [ROG] and NO_x), PM₁₀, and PM_{2.5}. Therefore, pipeline construction would not result in a cumulatively considerable net increase in emissions of ozone, PM₁₀, or PM_{2.5}, and impacts would be less than significant.

After installation of the underground pipeline, there would be occasional inspection and maintenance trips. These trips would be minimal and currently occur within the District's jurisdiction by existing staff. Inspection and maintenance trips would not result in operational emissions that exceed SCAQMD thresholds and there would be no other source of operational emissions. Impacts associated with pipeline operation would be less than significant.

Localized Construction Impacts

In addition to these regional significance thresholds, the SCAQMD utilizes Localized Significance Thresholds (LST) to evaluate localized air quality impact to sensitive receptors in the vicinity of the proposed project (SCAQMD 2008). LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest residence or sensitive receptor. Localized air quality impacts would occur if pollutant concentrations at sensitive receptors exceeded applicable NAAQS or CAAQS.

The project area is located within Source Receptor Area 26. LSTs apply to on-site air emissions of CO, NO₂, PM₁₀, and PM_{2.5}. The LST methodology states that only on-site emissions should be compared to LSTs. Therefore, off-site emissions associated with worker travel, materials deliveries, and other mobile sources are not evaluated against LSTs. The LSTs for a 1-acre site with receptors at 25 meters were conservatively used. The results of the LST analysis are provided in Table 4.

Table 4 Localized Construction Emissions				
	Pollutant			
	NO _x	CO	PM ₁₀	PM _{2.5}
Maximum Daily Emission	27.35	31.45	3.47	1.60
<i>LST Threshold</i>	<i>162</i>	<i>750</i>	<i>4</i>	<i>3</i>
Threshold Exceeded?	No	No	No	No

As shown in Table 4, maximum localized pipeline construction emissions would not exceed any of the SCAQMD recommended localized screening thresholds. Therefore, the pipeline construction of the proposed project would not exceed the LST thresholds for CO, NO_x, PM₁₀, or PM_{2.5}, and impacts would be less than significant.

c. Less Than Significant Impact

A sensitive receptor is a person in the population who is more susceptible to health effects due to exposure to an air contaminant than is the population at large. Examples of sensitive receptor locations in the community include residences, schools, playgrounds, childcare centers, churches, athletic facilities, retirement homes, and long-term health care facilities. Residential uses are located adjacent to the pipeline loop. Additionally, a park is located north of the pipeline loop. Pollutants that have the potential to affect sensitive receptors include criteria pollutants, diesel particulate matter (DPM), and CO hotspots. Ozone is formed through the combination of ROG and NO_x, with help from sunlight and heat. Exposure to either can impact respiratory health, causing respiratory inflammation and asthma exacerbations. Health effects of DPM are wide ranging, with strong links to all-cause mortality, cardiovascular mortality and hospitalizations, and respiratory and asthma hospitalizations. Adverse health effects associated with CO include chest pain in heart patients, headaches, and reduced mental alertness. Impacts to sensitive receptors from criteria pollutants are discussed above in Section 4.3b, Localized Construction Impacts. DPM and CO hotspots are discussed below.

Diesel Particulate Matter

Construction of the pipeline would result in short-term diesel exhaust emissions from on-site heavy-duty equipment. Construction of the pipeline would result in the generation of diesel exhaust DPM emissions from the use of off-road diesel equipment required for construction activities and on-road diesel equipment used to bring materials to and from the project site.

Generation of DPM from construction projects typically occurs in a single area for a short period. Construction is anticipated to last for approximately five months. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. Dose is positively correlated with time, meaning that a longer

exposure period would result in a higher exposure level for the Maximally Exposed Individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the proposed project (OEHHA 2015). Although the alignment is located adjacent to residential uses, construction equipment would only be located adjacent to a particular sensitive receptor for a matter of days or weeks since work would move along the alignment. Thus, because the duration of proposed construction activities near any specific sensitive receptor would be minimal and would be significantly less than the 30-year exposure period used in health risk assessments, the impacts would be less than significant.

Additionally, with ongoing implementation of U.S. EPA and CARB requirements for cleaner fuels; off-road diesel engine retrofits; and new, low-emission diesel engine types, the DPM emissions of individual equipment would be reduced over time. As discussed previously, all construction equipment is subject to the CARB In-Use Off-Road Diesel-Fueled Fleets Regulation, which limits unnecessary idling to 5 minutes, requires all construction fleets to be labeled and reported to CARB, bans Tier 0 equipment and phases out Tier 1 and 2 equipment (thereby replacing fleets with cleaner equipment), and requires that fleets comply with Best Available Control Technology requirements. Therefore, due to the limited duration of construction activities, the limited amount of time equipment would be located adjacent to any specific sensitive receptor, and implementation of the In-Use Off-Road Diesel-Fueled Fleets Regulation, DPM generated by project construction is not expected to create conditions where the probability is greater than 10 in 1 million of contracting cancer for the Maximally Exposed Individual or to generate ground-level concentrations of non-carcinogenic TACs that exceed a Hazard Index greater than 1 for the Maximally Exposed Individual. Therefore, the pipeline construction component of the proposed project would not expose sensitive receptors to substantial pollutant concentration, and impacts would be less than significant.

Carbon Monoxide Hot Spots

A CO hot spot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. CO hot spots have the potential to violate state and federal CO standards at intersections, even if the broader basin is in attainment for federal and state levels. CO hot spots occur nearly exclusively at signalized intersections operating at level of service (LOS) E or F. Due to increased requirements for cleaner vehicles, equipment, and fuels, CO levels in the state have dropped substantially. All air basins are attainment or maintenance areas for CO. Therefore, more recent screening procedures based on more current methodologies have been developed. The Sacramento Metropolitan Air Quality Management District developed a screening threshold in 2011, which states that any project involving an intersection experiencing 31,600 vehicles per hour or more will require detailed analysis. In addition, the Bay Area Air Quality Management District developed a screening threshold in 2010 which states that any project involving an intersection experiencing 44,000 vehicles per hour would require detailed analysis.

The pipeline construction component of the proposed project would generate vehicle trips during construction in the form of haul trucks and worker commute vehicles. Based on the RCEM emission calculations prepared for project construction, up to 20 daily worker trips would occur during peak construction activities, and up to 10 daily hauling trips would be required. The proposed alignment

would not affect any signalized intersections. The addition of construction traffic to area roadways would not cause any intersections to operate at LOS E or F and would not significantly increase peak hourly volumes. Construction vehicle generation would also be temporary. Therefore, the pipeline construction component of the proposed project would not generate CO hot spots, and potential impacts would be less than significant.

d. Less Than Significant Impact

The potential for an odor impact is dependent on a number of variables, including the nature of the odor source, distance between the receptor and odor source, and local meteorological conditions. During construction, diesel equipment may generate some nuisance odors from equipment exhaust. Additionally, paving activities have the potential to generate odors while laying asphalt. Sensitive receptors near the project site/pipeline alignment include residential uses adjacent to the pipeline loop. However, exposure to odors associated with project construction would be short-term and temporary in nature. In addition, construction activities within the project site is required to comply with SCAQMD Rule 402, which prohibits the discharge of odorous emissions that would create a public nuisance. Further, per CARB's Airborne Toxic Control Measures 13 (California Code of Regulations Chapter 10 Section 2485), the applicant shall not allow idling time to exceed 5 minutes unless more time is required per engine manufacturers' specifications or for safety reasons. Compliance with this regulation would reduce odors from equipment exhaust. Given the short-term nature of construction, compliance with SCAQMD Rule 402, and the distance to the nearest sensitive receptors, it is not anticipated that project construction would generate odors that would affect a substantial number of people.

The following list provides some common types of facilities that are known producers of objectionable odors (Bay Area Air Quality Management District 2017). This list of facilities is not meant to be all-inclusive.

- Wastewater Treatment Plant
- Wastewater Pumping Facilities
- Sanitary Landfill
- Transfer Station
- Composting Facility
- Petroleum Refinery
- Asphalt Batch Plant
- Chemical Manufacturing
- Fiberglass Manufacturing
- Painting/Coating Operations
- Rendering Plant
- Coffee Roaster
- Food Processing Facility
- Confined Animal Facility/Feed Lot/Dairy
- Green Waste and Recycling Operations
- Metal Smelting Plants

The proposed project does not include any of these uses that are typically associated with odor complaints. There would be no operational source of odors associated with the proposed project, as the water pipeline would be completely enclosed and underground. Therefore, the proposed project would not generate substantial amounts of odors adversely affecting a substantial number of people, and impacts would be less than significant.

4.4 Biological Resources

Would the proposed project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
e. Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

EXPLANATIONS:

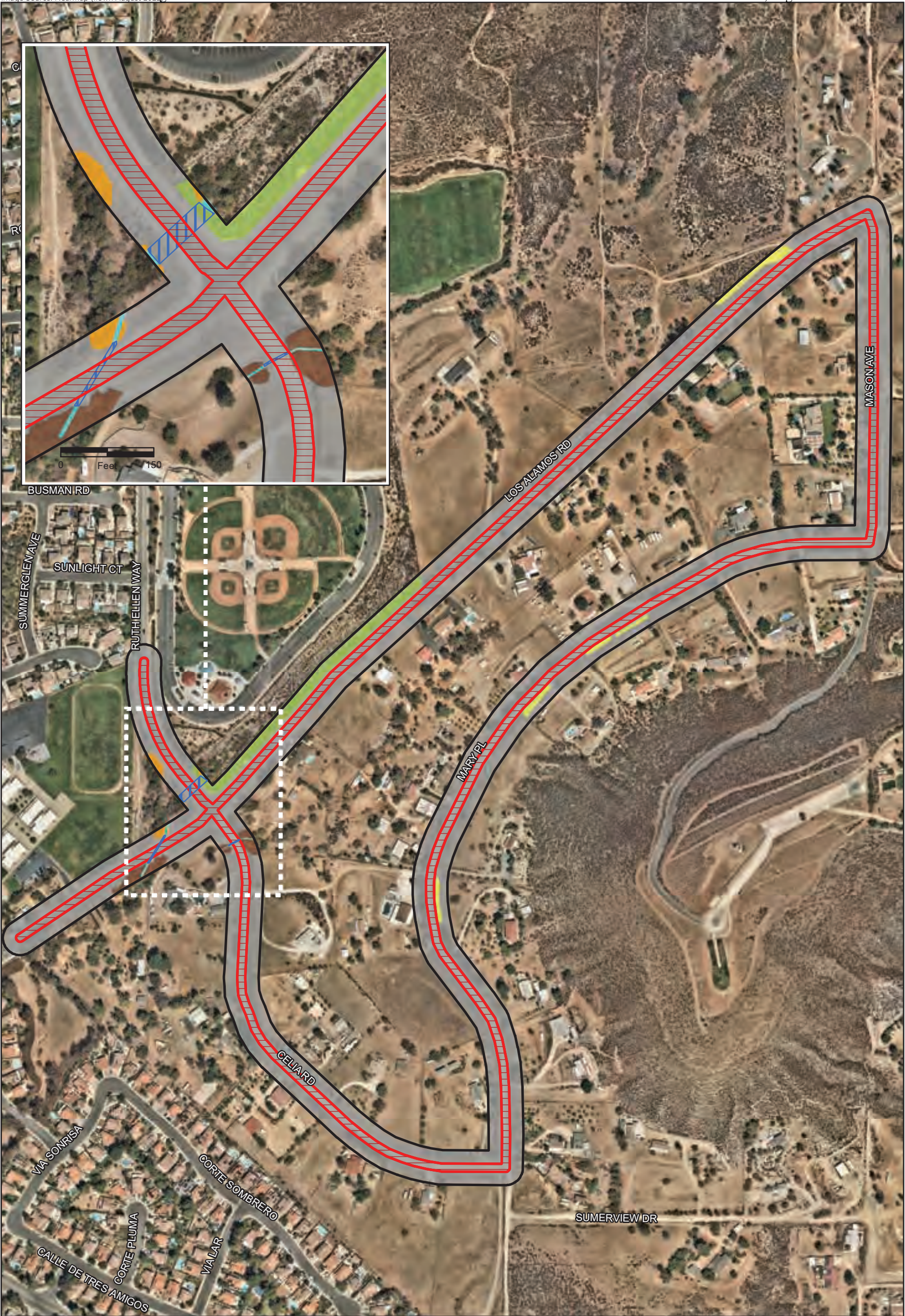
The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. Potentially Significant Unless Mitigation Incorporated

This section is based on the Biological Resources Survey prepared by RECON Environmental, Inc. (Appendix B). The survey area included the project site (the pipeline trench plus a 15-foot temporary work area), plus a surrounding 50-foot buffer. The totality of the survey area is 34.12 acres. The biological surveys were conducted on September 27, 2022; biological resources and potential impacts to biological resources are identified in Figure 9.

Vegetation Communities/Land Cover Types

The project site consists of paved and unpaved roadways, which contain one land cover type: urban/developed. The project site is further surrounded by the following six vegetation communities/land cover types: flat-topped buckwheat scrub, Riversidean sage scrub, southern riparian woodland, walnut woodland, non-vegetated channel, and urban/developed. The acreage of these vegetation communities/land cover types is presented in Table 5 and descriptions are provided below.



- Project Site
- Survey Area
- Project Impacts
- Culverted Non-vegetated Channel

- Vegetation Communities and Land Cover Types**
- Flat-topped Buckwheat Scrub
 - Non-vegetated Channel

- Riversidean Sage Scrub
- Southern Riparian Woodland
- Walnut Woodland
- Urban/Developed

0 Feet 350

FIGURE 9
Impacts to Biological Resources

Table 5 Vegetation Communities within the Survey Area (acres)		
Vegetation Communities	Project Site/ Pipeline Alignment	Survey Area
Flat-topped Buckwheat Scrub	–	0.24
Riversidean Sage Scrub	–	1.02
Southern Riparian Woodland	–	0.10
Walnut Woodland	–	0.39
Non-vegetated Channel	–	0.03
Urban/developed	7.91	32.34
TOTAL	7.91	34.12

Urban/Developed Land

Urban/developed land accounts for the entirety of the project site and the majority of the buffer surrounding the project site and occurs as various paved and unpaved roadways, private residences, and a manufactured ditch running adjacent to Los Alamos Road along the northeastern portion of the survey area. Vegetation within urban/developed land consists of ornamental landscaping and a variety of non-native species, including riggut brome, Peruvian pepper tree, and gum tree.

Non-vegetated Channel

Non-vegetated channel occurs as culverted drainage channels traveling under Ruth Ellen Way, Los Alamos Road, and Celia Road adjacent to the intersection of Ruth Ellen Way, Los Alamos Road, and Celia Road in the western portion of the survey area. No water was flowing at the time of the survey and the channels appear to support either an ephemeral or intermittent flow regime.

Flat-topped Buckwheat Scrub

Flat-topped buckwheat scrub is present in small linear patches (0.24 acre) along Los Alamos Road adjacent to the northeastern portion of the project site and along Mary Place adjacent to the southern portion of the survey area, adjacent to the project site. This vegetation community is comprised entirely of California buckwheat occurring primarily along fence line and appears to be regularly mowed for fuel management along the roadway.

Riversidean Sage Scrub

Riversidean sage scrub is found with moderate vegetation cover along Los Alamos Road adjacent to the northwestern portion of the project site. The Riversidean sage scrub occurs as an isolated patch adjacent to Los Alamos Road that was planted on a graded slope based on historic aerials. The Riversidean sage scrub is dominated by native scrub species such as California buckwheat, coyote brush, brittlebush, and coastal goldenbush.

Southern Riparian Woodland

Southern riparian woodland is found in small, isolated segments on either side of Ruth Ellen Way along Los Alamos Road adjacent to the western portion of the project site. This vegetation community is dominated by western sycamore and contains an understory dominated by mule fat.

Walnut Woodland

Walnut woodland is found in small, isolated segments on either side of Ruth Ellen Way and along Los Alamos Road adjacent to the western portion of the project site. This vegetation community is dominated by southern California black walnut with an understory of mule fat.

The proposed project would result in a total of up to 7.91 acres of direct impacts to urban/developed land. Impacts to urban/developed land are not considered significant as this land cover type is not considered sensitive. Thus, no mitigation is required for impacts to vegetation communities as a result of the proposed project. Therefore, potential impacts would be less than significant and no mitigation would be required.

Plant Species

No sensitive plants were observed within or adjacent to the project site during the biological survey, and none are expected to occur due to the developed nature of the project site and surrounding area. Therefore, no impacts to sensitive plant species are anticipated to result from the proposed project and no mitigation would be required.

Wildlife

No sensitive wildlife was detected within or adjacent to the project site during the biological survey. However, there is a low to moderate potential for coastal California gnatcatcher, southern California rufous-crowned sparrow, Bell's sage sparrow, and migratory/nesting birds to occur adjacent to the project site. These species are discussed in further detail below.

Coastal California Gnatcatcher

Coastal California gnatcatcher is federally listed as threatened, a California Department of Fish and Wildlife (CDFW) species of special concern, and a MSHCP (County of Riverside 2003) covered species. This species is generally found in mature coastal sage scrub habitat consisting of low shrub and sub-shrub species. This species has a low to moderate potential to occur in suitable Riversidean sage scrub habitat adjacent to the project site, outside of the project impact area. Though the identified Riversidean sage scrub habitat adjacent to the project site consists of appropriate vegetation structure for nesting, the Riversidean sage scrub is limited to a small, isolated patch bounded by urban/developed land and lacks connectivity to open space areas. Should this species be present adjacent to the project site, direct impacts to coastal California gnatcatcher are not anticipated as the proposed project would be limited to the developed roadway and the proposed project would avoid removal of suitable Riversidean sage scrub habitat. However, due to the proximity of potentially suitable Riversidean sage scrub to work areas, indirect impacts as a result of construction noise during the breeding season (March 1 through August 15) could result if this species were to nest adjacent to the project site. Indirect impacts to coastal California gnatcatcher if present at the time of project construction would be significant (Impact BIO-1). Implementation of mitigation measure BIO-1 would reduce this impact to a level less than significant.

Southern California Rufous-crowned Sparrow

Southern California rufous-crowned sparrow is a CDFW watch list species and an MSHCP covered species. This species is primarily found in coastal sage scrub, chaparral, and grassland habitats. This

species has low to moderate potential to occur in suitable Riversidean sage scrub habitat adjacent to the project site, outside of the project impact area. Though the Riversidean sage scrub habitat adjacent to the project site consists of appropriate vegetation structure for nesting, the Riversidean sage scrub is limited to a small, isolated patch bounded by urban/developed land and lacks connectivity to open space areas. Should this species be present adjacent to the project site, direct impacts to southern California rufous-crowned sparrow are not anticipated as the proposed project would be limited to the developed roadway and the proposed project would avoid removal of suitable Riversidean sage scrub habitat. However, due to the proximity of potentially suitable Riversidean sage scrub to work areas, indirect impacts as a result of construction noise during the general bird breeding season (February 1 through September 15) could result if this species were to nest adjacent to the project site. Indirect impacts to southern California rufous-crowned sparrow if present at the time of project construction would be significant (Impact BIO-2). Implementation of mitigation measure BIO-2 would reduce this impact to a level less than significant.

Bell's Sage Sparrow

Bell's sage sparrow is a CDFW watch list species and an MSHCP covered species. This species is primarily found in sage scrub and low chaparral habitats. There is one record of this species within one mile of the project area. This species has low to moderate potential to occur in suitable Riversidean sage scrub habitat adjacent to the project site, outside of the project impact area. Though the Riversidean sage scrub habitat adjacent to the project site consists of appropriate vegetation structure for nesting, the Riversidean sage scrub is limited to a small, isolated patch bounded by urban/developed land and lacks connectivity to open space areas. Should this species be present adjacent to the project site, direct impacts to Bell's sage sparrow are not anticipated as the proposed project would be limited to the developed roadway and the proposed project would avoid removal of suitable Riversidean sage scrub habitat. However, due to the proximity of potentially suitable Riversidean sage scrub to work areas, indirect impacts as a result of construction noise during the general bird breeding season (February 1 through September 15) could result if this species were to nest adjacent to the project site. Indirect impacts to Bell's sage sparrow if present at the time of project construction would be significant (Impact BIO-2). Implementation of mitigation measure BIO-2 would reduce this impact to a level less than significant.

Migratory and Nesting Birds

No migratory or nesting birds are anticipated to nest within the project site due to project site's location within a developed roadway. However, the majority of the adjacent habitat including the scrub habitats, woodland habitats, and the non-native Peruvian pepper trees and gum trees found within the urban/developed land, have potential to support migratory and nesting bird species. Urban adapted species in particular have been known to nest within ornamental vegetation or the eaves of houses or openings in structures. Direct impacts to migratory and nesting birds are not anticipated as no vegetation would be removed by the proposed project, and the proposed project occurs within a developed roadway with existing vehicular traffic. However, indirect noise impacts may occur to nesting and migratory birds, including southern California rufous-crowned sparrow and Bell's sage sparrow, if they are nesting in the adjacent habitat should construction occur during the general avian breeding season (February 1 to September 15). Impacts to nesting and migratory birds if present at the time of project construction would be considered significant (Impact BIO-2). Implementation of mitigation measure BIO-2 would reduce this impact to a level less than significant.

b. Less Than Significant Impact

Direct impacts associated with the proposed project would be limited to urban/developed land associated with the existing roadway. Project impacts to urban/developed land would be less than significant as this land cover type is not considered sensitive and, therefore, no mitigation would be required.

c. Potentially Significant Unless Mitigation Incorporated

The proposed project would avoid direct impacts to potentially jurisdictional non-wetland waters by avoiding the drainage culverts underlying the roadways. Specifically, construction of trenches would be in the roadway above culverts. If there is not enough depth from pavement to install the pipelines above the culverts, construction of the pipeline would require a tunnel beneath the culverts. Therefore, there would be no impact to culverts and associated drainages and non-wetland waters. However, the proposed project has potential to result in indirect impacts to potential jurisdictional resources occurring adjacent to the work areas (BIO-3). Implementation of mitigation measure BIO-3 would reduce this impact to a level less than significant.

d. Less Than Significant Impact

Wildlife movement corridors are defined as areas that connect suitable wildlife habitat areas in a region otherwise fragmented by rugged terrain, changes in vegetation, or human disturbance. Natural features such as canyon drainages, ridgelines, or areas with vegetation cover provide corridors for wildlife travel. Wildlife movement corridors are important because they provide access to mates, food, and water; allow the dispersal of individuals away from high population density areas; and facilitate the exchange of genetic traits between populations. Wildlife movement corridors are considered sensitive by resource and conservation agencies.

The project site is comprised of roadways within existing easements and rights-of-way along Los Alamos Road, Mason Avenue, Mary Place, Celia Road, and Ruth Ellen Way. The project is generally bounded by a school and undeveloped lots to the north, residential development and open space to the south, residential development to the west, and undeveloped lots to the east. Though habitats adjacent to the project site likely provides habitat for urban-adapted species and local wildlife movement, it is not anticipated that these habitats would constitute a significant regional corridor due to the project site's location in a developed area and lack of connectivity to off-site areas of open space. Also, the project site is unlikely to support wildlife nursery sites or large roosting or breeding colonies due to the developed nature of the project site. The project site is separated from any MSHCP Conservation Areas by residential development to the east and Summerview Drive, Somerville Road, Willie Lane, and Skipper Drive and existing residential development to the southeast. Therefore, impacts to wildlife movement corridors would be less than significant, and no mitigation required.

e. Less Than Significant Impact

The Murrieta General Plan 2035 (Conservation Element CSV-8: Biological) provides policies related to protecting biological resources and implementing the MSHCP. As discussed in further detail below, the proposed project is consistent with the MSHCP and, therefore, would not conflict within any Murrieta General Plan 2035 policies pertaining to the protection of biological resources. In addition, the City's Development Code (Article III, Chapter 16.42-Tree Preservation) has a Tree

Preservation Ordinance that provides regulations and guidelines for the protection of existing trees. No trees are located within the project site and no conflicts with the development code would occur. Therefore, the proposed project would not conflict with any local policies or ordinances protecting biological resources, and impacts would be less than significant.

f. Less Than Significant Impact

The project area is located within the boundaries of the Western Riverside County MSHCP plan area. A portion of the project area is specifically located within criteria cells in Subunit 5, French Valley/Lower Sedco Hills, identified by the MSHCP. However, the project site is restricted to existing developed roadways within the criteria cells and does not contain biological resources meeting the conservation criteria of the MSHCP. In addition, there are no riparian areas, vernal pools, narrow endemic or criteria area plant species, or burrowing owl habitat protected by the MSHCP within the project site, and the proposed project has been designed to avoid potential riverine areas associated with the culverted drainages underlying the roadway. Specifically, construction of trenches would be in the roadway above culverts. If there is not enough depth from pavement to install the pipelines above the culverts, construction of the pipeline would require a tunnel beneath the culverts. Following these construction measures, there would be no impact to culverts and associated drainages and non-wetland waters. Therefore, there are no MSHCP compliance requirements related to these resources applicable to the proposed project and the proposed project would have no impact. A more detailed analysis of project consistency with the MSHCP is contained in the Biological Resources Report (see Appendix B).

As further described in the biological report, the development of the proposed project, which consists of the installation of water pipelines in previously developed roadways, would not preclude the ability of MSHCP conservation goals to be reached nor is the project area located in an area that would cause indirect impacts to conservation areas in the urban/wildland interface area. Therefore, the proposed project is consistent with the reserve assembly goals of the MSHCP, as well as the guidelines pertaining to the urban/wildlife interface; therefore, impacts would be less than significant.

Mitigation Measures

BIO-1: Coastal California Gnatcatcher: Project construction should be conducted outside the coastal California gnatcatcher breeding season, which is March 1 to August 15. If construction must take place during the coastal California gnatcatcher breeding season, a qualified biologist (possessing a valid Endangered Species Act Section 10(a)(1)(A) Recovery Permit) shall survey Riversidean sage scrub adjacent to the project site for the presence of the coastal California gnatcatcher. Surveys for coastal California gnatcatcher shall be conducted pursuant to the protocol survey guidelines established by the U.S. Fish and Wildlife Service (USFWS) within the breeding season prior to the commencement of any construction. If the protocol survey concludes that no coastal California gnatcatchers are present or all work is constructed outside of the breeding season (August 16 to February 28), no additional mitigation measures would be necessary. If coastal California gnatcatchers are present, then the following additional mitigation conditions must be met:

- a. Between March 1 and August 15, no construction activities shall occur within any portion of the project site where construction activities would result in noise levels exceeding 60 A-weighted decibels [dB(A)] hourly average (or ambient, whichever is higher) at the edge of occupied coastal California gnatcatcher habitat. An analysis showing that noise generated by construction activities would not exceed 60 dB(A) hourly average at the edge of occupied habitat must be completed by a qualified acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by District at least two weeks prior to the commencement of construction activities. Prior to the commencement of construction activities during the breeding season, areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist; or
- b. At least two weeks prior to the commencement of construction activities during the breeding season, under the direction of a qualified acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities will not exceed 60 dB(A) hourly average (or ambient, whichever is higher) at the edge of habitat occupied by the coastal California gnatcatcher. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring shall be conducted at the edge of the occupied habitat area to ensure that noise levels do not exceed the noise threshold. If the noise attenuation techniques implemented are determined inadequate by the qualified acoustician or biologist, then the associated construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (August 16); or
- c. Prior to construction during the breeding season, the District shall prepare an MSHCP Consistency Analysis for review by the Western Riverside County Regional Conservation Authority and obtain incidental take coverage for coastal California gnatcatcher via the Participating Special Entity process. The proposed project would pay any necessary mitigation fees for impacts to 7.91 acres prior to construction.

BIO-2: Migratory and Nesting Birds: Construction should be conducted outside the nesting season, which is generally defined as January 15 to August 31. If construction must take place during the nesting season, a qualified biologist shall perform a pre-construction survey for nesting birds. The nesting bird survey shall occur no more than seven days prior to the start of construction. Additionally, raptors (birds of prey) are known to begin nest building in January or February. If construction is to occur between January 1 and February 15, a nesting raptor survey will be conducted within the project area, including a 500-foot buffer. If active bird nests are confirmed to be present during the pre-construction survey, a buffer zone will be established by a qualified biologist until a qualified biologist has verified that the young have fledged or the nest has otherwise become inactive.

BIO-3: Aquatic Resources: The applicant for the proposed project shall avoid indirect impacts to potentially jurisdictional features with best management practices (BMPs), such as the use of silt fences, fiber rolls, and/or gravel bags, implemented. No equipment maintenance or fueling should be performed within or near the non-vegetated channel where petroleum products or other pollutants from the equipment may enter this area.

4.5 Cultural Resources

Would the proposed project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of an historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Disturb human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. Less Than Significant

Construction of the water pipeline within the project site could result in significant impacts to historical resources if any occur within the impact areas. An Archaeological Resources Survey Report was prepared by RECON Environmental, Inc. in November 2022. The report contains a background research, review of historic aerial photographs, and the results of an on-foot survey of the project site (Appendix C). The survey area included the pipeline alignment (7.91-acre project site) and buffer, totaling 9 acres. No significant prehistoric or historic cultural resources were observed during the survey.

Prior to the survey, a records search was requested from the Eastern Information Center (EIC) to identify any previously recorded cultural resources located within a one-mile radius of the project area. In addition, a letter was sent on September 22, 2022 to the Native American Heritage Commission (NAHC) requesting a search of their Sacred Lands File to identify spiritually significant and/or sacred sites or traditional use areas in the project vicinity (see Attachment 2 of Appendix C). The NAHC was also asked to provide a list of local Native American tribes, bands, or individuals that may have concerns or interests regarding cultural resources potentially occurring within the area of potential effect. The record search results showed that there have been 57 previous archaeological investigations, and 33 resources have been recorded within one mile of the project area. Of these, 8 investigations and 2 resources (P-33-0293953 and P-33-006237) cross the project site. A response was received from the NAHC on November 3, 2022 indicating that their Sacred Lands File search results were positive.

The records search identified two cultural resources within the project area. P-33-006237 was recorded in 1995 as a single-family residence with associated outbuildings but the property has since been demolished. P-33-023953 is a 6.33-mile segment of Los Alamos Road recorded in 2014. The roadway has been present since 1891 but recommended not eligible under the National Register of Historic Places (NRHP) and under the California Register of Historical Resources (CRHR) because the road was not a primary route across the region and does not meet the criteria for listing. Therefore, because none of these resources are significant, the proposed project would not cause a substantial adverse change in the significance of an historical resource pursuant to §15064.5. Therefore, impacts would be less than significant.

b. Less Than Significant

The entire pipeline alignment/project site has been disturbed by past development and the possibility of buried significant cultural resources being present is considered low. Therefore, the proposed project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5. Impacts would be less than significant.

c. Less Than Significant

There are no formal cemeteries or recorded burials in the vicinity of the project site. While no human remains are anticipated to be discovered during project construction, in the unexpected event that human remains are encountered during construction, the proposed project would follow the requirements of Health & Safety Code §7050.5 and Public Resources Code §5097.98. Conformance with these regulations would include contacting the County Coroner. If the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the NAHC, shall be contacted in order to determine proper treatment and disposition of the remains. Therefore, through regulatory compliance and NAHC protocol, impacts associated with found human remains would be less than significant.

4.6 Energy

Would the proposed project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. Less Than Significant Impact

Construction of the water pipeline component of the proposed project would consume energy during both construction and operation. Energy use during construction would occur within two general categories: vehicle fuel used by workers commuting to and from the construction site, and fuel use by vehicles and other equipment to haul materials and conduct construction activities. While construction activities would consume fuels, project-related consumption of such resources would be temporary and would cease upon the completion of construction. In addition, mobile equipment energy usage during construction would be minimized as the proposed project would comply with CARB's idling regulations, which restrict idling diesel vehicles and equipment to five minutes. Additionally, consistent with state requirements, all construction equipment would meet CARB Tier 3 In-Use Off-Road Diesel Engine Standards. Engines are required to meet certain emission standards, and groups of standards are referred to as Tiers. A Tier 0 engine is unregulated with no emission controls, and each progression of standard level (i.e., Tier 1, Tier 2, Tier 3, etc.) generate lower emissions, use less energy, and are more advanced technologically than the previous tier. CARB's Tier 3 In-Use Off-Road Diesel Engine Standards requires that construction equipment fleets become cleaner and use less energy over time. The fuel consumed during construction would also be typical of similar construction projects and would not require the use of new energy resources beyond what

are typically consumed in California. Therefore, construction of the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources, and impacts would be less than significant.

Operational energy usage would be minimal and would consist of occasional maintenance worker vehicle trips. Pipeline construction would not use energy in a wasteful, inefficient, or unnecessary manner. Therefore, operation of the proposed project would not result in a wasteful, inefficient, or unnecessary consumption of energy resources, and impacts would be less than significant.

b. Less Than Significant Impact

Equipment required for pipeline construction would be subject to CARB's idling regulations and Tier 3 In-Use Off-Road Diesel Engine Standards. Operation of the proposed project would not require ongoing or regular use of a substantial amount of energy. Therefore, the proposed project would not conflict with any state or local plans for renewable energy or energy efficiency, and impacts would be less than significant.

4.7 Geology and Soils

Would the proposed project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a.i, and ii. Less Than Significant Impact

Construction of the water pipeline within the project site could result in adverse effects from earthquakes. Although review of the Alquist-Priolo Earthquake Fault Zone Map (Appendix G of the Murrieta General Plan 2035) identified that no portions of the project area are located within a currently designated State of California or Riverside County earthquake fault zone, the project area is located in a seismically active southern California region. The nearest active fault zone is a Riverside County fault zone approximately 1,400 feet south of the intersection of Celia Road and Mary Place. The nearest fault is a Riverside County fault approximately 400 feet south of the intersection of Celia Road and Mary Place. The Elsinore fault zone is approximately 2.35 miles southwest of the Celia Road

and Mary Place. However, pipeline construction would be limited to construction of a water pipeline and would not introduce any residential, commercial, or other uses that could expose people to strong ground shaking and the potential for surface rupture and ground shaking resulting from earthquakes is not known with certainty but is considered very low. Nonetheless, the Geotechnical Investigation Report prepared for the proposed project (Converse Consultants 2022; Appendix D) includes construction and design recommendations, the implementation of which would ensure avoidance of potential impacts associated with seismic activity. Additionally, construction would be in accordance with the 2022 California Building Code (CBC) to meet all seismic design parameters (see Table 6 of Appendix D). Therefore, through code compliance and adherence to the Geotechnical Investigation recommendations, the impacts related to seismic activity would be less than significant.

a.iii. Less Than Significant Impact

Liquefaction is a phenomenon where water-saturated granular soil loses shear strength during strong ground shaking produced by earthquakes. The loss of soil strength occurs when cyclic pore water pressure increases below the groundwater surface. Potential hazards due to liquefaction include the loss of bearing strength beneath structures; feasibly causing foundation failure or significant settlements and differential settlements. Construction of the water pipeline could result in risk of liquefaction of soils if the soils in which the pipelines were placed were susceptible to liquefaction. However, based on the geotechnical review, there is a very low risk for liquefaction along Ruth Ellen Way, Los Alamos Road, Mason Avenue, and the northeastern section of Mary Place and there is no risk for liquefaction on Celia Road and the southwest section of Mary Place (see Appendix D).

Groundwater was not encountered during boring investigations. Due to the lack of groundwater, in combination with the proposed dense fill soils over Pauba Formation (bedrock), the potential for liquefaction and associated settlement of structures is low. Additionally, review of Exhibit 12-5 of the Murrieta General Plan 2035 determined that the project site is not located within a liquefaction hazard zone (City of Murrieta 2011). Therefore, impacts related to liquefaction would be less than significant.

a.iv. Less Than Significant Impact

Earthwork related to pipeline construction is expected to consist of road excavation and pipeline construction. Seismically induced landslides and other slope failures are common occurrences during or after earthquakes in areas of significant relief. No portions of the project area are located within a currently designated State of California or Riverside County Landslide Zone (Albert A. Webb Associates 2022). The pipeline alignment is located within a relatively flat, paved roadway, and project design and construction would adhere to the recommendations in the standard project-specific geotechnical engineering report. As such, grading and excavation required for the proposed project would not likely increase or exacerbate the potential for landslides to occur. Nonetheless, the Geotechnical Investigation Report prepared for the proposed project (Converse Consultants 2022; see Appendix D) includes construction and design recommendations, the implementation of which would ensure avoidance of potential impacts associated with seismic activity. Additionally, construction would be in accordance with the CBC to meet all seismic design parameters. Therefore, through code compliance and adherence to the Geotechnical Investigation recommendations, the

proposed project would not cause or increase the potential for landslides, and impacts would be less than significant.

b. Less Than Significant Impact

Construction activities associated with the pipeline would temporarily create the potential for increased erosion within existing unpaved roadways; however, as all developed areas would be stabilized consistent with City regulations and recommendations included in the Geotechnical Investigations (see Appendix D). For example, graded areas and fill materials would be stabilized through efforts such as backfill. Erosion potential would be higher in the short-term during construction than in pre-construction conditions. Design requirements include that surfaces exposed in sloped excavations should be kept moist but not saturated to retard raveling and sloughing during construction. Adequate provisions should be made to protect the slopes from erosion during periods of rainfall. Surcharge loads, including construction materials, should not be placed within 5 feet of the unsupported slope edge. Stockpiled soils with a height higher than 6 feet will require greater distance from trench edges (Converse Consultants 2022). Therefore, through regulatory compliance and adherence to the Geotechnical Investigation recommendations, impacts related to soil erosion and loss of topsoil would be less than significant.

c. Less Than Significant Impact

The project site is not underlain by unstable soils and all subsurface soil materials are expected to be excavatable by conventional equipment (Converse Consultants 2022). As described in 4.7a-iii above, the project area is not located within a liquefaction hazard zone. As described in the Geotechnical Investigation Report prepared for the proposed project (Converse Consultants 2022; see Appendix D), there is a very low risk for liquefaction along Ruth Ellen Way, Los Alamos Road, Mason Avenue, and the northeastern section of Mary Place. Along Celia Road and the southwest section of Mary Place, there is no risk for liquefaction. Additionally, the potential for landslides or lateral spreading at the project site is considered very low. Furthermore, project excavation and construction would be conducted consistent with requirements of the CBC regarding unstable soils. Nonetheless, the Geotechnical Investigation Report prepared for the proposed project (Converse Consultants 2022; see Appendix D) includes construction and design recommendations, the implementation of which would ensure avoidance of potential impacts associated with seismic activity. Additionally, construction would be in accordance with the CBC to meet all seismic design parameters. Therefore, through code compliance and adherence to the Geotechnical Investigation recommendations, the proposed project would not cause or increase the potential for landslides, and impacts would be less than significant. Adherence to these guidelines would ensure that impacts associated with unstable soils would be less than significant.

d. Less Than Significant Impact

Expansive soils are those known to absorb water resulting in swelling. Expansive soils could cause serious damage to even lightweight structures such as roads, sidewalks, and driveways (<https://definecivil.com/expansive-soils/>). Construction of the water pipeline component could result in impacts if expansive soils are encountered during construction. According to the Geotechnical Investigation Report prepared for the proposed project (see Appendix D), the project area is underlain by soil types known as undocumented artificial fill and alluvium. Specific design

recommendations are included in the Geotechnical Investigation Report, the implementation of which would ensure avoidance of potential impacts associated with expansive soils. In addition, project excavation and construction would be conducted consistent with requirements of the CBC regarding expansive soils. Adherence to these guidelines and recommendations would ensure that impacts associated with expansive soils would be less than significant.

e. No Impact

The proposed project does not propose the use of septic tanks or alternative wastewater disposal systems. No impact would occur.

f. Potentially Significant unless Mitigation Incorporated

The Murrieta area is generally underlain by highly fossiliferous rock units that include the Pauba formation and Unnamed Sandstone formation. The San Bernardino County Museum Earth Sciences Division has classified the majority of Murrieta as having a high potential for containing significant, nonrenewable paleontological resources (City of Murrieta 2010). Construction of the water pipeline would result in ground-disturbing activities that have the potential to uncover paleontological resources, the loss of which would be a significant impact (Impact GEO-1). Implementation of mitigation measure GEO-1 would ensure that impacts would be reduced to less than significant.

Mitigation Measure

GEO-1 Paleontological Monitor. Excavation shall be monitored by a qualified paleontologist. If paleontological resources are encountered, the paleontological monitor shall have the authority to temporarily halt or redirect work while the paleontological resources are documented and assessed. If significant deposits are found, additional data recovery shall be conducted, as necessary, in order to adequately mitigate project impacts. The fossil collection and all associated documentation shall be legally transferred to a qualified repository within Riverside County. Full-time paleontological monitoring can be reduced to part-time inspections or ceased entirely if determined adequate by the qualified paleontologist.

4.8 Greenhouse Gas Emissions

Would the proposed project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. Less Than Significant Impact

The District has not adopted its own greenhouse gas (GHG) thresholds of significance for CEQA. The SCAQMD published its Interim CEQA GHG Significance Thresholds for Stationary Sources, Rules, and Plans in 2008 (SCAQMD 2008). The interim thresholds are a tiered approach; projects may be determined to be less than significant under each tier or require further analysis under subsequent tiers. For the proposed project, the most appropriate screening threshold for determining GHG emissions is the SCAQMD proposed Tier 3 screening threshold (SCAQMD 2010); therefore, a significant impact would occur if the proposed project would exceed the SCAQMD proposed Tier 3 screening threshold of 3,000 metric tons carbon dioxide equivalent (MT CO₂E) per year. Based on guidance from the SCAQMD, total construction GHG emissions resulting from a project should be amortized over the lifetime of a project, which is defined as 30 years (SCAQMD 2009).

Construction of the water pipeline within the project site would result in short-term emissions from construction activities. Construction emissions were calculated using RCEM and the parameters discussed in detail in Section 4.3b above. Total construction GHG emissions are summarized in Table 6.

Table 6 Summary of Total Construction GHG Emissions	
Phase/Year	GHG Emissions (MT CO ₂ E)
Grubbing/Land Clearing	15.60
Grading/Excavation	185.75
Drainage/Utilities/Sub-Grade	88.28
Paving	9.42
Total Construction Emissions	299.05
<i>Amortized Construction Emissions</i>	<i>10</i>
SOURCE: Appendix A	
NOTE: Totals may vary due to rounding	

As shown in Table 6, the proposed project would result in a total of 299 MT CO₂E over the entire construction period, which would be 10 MT CO₂E per year when amortized over the lifetime of the proposed project. After installation of the underground pipeline, there would be occasional inspection and maintenance trips. These trips would be minimal and currently occur within the District jurisdiction by existing staff. Inspection and maintenance trips would result in negligible operational emissions and there would be no other source of operational emissions. GHG emissions would be less than the 3,000 MT CO₂E annual screening threshold. Therefore, impacts from construction and operation of the proposed project would be less than significant.

b. Less Than Significant Impact

Executive Order (EO) S-3-05 and EO B-30-15 established GHG emission reduction targets for the state, and Assembly Bill 32 launched the CARB Climate Change Scoping Plan that outlined the reduction measures needed to reach the 2020 target, which the state has achieved. As required by Senate Bill 32, CARB's 2017 Climate Change Scoping Plan outlines reduction measures needed to achieve the interim 2030 target. As detailed in the response under 4.8a above, the proposed project would result in construction GHG emissions below the SCAQMD proposed Tier 3 screening threshold of 3,000 MT CO₂E per year. Construction of the water pipeline within the proposed project would not result in emissions that would adversely affect statewide attainment of GHG emission reduction goals as described in Assembly Bill 32, EOs S-3-05 and B-30-15, and Senate Bill 32. Project emissions would, therefore, have a less than cumulatively considerable contribution to global climate change impacts. The proposed project would not result in a significant increase in regional vehicle miles traveled since vehicle trips would be limited to occasional maintenance trips that would be performed by existing/planned District staff. The proposed project would be consistent with land use designations, as it would supply water for existing residential uses. Because the proposed project would provide water for existing development and because project trips would be limited to occasional maintenance activities, it would not conflict with the transportation-related GHG reduction goals outlined in the Regional Transportation Plan. Further, the proposed project would not conflict with energy efficiency standards or conflict with Southern California Edison's Renewables Portfolio Standard renewable energy goals as these are not applicable to project construction and operation. Therefore, the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions, and impacts would be less than significant.

4.9 Hazards and Hazardous Materials

Would the proposed project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. Less Than Significant Impact

During the project construction period, hazardous substances used to maintain and operate construction equipment (such as fuel, lubricants, cleaners, paint, oils, adhesives, solvents, and asphalt) would be present. The use or generation of such construction-related hazardous materials could potentially result in significant impacts through accidental discharge associated with use, storage, operation, and maintenance activities. The transport, use, and disposal of hazardous materials would be conducted in accordance with applicable federal and state laws, including the Hazardous Materials Transportation Act and California Code of Regulations, Title 22, Division 4.5.

Construction of the water pipeline within the project site would not involve routine transport, use, or disposal of significant hazardous materials. Project construction may involve the use of small amounts of solvents, cleaners, paint, oils and fuel for equipment. The proposed project would comply with a National Pollutant Discharge Elimination System (NPDES) permit program which controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Additionally, project construction would be required to be undertaken in compliance with all applicable federal, state, and local regulations pertaining to the proper use of these common hazardous materials. Compliance with these regulations is mandatory per standard permitting conditions. Therefore, the proposed project would not create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials, and impacts would be less than significant.

b. Less Than Significant Impact

As discussed above in Item 9.a, project construction would require small amounts of hazardous materials. Otherwise, the proposed pipeline would not involve the routine transport, use, or disposal of significant hazardous materials. In addition, the proposed project would be required to implement the Division of Occupational Safety and Health of California Construction Safety Plan/Hazard Communication Program; in case of accidental release, the proposed project would be required to

comply with the Code of Federal Regulations Section 1910.120. Furthermore, project construction would be conducted consistent with all applicable safety regulations and would not be expected to introduce accident conditions that could result in the release of hazardous materials into the environment. Therefore, the proposed project would not create upset and accident conditions that could result in the release of hazardous materials, and impacts would be less than significant.

c. Less Than Significant Impact

Avaxat Elementary School is located approximately 0.6 mile west of the project area. Construction of the water pipeline within the project site would not require the use of acutely hazardous materials and would be limited to the use of small amounts of lubricants, cleaners, paint, oils, adhesives, solvents, asphalt, and fuel for equipment. Use of these common hazardous materials in small quantities would not represent a significant hazard to the public or environment, and the use and handling of hazardous materials during construction would be conducted consistent with all applicable regulations (see Section 4.8a, above). Therefore, impacts related to hazardous emissions within 0.25 mile of a school would be less than significant.

d. Less Than Significant Impact

The project site is not located on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (Department of Toxic Substances Control 2022). The proposed project would be required to comply with all applicable federal, state, and local laws and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous waste, including but not limited to Title 49 of the Code of Federal Regulations implemented by Title 13 of the California Code of Regulations, which describes strict regulations for the safe transportation of hazardous materials. Compliance with all applicable federal, state, and local laws related to hazardous materials will ensure that impacts related to emitting hazardous emissions or materials within one-quarter mile of a school will be less than significant. Thus, the proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school and is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, impacts are less than significant.

e. No Impact

The project area is not located within the vicinity of a private airstrip. The nearest airport is the French Valley Airport, a County-owned public-use airport located on State Route 79, north of the city of Temecula in their sphere of influence, and adjacent to the City's eastern boundary and is located approximately 6.2 miles to the east. Therefore, the project site is not located within an airport land use plan or within two miles of a public airport and would not result in a safety hazard or excessive noise. No impact would occur.

f. Less Than Significant Impact

The emergency response plan in effect in the City is the Emergency Operations Plan approved by the City Council in 2017. The proposed project could temporarily impact street traffic adjacent to the project area during the construction phase due to construction activities into the ROW. Project

construction could temporarily reduce the number of lanes or temporarily close a portion of the project roads. The City requires that projects conducting construction work in City roadway ROWs get encroachment permits approved by the City Department of Public Works. Emergency access must be maintained. Compliance with City requirements for traffic management during construction in the public ROW would ensure that the proposed project would have a less than significant impact. Therefore, the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

g. Less Than Significant Impact

The project area is located in a Very High Fire Hazard Severity Zone as indicated in exhibit 5.17-1 in the Murrieta General Plan 2035 Final Environmental Impact Report (FEIR; City of Murrieta 2011); however, pipeline construction does not include the construction of habitable structures that could expose people to a significant risk of loss, injury, or death involving wildland fires. Human presence would be limited to temporary construction and periodic maintenance. All construction would be required to comply with fire protection and prevention requirements specified by state law (California Code of Regulations) and the California Division of Occupational Safety and Health. This includes various measures such as easy accessibility of firefighting equipment, proper storage of combustible liquids, no smoking in service and refueling areas, and worker training for firefighter extinguisher use. Further, all new construction is required to comply with the California Fire and Building Codes. Additionally, the proposed project would be required to comply with all regulatory requirements concerning fire protection. Therefore, the exposure of people or structures to significant risk of loss, injury, or death would not be likely to occur and impacts would be less than significant.

4.10 Hydrology and Water Quality

Would the proposed project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces in a manner, which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. Less Than Significant Impact

Pipeline construction would have the potential to generate erosion/sedimentation and pollutants that could impact water quality. However, the proposed project is subject to the NPDES permit requirements overseen by the District which includes preparation and implementation of a Storm Water Pollution Prevention Program (SWPPP) for the prevention of polluted runoff during construction. The proposed project would be required to prepare and implement a SWPPP identifying feasible BMPs prior to the commencement of construction activities, and to incorporate water quality design features to address potential erosion and siltation impacts. Upon completion of construction activities, the pipeline alignment would be restored to pre-existing conditions. Therefore, through regulatory compliance and implementation of project-specific BMPs, which would be conditions of project approval, the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality, and impacts would be less than significant.

b. Less Than Significant Impact

Pipeline construction would not increase the amount of impervious surface area within the project area. Pre- to post-project conditions would not see any change in the amount of surface runoff and would not interfere substantially with groundwater recharge. The proposed project would install a water line connection and would not interfere with current ground water supplies in the immediate area since it will be supplying potable water to the area through existing water transmission and distribution systems. The proposed project would not introduce any residential, commercial, or other uses that would use groundwater. Therefore, the proposed project would not significantly decrease groundwater supplies or interfere with groundwater recharge or obstruct sustainable groundwater management, and impacts would be less than significant.

c.i. Less Than Significant Impact

The pipeline alignment would be located within existing ROW that is currently developed with paved and unpaved roads. Construction of the water pipeline within the project site would experience temporary disturbance during construction activities; however, the roads would be returned to existing conditions and drainage patterns would not be altered. The proposed project would implement construction BMPs, identified in the proposed project SWPPP, consistent with the NPDES Construction General Permit and related requirements that would prevent erosion and storm water runoff during construction. Therefore, the proposed project would not substantially alter the drainage pattern of the site or the surrounding area in a manner that could result in substantial erosion, runoff, impediment or redirection of flood flows, and impacts would be less than significant.

c.ii. Less Than Significant Impact

Pipeline construction would not increase in impervious surface areas and would not result in any change to the existing drainage pattern within or surrounding the proposed project pipeline alignment. As described in Section 4.10a above, the proposed project would implement construction BMPs, identified in the proposed project SWPPP, consistent with the NPDES Construction General Permit. Therefore, the proposed project would not substantially increase the rate or amount of

surface runoff in a manner which would result in flooding on- or off-site, and impacts would be less than significant.

c.iii. Less Than Significant Impact

As described in Section 4.10a above, the proposed project would implement construction BMPs, identified in the proposed project SWPPP, consistent with the NPDES Construction General Permit and related requirements that would minimize erosion and prevent pollution from affecting water quality. Post-project runoff flows would be the same as prior to construction. Therefore, the proposed project would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, and impacts would be less than significant.

c.iv. Less Than Significant Impact

As shown in exhibit 5.13-2, Flood Hazards in the City General Plan FEIR, the project site is not within a flood hazard zone (City of Murrieta 2011). The proposed project would be limited to construction of a pipeline that would be located underground within developed ROWs and would not impede or redirect flood flows. Additionally, the implementation of the proposed project would not add impervious surfaces. Therefore, the proposed project would not impede or redirect flood flows, and impacts would be less than significant.

d. No Impact

The City of Murrieta General Plan FEIR (Exhibit 5.13-2) identifies the project site as being outside the flood hazard zone. The project area is located approximately 30 miles inland from the Pacific Ocean, and therefore is not subject to risk associated with tsunamis. The nearest body of water is Lake Skinner located approximately 13 miles east of the project area. Due to the distance the project site is from Lake Skinner and the low likelihood of a seiche forming, the proposed project would not be susceptible to seiche inundation events. Therefore, the proposed project would not result in impacts associated with flood hazard, tsunami, or seiche zones. No impact would occur.

e. Less Than Significant Impact

The pipeline component of the proposed project would implement construction BMPs, identified in the proposed project SWPPP, consistent with the NPDES Construction General Permit and related requirements that would prevent erosion and pollution from affecting water quality. The proposed project would not decrease groundwater supplies or interfere with groundwater recharge. Therefore, the proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan, and impacts would be less than significant.

4.11 Land Use and Planning

Would the proposed project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. No Impact

The proposed pipeline would be located within existing roadways. Portions of the roadways would be closed during construction, and some staging activities may also occur along the alignment. Traffic control measures could create a temporary nuisance to residents adjacent to the project area; however, construction activities would be temporary. Access for residents along the alignment would be maintained during construction. Operation of the proposed project would not result in any access restrictions since the pipeline is located underground. The proposed project would not introduce any divisions to the existing community. Ongoing maintenance would also not result in a disruption to the surrounding properties. Therefore, the proposed project would not physically divide an established community. No impact would occur.

b. Less Than Significant Impact

Pipeline construction would be limited to construction of a new water pipeline and would not conflict with the applicable land use/zoning designations within the project area. The pipeline would be located below ground and would not result in any permanent changes aboveground. Therefore, the proposed project would not conflict with any land use plan, policy, or regulation adopted for the

purpose of avoiding or mitigating an environmental effect, and impacts would be less than significant.

4.12 Mineral Resources

Would the proposed project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. No Impact

The Conservation Element of the Murrieta General Plan 2035 (Exhibit 8-1) shows no known mineral resources located within the project site (City of Murrieta 2011). Therefore, the proposed project would not result in the loss of availability of known mineral resources that would be of value to the region and the residents of the state or of a locally important mineral resource recovery site. No impact would occur.

b. No Impact

The Murrieta General Plan 2035 does not identify the project area as an existing or former mineral resource site. No impact would occur.

4.13 Noise

Would the proposed project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive ground borne vibration or ground borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. Potentially Significant Unless Mitigation Incorporated

Noise Fundamentals

Noise is defined as sound that is loud, unpleasant, unexpected, or undesired, and therefore, may cause general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment. Decibels (dB) are the standard unit of measurement of the sound

pressure generated by noise sources and are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale for earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; a halving of the noise energy would result in a 3 dB decrease.

The human ear is not equally sensitive to all frequencies within the sound spectrum. To accommodate this phenomenon, the A-weighted scale, which approximates the frequency response of the average young ear when listening to most ordinary everyday sounds, was devised. Noise levels using A-weighted measurements are written as dB(A). It is widely accepted that the average healthy ear can barely perceive changes of 3 dB(A) (increase or decrease) and that a change of 5 dB(A) is readily perceptible. An increase of 10 dB(A) is perceived as twice as loud, and a decrease of 10 dB(A) is perceived as half as loud (Caltrans 2013).

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important. In addition, most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors has been developed. The noise descriptors used for this study are the equivalent noise level (L_{eq}), the maximum noise level, and the community noise equivalent level (CNEL).

The L_{eq} is the equivalent steady-state noise level in a stated period of time that is calculated by averaging the acoustic energy over a time period; when no period is specified, a 1-hour period is assumed. The maximum noise level is the highest sound level occurring during a specific period.

The CNEL is a 24-hour equivalent sound level. The CNEL calculation applies an additional 5 dB(A) penalty to noise occurring during evening hours, between 7:00 p.m. and 10:00 p.m., and a 10 dB(A) penalty is added to noise occurring during the night, between 10:00 p.m. and 7:00 a.m. These increases for certain times are intended to account for the added sensitivity of humans to noise during the evening and night.

Regulatory Framework

The District, as a public agency, is not subject to other jurisdictional agencies' established noise standards. Likewise, as a public agency, the District is not subject to the City or County ordinances and would not be required to obtain variances. The District has not established an applicable noise standard of its own for permanent or temporary ambient noise levels. However, the District follows a "good neighbor" approach to adhering to local noise standards. The noise standards of the City are used for the purposes of evaluating the significance of the proposed project's noise levels for the purposes of this analysis under CEQA.

The City outlines their noise regulations and standards within the Municipal Code and the Noise Element of the Murrieta General Plan 2035. The proposed project would not construct a noise sensitive land use or create an operational source of noise. The regulations and standards applicable to pipeline construction would be those associated with construction noise. The Murrieta General Plan 2035 contains the following goal and policies related to construction noise:

- Goal N-4: Reduced noise levels from construction activities.
 - Policy N-4.1: Regulate construction activities to ensure construction noise complies with the City's Noise Ordinance.
 - Policy N-4.2: Limit the hours of construction activity in residential areas to reduce intrusive noise in early morning and evening hours and on Sundays and holidays.
 - Policy N-4.3: Employ construction noise reduction methods to the maximum extent feasible. These measures may include, but not limited to, shutting off idling equipment, installing temporary acoustic barriers around stationary construction noise sources, maximizing the distance between construction equipment staging areas and occupied sensitive receptor areas, and use of electric air compressors and similar power tools, rather than diesel equipment.
 - Policy N-4.4: Encourage municipal vehicles and noise-generating mechanical equipment purchased or used by the City to comply with noise standards specified in the City's Municipal Code, or other applicable codes.
 - Policy N-4.5: Allow exceedance of noise standards on a case-by-case basis for special circumstances including emergency situations, special events, and expedited development projects.
 - Policy N-4.6: Ensure acceptable noise levels are maintained near schools, hospitals, convalescent homes, churches, and other noise-sensitive areas.

Section 16.30.130(A) of the City's Noise Ordinance regulates construction noise. The Noise Ordinance prohibits noise generated by construction activities between the hours of 7:00 p.m. and 7:00 a.m. and on Sundays and holidays. Construction activities shall be conducted in a manner that the maximum noise levels at the affected structures will not exceed those listed in Table 7.

Table 7 City of Murrieta Construction Noise Standards			
	Single-Family Residential	Multi-Family Residential	Commercial
Mobile Equipment			
Daily, except Sundays and holidays, 7:00 a.m. to 8:00 p.m.	75 dB(A)	80 dB(A)	85 dB(A)
Daily, except Sundays and holidays, 8:00 p.m. to 7:00 a.m.	60 dB(A)	64 dB(A)	70 dB(A)
Stationary Equipment			
Daily, except Sundays and holidays, 7:00 a.m. to 8:00 p.m.	60 dB(A)	65 dB(A)	70 dB(A)
Daily, except Sundays and holidays, 8:00 p.m. to 7:00 a.m.	50 dB(A)	55 dB(A)	60 dB(A)
dB(A) = A-weighted decibels SOURCE: City of Murrieta Development Code Section 16.30.130.			

Construction of the water pipeline would require the use of mobile construction equipment. Construction equipment would move along the pipeline alignment and would not be located at any one location for a long period of time. Therefore, the applicable standards would be the "Mobile

Equipment” standards shown in Table 7. Construction activities would occur during the daytime hours; therefore, the applicable noise level limit is 75 dB(A) L_{eq} .

Section 16.30.130(K) states the following as it relates to vibration: Operating or permitting the operation of any device that creates vibration that is above the vibration perception threshold of an individual at or beyond the property boundary of the source if on private property, or at 150 feet from the source if on a public space or public ROW is prohibited. The perception threshold shall be a motion velocity of 0.01 inch per second (in/sec) over the range of 1 to 100 Hertz.

Construction Noise

Noise impacts from construction are a function of the noise generated by equipment, the location and sensitivity of nearby land uses, and the timing and duration of the noise-generating activities. Table 8 presents a list of noise generation levels for various types of equipment anticipated to be used for construction of the pipeline. The duty cycle is the amount of time that equipment generates the reported noise level during typical, standard equipment operation. The noise levels and duty cycles summarized in Table 8 are based on measurements and studies conducted by Federal Highway Administration (FHWA) and the Federal Transit Authority (FTA).

Table 8 Typical Construction Equipment Noise Levels			
Equipment	Maximum Noise Level at 50 Feet [dB(A) L_{max}]	Typical Duty Cycle ³	Maximum Average Hourly Noise Level [dB(A) L_{eq}]
Concrete Saw	90	20%	83
Compressor	80	40%	76
Dump Truck	84	5%	71
Excavator	85	40%	81
Generator	82	50%	79
Paver	85	50%	82
Sweeper ¹	84	40%	80
Tractor/Loader/Backhoe	80	40%	76
Utility Truck ²	78	5%	65
Water Truck ¹	84	40%	80
SOURCE: FHWA 2006, FTA 2006. ¹ Sweeper and water truck noise assumed to be comparable to tractor noise. ² Utility truck noise assumed to be comparable to flat-bed truck noise. ³ The dump truck and utility truck duty cycle was adjusted to 5 percent to represent the time this equipment is arriving at and departing from the site. Engines would be idle all other times.			

Due to the complex nature of construction sites, construction noise from a linear project, such as a pipeline project, is assessed from the centerline of the alignment and work area. Maximum noise levels would occur when the construction equipment is nearest to a noise sensitive receiver. Although construction equipment may temporarily be located at the point on the alignment nearest to a receiver, throughout the day equipment would move along the alignment. Therefore, the distance

from a receiver to the centerline of the alignment is not the same as the average distance during a given day from the receiver to construction equipment. Thus, average noise levels correlate to the area of active construction. Residential receivers are located in the project vicinity at a distance of 50 feet or more from the pipeline alignment. The total linear length is 10,685 feet, and 200 feet of the pipeline would be constructed per day. For a receiver that is set back 50 feet from the active work area alignment, using the Pythagorean theorem ($a^2 + b^2 = c^2$), it is calculated that the receiver is at an average distance of 112 feet from the construction equipment ($\sqrt{50^2 + 100^2} = 112$).

Construction noise levels were calculated assuming the simultaneous use two pieces of construction equipment during each phase. Although more construction equipment would be present on-site, not all would be used at the same time. Noise levels from construction activities are typically considered point sources and would drop off at a rate of -6 dB(A) per doubling of distance over hard site surfaces, such as streets and parking lots. Construction noise attenuation is calculated using the following formula:

$$N_R = N_C + 20 \times \log(D_C/D_R)$$

Where,

N_R = Noise level at receiver

N_C = Construction equipment reference noise level

D_C = Construction equipment reference noise level distance (i.e., 50 feet)

D_R = Distance to receiver (i.e., 112 feet)

The average noise level at the residential receivers were then calculated for each phase. The results are summarized in Table 9.

Table 9 Construction Equipment Noise Levels						
Phase	Equipment	Maximum Average Hourly Noise Level at 50 Feet [dB(A) L _{eq}]	Phase Duration (months/ days) ¹	Active Construction Area (feet/day)	Average Distance to Receiver (feet)	Average Noise Level at Receiver [dB(A) L _{eq}]
Grubbing/ Land Clearing	Concrete Saw	83	0.25/5.5	200	112	76
	Dump Truck	71				
	Total	83				
Grading/ Excavation	Excavator	81	2.25/49.5	200	112	75
	Front End Loader	76				
	Total	82				
Drainage/ Utilities/ Subgrade	Excavator	81	1.5/33	200	112	74
	Utility Truck	74				
	Total	82				
Paving	Paver	82	1/22	200	112	75
	Utility Truck	65				
	Total	82				
¹ Assumes 22 working days per month.						

As shown in Table 9, construction noise levels have the potential to exceed 75 dB(A) L_{eq} during the grubbing/land clearing phase due to the use of a concrete saw. Construction noise levels during all other phases are not anticipated to exceed 75 dB(A) L_{eq} at the adjacent residential uses. Construction activities would occur during daytime hours between 7:00 a.m. to 8:00 p.m. Pipeline construction noise levels are not anticipated to exceed Noise Ordinance limits. Due to the proximity of construction activities to residences and other noise-sensitive receptors, impacts from construction noise would be potentially disruptive to daily activities (Impact NOI-1). Implementation of mitigation measure NOI-1, which requires the construction contractor to implement BMPs for noise control, daytime construction noise impacts would be reduced to less than significant.

The below-ground pipeline would not generate noise during operation. Noise may be associated with occasional vehicle maintenance trips but these trips would be negligible. The proposed project would have less than significant long-term operational noise impacts.

b. Less Than Significant Impact

Human reaction to vibration is dependent on the environment the receiver is in, as well as individual sensitivity. For example, outdoor vibration is rarely noticeable and generally not considered annoying. Typically, humans must be inside a structure for vibrations to become noticeable and/or annoying (FTA 2006). Project construction would occur within public ROW. Section 16.30.130(K) of the Municipal Code states that vibration levels shall not exceed 0.01 in/sec peak particle velocity (PPV) at 150 feet from the public ROW.

Construction activities produce varying degrees of ground vibration depending on the equipment and methods employed. While ground vibrations from typical construction activities rarely reach levels high enough to cause damage to structures, special consideration must be made when sensitive or historic land uses are near the construction site. The construction activities that typically generate the highest levels of vibration are blasting and impact pile driving. The proposed project would not require pile driving or blasting. The equipment with the greatest potential to generate vibration would be a jack hammer. According to the FTA, jack hammers generate vibration levels of 0.035 in/sec PPV at 25 feet. This vibration level would attenuate to 0.005 in/sec PPV at 150 feet and would therefore not exceed the limit established in Section 16.30.130(K) of the Municipal Code.

Operation of the proposed project would not generate groundborne noise or vibration.

c. No Impact

The project site is not located within the vicinity of a private airstrip. The nearest airport is the French Valley Airport, which is located approximately two miles to the east. The project site is located well outside the noise contours for the French Valley Airport (Riverside County Airport Land Use Commission 2004). Further, the proposed project would not include any sensitive noise receivers. Therefore, the proposed project would not expose people to excessive noise levels. No impact would occur.

Mitigation Measure:**NOI-1: Construction Noise Reduction Measures**

- District shall require its contractor to implement the following actions relative to construction noise: District shall conduct construction activities between 7:00 a.m. and 8:00 p.m. on weekdays in accordance with the City of Murrieta Municipal Code, Section 16.30.130(A).
- Prior to construction, the District in coordination with the construction contractor, shall provide written notification to all properties within 50 feet of the proposed project facilities informing occupants of the type and duration of construction activities. Notification materials shall identify a method to contact the District's program manager with noise concerns. Prior to construction commencement, the District program manager shall establish a noise complaint process to allow for resolution of noise problems. This process shall be clearly described in the notifications.
- Stationary noise-generating equipment shall be located as far from sensitive receptors as possible. Such equipment shall also be oriented to minimize noise that would be directed toward sensitive receptors. Whenever possible, other non-noise generating equipment (e.g., roll-off dumpsters) shall be positioned between the noise source and sensitive receptors.
- Equipment and staging areas shall be located as far from sensitive receptors as possible. At the staging location, equipment and materials shall be kept as far from adjacent sensitive receptors as possible.
- Construction vehicles and equipment shall be maintained in the best possible working order; operated by an experienced, trained operator; and shall utilize the best available noise control techniques (including mufflers, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds).
- Unnecessary idling of internal combustion engines shall be prohibited. In practice, this would require turning off equipment if it would idle for five or more minutes.
- Electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment, where feasible.
- The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.

4.14 Population and Housing

Would the proposed project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. Less Than Significant Impact

The project area is within the District's sphere of influence. The proposed water pipeline has been sized to serve the existing residential lots including the future development of the five vacant lots that are located within the project site (Albert A. Webb Associates 2022). The five vacant parcels are similarly zoned rural residential. Additionally, future connections of the pipeline to individual parcels would be provided to individual property owners who opt to connection for District water supply (Albert A. Webb Associates 2022). All future development proposals, including changes to land use, would require discretionary action and additional environmental review by the City. Therefore, the extension of the water pipeline not induce unplanned growth and impacts would be less than significant impact.

b. No Impact

Pipeline construction would construct a waterline to serve the existing project area. All construction would occur within existing easements and ROW. Thus, the proposed project would not displace any existing people or housing. No impact would occur.

4.15 Public Services

Would the proposed project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not in itself result in physical impacts on the environment. Therefore, the analysis that follows addresses pipeline construction within the project site. The water pipeline development provides an additional option for water supply and does not result in the increase in new development to the project area. There are no permits for development currently submitted with the City within the project site area. There are five vacant lots that are zoned rural residential and the proposed project has been designed to incorporate laterals to appropriately serve these lots if these lots are developed in the future. Any development plans, increase in density, or changes in land use within the project site would be subject to additional environmental review and would be at the discretion of the City. At the time of subsequent review, a determination regarding the adequacy of public services based on future proposed development plans would occur. Therefore, as described below, the currently proposed project would not result in a secondary effect for new or expanded public services.

a.i. Less than Significant Impact

Upon completion of construction, the project site would be paved and not require fire services beyond that which is currently required for the project area. Therefore, the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered facilities, the need for new or physically altered government facilities, or other performance objectives for fire protection services. Impacts would be less than significant.

a.ii. Less than Significant Impact

Pipeline construction would be limited to the construction of a water line. No new residential, commercial, or other uses that would require police protection services would result. Therefore, the proposed project would not require new or expanded police protection facilities. proposed water storage project would not increase in the need for new police protection. Impacts would be less than significant.

a.iii. No Impact

Pipeline construction would be limited to the construction of a water line to serve the existing project area. The proposed project would not construct any residential uses that would generate any new student enrollment that would increase demand for school services. Therefore, the proposed project would not require new or expanded school facilities. No impact would occur.

a.iv. No Impact

Pipeline construction would serve the existing project area and would not alter population in the area or construct any residential uses that would increase demand for parks. Therefore, the proposed project would not require new or expanded park facilities. No impact would occur.

a.v. No Impact

Other public facilities include libraries and government administrative services. The need for new or altered libraries or administrative services is typically associated with an increase in population. Pipeline construction would not construct any residential, commercial, or other uses that would require additional public services. No impact would occur.

4.16 Recreation

Would the proposed project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. No Impact

The proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. No population growth would be generated that would increase the use and deterioration of existing recreational facilities. Therefore, no impacts to existing neighborhood and regional parks or other recreational facilities are anticipated to result from the proposed project.

b. No Impact

The proposed project would not result in the construction of recreational facilities, nor would it increase demand for construction or expansion of recreational facilities. No impact would occur.

4.17 Transportation/Traffic

Would the proposed project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. Less Than Significant Impact

Physical improvements associated with the proposed project is limited to construction of the proposed pipeline. The proposed project does not include construction of residential, commercial, or other uses that would generate long-term vehicle trips. Construction activities would include temporary hauling, utility trucks, and employee vehicles.

Access to the project site for pipeline construction would occur along Los Alamos Road, Celia Road, Mason Avenue, Mary Place and Ruth Ellen Way. Consistent with the MMC Section 15.54.140, a Traffic Control Plan (TCP) would be submitted to the City for approval. Excavation areas within the easements and ROW would be plated during non-working hours. To allow the coordination of daily construction activity, the TCP would include measures to ensure that traffic conditions are maintained

as near normal as practicable (MMC Section 15.54.140(F)) and would maintain access and ensure safety. Such measures would likely include standard efforts such as the use of cones, barriers, signs, and flaggers, where applicable. The proposed project would generate vehicle trips during construction in the form of haul trucks and worker commute vehicles; however, the number of vehicles generated would be limited and would not likely result in congestion on nearby roadways. Roadways would be restored to pre-existing conditions once construction is completed.

The proposed project would not impact alternative modes of transportation. Construction would not occur within sidewalks, and the proposed project would maintain pedestrian access during construction. There are no bicycle lanes or bus stops located along Los Alamos Road, Celia Road, Mason Avenue, Mary Place, and Ruth Ellen Way. Therefore, the construction project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, and impacts would be less than significant.

Operational traffic trips would be limited to periodic maintenance and inspection that would not significantly affect intersection and roadway operations. Impacts would be less than significant.

b. Less Than Significant Impact

The proposed project would not result in any changes to the amount of travel required for local residents. Therefore, preparation of a Vehicle Miles Traveled Analysis per CEQA Guidelines Section 15064.3, subdivision (b) was not required, and impacts would be less than significant.

c. Less Than Significant Impact

Pipeline construction would be limited to the constriction of water service infrastructure located within existing easements and ROW along Los Alamos Road, Celia Road, Mason Avenue, Mary Place and Ruth Ellen Way and would not result in any permanent changes to the existing circulation network. Construction would be temporary and include a TCP to allow continued access. Roadways would be restored to pre-existing conditions once construction is completed. Therefore, the proposed project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses, and impacts would be less than significant.

d. Less Than Significant Impact

Pipeline construction within the easements and ROW would be temporary and include a TCP to allow continued access. The road would be restored to pre-existing conditions once construction is completed. As described in Section 4.17a above, vehicle trips generated during construction and operation would not affect intersection and roadway operations. Therefore, the proposed project would not result in inadequate emergency access to or from the project site, and impacts would be less than significant.

4.18 Tribal Cultural Resources

Would the proposed project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a.i. Less than Significant

AB 52 establishes a formal consultation process between the lead agency, the District, and all California Native American tribes within the area regarding tribal cultural resource evaluation. AB 52 mandates that the lead agency must provide formal written notification to the designated contact of traditionally and culturally affiliated California Native American tribes that have previously requested notice. Native American tribes are notified early in the project review phase by written notification that includes a brief description of the proposed project, location, and the lead agency's contact information. The tribal contact then has 30 days to request project-specific consultation pursuant to this section (Public Resources Code §21080.1).

As a part of the consultation pursuant Public Resources Code §21080.3.1(b), both parties may suggest mitigation measures (Public Resources Code §21082.3) that can avoid or substantially lessen potential significant impacts to tribal cultural resources or provide alternatives that would avoid significant impacts to a tribal cultural resource. The California Native American tribe may request consultation on mitigation measures, alternatives to the proposed project, or significant effects. The consultation may also include discussion on the environmental review, the significance of tribal cultural resources, the significance of the proposed project's impact on the tribal cultural resources, project alternatives, or the measures planned to preserve or mitigate impacts on resources. Consultation shall end when either (1) both parties agree on the mitigation measures to avoid or mitigate significant effects on a tribal cultural resource, or (2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.

Per AB 52, the District initiated consultation with Native American tribes that are traditionally and culturally affiliated with the geographic area of the proposed project to identify resources of cultural or spiritual value to the tribe. On October 7, 2022, the District sent consultation notification letters to Native American tribes on the District's Master List pursuant to the requirements of AB 52 pertaining to government-to-government consultation. Table 10 summarizes the consultation efforts. Six Native American Tribes were contacted, but to date, none have responded.

Table 10 Assembly Bill 52 Consultation				
Tribe	Individual Contacted	Date Letter Mailed	Response Received	Consultation Held
Soboba	Joe Ontiveros	October 7, 2022	DNR	N/A
Pechanga	Ebru Ozdil	October 7, 2022	DNR	N/A
Rincon	Destiny Choloco	October 7, 2022	DNR	N/A
Agua Caliente	Katie Croft	October 7, 2022	October 13, 2022	Declined Consultation
San Manuel	Jessica Mauck	October 7, 2022	November 7, 2022	Declined Consultation
Morongo	Travis Armstrong	October 7, 2022	DNR	N/A
DNR = Did not respond; N/A = Consultation was not requested				

Agua Caliente responded on October 13, 2022 and declined consultation and San Manuel responded on November 7, 2022 and declined consultation. Both Tribes responded within the 30-day period after receiving notification. Based on the level of past disturbance the possibility of buried significant cultural resources being present within the project site is considered low. Therefore, impacts to tribal cultural resources would be less than significant.

a.ii. Less Than Significant

RECON conducted a survey of the pipeline alignment and no significant prehistoric or historic cultural resources were observed during the survey. Given past disturbances, the possibility of buried significant cultural resources being present within the project site is considered low. The survey results coupled with the lack of response from the Native American tribes allows a finding that impacts to tribal cultural resources would be less than significant

4.19 Utilities and Service Systems

Would the proposed project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a determination by the wastewater treatment provided which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with federal, state, and local statutes and regulation related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. No Impact

Pipeline construction would require electricity and a connection to the District's water distribution system but does not involve construction of new or expansion of existing wastewater, natural gas or telecommunication facilities. Upon completion of the pipeline construction, the proposed project would contain and convey potable water but would not generate water demand in and of itself. Further, it would not generate wastewater, nor would the proposed project change the existing on-site stormwater runoff conveyance, collection, or treatment, which would continue according to District standards. No impacts would occur.

b. Less Than Significant Impact

The annexation of the project area to the District would allow the provision of potable water via the new pipeline to an area currently served by private wells. Pipeline construction would be sized to serve the existing project area and would allow the provision of existing water demand levels (Albert A. Webb Associates 2022). Therefore, the proposed project would provide sufficient water supplies to serve the project area, and impacts would be less than significant.

c. No Impact

The proposed project would not construct any uses that would require expanded wastewater treatment capacity. Therefore, the proposed project would not exceed existing wastewater treatment capacity. No impact would occur.

d. Less Than Significant Impact

Project construction would generate small amounts of waste that would likely be disposed of at either the Badlands Sanitary Landfill, located in Moreno Valley, or the El Sobrante Landfill, located in Corona. The Badlands Landfill has a remaining capacity of 15,748,799 cubic yards and a maximum permitted throughput of 4,800 tons per day and the El Sobrante Landfill has a remaining capacity of 143,977,170 cubic yards and a maximum permitted throughput of 16,054 tons per day (California Department of Resources Recycling and Recovery 2020). Both landfills would have sufficient capacity to accommodate the small amounts of waste that would be generated during construction. Operation of the proposed project would not generate any solid waste. Therefore, the proposed project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, and impacts would be less than significant.

e. Less Than Significant Impact

As described in Section 4.19d above, the proposed project would generate small amounts of waste during construction that would be disposed of at either the Badlands Sanitary Landfill, located in Moreno Valley, or the El Sobrante Landfill, located in Corona, which both have adequate capacity. The proposed project would also comply with local regulations pertaining to recycling of construction waste. Operation of the proposed project would not generate any solid waste. Therefore, the proposed project would comply with federal, state, and local statutes and regulation related to solid waste, and impacts would be less than significant.

4.20 Wildfire

Would the proposed project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. Less Than Significant Impact

Construction of the water pipeline component of the proposed project would not disrupt traffic operations. Construction within easements and ROW along Los Alamos Road, Celia Road, Mason Avenue, Mary Place, and Ruth Ellen Way would be temporary and a TCP to allow continued access. Roadways would be restored to pre-existing conditions once construction is completed. The TCP would include measures to ensure maintained access to hospitals, emergency response centers, school locations, communication facilities, highways and bridges, airports, and evacuation routes in

the event of an emergency. Therefore, the proposed project would not impair an adopted emergency response plan or emergency evacuation plan, and impacts would be less than significant.

b. No Impact

Because the proposed project includes a below ground water pipeline, it would not, in combination with environmental factors such as slope or prevailing winds, exacerbate fire risks. In addition, aside from temporary construction and maintenance workers, there would be no occupants on-site. Therefore, no impact would occur.

c. No Impact

Pipeline construction would be limited to construction of a below ground water pipeline. Roadways would be restored to pre-existing conditions once construction is completed, and new fire risks would result. Therefore, the proposed project would not require the installation or maintenance of infrastructure that could exacerbate fire risk or result in temporary or ongoing impacts to the environment. No impact would occur.

d. No Impact

Upon completion of pipeline construction, roadways would be restored to pre-existing conditions. As described in Sections 4.8 and 4.10, the proposed project would not result in any impacts associated with landslides or flooding. Therefore, the proposed project would not expose people or structures to significant risks from runoff, post-fire slope instability, or drainage changes. No impact would occur.

All construction would be required to comply with fire protection and prevention requirements specific by state law (California Code of Regulations) and the California Division of Occupational Safety and Health. This includes various measures such as easy accessibility of firefighting equipment, proper storage of combustible liquids, no smoking in service and refueling areas, and worker training for firefighter extinguisher use. Further, all new construction would be required to comply with the California Fire and Building Codes. Additionally, the proposed project would be required to comply with all regulatory requirements concerning fire protection. As discussed in more detail in Section 4.10, Hydrology and Water Quality, the proposed project would not significantly impact drainage patterns, flooding, or cause landslides. Thus, although the proposed project is located in a high fire hazard area, it would not exacerbate wildfire risks, due to slope, prevailing winds, and other factors, thereby exposing project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire because the proposed project does not include occupants. Further, the proposed project does not require the installation maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment and does not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Therefore, impacts would be less than significant.

4.21 Mandatory Findings of Significance

Does the proposed project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable futures projects)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

EXPLANATIONS:

a. Potentially Significant Unless Mitigation Incorporated

As described in Section 4.4a, implementation of mitigation measure BIO-1 would reduce the potential impacts on coastal California gnatcatcher to a level less than significant, implementation of mitigation measure BIO-2 would reduce impacts to migratory and nesting birds to a level less than significant, and implementation of mitigation measure BIO-3 would reduce impacts to aquatic

resources to a level less than significant. The proposed project does not have the potential to result in any other impacts that would substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory. As described in Section 4.5a, the proposed project would not impact any historical or archeological resources.

b. Potentially Significant Unless Mitigation Incorporated

Project impacts requiring mitigation are limited to biological resources, paleontological resources and noise. As described in Section 4.4a, implementation of mitigation measure BIO-1 would reduce impacts related on coastal California gnatcatcher to a level less than significant, implementation of mitigation measure BIO-2 would reduce impacts to migratory and nesting birds species to a level less than significant, and implementation of mitigation measure BIO-3 would reduce impacts related to aquatic resources to a level less than significant. Implementation of BIO-1, BIO-2, and BIO-3 would also ensure consistency with the MSHCP. As described in 4.7f, implementation of mitigation measure GEO-1 would reduce impacts to paleontological resources to a level less than significant. As described in Section 4.13a, implementation of mitigation measure NOI-1, would reduce noise impacts to less than significant. By mitigating project-level impacts to a level less than significant, the proposed project would not contribute to existing cumulative impact. As described throughout the IS/MND, all other project-level impacts would be less than significant without mitigation. Consequently, the proposed project would not result in any project-level significant impacts that could contribute to an existing cumulative impact on the environment.

c. Less Than Significant Impact

As described in Sections 4.1 through 4.20, the proposed project would not result in any substantial adverse direct or indirect impacts to human beings. Therefore, impacts would be less than significant.

5.0 Preparers

Eastern Municipal Water District

Al Javier, Director of Environmental Regulatory Compliance
Joseph Broadhead, Principal Water Resource Specialist, CEQA/NEPA
Gustavo Gomez, Associate Engineer I

RECON Environmental, Inc., 3111 Camino del Rio North, Suite 600, San Diego, CA 92108

Michael Page, AICP, Project Director
Morgan Weintraub, Project Manager
Bronwyn Brown, Senior Project Manager
Lori Spar, Senior Project Manager
Carmen Zepeda-Herman, Senior Archaeologist
Cailin Lyons, Biology Director
Jessica Fleming, Air Quality/GHG/Noise Analyst
Benjamin Arp, GIS Specialist
Stacey Higgins, Senior Production Specialist

6.0 Sources Consulted

Project Description

Riverside, County of

2003 Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Prepared by Dudek and Associates. Approved June 17. https://www.wrc-rca.org/Permit_Docs/MSHCP/MSHCP-Volume%201.pdf.

U.S. Geological Survey (USGS)

1979 Murrieta quadrangle, Township 7 South, Range 3 West.

Aesthetics

California Department of Transportation (Caltrans)

2022 California State Scenic Highway Scenic Map. <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca>. Accessed August 8.

Agriculture and Forest Resources

California Department of Conservation

2018 California Important Farmland Finder. <https://maps.conservation.ca.gov/dlrp/ciff/>.

Air Quality

Bay Area Air Quality Management District

2017 California Environmental Quality Act Air Quality Guidelines. May.

Office of Environmental Health Hazard Assessment (OEHHA)

- 2015 Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments (Guidance Manual), February.

Sacramento Metropolitan Air Quality Management District (SMAQMD)

- 2022 Road Construction Emissions Model, Version 9.0.1.

South Coast Air Quality Management District (SCAQMD)

- 1993 SCAQMD CEQA Air Handbook. November.
- 2008 Final Localized Significance Threshold Methodology. July.
- 2015 SCAQMD Air Quality Significance Thresholds. Updated March 2015.

Biological Resources

Riverside, County of

- 2003 Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Prepared by Dudek and Associates. Approved June 17. https://www.wrc-rca.org/Permit_Docs/MSHCP/MSHCP-Volume%201.pdf.

Geology and Soils

Albert A. Webb Associates

- 2022 Los Alamos Hills Water Facilities Feasibility Report. September 29.

Converse Consultants

- 2022 Geotechnical Investigation Report EMWD Los Alamos Hills Pipeline Project, City of Murrieta, Riverside County, California. Converse Project No. 22-81-144-02. November 28.

Murrieta, City of

- 2010 General Plan Update Existing Conditions Background Report. January. <https://www.murrietaca.gov/DocumentCenter/View/736/Existing-Conditions-Background-Report-PDF>.

Greenhouse Gas Emissions

South Coast Air Quality Management District (SCAQMD)

- 2008 Interim CEQA GHG Significance Thresholds for Stationary Sources, Rules, and Plans.
- 2009 Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group 14. <http://www.aqmd.gov/ceqa/handbook/GHG/2009/nov19mtg/ghgmtg14.pdf>.
- 2010 Greenhouse Gas CEQA Significance Thresholds Stakeholder Working Group 15. September 28.

Hazards and Hazardous Materials

Department of Toxic Substances Control

- 2022 DTSC's Hazardous Waste and Substances Site List – Site Cleanup (Cortese List).
<https://dtsc.ca.gov/dtscs-cortese-list/>.

Murrieta, City of

- 2011 Murrieta General Plan Update 2035 Final Environmental Impact Report, Section 5.17 Fire Protection, exhibit 5.17-1. <https://www.murrietaca.gov/DocumentCenter/View/762/05-17--Fire-Protection-PDF>.

Hydrology and Water Quality

- 2011 Murrieta General Plan Update 2035 Final Environmental Impact Report, Section 5.13 Hydrology, Drainage, and Water Quality, exhibit 5.13-2, Flood Hazards.
<https://www.murrietaca.gov/DocumentCenter/View/758/05-13---Hydrology-Drainage-and-Water-Quality-PDF>

Mineral Resources

Murrieta, City of

- 2011 Murrieta General Plan Update. Exhibit 8-1 of the Conservation Element.
<https://www.murrietaca.gov/DocumentCenter/View/4362/08---Conservation-Elementpdf>.

Noise

California Department of Transportation (Caltrans)

- 2013 Technical Noise Supplement. November.

Federal Highway Administration (FHWA)

- 2006 Roadway Construction Noise Model User's Guide. FHWA-HEP-05-054, SOT-VNTSC-FHWA-05-01. Final Report. January.

Federal Transit Administration (FTA)

- 2006 Transit Noise and Vibration Impact Assessment. Washington, DC. May.

Riverside County Airport Land Use Commission (RCALUC)

- 2004 Riverside County Airport Land Use Compatibility Plan. Background Data Volume 2 West County Airports. October 2004.

Population and Housing

Albert A. Webb Associates

- 2022 Los Alamos Hills Water Facilities Feasibility Report. September 29.

Utilities and Service Systems

Albert A. Webb Associates

- 2022 Los Alamos Hills Water Facilities Feasibility Report. September 29.

California Department of Resources Recycling and Recovery (CalRecycle)

- 2020 Solid Waste Information System. <https://www2.calrecycle.ca.gov/swfacilities/Directory/>.

APPENDICES

APPENDIX A

Air Quality Calculations

Los Alamos Hills Water Facilities
Calculation Details

Pipeline Length:

10,685 feet
5,280 feet/mile
2.0 miles

Project Area:

5 feet wide
53,425 square feet
43,560 square feet/acre
1.2 acres

Asphalt Export:

5,275 feet paved
5 feet wide
0.25 feet deep (3 inch asphalt depth)
6,593.75 cubic feet
27 cubic feet/cubic yard
244.21 cubic yards
20 cubic yard truck capacity
13 hauling trips (rounded up)
0.25 month grubbing/land clearing phase
22 work days/month
5.5 days
45 cubic yards/day (rounded up)

Soil Export:

10,685 feet long
5 feet wide
10.00 feet deep
534,250 cubic feet
27 cubic feet/cubic yard
19,787 cubic yards
20 cubic yard truck capacity
990 hauling trips (rounded up)
2.25 month grading/excavation phase
22 work days/month
49.5 days
400 cubic yards/day (rounded up)

Road Construction Emissions Model, Version 9.0.1

Daily Emission Estimates for -> Los Alamos Hills Water Facilities																																																							
Project Phases (Pounds)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	Total PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	SOx (lbs/day)	CO2 (lbs/day)	CH4 (lbs/day)	N2O (lbs/day)	CO2e (lbs/day)																																									
Grubbing/Land Clearing	2.93	31.00	23.83	3.35	1.17	2.18	1.54	1.09	0.45	0.06	6,190.50	1.01	0.13	6,254.15																																									
Grading/Excavation	2.96	31.45	27.35	3.47	1.29	2.18	1.60	1.14	0.45	0.08	8,118.76	1.01	0.43	8,272.78																																									
Drainage/Utilities/Sub-Grade	2.93	30.92	23.21	3.33	1.15	2.18	1.53	1.08	0.45	0.06	5,850.22	1.01	0.08	5,897.92																																									
Paving	0.48	5.01	3.40	0.19	0.19	0.00	0.15	0.15	0.00	0.01	935.61	0.17	0.01	943.80																																									
Maximum (pounds/day)	2.96	31.45	27.35	3.47	1.29	2.18	1.60	1.14	0.45	0.08	8,118.76	1.01	0.43	8,272.78																																									
Total (tons/construction project)	0.13	1.43	1.16	0.15	0.06	0.10	0.07	0.05	0.02	0.00	324.78	0.05	0.01	329.65																																									
Notes: Project Start Year -> 2023																																																							
Project Length (months) -> 5																																																							
Total Project Area (acres) -> 1																																																							
Maximum Area Disturbed/Day (acres) -> 0																																																							
Water Truck Used? -> Yes																																																							
<table><tr><td colspan="2">Total Material Imported/Exported Volume (yd³/day)</td><td colspan="4">Daily VMT (miles/day)</td></tr><tr><td>Phase</td><td>Soil</td><td>Asphalt</td><td>Soil Hauling</td><td>Asphalt Hauling</td><td>Worker Commute</td><td>Water Truck</td></tr><tr><td>Grubbing/Land Clearing</td><td>0</td><td>45</td><td>0</td><td>90</td><td>400</td><td>40</td></tr><tr><td>Grading/Excavation</td><td>400</td><td>0</td><td>600</td><td>0</td><td>400</td><td>40</td></tr><tr><td>Drainage/Utilities/Sub-Grade</td><td>0</td><td>0</td><td>0</td><td>0</td><td>400</td><td>40</td></tr><tr><td>Paving</td><td>0</td><td>0</td><td>0</td><td>0</td><td>400</td><td>0</td></tr></table>															Total Material Imported/Exported Volume (yd³/day)		Daily VMT (miles/day)				Phase	Soil	Asphalt	Soil Hauling	Asphalt Hauling	Worker Commute	Water Truck	Grubbing/Land Clearing	0	45	0	90	400	40	Grading/Excavation	400	0	600	0	400	40	Drainage/Utilities/Sub-Grade	0	0	0	0	400	40	Paving	0	0	0	0	400	0
Total Material Imported/Exported Volume (yd³/day)		Daily VMT (miles/day)																																																					
Phase	Soil	Asphalt	Soil Hauling	Asphalt Hauling	Worker Commute	Water Truck																																																	
Grubbing/Land Clearing	0	45	0	90	400	40																																																	
Grading/Excavation	400	0	600	0	400	40																																																	
Drainage/Utilities/Sub-Grade	0	0	0	0	400	40																																																	
Paving	0	0	0	0	400	0																																																	
PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.																																																							
Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.																																																							
CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.																																																							
Total Emission Estimates by Phase for -> Los Alamos Hills Water Facilities																																																							
Project Phases (Tons for all except CO2e. Metric tonnes for CO2e)	ROG (tons/phase)	CO (tons/phase)	NOx (tons/phase)	Total PM10 (tons/phase)	Exhaust PM10 (tons/phase)	Fugitive Dust PM10 (tons/phase)	Total PM2.5 (tons/phase)	Exhaust PM2.5 (tons/phase)	Fugitive Dust PM2.5 (tons/phase)	SOx (tons/phase)	CO2 (tons/phase)	CH4 (tons/phase)	N2O (tons/phase)	CO2e (MT/phase)																																									
Grubbing/Land Clearing	0.01	0.09	0.07	0.01	0.00	0.01	0.00	0.00	0.00	0.00	17.02	0.00	0.00	15.60																																									
Grading/Excavation	0.07	0.78	0.68	0.09	0.03	0.05	0.04	0.03	0.01	0.00	200.94	0.02	0.01	185.75																																									
Drainage/Utilities/Sub-Grade	0.05	0.51	0.38	0.05	0.02	0.04	0.03	0.02	0.01	0.00	96.53	0.02	0.00	88.28																																									
Paving	0.01	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.29	0.00	0.00	9.42																																									
Maximum (tons/phase)	0.07	0.78	0.68	0.09	0.03	0.05	0.04	0.03	0.01	0.00	200.94	0.02	0.01	185.75																																									
Total (tons/construction project)	0.13	1.43	1.16	0.15	0.06	0.10	0.07	0.05	0.02	0.00	324.78	0.05	0.01	299.05																																									
PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.																																																							
Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.																																																							
CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.																																																							
The CO2e emissions are reported as metric tons per phase.																																																							

1/9/2023

The remaining sections of this sheet contain areas that require modification when 'Other Project Type' is selected.

Note: The program's estimates of construction period phase length can be overridden in cells D50 through D53, and F50 through F53.

Construction Periods	User Override of Construction Months	Program Calculated Months	User Override of Phase Starting Date	Program Default Phase Starting Date
Grubbing/Land Clearing	0.25	0.50		1/1/2023
Grading/Excavation	2.25	2.25		1/9/2023
Drainage/Utilities/Sub-Grade	1.50	1.50		3/19/2023
Paving	1.00	0.75		5/4/2023
Totals (Months)		5		

Note: Soil Hauling emission default values can be overridden in cells D61 through D64, and F61 through F64.

Soil Hauling Emissions	User Override of Miles/Round Trip	Program Estimate of Miles/Round Trip	User Override of Truck Round Trips/Day	Default Values Round Trips/Day	Calculated Daily VMT
User Input					
Miles/round trip: Grubbing/Land Clearing	30.00			0	0.00
Miles/round trip: Grading/Excavation	30.00			20	600.00
Miles/round trip: Drainage/Utilities/Sub-Grade	30.00			0	0.00
Miles/round trip: Paving	30.00			0	0.00

Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36
Grading/Excavation (grams/mile)	0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36
Draining/Utilities/Sub-Grade (grams/mile)	0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36
Paving (grams/mile)	0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36
Grubbing/Land Clearing (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading/Excavation (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Draining/Utilities/Sub-Grade (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling Emissions	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Pounds per day - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Grading/Excavation	0.04	0.54	4.14	0.15	0.06	0.02	2,268.54	0.00	0.36	2,374.85
Tons per const. Period - Grading/Excavation	0.00	0.01	0.10	0.00	0.00	0.00	56.15	0.00	0.01	58.78
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons per construction project	0.00	0.01	0.10	0.00	0.00	0.00	56.15	0.00	0.01	58.78

Note: Asphalt Hauling emission default values can be overridden in cells D91 through D94, and F91 through F94.

Asphalt Hauling Emissions		User Override of Miles/Round Trip	Program Estimate of Miles/Round Trip	User Override of Truck Round Trips/Day	Default Values Round Trips/Day	Calculated Daily VMT
User Input						
Miles/round trip: Grubbing/Land Clearing	30.00			3	90.00	
Miles/round trip: Grading/Excavation	30.00			0	0.00	
Miles/round trip: Drainage/Utilities/Sub-Grade	30.00			0	0.00	
Miles/round trip: Paving	30.00			0	0.00	

Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36
Grading/Excavation (grams/mile)	0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36
Draining/Utilities/Sub-Grade (grams/mile)	0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36
Paving (grams/mile)	0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36
Grubbing/Land Clearing (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading/Excavation (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Draining/Utilities/Sub-Grade (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Emissions	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Pounds per day - Grubbing/Land Clearing	0.01	0.08	0.62	0.02	0.01	0.00	340.28	0.00	0.05	356.23
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.94	0.00	0.00	0.98
Pounds per day - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons per construction project	0.00	0.00	0.00	0.00	0.00	0.00	0.94	0.00	0.00	0.98

Note: Worker commute default values can be overridden in cells D121 through D126.

Worker Commute Emissions		User Override of Worker Commute Default Values		Default Values									
User Input		20		Calculated	Calculated								
Miles/ one-way trip		2		Daily Trips	Daily VMT								
One-way trips/day													
No. of employees: Grubbing/Land Clearing		10		20	400.00								
No. of employees: Grading/Excavation		10		20	400.00								
No. of employees: Drainage/Utilities/Sub-Grade		10		20	400.00								
No. of employees: Paving		10		20	400.00								
Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e			
Grubbing/Land Clearing (grams/mile)	0.02	0.91	0.07	0.05	0.02	0.00	317.66	0.00	0.01	319.68			
Grading/Excavation (grams/mile)	0.02	0.91	0.07	0.05	0.02	0.00	317.66	0.00	0.01	319.68			
Draining/Utilities/Sub-Grade (grams/mile)	0.02	0.91	0.07	0.05	0.02	0.00	317.66	0.00	0.01	319.68			
Paving (grams/mile)	0.02	0.91	0.07	0.05	0.02	0.00	317.66	0.00	0.01	319.68			
Grubbing/Land Clearing (grams/trip)	1.04	2.75	0.29	0.00	0.00	0.00	68.26	0.07	0.03	79.50			
Grading/Excavation (grams/trip)	1.04	2.75	0.29	0.00	0.00	0.00	68.26	0.07	0.03	79.50			
Draining/Utilities/Sub-Grade (grams/trip)	1.04	2.75	0.29	0.00	0.00	0.00	68.26	0.07	0.03	79.50			
Paving (grams/trip)	1.04	2.75	0.29	0.00	0.00	0.00	68.26	0.07	0.03	79.50			
Emissions	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e			
Pounds per day - Grubbing/Land Clearing	0.06	0.93	0.08	0.04	0.02	0.00	283.14	0.01	0.01	285.42			
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.78	0.00	0.00	0.78			
Pounds per day - Grading/Excavation	0.06	0.93	0.08	0.04	0.02	0.00	283.14	0.01	0.01	285.42			
Tons per const. Period - Grading/Excavation	0.00	0.02	0.00	0.00	0.00	0.00	7.01	0.00	0.00	7.06			
Pounds per day - Drainage/Utilities/Sub-Grade	0.06	0.93	0.08	0.04	0.02	0.00	283.14	0.01	0.01	285.42			
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.02	0.00	0.00	0.00	0.00	4.67	0.00	0.00	4.71			
Pounds per day - Paving	0.06	0.93	0.08	0.04	0.02	0.00	283.14	0.01	0.01	285.42			
Tons per const. Period - Paving	0.00	0.01	0.00	0.00	0.00	0.00	3.11	0.00	0.00	3.14			
Total tons per construction project	0.00	0.05	0.00	0.00	0.00	0.00	15.57	0.00	0.00	15.70			

Note: Water Truck default values can be overridden in cells D153 through D156, I153 through I156, and F153 through F156.

Water Truck Emissions		User Override of Default # Water Trucks		Program Estimate of Number of Water Trucks		User Override of Truck Round Trips/Vehicle/Day		Default Values Round Trips/Vehicle/Day		Calculated Trips/day		User Override of Miles/Round Trip		Default Values Miles/Round Trip		Calculated Daily VMT	
User Input																	
Grubbing/Land Clearing - Exhaust		1			5.00							8.00				40.00	
Grading/Excavation - Exhaust		1			5.00							8.00				40.00	
Drainage/Utilities/Subgrade		1			5.00							8.00				40.00	
Paving																0.00	
Emission Rates		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e						
Grubbing/Land Clearing (grams/mile)		0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36						
Grading/Excavation (grams/mile)		0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36						
Draining/Utilities/Sub-Grade (grams/mile)		0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36						
Paving (grams/mile)		0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36						
Grubbing/Land Clearing (grams/trip)		0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Grading/Excavation (grams/trip)		0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Draining/Utilities/Sub-Grade (grams/trip)		0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Paving (grams/trip)		0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Emissions		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e						
Pounds per day - Grubbing/Land Clearing		0.00	0.04	0.31	0.01	0.00	0.00	151.24	0.00	0.02	158.32						
Tons per const. Period - Grubbing/Land Clearing		0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.44						
Pounds per day - Grading/Excavation		0.00	0.04	0.31	0.01	0.00	0.00	151.24	0.00	0.02	158.32						
Tons per const. Period - Grading/Excavation		0.00	0.00	0.01	0.00	0.00	0.00	3.74	0.00	0.00	3.92						
Pounds per day - Drainage/Utilities/Sub-Grade		0.00	0.04	0.31	0.01	0.00	0.00	151.24	0.00	0.02	158.32						
Tons per const. Period - Drainage/Utilities/Sub-Grade		0.00	0.00	0.01	0.00	0.00	0.00	2.50	0.00	0.00	2.61						
Pounds per day - Paving		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Tons per const. Period - Paving		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Total tons per construction project		0.00	0.00	0.01	0.00	0.00	0.00	6.65	0.00	0.00	6.97						

Note: Fugitive dust default values can be overridden in cells D183 through D185.

Fugitive Dust		User Override of Max Acreage Disturbed/Day		Default Maximum Acreage/Day		PM10 pounds/day	PM10 tons/per period	PM2.5 pounds/day	PM2.5 tons/per period
Fugitive Dust - Grubbing/Land Clearing						2.18	0.01	0.45	0.00
Fugitive Dust - Grading/Excavation						2.18	0.05	0.45	0.01
Fugitive Dust - Drainage/Utilities/Subgrade						2.18	0.04	0.45	0.01

Values in cells D195 through D228, D246 through D279, D297 through D330, and D348 through D381 are required when 'Other Project Type' is selected.

Off-Road Equipment Emissions														
Grubbing/Land Clearing	Default		Mitigation Option		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
	Number of Vehicles	Override of	Default											
	Override of Default Number of Vehicles	Program-estimate	Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Equipment Tier										
			Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.00			Model Default Tier	Air Compressors	0.51	4.83	3.47	0.19	0.19	0.01	750.53	0.04	0.01	753.33
			Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00			Model Default Tier	Concrete/Industrial Saws	0.33	3.66	2.58	0.13	0.13	0.01	592.67	0.03	0.00	594.72
			Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00			Model Default Tier	Excavators	0.19	3.26	1.55	0.08	0.07	0.01	500.11	0.16	0.00	505.50
			Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.00			Model Default Tier	Generator Sets	0.61	7.34	5.43	0.26	0.26	0.01	1,246.07	0.05	0.01	1,250.23
			Model Default Tier	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00			Model Default Tier	Off-Highway Trucks	0.50	3.29	3.57	0.13	0.12	0.01	1,279.89	0.41	0.01	1,293.67
			Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other General Industrial Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.00			Model Default Tier	Signal Boards	0.23	1.20	1.44	0.06	0.06	0.00	197.25	0.02	0.00	198.26
			Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00			Model Default Tier	Sweepers/Scrubbers	0.18	1.92	1.71	0.11	0.10	0.00	246.18	0.08	0.00	248.83
2.00			Model Default Tier	Tractors/Loaders/Backhoes	0.30	4.46	3.07	0.15	0.14	0.01	603.15	0.20	0.01	609.64
			Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User-Defined Off-road Equipment														
If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab					ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
	Number of Vehicles		Equipment Tier	Type	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
	0.00		N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00		N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00		N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00		N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00		N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00		N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00		N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00		N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Grubbing/Land Clearing		pounds per day	2.86	29.96	22.82	1.09	1.06	0.06	5,415.84	1.00	0.04	5,454.18
		Grubbing/Land Clearing		tons per phase	0.01	0.08	0.06	0.00	0.00	0.00	14.89	0.00	0.00	15.00

1/9/2023

Data Entry Worksheet

Drainage/Utilities/Subgrade				Default	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Default Number of Vehicles		Override of	Mitigation Option	Default										
Override of Default Number of Vehicles		Program-estimate	Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Equipment Tier	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
				Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.00				Model Default Tier	Air Compressors	0.51	4.83	3.47	0.19	0.19	0.01	750.53	0.04	753.33
				Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00				Model Default Tier	Concrete/Industrial Saws	0.33	3.66	2.58	0.13	0.13	0.01	592.67	0.03	594.72
				Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00				Model Default Tier	Excavators	0.19	3.26	1.55	0.08	0.07	0.01	500.11	0.16	505.50
				Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.00				Model Default Tier	Generator Sets	0.61	7.34	5.43	0.26	0.26	0.01	1,246.07	0.05	1,250.23
				Model Default Tier	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00				Model Default Tier	Off-Highway Trucks	0.50	3.29	3.57	0.13	0.12	0.01	1,279.89	0.41	1,293.67
				Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Other General Industrial Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.00				Model Default Tier	Signal Boards	0.23	1.20	1.44	0.06	0.06	0.00	197.25	0.02	198.26
				Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00				Model Default Tier	Sweepers/Scrubbers	0.18	1.92	1.71	0.11	0.10	0.00	246.18	0.08	248.83
2.00				Model Default Tier	Tractors/Loaders/Backhoes	0.30	4.46	3.07	0.15	0.14	0.01	603.15	0.20	609.64
				Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User-Defined Off-road Equipment				If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab										
Number of Vehicles		Equipment Tier		Type	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
0.00			N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00			N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00			N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00			N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00			N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00			N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00			N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00			N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Drainage/Utilities/Sub-Grade		pounds per day	2.86	29.96	22.82	1.09	1.06	0.06	5,415.84	1.00	0.04	5,454.18
		Drainage/Utilities/Sub-Grade		tons per phase	0.05	0.49	0.38	0.02	0.02	0.00	89.36	0.02	0.00	89.99

Paving	Default		Mitigation Option		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e	
	Number of Vehicles	Override of	Default												
Override of Default Number of Vehicles		Program-estimate	Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)		Equipment Tier	Type	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	
					Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
					Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
					Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
					Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
					Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
					Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
					Model Default Tier	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
					Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
					Model Default Tier	Excavators	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
					Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
					Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
					Model Default Tier	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
					Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
					Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
					Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
					Model Default Tier	Other General Industrial Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
					Model Default Tier	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1.00					Model Default Tier	Pavers	0.19	2.88	1.88	0.09	0.08	0.00	455.22	0.15	460.13
					Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
					Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
					Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
					Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
					Model Default Tier	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
					Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
					Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
					Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
					Model Default Tier	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.00					Model Default Tier	Signal Boards	0.23	1.20	1.44	0.06	0.06	0.00	197.25	0.02	198.26
					Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
					Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
					Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
					Model Default Tier	Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
					Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
					Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User-Defined Off-road Equipment															
Number of Vehicles		If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab				ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
		Equipment Tier		Type		pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
0.00		N/A		0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A		0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A		0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A		0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A		0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A		0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A		0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A		0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
						0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Paving				pounds per day	0.42	4.09	3.32	0.14	0.14	0.01	652.47	0.17	658.38
		Paving				tons per phase	0.00	0.04	0.04	0.00	0.00	0.00	7.18	0.00	7.24
Total Emissions all Phases (tons per construction period) =>						0.13	1.36	1.04	0.05	0.05	0.00	245.47	0.05	0.00	247.23

Equipment default values for horsepower and hours/day can be overridden in cells D403 through D436 and F403 through F436.

Equipment	User Override of Horsepower	Default Values Horsepower	User Override of Hours/day	Default Values Hours/day
Aerial Lifts		63		8
Air Compressors		78		8
Bore/Drill Rigs		221		8
Cement and Mortar Mixers		9		8
Concrete/Industrial Saws		81		8
Cranes		231		8
Crawler Tractors		212		8
Crushing/Proc. Equipment		85		8
Excavators		158		8
Forklifts		89		8
Generator Sets		84		8
Graders		187		8
Off-Highway Tractors		124		8
Off-Highway Trucks		402		8
Other Construction Equipment		172		8
Other General Industrial Equipment		88		8
Other Material Handling Equipment		168		8
Pavers		130		8
Paving Equipment		132		8
Plate Compactors		8		8
Pressure Washers		13		8
Pumps		84		8
Rollers		80		8
Rough Terrain Forklifts		100		8
Rubber Tired Dozers		247		8
Rubber Tired Loaders		203		8
Scrapers		367		8
Signal Boards		6		8
Skid Steer Loaders		65		8
Surfacing Equipment		263		8
Sweepers/Scrubbers		64		8
Tractors/Loaders/Backhoes		97		8
Trenchers		78		8
Welders		46		8

END OF DATA ENTRY SHEET

APPENDIX B

Biological Resources Survey Report

December 30, 2022

Mr. Joseph Broadhead
Principal Water Resource Specialist
Eastern Municipal Water District
2270 Trumble Road
Perris, CA 92572

Reference: Biological Resources Survey for the Los Alamos Hills Water System Project (RECON Number 9878-9)

Dear Mr. Broadhead:

This letter details the results of a biological resources survey conducted for the Los Alamos Hills Water System Project (project). This biological constraints letter has been prepared to provide necessary information to the Eastern Municipal Water District (District) for environmental analysis of the project.

1.0 Introduction

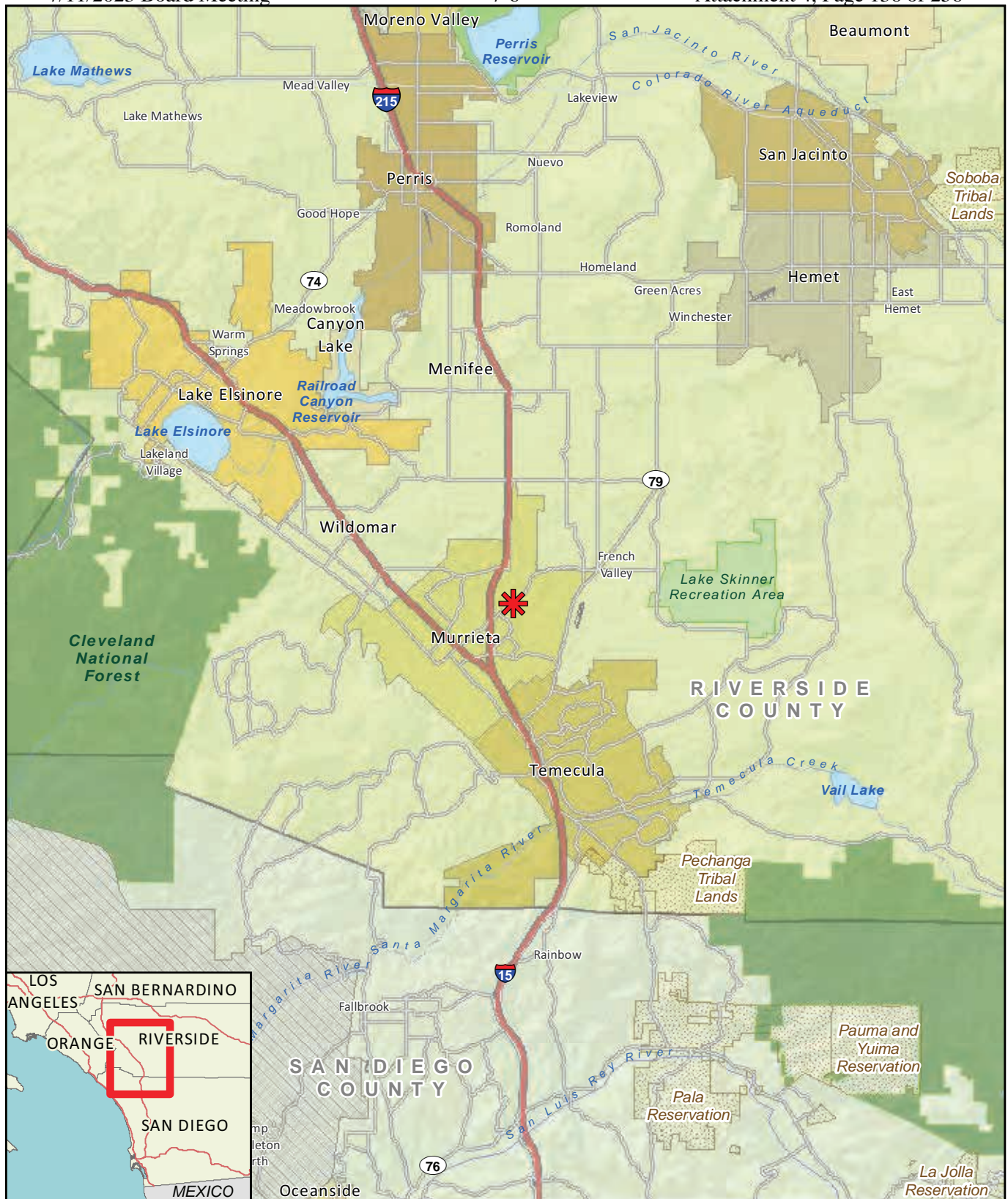
1.1 Project Location

The project is located in the city of Murrieta, California (Figures 1 through 3). Regional access to the project site is provided via Interstate 215, located approximately 0.45 mile to the east, and local access is provided via Interstate 215 south to east on Los Alamos Road. The project site is in the U.S. Geological Survey (USGS) Murrieta quadrangle, Township 7 South, Range 3 West (USGS 1979; see Figure 2). The project site is comprised of paved and unpaved ground, either bare or with existing and disturbed vegetation, within existing easements and rights-of-way along Los Alamos Road, Mason Avenue, Mary Place, Celia Road, and Ruth Ellen Way. The project site is generally bounded by a school and undeveloped lots to the north, residential development and open space to the south, residential development to the west, and undeveloped lots to the east.

1.2 Project Description

The project consists of the installation of a pipeline loop within existing city streets with diameters ranging from 8 to 12 inches. The total distance covered by the proposed Los Alamos Hills Water System loop pipeline is approximately 10,685 linear feet or approximately 2 miles. The following are the pipeline segments that make up the project:

- Los Alamos Road 12-inch pipe, Celia Road to Mason Avenue (approximately 3,350 linear feet)
- Celia Road 8-inch pipe, Mary Place to Mason Road (approximately 2,000 linear feet)
- Mason Road 8-inch pipe, Mary Place to Los Alamos Road (approximately 1,260 linear feet)
- Mary Place 8-inch pipe, Celia Road to Mason Avenue (approximately 3,400 linear feet)
- Ruth Ellen Way 12-inch pipe, Los Alamos Road to the northern property line of Rail Ranch Elementary School (approximately 675 linear feet)



0 5 Miles



✱ Project Site

FIGURE 1
Regional Location



0 Feet 600



Project Site

FIGURE 3
Project Site on Aerial Photograph

All pipeline segments and work areas are proposed within existing paved and unpaved roadways and roadsides, therefore avoiding direct impacts to sensitive biological resources. However, there is native upland and wetland vegetation adjacent to these roadways that may support sensitive species subject to indirect impacts of construction activities.

1.3 Regional Context

The project is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) area (County of Riverside 2003; Figure 4). The MSHCP was designed to conserve approximately 500,000 acres of habitat, including 347,000 acres of existing conservation on public and quasi-public land and 153,000 acres of conservation on privately owned lands. Areas of privately owned lands considered for potential conservation are identified as Criteria Cells, which are intended to facilitate assessment of conservation potential under the MSHCP. In this way, the MSHCP directs future conservation efforts to occur within these Criteria Cells.

A portion of the project site is located within Criteria Cells in Subunit 5, French Valley/Lower Sedco Hills, identified by the MSHCP. The southernmost portion of Mary Place is located within Cell Group D of Cell 5977, the central and northern portions of Mary Place and the southern portion of Mason Avenue are located within Cell Group E of Cell 5873, and the northern portion of Mason Avenue is located within Cell Group F of Cell 5783. However, the project site is restricted to existing developed roadways within the criteria cells and does not contain biological resources meeting the conservation criteria presented in Table 3-16 of the MSHCP. The portions of the project site along Los Alamos Road, Ruth Ellen Way, and Celia Road are not located within a Cell Group. Additionally, the project site is located within the Narrow Endemic Plant Species Survey Area 4, the Criteria Area Species Survey Area, and the western burrowing owl (*Athene cunicularia hypugaea*) survey area identified in the MSHCP (County of Riverside 2003).

2.0 Methods

RECON Environmental, Inc. (RECON) biologists Cailin Lyons and Chelsea Poley conducted a general biological survey within the project site and surrounding 15-foot buffer (herein referred to as the survey area), on September 27, 2022. During the general biological survey, RECON biologists mapped vegetation communities, recorded vegetation and habitat characteristics, and noted wildlife and plant species apparent at the time of the survey. Vegetation communities were mapped in the field on a digital map of the survey area. Plants were visually identified in the field and wildlife species were identified visually with the aid of binoculars or based on identification of calls, scat, tracks, or burrows. Private property was surveyed with binoculars from public rights-of-way.

3.0 Background Research

Prior to conducting field surveys, RECON conducted a search of existing biological data for the project site, including a review of biological databases for sensitive plant and animal species reported within one mile of the project site, and a review of the project site's physical characteristics (e.g., location, elevation, soils/substrate, topography). Databases consulted included the California Natural Diversity Database (California Department of Fish and Wildlife [CDFW] 2022) and the U.S. Fish and Wildlife Service (USFWS) All Species Occurrences Database (USFWS 2022a). In addition, a review of the National Wetlands Inventory was conducted to identify any potential wetlands or water resources present in the vicinity of the project site (USFWS 2022b).

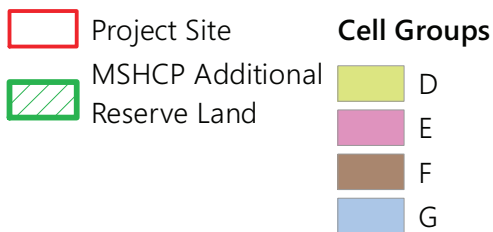
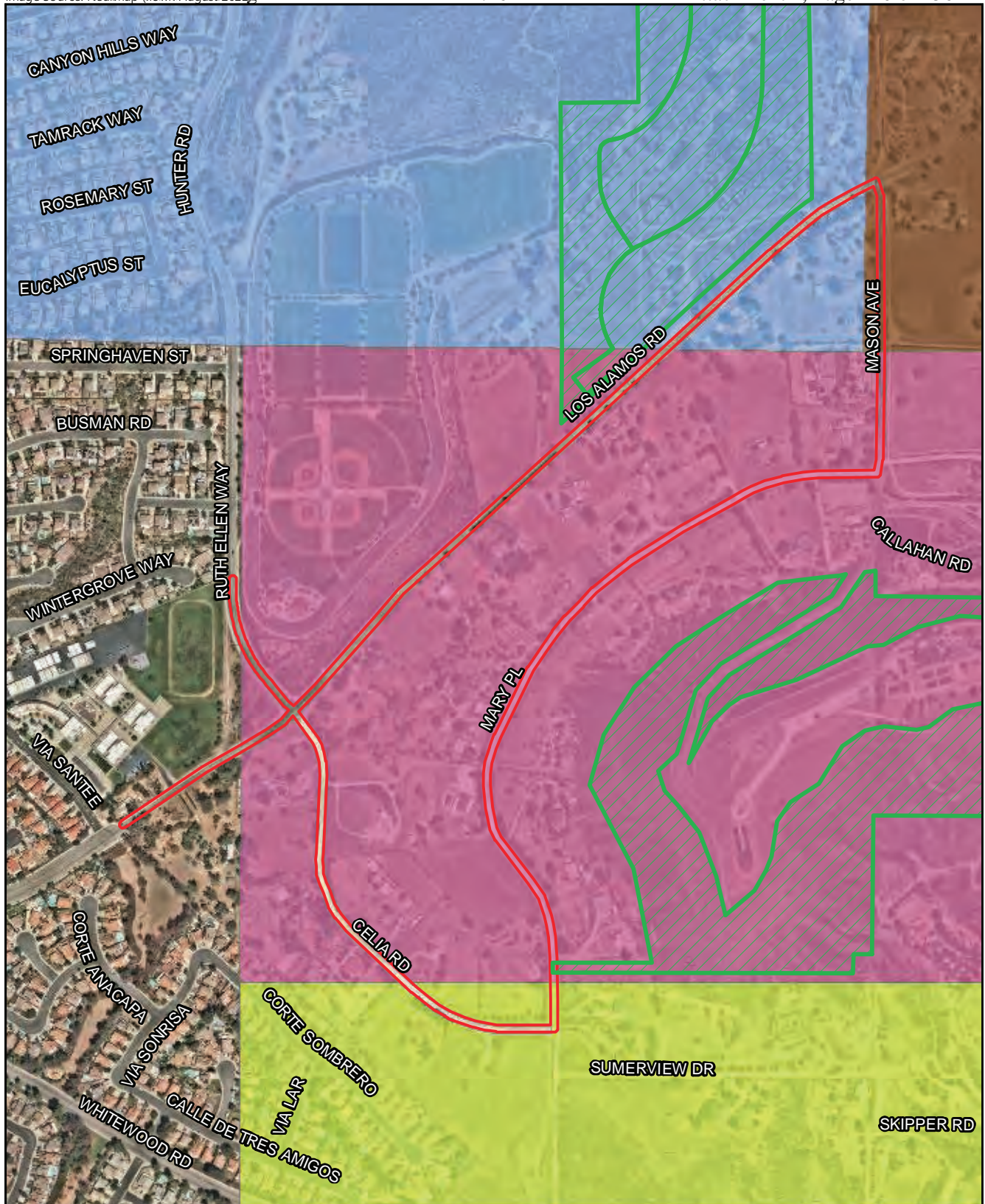


FIGURE 4
Project in Relation to MSHCP Area

Based on the database search, there are a number of sensitive species known within one mile of the project site. The project site consists entirely of urban/developed land and is primarily surrounded by development with small segments of scrub and woodland habitats. Thus, the potential for many species to occur is evaluated based on the habitat within the project site, as well as within land adjacent to the project site. Three sensitive wildlife species, coastal California gnatcatcher (*Poliophtila californica californica*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), and Bell's sage sparrow (*Artemisiospiza [=Amphispiza] belli belli*) were determined to have a low to moderate potential to occur adjacent to the project site. Additional plant and wildlife species that were evaluated based on the database review but are not expected or have low potential to occur based on the records search and habitat conditions are discussed in Attachments 1 and 2, respectively.

4.0 Existing Biological Resources

4.1 Vegetation Communities

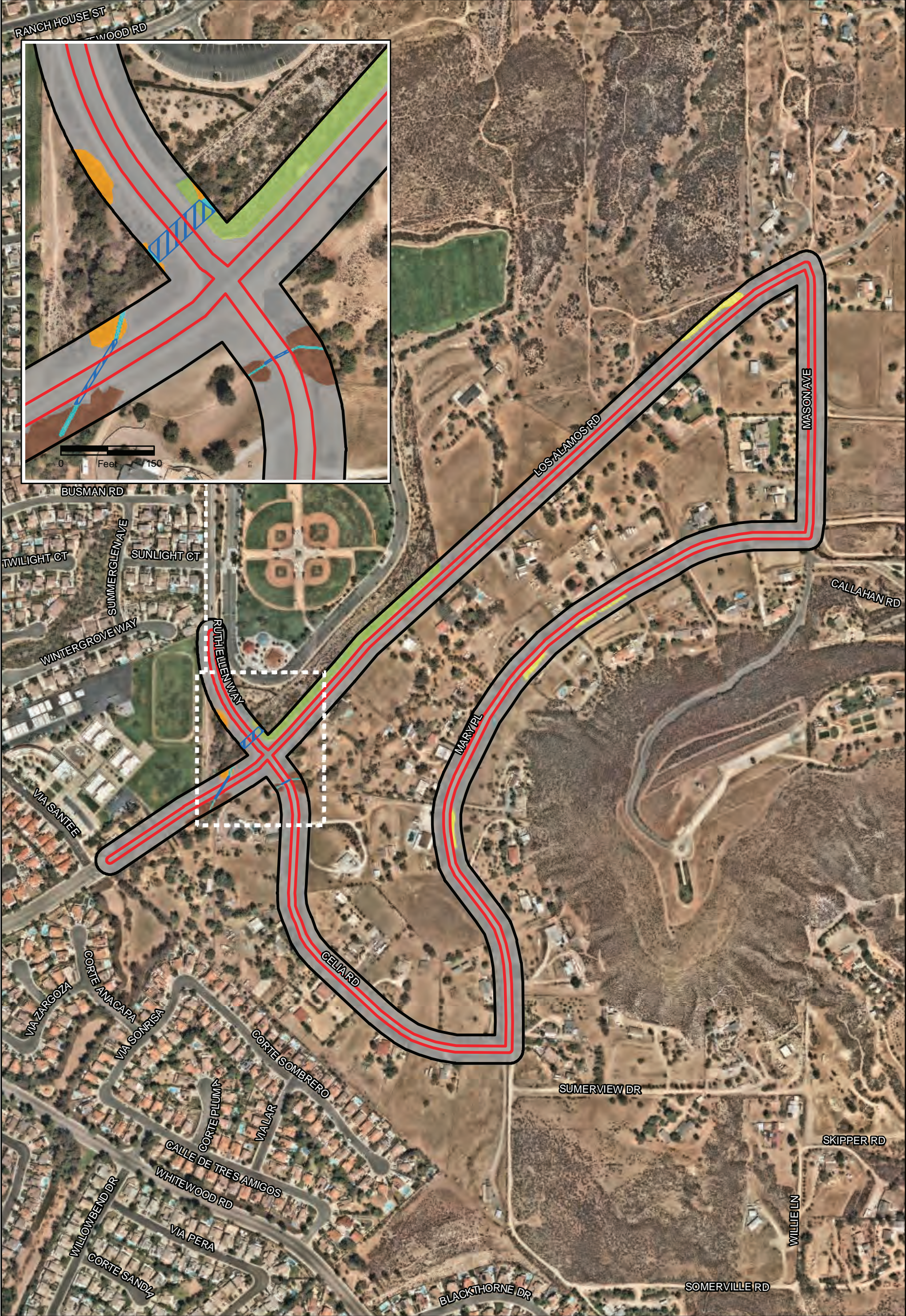
The project site supports only urban/developed. The buffer surrounding the project site supports six vegetation communities/land cover types: flat-topped buckwheat scrub, Riversidean sage scrub, southern riparian woodland, walnut woodland, non-vegetated channel, and urban/developed (Figure 5). The acreages of these vegetation communities and land cover types are listed in Table 1 and described below.

Table 1 Vegetation Communities and Land Cover Types within Survey Area (acres)		
Vegetation Communities	Project Site	Survey Area (Project Site Plus 50-foot Buffer)
Flat-topped Buckwheat Scrub	–	0.24
Riversidean Sage Scrub	–	1.02
Southern Riparian Woodland	–	0.10
Walnut Woodland	–	0.39
Non-vegetated Channel	–	0.03
Urban/developed	7.91	32.34
TOTAL	7.91	34.12

Urban/developed accounts for the entirety of the project site and the majority of the buffer surrounding the project site and occurs as various paved and unpaved roadways, private residences, and a manufactured ditch running along Los Alamos Road adjacent to the northeastern portion of the project site. Vegetation within urban/developed land consists of ornamental landscaping and a variety of non-native species, including ripgut brome (*Bromus diandrus*), Peruvian petter tree (*Schinus molle*), and gum tree (*Eucalyptus* spp.).

Non-vegetated channel occurs as culverted drainage channels traveling under Ruth Ellen Way, Los Alamos Road, and Celia Road adjacent to the intersection of Ruth Ellen Way, Los Alamos Road, and Celia Road in the western portion of the project site. No water was flowing at the time of the survey and the channels appear to support either an ephemeral or intermittent flow regime.

Flat-topped buckwheat scrub is present in small linear patches (0.24 acre) along Los Alamos Road adjacent to the northeastern portion of the project site and along Mary Place adjacent to the southern portion of the project site. This vegetation community is comprised entirely of California buckwheat (*Eriogonum fasciculatum*) occurring primarily along fence line and appears to be regularly mowed for fuel management along the roadway.



- Project Site
- Survey Area
- Culverted Non-vegetated Channel

- Vegetation Communities and Land Cover Types**
- Flat-topped Buckwheat Scrub
 - Non-vegetated Channel

- Riversidean Sage Scrub
- Southern Riparian Woodland
- Walnut Woodland
- Urban/Developed

FIGURE 5
Existing Biological Resources

Riversidean sage scrub is found with moderate vegetation cover along Los Alamos Road adjacent to the northwestern portion of the project site. The Riversidean sage scrub occurs as an isolated patch that was planted on a graded slope based on historic aerals. The Riversidean sage scrub is dominated by native scrub species such as California buckwheat, coyote brush (*Baccharis pilularis*), brittlebush (*Encelia farinosa*), and coastal goldenbush (*Isocoma menziesii*).

Southern riparian woodland is found in small, isolated segments on either side of Ruth Ellen Way along Los Alamos Road adjacent to the western portion of the project site. This vegetation community is dominated by western sycamore (*Platanus racemosa*) and contains an understory dominated by mule fat (*Baccharis salicifolia*).

Walnut woodland is found in small, isolated segments on either side of Ruth Ellen Way and along Los Alamos Road adjacent to the western portion of the project site. This vegetation community is dominated by southern California black walnut (*Juglans californica*) with an understory of mule fat.

4.2 Sensitive Plant Species

No sensitive plants were observed within or adjacent to the project site during the biological survey. Sensitive plant species known to occur within one mile of the project site, based on a database review, are presented in Attachment 1.

4.3 Sensitive Wildlife Species

No sensitive wildlife was detected within or adjacent to the project site during the biological survey. Sensitive wildlife species known to occur within one mile of the project site, based on a database review, are presented in Attachment 2.

Coastal California Gnatcatcher. Coastal California gnatcatcher is federally listed as threatened, a CDFW species of special concern, and an MSHCP covered species. This species is generally found in mature coastal sage scrub habitat consisting of low shrub and sub-shrub species. This species has low to moderate potential to occur in suitable Riversidean sage scrub habitat adjacent to the project site, outside of the project impact area. Though the Riversidean sage scrub habitat adjacent to the project site consists of appropriate vegetation structure for nesting, the Riversidean sage scrub is limited to a small, isolated patch bounded by urban/developed land and lacks connectivity to open space areas.

Southern California Rufous-crowned Sparrow. Southern California rufous-crowned sparrow is a CDFW watch list species and an MSHCP covered species. This species is primarily found in coastal sage scrub, chaparral, and grassland habitats. This species has low to moderate potential to occur in suitable Riversidean sage scrub habitat adjacent to the project site, outside of the project impact area. Though the Riversidean sage scrub habitat adjacent to the project site consists of appropriate vegetation structure for nesting, the Riversidean sage scrub is limited to a small, isolated patch bounded by urban/developed land and lacks connectivity to open space areas.

Bell's Sage Sparrow. Bell's sage sparrow is a CDFW watch list species and an MSHCP covered species. This species is primarily found in sage scrub and low chaparral habitats. There is one record of this species within one mile of the project site. This species has low to moderate potential to occur in suitable Riversidean sage scrub habitat adjacent to the project site, outside of the project impact area. Though the Riversidean sage scrub habitat adjacent to the project site consists of appropriate vegetation structure for nesting, the Riversidean sage scrub is limited to a small, isolated patch bounded by urban/developed land and lacks connectivity to open space areas.

Migratory and Nesting Birds. The majority of the project site and adjacent habitat, including the scrub habitats, woodland habitats, and the non-native Peruvian pepper trees and gum trees found within the urban/developed land, has potential to support migratory and nesting bird species. Urban-adapted species in particular have been known to nest within ornamental vegetation or the eaves of houses or openings in structures. In addition, several ground nesting species have the potential to nest within the open areas found within the urban/developed land within and adjacent to the project site.

4.4 Aquatic Resources

No potentially jurisdictional wetlands, including riparian/riverine areas or vernal pools, were observed within the project site; however, potentially jurisdictional non-wetland waters occur adjacent to the project site within the culverted drainage channels traveling under Ruth Ellen Way, Los Alamos Road, and Celia Road. The culverted drainage channels would likely be considered waters of the U.S. under U.S. Army Corps of Engineers (USACE) jurisdiction and waters of the state under Regional Water Quality Control Board (RWQCB), and CDFW jurisdiction.

4.5 Wildlife Movement Corridors and Nursery Sites

The project site is located on roadways and rights-of-way that are primarily surrounded by development and residential properties. Though habitats adjacent to the project site likely provides habitat for urban-adapted species and local wildlife movement, it is not anticipated that these habitats would constitute a significant regional corridor due to the project site's location in a developed area and lack of connectivity to off-site areas of open space. Also, the project site is unlikely to support wildlife nursery sites or large roosting or breeding colonies due to the developed nature of the project site.

4.6 MSHCP Consistency

The project site is located within the boundaries of the MSHCP (WRCRCA 2003). The MSHCP allocates responsibility for assembly and management of its Conservation Areas to local, state, and federal governments, as well as private and public entities engaged in construction that may impact MSHCP covered species. As lead agency, the District is not a participant in the MSHCP; however, due to the project's location within a Criteria Cell, the project has been evaluated for consistency with the MSHCP to demonstrate it would not prevent implementation of the plan's conservation goals and objectives as described in further detail below. The project is located in an existing developed roadway and no components of the project are within existing or proposed reserves defined by the MSHCP. Portions of the project site located on private property along Mary Place and Mason Avenue are located within existing criteria areas defined by the MSHCP. Portions of the project site are located within Cell Group D of Cell 5977, within Cell Group E of Cell 5873, and within Cell Group F of Cell 5783. Conservation described for Cell Groups D, E, and F is to contribute to the assembly of Proposed Core 2 and will focus on riparian scrub, woodland and forest habitat along Warm Springs Creek and adjacent chaparral, coastal sage scrub, and grassland habitat. The segments of the project site within Cell Groups D, E, and F are located outside of each cell group's focus area described for conservation. Furthermore, the project site is separated from the area described for conservation by Callahan Road and existing residential development to the east and Summerview Drive, Somerville Road, Willie Lane, and Skipper Drive and existing residential development to the southeast. Development of the project, which consists of a water system in a previously developed roadway, will not preclude the ability of MSHCP conservation goals to be reached in Cell Groups D, E, or F, nor is the project site located in an area that would cause indirect impacts to any conservation areas in the MSHCP. Therefore, the project is consistent with the reserve assembly goals of the MSHCP, as well as the guidelines pertaining to the urban/wildlife interface.

The presence of riparian/riverine areas and vernal pools as defined by the MSHCP was evaluated during the general biological survey conducted by RECON in 2022. No riparian areas or vernal pools occur within the project site. The project has been designed to avoid potential riverine areas associated with the culverted drainage that underlies Los Alamos Road, Celia Road, and Ruth Ellen Way. Thus, the project is consistent with the requirements for riparian/riverine areas and vernal pools contained in the MSHCP. The project also incorporates best management practices to ensure that construction-related runoff and pollutants do not enter adjacent riverine areas.

The project site is within an area designated in the MSHCP as a Narrow Endemic Plant Species Survey Area for Munz's onion (*Allium munzii*), San Diego ambrosia (*Ambrosia pumila*), many-stemmed dudleya (*Dudleya multicaulis*), spreading navarretia (*Navarretia fossalis*), California Orcutt grass (*Orcuttia californica*), and Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*). The project site is also within an area designated in the MSHCP as a Criteria Area Species Survey Area for Parish's brittlescale (*Atriplex parishii*), Davidson's saltscale (*Atriplex serenana* var. *davidsonii*), thread-leaved brodiaea (*Brodiaea filifolia*), round-leaved filaree (*California macrophylla* [= *Erodium macrophyllum*]), smooth tarplant (*Centromadia pungens* ssp. *laevis* [= *Hemizonia pungens* ssp. *laevis*]), Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*), little mouseltail (*Myosurus minimus* [= *Myosurus minimus* ssp. *apus*]), and mud nama (*Nama stenocarpum*). Suitable habitat for these species were evaluated during the general biological survey conducted by RECON in 2022 and are not expected to occur within the developed roadway associated with the project site. San Diego ambrosia and mud nama require floodplain habitats, which are absent within the project site. Many stemmed dudleya requires Altamont, Auld, Bosanko, Claypit, or Porterville clay soils, which are absent within the project site. Spreading navarretia and California Orcutt grass are vernal pool endemic plants, and no suitable vernal pool habitat occurs on-site. Wright's trichocoronis occurs only in alkali floodplains along the San Jacinto River, which is located approximately 8.45 miles northwest of the project site. Moreover, no suitable alkali floodplains are present in or adjacent to the project site. Parish's brittlescale, Davidson's saltscale, smooth tarplant, Coulter's goldfields, and little mouseltail require alkali soils and are generally found in alkali vernal pools, alkali scrub, alkali grassland, alkali playa, and alkali floodplains, which are absent from the project site. Thread-leaved brodiaea occur in mudflat, vernal pool, mesic grassland, mixed native-nonnative grassland, and alkali grassland habitat, which are absent from the project site. Munz's onion and round-leaved filaree occur in open cismontane woodland and valley and foothill grassland with friable clay soils, which are absent from the project site.

The project site also falls within an area designated by the MSHCP as a survey area for burrowing owl. Suitable habitat for this species was evaluated during the general biological survey conducted by RECON in 2022. The project site is not anticipated to support this species due to the project site's location within an existing developed roadway, and lack of suitable burrows or burrow surrogates within or adjacent to the project site.

Furthermore, the project site does not fall within the MSHCP survey areas for amphibians, mammals, or Delhi Sands flower-loving fly and is not anticipated to result in any impacts to these species due to lack of suitable habitat.

5.0 Avoidance, Minimization, and Mitigation for Project Impacts

Project impacts to urban/developed land would be less than significant and would not require mitigation. The project would not impact any sensitive vegetation communities, sensitive plant species, wildlife movement corridors, or nursery sites; therefore, no mitigation would be required. Potential direct and/or indirect impacts to sensitive wildlife species and potentially jurisdictional aquatic resources would be addressed through the following avoidance, minimization, and mitigation measures below.

5.1 Vegetation Communities and Land Cover Types

The project would result in a total of up to 7.91 acres of direct impacts to urban/developed land (Figure 6). Impacts to urban/developed land are not considered significant as this land cover type is not considered sensitive. Thus, no mitigation is required for impacts to vegetation communities as a result of the project.

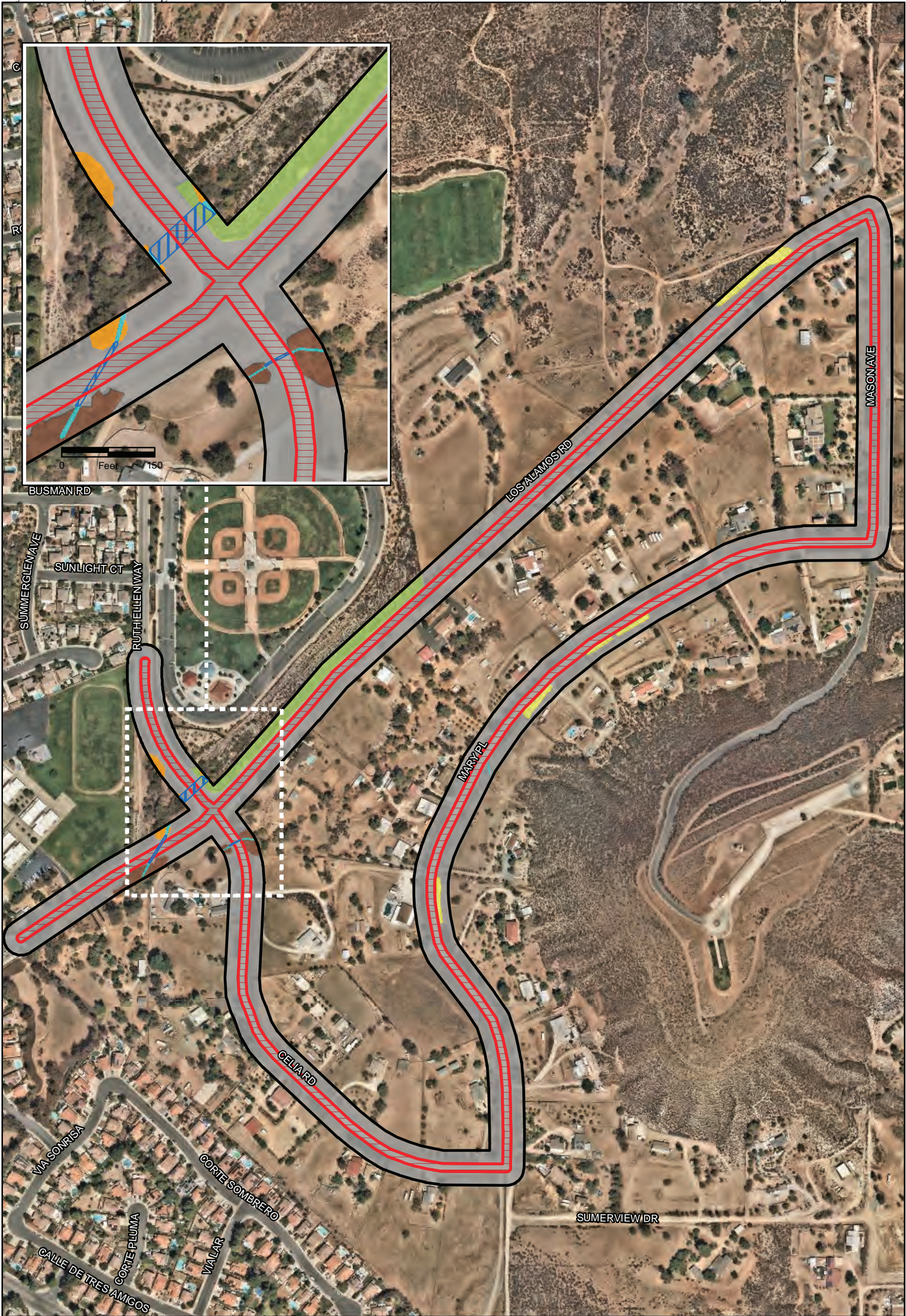
5.2 Sensitive Wildlife

Coastal California Gnatcatcher. This species has a low to moderate potential to occur adjacent to the project site. Should this species be present adjacent to the project site, direct impacts to coastal California gnatcatcher are not anticipated as the project would be limited to the developed roadway and the project would avoid removal of suitable Riversidean sage scrub habitat. However, due to the proximity of potentially suitable Riversidean sage scrub to work areas, indirect impacts as a result of construction noise during the breeding season (March 1 through August 15) could result if this species were to nest adjacent to the project site. Measures to avoid impacts to coastal California gnatcatcher are described below.

AMM-BIO-1: Coastal California Gnatcatcher

Project construction should be conducted outside the coastal California gnatcatcher breeding season, which is March 1 to August 15. If construction must take place during the coastal California gnatcatcher breeding season, a qualified biologist (possessing a valid Endangered Species Act Section 10(a)(1)(A) Recovery Permit) shall survey Riversidean sage scrub adjacent to the project site for the presence of the coastal California gnatcatcher. Surveys for coastal California gnatcatcher shall be conducted pursuant to the protocol survey guidelines established by the USFWS within the breeding season prior to the commencement of any construction. If the protocol survey concludes that no coastal California gnatcatchers are present or all work is constructed outside of the breeding season (August 16 to February 28), no mitigation measures would be necessary. If coastal California gnatcatchers are present, then the following conditions must be met:

- a. Between March 1 and August 15, no construction activities shall occur within any portion of the project site where construction activities would result in noise levels exceeding 60 A-weighted decibels [dB(A)] hourly average (or ambient, whichever is higher) at the edge of occupied coastal California gnatcatcher habitat. An analysis showing that noise generated by construction activities would not exceed 60 dB(A) hourly average at the edge of occupied habitat must be completed by a qualified acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the District at least two weeks prior to the commencement of construction activities. Prior to the commencement of construction activities during the breeding season, areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist; or
- b. At least two weeks prior to the commencement of construction activities during the breeding season, under the direction of a qualified acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities will not exceed 60 dB(A) hourly average (or ambient, whichever is higher) at the edge of habitat occupied by the coastal California gnatcatcher. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring shall be conducted at the edge of the occupied habitat area to ensure that noise levels do not exceed the noise threshold. If the noise attenuation techniques implemented are determined inadequate by the qualified acoustician or biologist, then the associated construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (August 16); or



- Project Site
- Survey Area
- Project Impacts
- Culverted Non-vegetated Channel

- Vegetation Communities and Land Cover Types**
- Flat-topped Buckwheat Scrub
 - Non-vegetated Channel

- Riversidean Sage Scrub
- Southern Riparian Woodland
- Walnut Woodland
- Urban/Developed

0 Feet 350

FIGURE 6
Impacts to Biological Resources

- c. Prior to construction during the breeding season, the District shall prepare an MSHCP Consistency Analysis for review by the Western Riverside County Regional Conservation Authority and obtain incidental take coverage for coastal California gnatcatcher via the Participating Special Entity process. The project would pay any necessary mitigation fees for impacts to 7.91 acres prior to construction.

Migratory and Nesting Birds. Direct impacts to nesting and migratory birds are not anticipated as the project is located within a developed roadway with existing vehicular traffic, and no vegetation removal would result from the project. However, indirect noise impacts may occur to migratory and nesting birds, including southern California rufous-crowned sparrow and Bell's sage sparrow, if they are nesting in the adjacent habitat should construction occur during the general avian breeding season (February 1 to September 15). These species are protected by the California Fish and Game Code Section 3503.5, and impacts to nesting individuals would need to be avoided. Measures to avoid impacts to nesting and migratory birds are described below.

AMM-BIO-2: Migratory and Nesting Birds

Construction should be conducted outside the nesting season, which is generally defined as January 15 to August 31. If construction must take place during the nesting season, a qualified biologist shall perform a pre-construction survey for nesting birds. The nesting bird survey shall occur no more than seven days prior to the start of construction. Additionally, raptors (birds of prey) are known to begin nest building in January or February. If construction is to occur between January 1 and February 15, a nesting raptor survey will be conducted within the project site, including a 500-foot buffer. If active bird nests are confirmed to be present during the pre-construction survey, a buffer zone will be established by a qualified biologist until a qualified biologist has verified that the young have fledged or the nest has otherwise become inactive.

5.3 Aquatic Resources

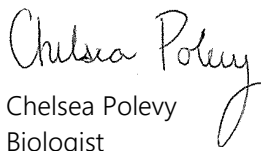
The project would avoid direct impacts to potentially jurisdictional non-wetland waters by avoiding the culverts underlying the roadways. However, the project has potential to result in indirect impacts to potential jurisdictional resources occurring adjacent to the project site. Measures to avoid indirect impacts to potential jurisdictional resources are described below.

AMM-BIO-3: Aquatic Resources

To avoid indirect impacts to potentially jurisdictional features, best management practices, such as the use of silt fences, fiber rolls, and/or gravel bags, should be implemented. No equipment maintenance or fueling should be performed within or near the non-vegetated channel where petroleum products or other pollutants from the equipment may enter this area.

If you have any questions or concerns about this project, please call me at (619) 308-9333 extension 198.

Sincerely,


Chelsea Polevy
Biologist

CAP:jg

cc: Gustavo Gomez, Eastern Municipal Water District

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ATTACHMENTS

ATTACHMENT 1

Sensitive Plant Species Observed or with the Potential to Occur

Attachment 1 Sensitive Plant Species Observed or with the Potential to Occur									
Major Plant Group	Family	Scientific Name/Common Name	Federal Status	State Status	CNPS Rare Plant Rank	Western Riverside	Habitat Preference/Requirements	Potential to Occur On-Site	Basis for Determination of Occurrence Potential
Angiosperms: Monocots	Liliaceae / Lily Family	<i>Calochortus weedii</i> var. <i>intermedius</i> / intermediate mariposa lily			1B.2	MSHCP	Perennial herb (bulbiferous); chaparral, coastal scrub, valley and foothill grassland; calcareous; rocky; blooms May-July; elevation between 345 and 2,805 feet.	Unexpected	This species has no potential to occur within the developed roadway within the project site and has low potential to occur in flat-topped buckwheat scrub and riversidean sage scrub habitat adjacent to the project site, outside of the impact areas. One extant record exists for this species within one mile of the survey area.
Angiosperms: Monocots	Poaceae (Gramineae) / Grass Family	<i>Orcuttia californica</i> / California Orcutt grass	FE	SE	1B.1	NE, MSHCP, 6.1.3	Annual herb; vernal pools; blooms April–August; elevation 50–2,200 feet.	Unexpected	This species was not observed and is not expected to occur due to lack of suitable vernal pool habitat within or adjacent to the project site. One extant record exists for this species within one mile of the survey area.
Angiosperms: Eudicots	Polygonaceae / Buckwheat Family	<i>Chorizanthe parryi</i> var. <i>parryi</i> / Parry's spineflower, Parry's spine flower**			1B.1	MSHCP	Annual herb; chaparral, cismontane woodland, coastal scrub, valley and foothill grassland; openings, rocky (sometimes), sandy (sometimes); blooms April-June; elevation between 900 and 4,000 feet.	Unexpected	This species has no potential to occur within the developed roadway within the project site. Though the Riversidean sage scrub adjacent to the project site contains suitable habitat for this species, it consists of a revegetation slope that was historically graded and therefore has a low potential to support this species. Three extant records exist for this species within one mile of the survey area.

Attachment 1 Sensitive Plant Species Observed or with the Potential to Occur									
Major Plant Group	Family	Scientific Name/Common Name	Federal Status	State Status	CNPS Rare Plant Rank	Western Riverside	Habitat Preference/Requirements	Potential to Occur On-Site	Basis for Determination of Occurrence Potential
Angiosperms: Eudicots	Polygonaceae / Buckwheat Family	<i>Chorizanthe polygonoides</i> var. <i>longispina</i> / long-spined spineflower, long-spined spine flower**			1B.2	MSHCP	Annual herb; clay soils; openings in chaparral, coastal sage scrub, near vernal pools and montane meadows, April–July; elevation 100–5,000 feet.	Unexpected	This species has no potential to occur within the developed roadway within the project site. Though the Riversidean sage scrub adjacent to the project site contains suitable habitat for this species, it consists of a revegetation slope that was historically graded and therefore has a low potential to support this species. Five extant records exist for this species within one mile of the survey area.

NOTE: Scientific and common names were primarily derived from Jepson eFlora (Jepson Flora Project 2020). Common names denoted with ** are from Western Riverside County Regional Conservation Authority 2003. Federal and state listing status is based on California Department of Fish and Wildlife, Natural Diversity Database (CDFW) 2022a.

STATUS CODES

Federal Status

FE = Listed as endangered by the federal government

State Status

SE = Listed as endangered by the state of California

California Native Plant Society (CNPS): California Rare Plant Ranks (CRPR)

1B = Species rare, threatened, or endangered in California and elsewhere. These species are eligible for state listing.

0.1 = Species seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat).

0.2 = Species fairly threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat).

Western Riverside

MSHCP = Western Riverside County Multiple Species Habitat Conservation Plan covered species.

6.1.3 = Species subject to survey requirements and avoidance measures in Section 6.1.3, Protection of Narrow Endemic Plant Species.

NE = Plant species that are highly restricted by their habitat affinities, edaphic requirements or other ecological factors, and for which specific conservation measures have been identified in Section 6.1.3 of the MSHCP.

ATTACHMENT 2

Sensitive Wildlife Species Occurring or with the Potential to Occur

Attachment 2 Sensitive Wildlife Species Occurring or with the Potential to Occur								
Major Wildlife Group	Family	Scientific Name / Common Name	Federal Status	State Status	Western Riverside	Habitat Preference / Requirements	Potential to Occur On-Site	Basis for Determination of Occurrence Potential
Invertebrates	Nymphalidae / Brush-footed Butterflies	<i>Euphydryas editha quino</i> / Quino checkerspot	FE		MSHCP	Open, dry areas in foothills, mesas, lake margins. Larval host plant <i>Plantago erecta</i> . Adult emergence mid-January through April.	Unexpected	This species was not observed and has no potential to occur within the developed roadway. Furthermore, this species is not anticipated to occur adjacent to project site due to lack of suitable open, native habitats. The flat-topped buckwheat scrub occurs in a disturbed roadside that appears to have been repeatedly cleared for fuel management, and the Riversidean sage scrub consists of a small revegetation slope that is not anticipated to support larval host plants and bounded by urban/developed land and lack connectivity to open space areas with suitable habitats. Four extant records exist for this species within one mile of the survey area.
Amphibians	Pelobatidae / Spadefoot Toads	<i>Spea hammondi</i> / western spadefoot		SSC	MSHCP	Vernal pools, floodplains, and alkali flats within areas of open vegetation.	Unexpected	This species was not observed and is not expected to occur due to lack of suitable vernal pool, floodplain, and alkali flats habitat. One extant record exists for this species within one mile of the survey area.

Attachment 2 Sensitive Wildlife Species Occurring or with the Potential to Occur								
Major Wildlife Group	Family	Scientific Name / Common Name	Federal Status	State Status	Western Riverside	Habitat Preference / Requirements	Potential to Occur On-Site	Basis for Determination of Occurrence Potential
Reptiles	Teiidae / Whiptail Lizards	<i>Aspidoscelis hyperythra beldingi</i> [= <i>Cnemidophorus hyperythrus</i>] / Belding's orange-throated whiptail		WL	MSHCP	Chaparral, coastal sage scrub with coarse sandy soils and scattered brush.	Unexpected	This species has no potential to occur within the project site and has low potential to occur in flat-topped buckwheat scrub and Riversidean sage scrub habitat adjacent to the project site, outside of the impact areas. The scrub habitat is limited to small, isolated patches bounded by urban/developed land and lacks connectivity to open space areas with suitable habitats. One extant record exists for this species within one mile of the survey area.
Birds	Strigidae / Typical Owls	<i>Athene cunicularia</i> / burrowing owl		SSC	MSHCP, 6.3.2	Grassland, agricultural land, coastal dunes. Require rodent burrows. Declining resident.	Unexpected	No western burrowing owl individuals, potential burrows, or any sign of western burrowing owl activity were detected during the survey, and none are expected to nest within or immediately adjacent to the project site due to the extensive urban development associated with the roadways and private residences and lack of suitable burrows or burrow surrogates.

Attachment 2 Sensitive Wildlife Species Occurring or with the Potential to Occur								
Major Wildlife Group	Family	Scientific Name / Common Name	Federal Status	State Status	Western Riverside	Habitat Preference / Requirements	Potential to Occur On-Site	Basis for Determination of Occurrence Potential
Birds	Vireonidae / Vireos	<i>Vireo bellii pusillus</i> / least Bell's vireo	FE	SCE	MSHCP, 6.1.2	Willow riparian woodlands. Summer resident.	Unexpected	This species has no potential to occur within the project site and has low potential to occur in southern riparian woodland habitat adjacent to the project site, outside of the impact areas. The southern riparian woodland is limited to small, isolated patches that are completely bounded by urban/developed land and lacks connectivity to suitable riparian habitat. Two extant records exist for this species approximately one mile east of the survey area, though are separated from the project vicinity by Interstate 215 and high-density residential development.
Mammals	Heteromyidae / Pocket Mice & Kangaroo Rats	<i>Chaetodipus fallax fallax</i> / northwestern San Diego pocket mouse		SSC	MSHCP	San Diego County west of mountains in sparse, disturbed coastal sage scrub or grasslands with sandy soils.	Unexpected	This species has no potential to occur within the project site and has low potential to occur in flat-topped buckwheat scrub and Riversidean sage scrub habitat adjacent to the project site, outside of the impact areas. The scrub habitat is limited to small, isolated patches bounded by urban/developed land and lacks connectivity to open space areas with suitable habitats. One extant record exists for this species within one mile of the survey area.

Attachment 2
Sensitive Wildlife Species Occurring or with the Potential to Occur

Major Wildlife Group	Family	Scientific Name / Common Name	Federal Status	State Status	Western Riverside	Habitat Preference / Requirements	Potential to Occur On-Site	Basis for Determination of Occurrence Potential
Mammals	Heteromyidae / Pocket Mice & Kangaroo Rats	<i>Dipodomys stephensi</i> / Stephens' kangaroo rat	FT	SCT	MSHCP, SKRHCP	Grassland, open areas.	Unexpected	This species was not observed and is not expected to occur due to lack of suitable open grassland habitat within or adjacent to the project site. Two extant records exist for this species within one mile of the survey area.

I= Introduced species

NOTE: Zoological nomenclature for invertebrates is in accordance with the NatureServe 2021 and Evans 2008; for fish with NatureServe 2021; for reptiles and amphibians with Crother et. al (2017); for birds with Chesser et al. 2021; for mammals with Bradley et al. (2014), American Society of Mammalogists 2021. Determination of the potential occurrence for listed, sensitive, or noteworthy species is based upon known ranges and habitat preferences for species follows Nature Festivals of San Diego County 2002, Evans 2008, Jennings and Hayes 1994, Unitt 2004, Tremor et. al. 2017, and Western Bat Working Group 2017. Federal and state listing status is based on California Department of Fish and Wildlife, Natural Diversity Database (CDFW) 2022.

STATUS CODES

Federal Status

FE = Listed as endangered by the federal government

FT = Listed as threatened by the federal government

State Status

SCE = State candidate for listing as Endangered

SCT = State candidate for listing as Threatened

SSC = California Department of Fish and Wildlife species of special concern

WL = California Department of Fish and Wildlife watch list species

Western Riverside

MSHCP = Western Riverside County Multiple Species Habitat Conservation Plan covered species

6.1.2 = Species subject to survey requirements and avoidance and minimization measures in Section 6.1.2, Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools of the MSHCP

6.3.2 = Species subject to survey requirements and avoidance measures in Section 6.3.2, Additional Survey Needs and Procedures of the MSHCP

APPENDIX C

Archaeological Resources Survey Report

November 29, 2022

Mr. Joe Broadhead
Principal Water Resource Specialist
Eastern Municipal Water District
2270 Trumble Road
Perris, CA 92572-8300

Reference: Archaeological Resources Survey Report for the Los Alamos Hills Water System Project
(RECON Number 9878-9)

Dear Mr. Broadhead:

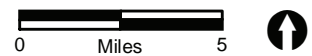
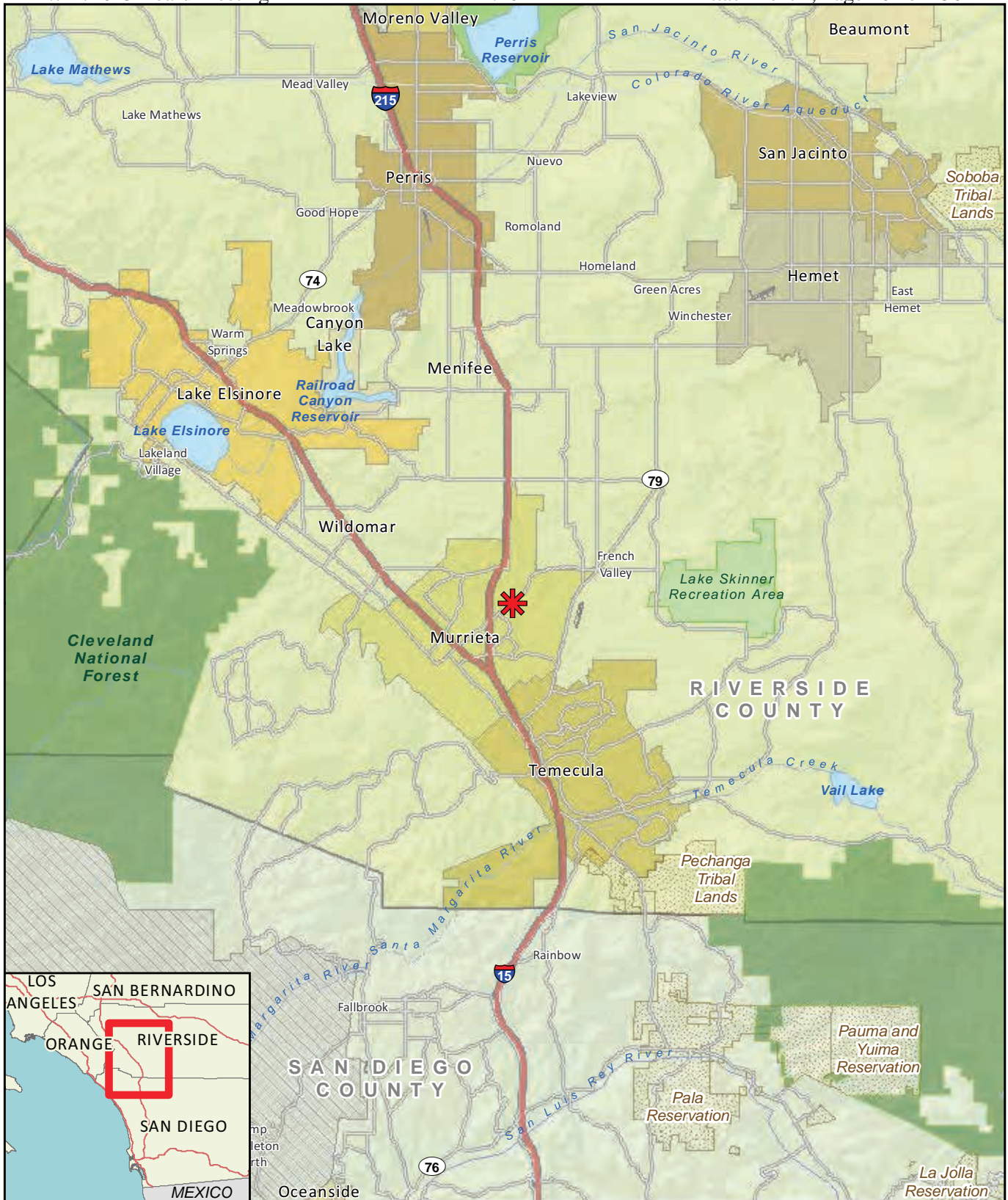
This letter details the results of an archaeological resources survey conducted for the Los Alamos Hills Water System Project (proposed project). RECON Environmental, Inc. (RECON) conducted background research, reviewed historic aerial photographs, and completed a pedestrian survey of the project area. This letter report has been prepared to provide necessary information to identify adverse impacts to potentially significant cultural resources by implementation of the proposed project.

PROJECT LOCATION AND DESCRIPTION

The project consists of the installation of a pipeline loop within existing city streets to provide imported water services to a residential area that currently relies on private wells for potable water. Pipe size would vary, with diameters ranging from 8-inch to 12-inch at approximately 4 to 7 feet in depth. The total length of the proposed loop pipeline is approximately 10,685 linear feet (approximately 2 miles). The following are the pipeline segments that make up the proposed project:

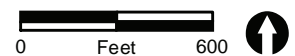
- Los Alamos Road 12-inch pipe, Celia Road to Mason Avenue (approximately 3,350 linear feet)
- Celia Road 8-inch pipe, Mary Place to Mason Road (approximately 2,000 linear feet)
- Mason Road 8-inch pipe, Mary Place to Los Alamos Road (approximately 1,260 linear feet)
- Mary Place 8-inch pipe, Celia Road to Mason Avenue (approximately 3,400 linear feet)
- Ruth Ellen Way 12-inch pipe, Los Alamos Road to the northern property line of Rail Ranch Elementary School (approximately 675 linear feet)

The project site is located in the city of Murrieta, California (Figure 1). Regional access to the project site is provided via Interstate 215 (I-215), located approximately 0.45 mile to the east, and local access is provided via I-215 and east on Los Alamos Road. The project site is in the U.S. Geological Survey Murrieta quadrangle, Township 7 South, Range 3 West (Figure 2). All pipeline segments would be constructed within the existing easements and rights-of-way. The project area is comprised of paved and unpaved ground, either bare or with existing and disturbed vegetation, within existing easements and rights-of-way along Los Alamos Road, Mason Avenue, Mary Place, Celia Road, and Ruth Ellen Way (Figure 3). The project is generally bounded by commercial development and undeveloped lots to the north, residential development to the south, residential and commercial development to the west, and undeveloped lots to the east. The area of potential effect (APE) is 9.0 acres.



 Project Location

FIGURE 1
Regional Location



— Project Location

FIGURE 3
Project Location on Aerial Photograph

METHODS

In order to determine if this project will adversely impact significant cultural resources, background research, a review of historic aerial photographs, and an on-foot survey was completed by RECON archaeologist Nathaniel Yerka on November 14, 2022. Prior to the survey, a records search of the five pipeline alignments was requested from the Eastern Information Center (EIC) to identify any previously recorded cultural resources located within a one-mile radius of the project area. In addition, a letter was sent on September 22, 2022 to the Native American Heritage Commission (NAHC) requesting a search of their Sacred Lands File to identify spiritually significant and/or sacred sites or traditional use areas in the project vicinity (Attachment 1). The NAHC was also asked to provide a list of local Native American tribes, bands, or individuals that may have concerns or interests regarding cultural resources potentially occurring within the area of potential effect.

The primary goal of this survey was to determine (1) if there are previously unrecorded cultural resources present, and if so, document the resources' locations and what they consist of and (2) to update conditions of previously recorded cultural resources. The project area was inspected for evidence of archaeological materials such as flaked and ground stone tools or fragments, ceramics, milling features, and human remains. Survey transects were concentrated on the sides of the paved roadways, as well as on the open areas of the unpaved roadways, since this approach offered the most ground visibility.

RESULTS OF RECORDS SEARCH

The records search results from the EIC indicate that 57 investigations have been conducted and 33 resources have been recorded within one mile of the project area (Confidential Attachment 1). Of the 33 resources, 2 are historic foundations, 1 trash scatter, 1 single-family property, 2 historic-era isolated artifacts, 21 prehistoric resources, and 6 prehistoric isolated artifacts. Prehistoric resources include bedrock milling features, lithic scatters, ground stone scatters, and faunal remains (Table 1). Of these, 8 investigations and 2 resources (P-33-0293953 and P-33-006237) cross the project area. A response was received from the NAHC on November 3, 2022 indicating that their Sacred Lands File search results were positive (see Attachment 1).

Primary #	Trinomial #	Period	Site Type	Recording Events	Notes
P-33-000637	CA-RIV-000637	Prehistoric	Lithic scatter	1973 (J. Humbert, S. Hammond, C.E.F.U.)	-
P-33-000638	CA-RIV-000638	Prehistoric	Bedrock milling; lithic, ground stone scatter	1973 (J. Humbert, S. Hammond, n/a)	-
P-33-001002	CA-RIV-001002	Prehistoric	Lithic scatter	1972 (B. Bettinger, n/a); 1998 (Chris Drover, Craig Lambert, David Smith, n/a)	-
P-33-001005	CA-RIV-001005	Prehistoric	Bedrock milling; lithic, ground stone scatter, faunal remains	1972 (B. Bettinger, n/a); 1998 (Chris Drover, Craig Lambert, David Smith, n/a)	-
P-33-001007	CA-RIV-001007	Prehistoric	Bedrock milling	1972 (B. Bettinger, n/a)	-
P-33-001008	CA-RIV-001008	Prehistoric	Bedrock milling; lithic, ground stone scatter, faunal remains	1972 (B. Bettinger, n/a); 1978 (J. Baldwin, n/a); 1991 (J. Keller, n/a); 2001 (Craig E. Lambert, The Keith Companies, Inc.)	-

Table 1
Cultural Resources Recorded within One-Mile of the Project Area

Primary #	Trinomial #	Period	Site Type	Recording Events	Notes
P-33-001009	CA-RIV-001009	Prehistoric	Bedrock milling	1972 (B. Bettinger, n/a)	-
P-33-001010	CA-RIV-001010	Prehistoric	Lithic, ground stone scatter	1972 (B. Bettinger, n/a); 1983 (M. Desautels, K. Henriksen, n/a)	-
P-33-001062	CA-RIV-001062	Prehistoric	Lithic, ground stone scatter; faunal remains	1976 (Eastvold, n/a); 1991 (J. Keller, Jean A. Keller); 2001 (Craig E. Lambert, The Keith Companies Inc.)	-
P-33-001360	CA-RIV-001360	Prehistoric	Isolate: metate	1976 (M Morin, W Waldron); 1998 (Chris Drover, Craig Lambert and David Smith)	-
P-33-001361	CA-RIV-001361	Prehistoric	Bedrock milling	1976 (Hildebrand); 1998 (Chris Drover, Craig Lambert and David Smith)	-
P-33-001362	CA-RIV-001362	Prehistoric	Bedrock milling	1976 (Hildebrand)	-
P-33-002081	CA-RIV-002081	Prehistoric	Ground stone scatter	1981 (L.L. Bowles)	-
P-33-003056	CA-RIV-003056	Prehistoric	Bedrock milling; lithic, ground stone scatter	1987 (Victor C. de Munk, Archaeological Research Unit, UC Riverside, CA.); 1992 (Ron Bissell and Ken Becker, RMW Paleo Associates, Inc., Mission Viejo, CA.); 1999 (Robbins-Wade, Affinis, El Cajon, CA.)	-
P-33-004104	CA-RIV-004104	Prehistoric	Lithic, ground stone scatter	1990 (C.E. Drover and D.M. Smith, Christopher Drover 13522 Malena Dr. Tustin, CA 92680)	-
P-33-006237*	-	Historic	Homestead	1983 (J. Oxedine, Riv. Co. Hist. Comm.); 1995 (Janet Tearnen, Historic Resources Consultant)	James Place, demolished
P-33-007450	-	Historic	Single family property	1983 (J. Oxendine, Riverside County Historical Comm.); 2005 (R. Alter, K. Crawford, S. Moomjian, Archaeos)	George Hind Property
P-33-009703	CA-RIV-006469	Prehistoric	Bedrock milling	2000 (Jean A. Keller, Cultural Resources Consultant)	-
P-33-009704	CA-RIV-006470	Prehistoric	Bedrock milling	2000 (Jean A. Keller, Cultural Resources Consultant)	-
P-33-009705	CA-RIV-006471	Prehistoric	Bedrock milling	2000 (Jean A. Keller, Cultural Resources Consultant)	-
P-33-011239	-	Prehistoric	Lithic scatter	2001 (CW Bouscaren, MG Espinoza, K. A. Hintzman, LSA Associates, Inc.)	-
P-33-011240	-	Historic	Foundations, trash scatter	2001 (CW Bouscaren, MG Espinoza, K. A. Hintzman, LSA, Assoc., Inc)	-
P-33-012771	-	Prehistoric	Isolate: manos	1981 (Bowles)	-
P-33-012772	-	Prehistoric	Isolate: chopper	1980 (C.E. Drover)	-
P-33-013304	CA-RIV-007405	Prehistoric	Bedrock milling; lithic, ground stone scatter	2004 (Sal Boites, CRM TECH)	-

Table 1
Cultural Resources Recorded within One-Mile of the Project Area

Primary #	Trinomial #	Period	Site Type	Recording Events	Notes
P-33-013397	-	Prehistoric	Isolate: mano	2013 (Claire Fritz and Patricia Tuck, LSA Associates)	-
P-33-013398	-	Prehistoric	Isolate: mano	2004 (Clarie Fritiz and Patricia Tuck, LSA Associates)	-
P-33-013840	CA-RIV-007566	Prehistoric	Lithic quarry	2004 (Gillelan, William R., L&L Environmental, Inc.)	-
P-33-013976	-	Prehistoric	Isolate: blade	1666 (Ballester, Daniel, CRM Tech)	-
P-33-015315	CA-RIV-008084	Historic	Trash scatter	2006 (Jones, J. E., M. Knypstra, and J. Meliska, Statistical Research, Inc.)	-
P-33-015316	CA-RIV-008085	Prehistoric	Bedrock milling	2006 (Jones, J. E., M. Knypstra, and J. Meliska, Statistical Research, Inc.)	-
P-33-015317	CA-RIV-008086	Historic	Foundations	2006 (Jones, J. E., M. Knypstra, and J. Meliska, Statistical Research, Inc.)	-
P-33-015318	-	Historic	Isolate: tin can	2006 (Jones, J. Elliott, M. Knypstra, and J. Meliska, Statistical Research, Inc.); 2012 (K. Lindgren, ECORP Consulting, Inc.)	-
P-33-021031	-	Historic	Isolate: metal can	2012 (AECOM, AECOM); 2013 (B Lichtenstein and K Moslak, Applied Earthworks Inc)	-
P-33-023953*	-	Historic	Roadway	2014 (Josh Smallwood, Applied Earth Works, Inc.); 2015 (Wilson, Stacie and Jill Gibson, AECOM)	Los Alamos Road

Bold = Previously recorded cultural resources mapped within the project area.

P-33-023953 is a 6.33-mile segment of Los Alamos Road recorded in 2014. The alignment for Los Alamos Road historically extended between Jefferson Avenue on the west end and Winchester Road (State Route 79) on the east end. It was declared a public highway in 1891 and started as a 60-foot standard width dirt road. The western portion of the roadway was paved circa 1987 and the portion east of Warm Springs Creek was still a graded dirt road in 1994. A 0.5-mile segment east of Briggs Road has been removed and landscaped. The roadway has been recommended not eligible under the National Register of Historic Places (NRHP) and under the California Register of Historical Resources (CRHR) because the road was not a primary route across the region like, e.g., the highly used Winchester, Washington, Murrieta Hot Springs, and Benton Roads were (Gousha Company as seen in Smallwood 2014). The roadway also does not qualify under the criteria for historic designation per the City of Murrieta's Municipal Code.

P-33-006237 was recorded in 1995 as James Place, a single-family residence with associated outbuildings. The recorded outbuildings include a barn, a stone masonry barbecue with picnic table, a storage shed, and a grain storage tower. The circa 1915 one-story wood-framed residence was recommended as potentially significant under criterion C/3 as an example of rural vernacular residential architecture during the Anglo farming period; however, the addition of two rooms and severe fire damage resulted in poor integrity and a recommendation of not significant for the NRHP or CRHR. A 1995 summary report of the measured drawings and photographic documentation by Janet L. Tearnen and Andrea Urbas was included in the records search data. This report was completed prior to the demolition of the residence and outbuildings (Tearnen and Urbas 1995).

RECON reviewed historic aerial photographs from 1938, 1967, 1978, and 1985. The 1938 photograph exhibits Los Alamos Road surrounded by agricultural fields and undeveloped lands; none of the other four roads were noted. The northern extent of the road within the project area followed a slightly different alignment in 1938. The 1967 photograph displays the same alignment for Los Alamos Road and the addition of Mason Avenue. By 1978, Mary Place and Celia Road are present, and the alignment of Los Alamos is straightened to its current alignment. The 1978 photograph also exhibits various small residential plots along the southern side of Los Alamos Road, the western side of Mason Avenue, and the northern side of Mary Place. Ruth Ellen Way is also present in 1978 as a small dirt road. The latter road follows the current width and alignment by the 2002 photograph. The residential plots along the southern side of Los Alamos Road, the western side of Mason Avenue, and the northern side of Mary Place, increase by the 1985 photograph (Nationwide Environmental Title Research LLC 2022).

RESULTS OF SURVEY

RECON archaeologist Nathaniel Yerka conducted a pedestrian survey of the project APE on November 14, 2022 and did not identify any cultural resources. Ruth Ellen Way, Los Alamos Road, and Mason Avenue are paved roadways. Ruth Ellen Way exhibits shoulder pathways made of imported base material with white vinyl fencing on the east side of the roadway, and concrete sidewalks on the west side (Photograph 1). A municipal park is on the east side of Ruth Ellen Way while an elementary school field as well as residential housing is to the west. The shoulder along the north side of the northeastern segment of Los Alamos has an improved pathway with white vinyl fencing along the length of the park while the southern shoulder is unimproved and fronts residential lots. Northeast of the park, the road shoulders of Los Alamos Road are unimproved and the area consists of agricultural fields on the north side and residential lots on the south side (Photograph 2). Mason Avenue has disturbed soft shoulders with an improved horse trail along the east side. Mary Place and Celia Road are unpaved dirt roads with ornamental vegetation along their shoulders (Photograph 3). Celia Road has been built at a higher elevation than the surrounding house pads and has improved ditches on either side of the roadway for drainage (Photograph 4). The entire project area has been disturbed in the past by grading and maintenance of the roads.

REGULATORY CONTEXT

California Environmental Quality Act

The regulatory framework and methods for determining impacts on cultural resources include compliance with California Environmental Quality Act (CEQA) requirements as defined in Section 15064.5 of the CEQA Guidelines, Determining the Significance of Impacts to Archaeological and Historical Resources. These guidelines require the identification of cultural resources that could be affected by the proposed project, the evaluation of the significance of such resources, an assessment of the proposed project impacts on significant resources, and a development of a research design and data recovery program to avoid or address adverse effects to significant resources. Significant resources, also called historical resources, are those cultural resources (whether prehistoric or historic) that have been evaluated and determined to be eligible for listing in the California Register of Historical Resources.



PHOTOGRAPH 1
Overview of Ruth Ellen Way, Looking North from
Los Alamos Road Intersection



PHOTOGRAPH 2
Overview of Los Alamos Road, Looking Northeast from Eastern Boundary of
Los Alamos Hills Sports Park Equestrian Trail



PHOTOGRAPH 3

End of Pavement at the Intersection of Mason Avenue and Mary Place,
Looking West from East Side of Mason Avenue where it Transitions to
Los Alamos Heights Road



PHOTOGRAPH 4

Overview of Celia Road with Drainage Ditch, Looking South from Celia Road,
Approximately 500 feet South of Intersection with Los Alamos Road

According to CEQA Section 15064.5(a), a historical resource includes the following:

1. A resource listed in, or determined to be eligible for listing on, the California Register of Historical Resources.
2. A resource included in the local register.
3. A resource which an agency determines to be historically significant. Generally a resource shall be considered to be "historically significant," if the resource meets the criteria for listing on the California Register of Historical Places (Public Resources Code Section 5024.1 Title 14 California Code of Regulations, Section 4852) including the following:
 - A. Is associated with events that have made a significant contribution to the broad patterns of California's history or cultural heritage;
 - B. Is associated with the lives of persons important in our past;
 - C. Embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of an important creative individual, or possesses high artistic values; or
 - D. Has yielded, or maybe likely to yield, information important to prehistory or history.
4. The fact that a resource is not listed in or determined to be eligible for listing in the California Register of Historical Resources or a local register does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

A resource must meet one of the above criteria and must have integrity; that is, it must evoke the resource's period of significance or, in the case of criterion D, it may be disturbed, but it must retain enough intact and undisturbed deposits to make a meaningful data contribution to regional research issues.

MANAGEMENT RECOMMENDATIONS

No significant prehistoric or historic cultural resources were observed during the survey. The records search identified two cultural resources within the project area. P-33-006237 was recorded in 1995 as a single-family residence with associated outbuildings but the property has since been demolished; therefore, it is not eligible for listing on the CRHR. Los Alamos Road (P-33-023953) has been present since 1891 but it does not meet the criteria for listing on the CRHR. Because none of these resources are significant, the project would not result in an adverse impact to known cultural resources. Because the entire project area has been disturbed by past development and the possibility of buried significant cultural resources being present within the project area is considered low, RECON does not recommend any further cultural resources work for this project.

Please call me at (619) 308-9333 extension 133 you have any questions or concerns about this project.

Sincerely,



Carmen Zepeda-Herman, RPA
Archaeology Project Director

CZH:sh

Attachments

REFERENCES CITED

Nationwide Environmental Title Research, LLC (NETR)

2022 Historic Aerials. <http://www.historicaerials.com/>. Accessed on November 14, 2022.

Smallwood, Josh

2014 Site form for P-33-023953. On file at the Eastern Information Center, University of California at Riverside.

Tearnen, Janet, and Andrea Urbas

1995 Summary Report for Measured Drawings and Photographic Documentation of the James Place, 37201 Los Alamos Road, Murrieta, California. On file at the Eastern Information Center, University of California at Riverside.

ATTACHMENT 1

NAHC Correspondence

STATE OF CALIFORNIA

Gavin Newsom, Governor

NATIVE AMERICAN HERITAGE COMMISSION

November 3, 2022

Carmen Zepeda-Herman
RECON Environmental, Inc.

Via Email to: czepeda@reconenvironmental.com

Re: Los Alamos Hills Pipelines Project, Riverside County

Dear Ms. Zepeda-Herman:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information submitted for the above referenced project. The results were positive. Please contact the Pechanga Band of Indians on the attached list for information. Please note that tribes do not always record their sacred sites in the SLF, nor are they required to do so. A SLF search is not a substitute for consultation with tribes that are **traditionally and culturally affiliated with a project's geographic area**. Other sources of cultural resources should also be contacted for information regarding known and recorded sites, such as the appropriate regional California Historical Research Information System (CHRIS) archaeological Information Center for the presence of recorded archaeological sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. Please contact all of those listed; if they cannot supply information, they may recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,



Andrew Green
Cultural Resources Analyst

Attachment



CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Sara Dutschke
Miwok

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
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Yokayo Pomo, Yuki,
Nomlaki

COMMISSIONER
Wayne Nelson
Luiseño

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
[Vacant]

COMMISSIONER
[Vacant]

EXECUTIVE SECRETARY
Raymond C.
Hitchcock
Miwok/Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

**Native American Heritage Commission
Native American Contact List
Riverside County
11/3/2022**

Agua Caliente Band of Cahuilla Indians

Reid Milanovich, Chairperson
5401 Dinah Shore Drive
Palm Springs, CA, 92264
Phone: (760) 699 - 6800
Fax: (760) 699-6919
laviles@aguacaliente.net

Cahuilla

Juaneno Band of Mission Indians Acjachemen Nation - Belardes

Matias Belardes, Chairperson
32161 Avenida Los Amigos
San Juan Capistrano, CA, 92675
Phone: (949) 293 - 8522
kaamalam@gmail.com

Juaneno

Agua Caliente Band of Cahuilla Indians

Patricia Garcia-Plotkin, Director
5401 Dinah Shore Drive
Palm Springs, CA, 92264
Phone: (760) 699 - 6907
Fax: (760) 699-6924
ACBCI-THPO@aguacaliente.net

Cahuilla

Juaneno Band of Mission Indians Acjachemen Nation - Belardes

Joyce Perry, Tribal Manager
4955 Paseo Segovia
Irvine, CA, 92603
Phone: (949) 293 - 8522
kaamalam@gmail.com

Juaneno

Augustine Band of Cahuilla Mission Indians

Amanda Vance, Chairperson
84-001 Avenue 54
Coachella, CA, 92236
Phone: (760) 398 - 4722
Fax: (760) 369-7161
hhaines@augustinetribe.com

Cahuilla

Juaneno Band of Mission Indians Acjachemen Nation 84A

Heidi Lucero, Chairperson
31411-A La Matanza Street
San Juan Capistrano, CA, 92675
Phone: (562) 879 - 2884
hllucero105@gmail.com

Juaneno

Cabazon Band of Mission Indians

Doug Welmas, Chairperson
84-245 Indio Springs Parkway
Indio, CA, 92203
Phone: (760) 342 - 2593
Fax: (760) 347-7880
jstapp@cabazonindians-nsn.gov

Cahuilla

La Jolla Band of Luiseno Indians

Norma Contreras, Chairperson
22000 Highway 76
Pauma Valley, CA, 92061
Phone: (760) 742 - 3771

Luiseno

Cahuilla Band of Indians

Daniel Salgado, Chairperson
52701 U.S. Highway 371
Anza, CA, 92539
Phone: (951) 763 - 5549
Fax: (951) 763-2808
Chairman@cahuilla.net

Cahuilla

Los Coyotes Band of Cahuilla and Cupeño Indians

Ray Chapparosa, Chairperson
P.O. Box 189
Warner Springs, CA, 92086-0189
Phone: (760) 782 - 0711
Fax: (760) 782-0712

Cahuilla

Morongo Band of Mission Indians

Ann Brierty, THPO
12700 Pumarra Road
Banning, CA, 92220
Phone: (951) 755 - 5259
Fax: (951) 572-6004
abrierty@morongo-nsn.gov

Cahuilla
Serrano

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Los Alamos Hills Pipelines Project, Riverside County.

**Native American Heritage Commission
Native American Contact List
Riverside County
11/3/2022**

Morongo Band of Mission Indians

Robert Martin, Chairperson
12700 Pumarra Road
Banning, CA, 92220
Phone: (951) 755 - 5110
Fax: (951) 755-5177
abrierty@morongo-nsn.gov

Cahuilla
Serrano

Quechan Tribe of the Fort Yuma Reservation

Jill McCormick, Historic
Preservation Officer
P.O. Box 1899
Yuma, AZ, 85366
Phone: (760) 572 - 2423
historicpreservation@quechantribe.com

Quechan

Pala Band of Mission Indians

Shasta Gaughen, Tribal Historic
Preservation Officer
PMB 50, 35008 Pala Temecula
Rd.
Pala, CA, 92059
Phone: (760) 891 - 3515
Fax: (760) 742-3189
sgaughen@palatribe.com

Cupeno
Luiseno

Quechan Tribe of the Fort Yuma Reservation

Manfred Scott, Acting Chairman
Kw'ts'an Cultural Committee
P.O. Box 1899
Yuma, AZ, 85366
Phone: (928) 750 - 2516
scottmanfred@yahoo.com

Quechan

Pauma Band of Luiseno Indians

Temet Aguilar, Chairperson
P.O. Box 369
Pauma Valley, CA, 92061
Phone: (760) 742 - 1289
Fax: (760) 742-3422
bennaecalac@aol.com

Luiseno

Ramona Band of Cahuilla

Joseph Hamilton, Chairperson
P.O. Box 391670
Anza, CA, 92539
Phone: (951) 763 - 4105
Fax: (951) 763-4325
admin@ramona-nsn.gov

Cahuilla

Pechanga Band of Indians

Mark Macarro, Chairperson
P.O. Box 1477
Temecula, CA, 92593
Phone: (951) 770 - 6000
Fax: (951) 695-1778
epreston@pechanga-nsn.gov

Luiseno

Ramona Band of Cahuilla

John Gomez, Environmental
Coordinator
P. O. Box 391670
Anza, CA, 92539
Phone: (951) 763 - 4105
Fax: (951) 763-4325
jgomez@ramona-nsn.gov

Cahuilla

Pechanga Band of Indians

Paul Macarro, Cultural Resources
Coordinator
P.O. Box 1477
Temecula, CA, 92593
Phone: (951) 770 - 6306
Fax: (951) 506-9491
pmacarro@pechanga-nsn.gov

Luiseno

Rincon Band of Luiseno Indians

Bo Mazzetti, Chairperson
One Government Center Lane
Valley Center, CA, 92082
Phone: (760) 749 - 1051
Fax: (760) 749-5144
bomazzetti@aol.com

Luiseno

Rincon Band of Luiseno Indians

Cheryl Madrigal, Tribal Historic
Preservation Officer
One Government Center Lane
Valley Center, CA, 92082
Phone: (760) 297 - 2635
crd@rincon-nsn.gov

Luiseno

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Los Alamos Hills Pipelines Project, Riverside County.

***Santa Rosa Band of Cahuilla
Indians***

Lovina Redner, Tribal Chair
P.O. Box 391820 Cahuilla
Anza, CA, 92539
Phone: (951) 659 - 2700
Fax: (951) 659-2228
lsaul@santarosa-nsn.gov

***Soboba Band of Luiseno
Indians***

Isaiah Vivanco, Chairperson
P. O. Box 487 Cahuilla
San Jacinto, CA, 92581 Luiseno
Phone: (951) 654 - 5544
Fax: (951) 654-4198
ivivanco@soboba-nsn.gov

***Soboba Band of Luiseno
Indians***

Joseph Ontiveros, Cultural
Resource Department
P.O. BOX 487 Cahuilla
San Jacinto, CA, 92581 Luiseno
Phone: (951) 663 - 5279
Fax: (951) 654-4198
jontiveros@soboba-nsn.gov

***Torres-Martinez Desert Cahuilla
Indians***

Cultural Committee,
P.O. Box 1160 Cahuilla
Thermal, CA, 92274
Phone: (760) 397 - 0300
Fax: (760) 397-8146
Cultural-
Committee@torresmartinez-
nsn.gov

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Los Alamos Hills Pipelines Project, Riverside County.

CONFIDENTIAL ATTACHMENT 1

Records Search

Not for Public Review

APPENDIX D

Geotechnical Report



GEOTECHNICAL INVESTIGATION REPORT

EMWD LOS ALAMOS HILLS PIPELINE PROJECT

City of Murrieta, Riverside County, California

CONVERSE PROJECT No. 22-81-144-02



Prepared For:

WEBB ASSOCIATES

3788 McCray Street
Riverside, CA 92506

Presented By:

CONVERSE CONSULTANTS

2021 Rancho Drive, Suite 1
Redlands, CA 92373
909-796-0544

November 28, 2022

November 28, 2022

Mr. Bradley Sackett, PE
Senior Engineer
Webb Associates
3788 McCray Street
Riverside, CA 92506

Subject: **GEOTECHNICAL INVESTIGATION REPORT**
EMWD LOS ALAMOS HILLS PIPELINE PROJECT
City of Murrieta, Riverside County, California
Converse Project No. 22-81-144-02

Dear Mr. Sackett:

Converse Consultants (Converse) is pleased to submit this Geotechnical Investigation Report for the EMWD Los Alamos Hills Project, located in the City of Murrieta, Riverside County, California. This report was prepared in accordance with our proposal dated June 21, 2022, and your Single-Project Subconsultant Agreement (Project Code: 2022-0143) dated August 22, 2022.

Based upon our field investigation, laboratory data, and analyses, the proposed project is considered feasible from a geotechnical standpoint, provided the recommendations presented in this report are incorporated into the design and construction of the project.

We appreciate the opportunity to be of service to Webb Associates (WEBB) and the Eastern Municipal Water District (EMWD). Should you have any questions, please do not hesitate to contact us at 909-474-2847.

CONVERSE CONSULTANTS



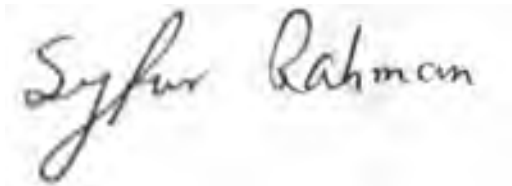
Hashmi S. E. Quazi, PhD, PE, GE
Principal Engineer

Dist.: 1-Electronic pdf/Addressee
HSQ/RG/MS/CN/SR/kvg

PROFESSIONAL CERTIFICATION

This report has been prepared by the following professionals whose seals and signatures appear herein.

The findings, recommendations, specifications and professional opinions contained in this report were prepared in accordance with the generally accepted professional engineering and engineering geologic principle and practice in this area of Southern California. We make no other warranty, either expressed or implied.



Sk Syfur Rahman, PhD, EIT
Senior Staff Engineer



Stephen McPherson
Staff Geologist



Hashmi S. E. Quazi, PhD, PE, GE
Principal Engineer



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Appendix A	<i>Field Exploration</i>
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1.0 INTRODUCTION

This report presents the results of our geotechnical investigation performed by Converse for the EMWD Los Alamos Hills project, located in the City of Murrieta, Riverside County, California. The pipeline alignments are shown in Figure No. 1, *Approximate Alignments Locations Map*.

The purpose of this investigation is to determine the nature and engineering properties of the subsurface soils, and to provide preliminary design and construction recommendations for the project.

This report is prepared for the project described herein and is intended for use solely by WEBB and EMWD and their authorized agents for design purposes. It should not be used as a bidding document but may be made available to the potential contractors for information on factual data only. For bidding purposes, the contractors should be responsible for making their own interpretation of the data contained in this report.

2.0 PROJECT DESCRIPTION

The pipeline alignments being considered for the project are summarized in the following table.

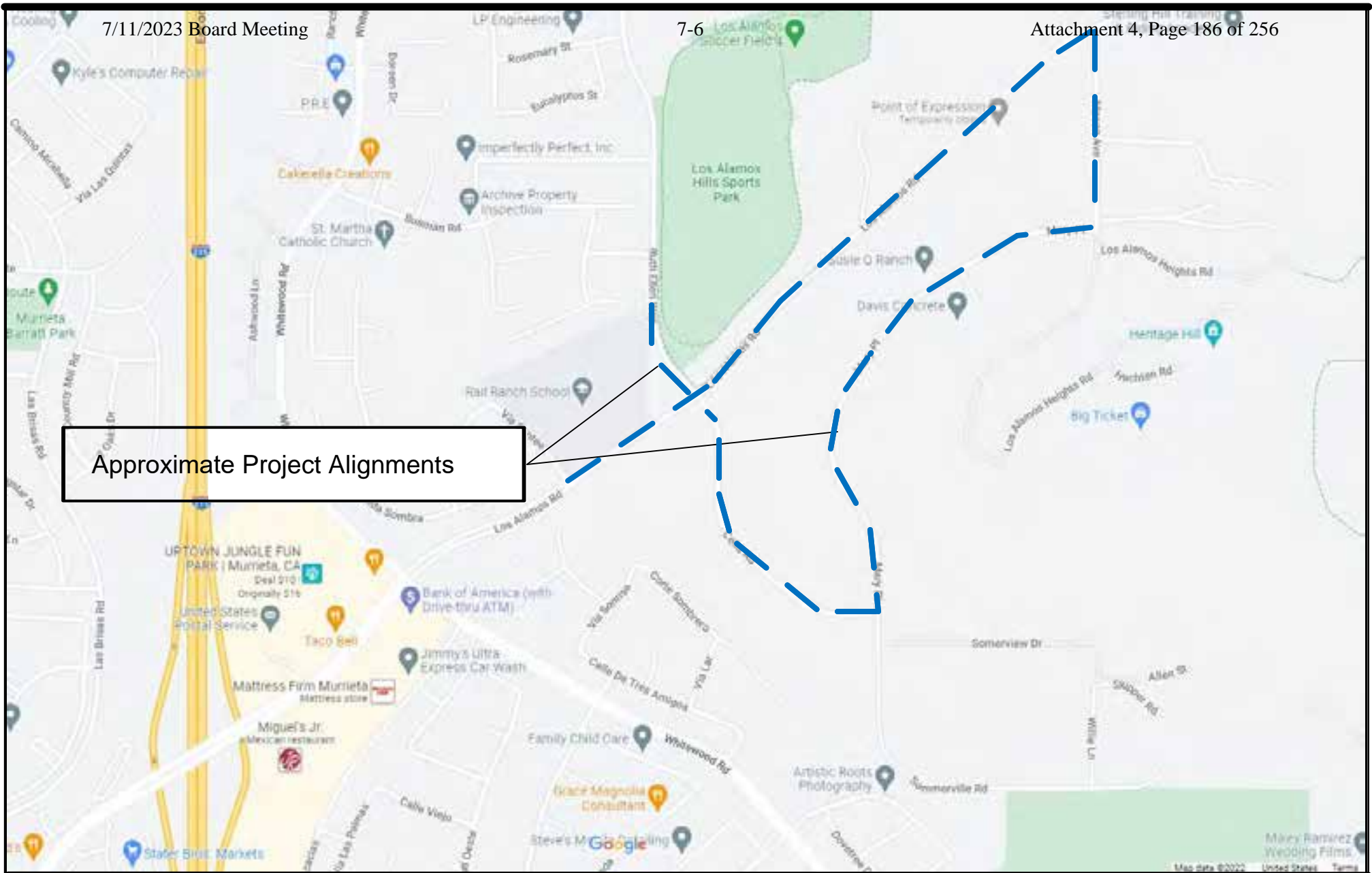
Table No. 1, Summary of the Pipelines Alignments

Site/Alignment	Location From	Location to	Approximate Distance (feet)
Los Alamos Road	Via Santee	Mason Avenue	4,280
Ruth Ellen Way	Approximately 670 feet North of Los Alamos Road	Los Alamos Road	670
Celia Road	Los Alamos Road	Mary Place	2,010
Mary Place	Celia Road	Mason Avenue	4,000
Mason Avenue	Mary Place	Los Alamos Road	1,240
Note: For each alignment location, refer to Figure No. 1, <i>Approximate Alignments Locations Map</i> .			

The available project plans are preliminary; therefore, project information described herein is subject to change if the project plans change.

3.0 ALIGNMENTS CONDITIONS

The surface conditions of the major streets along the pipeline alignments are described below.



Project: EMWD Los Alamos Hills
Location: City of Murrieta, Riverside County, California

Approximate Alignments Locations Map

For: Webb Associates

Project No.
22-81-144-02



Converse Consultants

Figure No.
1 429

a. Ruth Ellen Way: Beginning of Pipeline Alignments on Ruth Ellen Way to Los Alamos Road (approx. 670 feet)

- Bounded on west by Rail Ranch School Yard and drainage basin and to the east by a slope to Los Alamos Hills Sports Park.
- Paved road with single lane in each direction with shoulders, but no center painted median. The width of the road is approximately 45 feet.
- Sidewalk on west side of road with horse trail on the east.
- Overhanging streetlights.
- Parking lane on west side.
- Light traffic was observed.
- Professional traffic control was required.
- Drilling required the closure of the shoulder.
- Refer to Photograph Nos. 1 and 2.



Photograph No. 1: Ruth Ellen Way at beginning of pipeline alignments BH-02, facing south.



Photograph No. 2: Ruth Ellen Way at Los Alamos Road, facing north.

b. Los Alamos Road: Via Santee to Mason Avenue (approx. 4,280 feet)

- Bounded on the north from Via Santee to Ruth Ellen Way by Rail Ranch School and a residential property, then from Ruth Ellen Way by Los Alamos Hills Sports Park for approximately 1,100 feet, then residential horse property to Mason Avenue, and the south by residential horse property and vacant land.
- Paved road with 1 lane in each direction with no shoulders or center painted median. The width of the road is approximately 30 feet.
- No overhead utilities or streetlights.
- Moderate traffic was observed.
- Professional traffic control was required.
- Drilling required the closure of the shoulder.
- Refer to Photograph Nos. 3 through 6.



Photograph No. 3: Los Alamos Road at Ruth Ellen Way, facing northeast.



Photograph No. 4: Los Alamos Road BH-15, facing southwest.



Photograph No. 5: Los Alamos Road (BH-13), facing northeast.



Photograph No. 6: Los Alamos Road at Mason Avenue (BH-12), facing southwest.

c. Celia Road: Los Alamos Road to Mary Place (approx. 2.020 feet)

- Bounded on both sides by residential horse property.
- Graded dirt road with single lane in each direction. The width of the road is approximately 25 feet.
- The posted speed limit sign is 15 miles per hour (mph).
- No overhead or overhanging streetlights.
- Light traffic was observed.

- No professional traffic control was required.
- Drilling required the closure of the shoulder.
- Refer to Photograph Nos. 7 and 8.



Photograph No. 7: Celia Road at Los Alamos Road BH-03, facing southeast.



Photograph No. 8: Celia Road at Mary Place BH-05, facing west.

d. Mary Place: Celia Road to Mason Avenue (approx. 4,000 feet)

- Bounded on both sides by residential horse property.

- Graded dirt road with single lane in each direction. The width of the road is approximately 25 feet.
- Light traffic was observed.
- No professional traffic control required.
- Drilling required the closure of the shoulder.
- Refer to Photograph Nos. 9 through 10.



Photograph No. 9: Mary Place at Celia Road, facing north.



Photograph No. 10: Mary Place (BH-07), facing southwest.

e. **Mason Avenue: Los Alamos Road to Mary Place (approx. 1,240 feet)**

- Bounded on both sides by residential horse property.

- Heavily worn paved road with single lane in each direction. The width of the road is approximately 15 feet.
- The posted speed limit sign is 10 miles per hour (mph).
- No overhead utilities or streetlights.
- Light traffic was observed.
- No professional traffic control was required.
- Drilling required the closure of the shoulder.
- Refer Photograph Nos. 11 and 12.



Photograph No. 11: Mason Avenue at Los Alamos Road, facing south.



Photograph No. 12: Mason Avenue at Mary Place, facing north.

4.0 SCOPE OF WORK

The scope of this investigation included project set-up, subsurface exploration, laboratory testing, engineering analysis, and preparation of this report, as described in the following sections.

4.1 Document Review

We reviewed the following available documents.

- Reports and data provided by WEBB and EMWD.
- Desktop study report prepared by Converse Consultants, dated June 1, 2022.
- Regional and local geology literature and maps.
- Flood hazards maps.
- Arial photos.
- Faulting and seismicity, and any other documents that pertain to the sites or the vicinity.
- Groundwater data.

4.2 Project Set-up

The project set-up consisted of the following tasks.

- Prepared a boring locations map and submitted it to Brad Sackett with WEBB for review and approval.
- Conducted alignments reconnaissance and marked the borings at locations approved by Bradly Sackett with WEBB.
- Obtained encroachment permit to drill along Los Alamos Road and Ruth Ellen Way from the Public Works & Engineering Department, City of Murrieta.
- Prepared required traffic control plans.
- Notified Underground Service Alert (USA) at least 48 hours prior to drilling to clear the boring locations of any conflict with existing underground utilities.
- Engaged a California-licensed driller to drill exploratory borings.
- Engaged a Professional Traffic Control company.

4.3 Subsurface Exploration

Fifteen exploratory borings (BH-01 through BH-15) were drilled on October 18, and October 19, 2022, along the pipeline alignments to investigate subsurface conditions. The borings were drilled using a truck-mounted drill rig equipped with 8-inch diameter hollow-stem augers. The details of borings are presented in the following table.

Table No. 2, Summary of the Borings

Boring No.	Location	Boring Depth (ft, bgs)		Groundwater Depth (ft, bgs)	Date Completed
		Proposed	Completed		
BH-01	Los Alamos Road ^t	10.0	5.0**	N/E	10/19/2022
BH-02	Ruth Ellen Way ^t	10.0	11.5	N/E	10/19/2022
BH-03	Celia Road	10.0	11.4	N/E	10/18/2021
BH-04	Celia Road	10.0	6.0*	N/E	10/18/2021
BH-05	Celia Road	10.0	6.5*	N/E	10/18/2021
BH-06	Mary Place	10.0	10.3	N/E	10/18/2021
BH-07	Mary Place	10.0	10.3	N/E	10/18/2021
BH-08	Mary Place	10.0	10.6	N/E	10/18/2021
BH-09	Mary Place	10.0	11.5	N/E	10/18/2021
BH-10	Mason Avenue ^v	10.0	10.5	N/E	10/18/2021
BH-11	Mason Avenue ^v	10.0	10.9	N/E	10/18/2021
BH-12	Los Alamos Road ^t	10.0	10.3	N/E	10/19/2022
BH-13	Los Alamos Road ^t	10.0	11.3	N/E	10/19/2022
BH-14	Los Alamos Road ^t	10.0	10.4	N/E	10/19/2022
BH-15	Los Alamos Road ^t	10.0	10.2	N/E	10/19/2022
Note: - NE = not encountered. *Refusal due to large concentration of aggregate. **Refusal due to potential utility conflict. t=pavement cored, and core replaced with Pro Select Anchoring Adhesive and dyed black to match road surface. v= pavement drilled directly into and patched with cold patch asphalt concrete.					

The approximate locations of the borings are shown on Figure Nos. 2a and 2b, *Approximate Boring Locations Map*. A detailed discussion of the subsurface exploration is presented in Appendix A, *Field Exploration*.

4.4 Laboratory Testing

Representative soil samples were tested in the laboratory to aid in the soils classification and to evaluate the relevant engineering properties of the soil. These tests included the following.

- *In-situ* moisture contents and dry densities (ASTM D2216 and ASTM D2937)
- Sand Equivalent (ASTM D2419)
- Soil corrosivity (California Tests 643, 422, and 417)

BH-15/10



Number/Depth and Approximate Location of
Exploratory Boring

0'

1,000'



Project: EMWD Los Alamos Hills
Location: City of Murietta, Riverside County, California

For: Webb Associates

Approximate Boring Locations Map

Project No.
22-81-144-02



Converse Consultants

Figure No.
2a 438

Legend

BH-14/10



Number/Depth and Approximate
Location of Proposed Exploratory Boring



0'

1,000'



Project: EMWD Los Alamos Hills
Location: City of Murieta, Riverside County, California

For: Webb Associates

Approximate Boring Locations Map

Project No.
22-81-144-02



Converse Consultants

Figure No.
2b **439**

- Grain size distribution (ASTM D6913)
- Maximum dry density and optimum-moisture content (ASTM D1557)
- Direct shear (ASTM D3080)

For *in-situ* moisture and dry density data, see the Logs of Boring in Appendix A, *Field Exploration*. For a description of the laboratory test methods and test results, see Appendix B, *Laboratory Testing Program*.

4.5 Analysis and Report Preparation

Data obtained from the field exploration and laboratory testing program was compiled and evaluated. Geotechnical analyses of the compiled data were performed, and this report was prepared to present our findings, conclusions, and recommendations for the project.

5.0 SURFACE AND SUBSURFACE CONDITIONS

A general description of the surface and subsurface conditions, various materials and groundwater conditions encountered at each location during our field exploration is discussed below.

5.1 Existing Pavement Sections

The measured pavement thicknesses at each boring location are listed in the following table.

Table No. 3, Existing Pavement Sections

Boring No.	Street/Location	Asphalt Concrete Thickness (in.)	Aggregate Base Thickness (in.)
BH-01	Los Alamos Road	6.0	4.0
BH-02	Ruth Ellen Way	4.0	9.0
BH-03*	Celia Road	N/A	N/A
BH-04*	Celia Road	N/A	N/A
BH-05*	Celia Road	N/A	N/A
BH-06*	Mary Place	N/A	N/A
BH-07*	Mary Place	N/A	N/A
BH-08*	Mary Place	N/A	N/A
BH-09*	Mary Place	N/A	N/A
BH-10	Mason Avenue	4.0	3.0
BH-11	Mason Avenue	2.0	4.0

Boring No.	Street/Location	Asphalt Concrete Thickness (in.)	Aggregate Base Thickness (in.)
BH-12	Los Alamos Road	5.0	2.0
BH-13	Los Alamos Road	5.0	4.0
BH-14	Los Alamos Road	5.0	4.0
BH-15	Los Alamos Road	5.0	2.0
Note: For location of the borings, see Figure Nos. 2a and 2b, <i>Approximate Boring Locations Map</i> and <i>Table No. 2, Summary of Boring</i> . *Drilled on dirt.			

For a detailed description of the subsurface materials encountered in the exploratory borings, see Drawings No. A-2 through A-16, *Logs of Borings*, in Appendix A, *Field Exploration*.

5.2 Subsurface Profile

The subsurface profile to the depths of borings is described below.

Undocumented Artificial Fill: Undocumented artificial fill was encountered in all borings from the surface and below the asphalt concrete to a depth ranging from 0.5 feet to 5.0 feet below ground surface (bgs). Based on the exploratory borings and laboratory test results, the subsurface fill soils consist primarily of a mixture of sand, silt, occasional gravel and cobbles. Scattered to little gravel up to 3 inch in largest dimension, and scattered cobbles up to 8 inches in maximum dimension were observed in the borings.

Alluvium: The alluvium was encountered in all borings below the undocumented artificial fill at depths ranging from 0.5 to 5.0 feet bgs. Based on the exploratory borings and laboratory test results, the subsurface alluvium soils consist primarily of a mixture of sand, silt, clay, occasional gravel and occasional cobble. Scattered to little gravel up to 3 inch in largest dimension were observed in the borings.

5.3 Groundwater

Groundwater was not encountered during the field investigation.

Current and historical groundwater data was reviewed near the proposed pipeline alignment. Results from the searches are provided below.

The State Water Resources Control Board's GeoTracker Database (SWRCB, 2022) was reviewed for current and historic groundwater level data within a 1.0-mile radius of the

project area. Data from that search is listed below.

- Shell Service Station (Site No. T0606581892), located approximately 2,800 feet southwest of the project area, reported groundwater at depths ranging from approximately 17.63 to 40.12 feet bgs between 2003 and 2009.
- Mobil Service Station (Site No. T0606540445), located approximately 4,330 feet southwest of the project area, reported groundwater at depths ranging from approximately 54.84 to 58.01 feet bgs between 2005 and 2009.
- Las Brisas Cleaners (Site No. SL0607300208) located approximately 4,500 feet southwest of the project area, reported groundwater at depths ranging from approximately 55.07 to 62.10 feet bgs between 2006 and 2011.

The National Water Information System (USGS, 2022) was reviewed for current and historical groundwater data from sites within an approximately 1.0-mile radius of the pipeline alignments and the results of that search are included below.

Table No. 4, Summary of USGS Groundwater Depth Data

Site Number	Location	Groundwater Depth Range (ft. bgs)	Date Range
333501117095201	Los Alamos Road along pipeline alignment 1	30.00	1968
333512117092701	Approximately 4,500 feet east of Mason Avenue	43.00	1968
333440117101501	Approximately 300 feet west of Celia Road	12.00	1968
333442117102101	Approximately 800 feet west of the intersection of Los Alamos and Celia Road	34.00	1968
333533117091401	Approximately 2,500 feet northeast of the intersection of Los Alamos and Mason Avenue	23.00	1968
333529117093401	Approximately 2,300 feet northeast of the intersection of Los Alamos and Mason Avenue	10.00	1968
333532117100001	Approximately 2,800 feet northwest of the intersection of Los Alamos and Mason Avenue	9.00	1968
333506117102901	Approximately 2,000 feet northwest of the beginning of pipeline Alignment on Ruth Ellen Way	6.00	1968

The California Department of Water Resources database (DWR, 2022) was reviewed for historical groundwater data from sites within a 1.0-mile radius of the project site. No site, which is not listed above, with groundwater data was found within a 1.0-mile radius of the project site.

Historically high groundwater along the pipeline alignments is not known with certainty but is anticipated to be deeper than approximately 6.0 feet bgs. However, under certain conditions the groundwater may be at or above ground surface, e.g., periods of flooding or proximity to a stream.

It should be noted that the groundwater levels could vary depending upon the seasonal precipitation and possible groundwater pumping activity in the alignment vicinity. Shallow perched groundwater may be present locally, particularly following precipitation.

5.4 *Excavatability*

The subsurface soil materials are expected to be excavatable by conventional heavy-duty earth moving and trenching equipment. Excavation will likely be difficult where concentration of gravel and cobbles are encountered.

The phrase “conventional heavy-duty excavation equipment” is intended to include commonly used equipment such as excavators and trenching machines. It does not include hydraulic hammers (“breakers”), jackhammers, blasting, or other specialized equipment and techniques used to excavate hard earth materials. Selection of an appropriate excavation equipment model should be done by an experienced earthwork contractor and may require test excavations in representative areas.

5.5 *Subsurface Variations*

Based on results of the subsurface exploration and our experience, some variations in the continuity and nature of subsurface conditions within the pipeline alignments should be anticipated. Because of the uncertainties involved in the nature and depositional characteristics of the earth material, care should be exercised in interpolating or extrapolating subsurface conditions between or beyond the boring locations.

6.0 ENGINEERING GEOLOGY

The regional and local geology are discussed in the following subsections.

6.1 Regional Geology

The pipeline alignments are located within the northern Peninsular Ranges Geomorphic Province of Southern California. The Peninsular Ranges Geomorphic Province consists of a series of northwest-trending mountain ranges and valleys bounded on the north by the San Bernardino and San Gabriel Mountains, on the west by the Los Angeles Basin, and on the south by the Pacific Ocean.

The province is a seismically active region characterized by a series of northwest-trending strike-slip faults. The most prominent of the nearby fault zones include the San Jacinto, Cucamonga, and San Andreas Fault Zones, all of which have been known to be active during Quaternary time.

Topography within the province is generally characterized by broad alluvial valleys separated by linear mountain ranges. This northwest-trending linear fabric is created by the regional faulting within the granitic basement rock of the Southern California Batholith. Broad, linear, alluvial valleys have been formed by erosion of these principally granitic mountain ranges.

The project area is located within the Perris Block. The Perris Block is a relatively stable structural block bounded by the active Elsinore and San Jacinto fault zones to the west and east, and the Chino and Temecula basins to the north and south, respectively. The Perris Block has low relief and is roughly rectangular.

6.2 Local Geology

The project area is anticipated to be underlain by Cretaceous age undifferentiated hornblende gabbro (Kgb) to the southwest. The northeastern portion of the project area is anticipated to be underlain by Sandstone, moderately to well indurated, containing scattered cobble to boulder conglomerate (Qps) beds. Bedrock is anticipated to be encountered within the project area.

6.3 Flooding

Review of National Flood Insurance Rate Maps indicate that the pipeline alignments are located within a Flood Hazard Zone "X". The zone "X" is designated as an area with a 0.2 percent annual chance flood hazard. (FEMA, 2008).

7.0 FAULTING AND SEISMICITY

Nearby active faults, seismicity, and their impact on the project area are discussed in the following sections.

7.1 Faulting

The proposed pipeline alignments are situated in a seismically active region. As is the case for most areas of Southern California, ground-shaking resulting from earthquakes associated with nearby and more distant faults may occur at the project site. During the life of the project, seismic activity associated with active faults can be expected to generate moderate to strong ground shaking at the site. Review of recent seismological and geophysical publications indicates that the seismic hazard for the project is high.

No portion of the project area is located within a currently designated State of California or Riverside County Earthquake Fault Zone (CGS, 2007; Riverside County, 2022). The nearest active fault zone is the Murrieta Hot Springs fault zone approximately 1,400 feet south of the intersection of Celia Road and Mary Place. The nearest fault is the Warm Springs Fault approximately 400 feet south of the intersection of Celia Road and Mary Place. The Elsinore Fault Zone is approximately 2.35 miles southwest of the Celia Road and Mary Place intersection.

The table below summarizes selected data of known faults capable of seismic activity within 100 kilometers of the site. We used the generalized coordinates of 33.5809N, 117.16724W, for the fault table below. The data presented below was calculated using the National Seismic Hazard Maps Database (USGS, 2008) and other published geologic data.

Table No. 5, Summary of Regional Faults

Fault Name and Section	Closest Distance (km)	Slip Sense	Length (km)	Slip Rate (mm/year)	Maximum Magnitude
Elsinore	4.25	strike slip	241	n/a	7.85
San Jacinto	28.96	strike slip	241	n/a	7.88
Chino, alt 2	45.81	strike slip	29	1	6.80
Chino, alt 1	49.97	strike slip	24	1	6.70
Newport Inglewood Connected alt 1	50.25	strike slip	208	1.3	7.50
Newport Inglewood Connected alt 2	50.25	strike slip	208	1.3	7.50
Newport-Inglewood (Offshore)	50.25	strike slip	66	1.5	7.00
S. San Andreas	52.83	strike slip	548	n/a	8.18
Rose Canyon	56.17	strike slip	70	1.5	6.90
Pinto Mtn	66.84	strike slip	74	2.5	7.30
Earthquake Valley	69.93	strike slip	20	2	6.80
Cucamonga	70.91	thrust	28	5	6.70

Fault Name and Section	Closest Distance (km)	Slip Sense	Length (km)	Slip Rate (mm/year)	Maximum Magnitude
Newport-Inglewood, alt 1	71.33	strike slip	65	1	7.20
Puente Hills (Coyote Hills)	73.85	thrust	17	0.7	6.90
Coronado Bank	75.01	strike slip	186	3	7.40
Palos Verdes Connected	75.01	strike slip	285	3	7.70
San Jose	76.43	strike slip	20	0.5	6.70
Palos Verdes	77.38	strike slip	99	3	7.30
Cleghorn	77.39	strike slip	25	3	6.80
Sierra Madre	80.22	reverse	57	2	7.20
Sierra Madre Connected	80.22	reverse	76	2	7.30
Burnt Mtn	81.9	strike slip	21	0.6	6.80
North Frontal (West)	82.2	reverse	50	1	7.20
Eureka Peak	87.21	strike slip	19	0.6	6.70
Puente Hills (Santa Fe Springs)	87.93	thrust	11	0.7	6.70
Helendale-So Lockhart	88.68	strike slip	114	0.6	7.40
North Frontal (East)	90.44	thrust	27	0.5	7.00
Landers	94.87	strike slip	95	0.6	7.40
Clamshell-Sawpit	96.41	reverse	16	0.5	6.70
Lenwood-Lockhart-Old Woman Springs	98.06	strike slip	145	0.9	7.50
Puente Hills (LA)	98.75	thrust	22	0.7	7.00
Raymond	99.88	strike slip	22	1.5	6.80

(Source: https://earthquake.usgs.gov/cfusion/hazfaults_2008_search/)

7.2 CBC Seismic Design Parameters

Seismic parameters based on the 2022 California Building Code (CBSC, 2022) and ASCE 7-16 are provided in the following table. These parameters were determined using the generalized coordinates (33.5809N, 117.16724W) and the Seismic Design Maps ATC online tool.

Table No. 6, CBC 2022 Seismic Design Parameters

Seismic Parameters	
Site Coordinates	33.5809N, 117.16724W
Site Class	D*
Risk Category	III

Seismic Parameters	
Mapped Short period (0.2-sec) Spectral Response Acceleration, S_s	1.494g
Mapped 1-second Spectral Response Acceleration, S_1	0.558g
Site Coefficient (from Table 11.4-1), F_a	1.0
Site Coefficient (from Table 11.4-2), F_v	1.8
MCE 0.2-sec period Spectral Response Acceleration, S_{MS}	1.494g
MCE 1-second period Spectral Response Acceleration, S_{M1}	1.004g
Design Spectral Response Acceleration for short period S_{DS}	0.996g
Design Spectral Response Acceleration for 1-second period, S_{D1}	0.670g
Site Modified Maximum Peak Ground Acceleration, PGA_M	0.717g

* *Stiff Soil Classification*

7.3 Secondary Effects of Seismic Activity

Generally, in addition to ground shaking, effects of seismic activity on a pipeline or structure may include surface fault rupture, soil liquefaction, and settlement due to earthquake shaking, landslides, lateral spreading, tsunamis, seiches, and flooding due to earthquake-induced dam failure. The site-specific potential for each of these seismic hazards is discussed in the following sections.

Surface Fault Rupture: No portions of the project area are located within a currently designated State of California or Riverside County Earthquake Fault Zone (CGS, 2007; Riverside County, 2022). The potential for surface rupture resulting from the movement of nearby or distant faults is not known with certainty but is considered very low.

Dynamic Settlement (Liquefaction and Dry Seismic Settlement): Liquefaction is defined as the phenomenon in which a soil mass within about the upper 50 feet of the ground surface suffers a substantial reduction in its shear strength, due the development of excess pore pressures. During earthquakes, excess pore pressures in saturated soil deposits may develop as a result of induced cyclic shear stresses, resulting in liquefaction.

Soil liquefaction occurs during or after strong ground shaking. There are several requirements for liquefaction to occur. They are as follows.

- Soils must be submerged
- Soils must be loose to medium-dense
- Ground motion must be intense
- Duration of shaking must be sufficient for the soils to lose shear resistance

There is a very low risk for liquefaction along Ruth Ellen Way, Los Alamos Road, Mason Avenue and the northeastern section of Mary Place. Celia Road and the southwest section of Mary Place there is no risk for liquefaction. Dynamic settlement should be evaluated with data from the soil borings to be conducted during the geotechnical investigation phase

Landslides and Lateral Spreading: Seismically induced landslides and other slope failures are common occurrences during or after earthquakes in areas of significant relief. No portions of the project area are located within a currently designated State of California or Riverside County Landslide Zone (CGS, 2007; Riverside County, 2022). Seismically induced lateral spreading involves primarily lateral movement of earth materials due to ground shaking. The potential for landslides or lateral spreading at the project area is considered very low.

Tsunamis: Tsunamis are large waves generated in open bodies of water by fault displacement or major ground movement. Due to the inland location of the pipeline alignments, tsunamis are not considered to be a risk.

Seiches: Seiches are large waves generated in enclosed bodies of water in response to ground shaking. There are no enclosed bodies of water near the pipeline alignments. Seiching is not considered to be a risk during construction.

Earthquake-Induced Flooding: Dams or other water-retaining structures may fail as a result of large earthquakes. The pipeline alignments are not located within a designated dam inundation area (DSOD, 2022).

8.0 LABORATORY TEST RESULTS

Results of physical and chemical tests performed for this project are presented below.

8.1 *Physical Testing*

Physical test results for alignments are presented in the following table. For detailed description of these tests, see Appendix B, *Laboratory Testing Program*, except for the results of in-situ moisture and dry density tests which are presented on the Logs of Borings in Appendix A, *Field Exploration*.

Table No. 7, Physical Properties of Soils

Test	Values				
	Los Alamos BH01, BH-12 to BH-15	Ruth Ellen BH-02	Celia Way BH-03 to BH-05	Mary Place BH-06 to BH-09	Mason BH-10, BH- 11
*In-situ Moisture and Dry Density (ASTM D2216 and ASTM D2937)	94 to 135 pcf and 3 to 10 percent	103 to 132 pcf and 9 to 11 percent	90 to 127 pcf and 2 to 23 percent	110 to 138 pcf and 1 to 12 percent	107 to 128 pcf and 5 to 11 percent
Sand Equivalent (ASTM D2419)	21.0 to 34.0	N/T	N/T	23	29
Gran Size Analysis (ASTM D6913)	SM	SM	SM with gravel	SM	SM
Maximum Dry Density and Optimum Moisture Content (ASTM D1557)	131.0 pcf and 4.8 percent	N/T	136.0 pcf and 4.4 percent	135.0 pcf and 7.2 percent	N/T
Direct Shear (ASTM D3080)	C= 200 psf and $\phi = 36$	N/T	C= 110 to 400 psf and $\phi = 31$ to 41	C= 290 psf and $\phi = 31$	C= 250 psf and $\phi = 30$
Note: 1. N/T = Not Tested, SM = Silty Sand, 2. *Moisture and dry density for upper 10 feet 3. C = cohesion, ϕ = angle of internal friction					

8.2 Chemical Testing - Corrosivity Evaluation

Four representative soil samples were tested to determine minimum electrical resistivity, pH, and chemical content, including soluble sulfate and chloride concentrations. The purposes of these tests were to determine the corrosion potential of soils when placed in contact with common pipe and construction materials. These tests were performed by AP Engineering and Testing, Inc. (Pomona, CA) in accordance with Caltrans Test Methods 643, 422 and 417. The test results are summarized in the following table.

Table No. 8, Summary of Corrosivity Test Results

Boring No.	Street	Depth (feet)	pH	Soluble Sulfates (CA 417) (ppm)	Soluble Chlorides (CA 422) (ppm)	Min. Resistivity (CA 643) (Ohm-cm)
BH-03	Celia Way at Celia Way	5.0-10.0	7.6	35	26	2,107
BH-05	Celia Way at Mary Place	0 – 5.0	7.4	38	27	2,208
BH-08	Mary Place.	5.0 – 10.0	7.4	16	19	10,248
BH-11	Mason Avenue	0.5 – 5.0	7.3	35	24	2,045

9.0 TRENCH BACKFILL RECOMMENDATIONS

Recommendations of backfill for pipe trenching are presented in the following subsections.

9.1 General

Prior to the start of construction, all existing underground utilities and appurtenances should be located within the vicinity of the proposed alignments. Such utilities should either be protected in-place or removed and replaced during construction as required by the project specifications. All excavations should be conducted in such a manner as not to cause loss of bearing and/or lateral support of existing structures or utilities.

All debris, deleterious material, and surficial soils containing roots and perishable materials should be stripped and removed from the alignments. Deleterious material, including organics, concrete, and debris generated during excavation, should not be placed as fill.

Migration of fines from the surrounding native soils, in the case of water leak from the pipe, must be considered in selecting the gradation of the materials placed within the trench, including bedding, pipe zone and trench zone backfill, as defined in the following sections. Such migration of fines may deteriorate pipe support and may result in settlement/ground loss at the surface.

It should be the responsibility of the contractor to maintain safe working conditions during all phases of construction.

Observations and field tests should be performed by the project soils consultant to confirm that the required degree of compaction has been obtained. Where compaction is less than specified, additional compactive effort should be made with adjustment of the moisture content as necessary, until the specified compaction is obtained.

9.2 Pipeline Subgrade Preparation

The final subgrade surface should be level, firm, uniform, free of loose materials, and properly graded to provide uniform bearing and support to the entire section of the pipe placed on bedding material. Protruding oversize particles, larger than 3 inches maximum dimension, should be removed from the trench bottom and replaced with compacted on-alignments materials.

Any loose, soft and/or unsuitable materials encountered at the pipe sub-grade should be removed and replaced with an adequate bedding material.

During the digging of depressions for proper sealing of the pipe joints, the pipe should rest on a prepared bottom for as near its full length as is practicable.

9.3 Pipe Bedding

Bedding is defined as the material supporting and surrounding the pipe to 1 foot above the pipe. Pipe bedding should follow EMWD or City of Murrieta Standards, whichever is applicable. Additional information for pipe bedding is provided below.

To provide uniform and firm support for the pipe, compacted granular materials such as clean sand, gravel or ¾-inch crushed aggregate, or crushed rock may be used as pipe bedding material. The sand equivalents of the tested soils were between 21 and 34. Typically, soils with sand equivalent value of 30 or more are used as pipe bedding material. The pipe designer should determine if the soils are suitable as pipe bedding material.

The type and thickness of the granular bedding placed underneath and around the pipe, if any, should be selected by the pipe designer. The load on the rigid pipes and deflection of flexible pipes and, hence, the pipe design, depends on the type and the amount of bedding placed underneath and around the pipe.

Bedding materials should be vibrated in-place to achieve compaction. Care should be taken to densify the bedding material below the springline of the pipe. Prior to placing the pipe bedding material, the pipe subgrade should be uniform and properly graded to provide uniform bearing and support to the entire section of the pipe placed on bedding

material. During the digging of depressions for proper sealing of the pipe joints, the pipe should rest on a prepared bottom for as near its full length as is practicable.

Migration of fines from the surrounding native and/or fill soils must be considered in selecting the gradation of any imported bedding material. We recommend that the pipe bedding material should satisfy the following criteria to protect migration of fine materials.

- i. $\frac{D_{15}(F)}{D_{85}(B)} \leq 5$
- ii. $\frac{D_{50}(F)}{D_{50}(B)} < 25$
- iii. Bedding Materials must have less than 5 percent passing No. 200 sieve (0.0074 mm) to avoid internal movement of fines.

Where,

F = Bedding Material

B = Surrounding Native and/or Fill Soils

D₁₅(F) = Particle size through which 15% of bedding material will pass

D₈₅(B) = Particle size through which 85% of surrounding soil will pass

D₅₀(F) = Particle size through which 50% of bedding material will pass

D₅₀(B) = Particle size through which 50% of surrounding soil will pass

If the above criteria do not satisfy, commercially available geofabric used for filtration purposes (such as Mirafi 140N or equivalent) may be wrapped around the bedding material encasing the pipe to separate the bedding material from the surrounding native or fill soils.

9.4 Backfill Materials

No fill should be placed until excavations and/or natural ground preparation have been observed by the geotechnical consultant. Excavated soils should be processed, including removal of roots and debris, removal of oversized particles, mixing, and moisture conditioning, before placing as compacted fill. On-site soils used as fill should meet the following criteria.

- No particles larger than 3 inches in largest dimension.
- Rocks larger than one inch should not be placed within the upper 12 inches of subgrade soils.
- Free of all organic matter, debris, or other deleterious material.
- Expansion index of 30 or less.
- Sand Equivalent greater than 15 (greater than 30 for pipe bedding).
- Contain less than 40 percent fines (passing #200 sieve).

Imported materials, if required, should meet the above criteria prior to being used as compacted fill. Any imported fills should be tested and approved by geotechnical representative prior to delivery to the construction site.

9.5 *Compacted Fill Placement*

Fill soils should be thoroughly mixed, and moisture conditioned to within ± 3 percent of optimum moisture content for coarse soils and 0 to 2 percent above optimum moisture content for fine soils and compacted to at least 90 percent of the laboratory maximum dry density.

Fill materials should not be placed, spread or compacted during unfavorable weather conditions. When work is interrupted by heavy rain, filling operations should not resume until the geotechnical consultant approves the moisture and density conditions of the previously placed fill.

9.6 *Trench Zone Backfill*

The trench zone is defined as the portion of the trench above the pipe bedding extending up to the final grade level of the trench surface. Excavated on-site soils free of oversize particles and deleterious matter may be used to backfill the trench zone. Trench backfill should follow EMWD or City of Murrieta Standards, whichever is applicable. Additional trench backfill recommendations are presented below.

- Trench excavations to receive backfill should be free of trash, debris or other unsatisfactory materials at the time of backfill placement.
- Trench zone backfill should be compacted to at least 90 percent of the laboratory maximum dry density as per ASTM D1557 test method. At least the upper 1 foot of trench backfill underlying pavement should be compacted to at least 95 percent of the laboratory maximum dry density as per ASTM D1557 test method.
- Particles larger than 1 inch should not be placed within 12 inches of the pavement subgrade. No more than 30 percent of the backfill volume should be larger than $\frac{3}{4}$ -inch in the largest dimension. Gravel should be well mixed with finer soil. Rocks larger than 3 inches in the largest dimension should not be placed as trench backfill.
- Trench backfill should be compacted by mechanical methods, such as sheepsfoot, vibrating or pneumatic rollers or mechanical tampers to achieve the density specified herein. The backfill materials should be brought to within ± 3 percent of optimum moisture content for coarse-grained soil, and between optimum and 2 percent above optimum for fine-grained soil, then placed in horizontal layers. The thickness of uncompacted layers should not exceed 8 inches. Each layer should

be evenly spread, moistened or dried as necessary, and then tamped or rolled until the specified density has been achieved.

- The contractor should select the equipment and processes to be used to achieve the specified density without damage to adjacent ground, structures, utilities and completed work.
- The field density of the compacted soil should be measured by the ASTM D1556 (Sand Cone) or ASTM D6938 (Nuclear Gauge) or equivalent.
- Trench backfill should not be placed, spread or rolled during unfavorable weather conditions. When the work is interrupted by heavy rain, fill operations should not resume until field tests by the project's geotechnical consultant indicate that the moisture content and density of the fill are in compliance with project specifications.

10.0 DESIGN RECOMMENDATIONS

General design recommendations, resistance to lateral loads, pipe design parameters, bearing pressures, and soil corrosivity are discussed in the following subsections.

10.1 General

Where pipes connect to rigid structures and are subjected to significant loads as the backfill is placed to finish grade, we recommend that provisions be incorporated in the design to provide support of these pipes where they exit the structures. Consideration can be given to flexible connections, concrete slurry support beneath the pipes where they exit the structures, overlaying the pipes with a few inches of compressible material, (i.e., Styrofoam, or other materials), or other techniques.

The various design recommendations provided in this section are based on the assumption that the above earthwork recommendations will be implemented.

10.2 Resistance to Lateral Loads

Resistance to lateral loads can be assumed to be provided by passive earth pressures and friction between construction materials and native soils. The resistance to lateral loads were estimated by using on-site native soils strength parameters obtained from laboratory testing. The resistance to lateral loads recommended for use in design of thrust blocks are presented in the following table.

Table No. 9, Resistance to Lateral Loads

Soil Parameters	Value
Passive earth pressure (psf per foot of depth)	250
Maximum allowable bearing pressure against native soils (psf)	2,500
Coefficient of friction between formed concrete and native soils, fs	0.35

10.3 Soil Parameters for Pipe Design

Structural design requires proper evaluation of all possible loads acting on pipe. The stresses and strains induced on buried pipe depend on many factors, including the type of soil, density, bearing pressure, angle of internal friction, coefficient of passive earth pressure, and coefficient of friction at the interface between the backfill and native soils. The recommended values of the various soil parameters for design are provided in the following table.

Table No. 10, Soil Parameters for Pipe Design

Soil Parameters	Value		
	Celia Road	Marry Place	Los Alamos Road
Average compacted fill total unit weight (assuming 92% relative compaction), γ (pcf)	131	133	126
Angle of internal friction of soils, ϕ	31	31	36
Soil cohesion, c (psf)	110	110	200
Coefficient of friction between concrete and native soils, fs	0.35	0.35	0.35
Coefficient of friction between PVC pipe and native soils, fs	0.25	0.25	0.25
Bearing pressure against native soils (psf)	2,500	2,500	2,500
Coefficient of passive earth pressure, Kp	3.12	3.12	3.85
Coefficient of active earth pressure, Ka	0.32	0.32	0.26
Modulus of Soil Reaction E' (psi)	1,500	1,500	1,500
Note 1. Celia Road = BH-03 through BH-05, 2. Marry Place = BH-06 through BH-09, 3. Los Alamos Road = BH-01 and BH-12 through BH-15			

10.4 Bearing Pressure for Anchor and Thrust Blocks

An allowable net bearing pressure presented in Table No. 10, *Soil Parameters for Pipe Design* may be used for anchor and thrust block design against alluvial soils. Such thrust blocks should be at least 18 inches wide.

If normal code requirements are applied for design, the above recommended bearing capacity and passive resistances may be increased by 33 percent for short duration loading such as seismic or wind loading.

10.5 Soil Corrosivity

The results of chemical testing of four representative soil samples from the soil borings were evaluated for corrosivity evaluation with respect to common pipe and construction materials such as concrete and steel. The test results are presented in Appendix B, *Laboratory Testing Program*, and are discussed below.

The sulfate content of the sampled soil corresponds to American Concrete Institute (ACI) exposure category S0 for this sulfate concentration (ACI 318-14, Table 19.3.1.1). No concrete type restrictions are specified for exposure category S0 (ACI 318-14, Table 19.3.2.1). A minimum compressive strength of 2,500 psi is recommended.

We anticipate that the pipeline will be exposed to moisture from precipitation and irrigation. Based on the alignments location and the results of chloride testing of the soils, we do not anticipate pipeline will be exposed to external sources of chlorides, such as deicing chemicals, salt, brackish water, or seawater. ACI specifies exposure category C1 where concrete is exposed to moisture, but not to external sources of chlorides (ACI 318-14, Table 19.3.1.1). ACI provides concrete design recommendations in ACI 318-14, Table 19.3.2.1, including a compressive strength of at least 2,500 psi and a maximum chloride content of 0.3 percent.

According to Romanoff, 1957, the following table provides general guidelines of soil corrosion based on electrical resistivity.

Table No. 11, Correlation Between Resistivity and Corrosion

Soil Resistivity (ohm-cm) per Caltrans CT 643	Corrosivity Category
Over 10,000	Mildly corrosive
2,000 – 10,000	Moderately corrosive
1,000 – 2,000	corrosive
Less than 1,000	Severe corrosive

The minimum electrical resistivities along pipeline alignments when saturated ranged from 2,045 to 10,248 ohm-cm. These values indicate that the tested soils are moderately corrosive to ferrous metals in contact with the soils.

Converse does not practice in the area of corrosion consulting. If needed, a qualified corrosion consultant should provide appropriate corrosion mitigation measures for any ferrous metals in contact with the site soils.

11.0 CONSTRUCTION CONSIDERATIONS

Construction recommendations are presented below.

11.1 General

Prior to the start of construction, all existing underground utilities should be located along the pipeline alignments. Such utilities should either be protected in-place or removed and replaced during construction as required by the project specifications.

Vertical braced excavations are feasible along the pipeline alignments. Sloped excavations may not be feasible in locations adjacent to existing utilities (if any).

Where the side of the excavation is a vertical cut, it should be adequately supported by temporary shoring to protect workers and any adjacent structures.

All applicable requirements of the California Construction and General Industry Safety Orders, the Occupational Safety and Health Act, current amendments, and the Construction Safety Act should be met. The soil exposed in cuts should be observed during excavation by the owner's representative and the competent person employed by the contractor in accordance with regulations. If potentially unstable soil conditions are encountered, modifications of slope ratios for temporary cuts may be required.

11.2 Temporary Sloped Excavations

Temporary open-cut trenches may be constructed in areas not adjacent to existing underground utilities improvements with side slopes as recommended in the table below. Temporary cuts encountering soft and wet fine-grained soils, dry loose, cohesionless soils, or loose fill from trench backfill may have to be constructed at a flatter gradient than presented below.

Table No. 12, Slope Ratios for Temporary Excavations

Soil Type	OSHA Soil Type	Depth of Cut (feet)	Recommended Maximum Slope (Horizontal: Vertical) ¹
Silty Sand with Gravel (SM), Silty Sand (SM), Clay (CL)	C	0-10	1.5:1
		10-20	2:1

¹ Slope ratio is assumed to be constant from top to toe of slope, with level adjacent ground.

For shallow excavations up to 4 feet bgs, slope can be vertical. For steeper temporary construction slopes or deeper excavations, or unstable soil encountered during the excavation, shoring or trench shields should be provided by the contractor as necessary to protect the workers in the excavation.

Surfaces exposed in sloped excavations should be kept moist but not saturated to retard raveling and sloughing during construction. Adequate provisions should be made to protect the slopes from erosion during periods of rainfall. Surcharge loads, including construction materials, should not be placed within 5 feet of the unsupported slope edge. Stockpiled soils with a height higher than 6 feet will require greater distance from trench edges.

11.3 Shoring Design

Temporary shoring will be required where open sloped excavations will not be feasible due to unstable soils or due to nearby existing structures or facilities. Temporary shoring may consist of conventional soldier piles and lagging or sheet piles or any piles selected by contractor. The shoring for the pipe excavations may be laterally supported by walers and cross bracing or may be cantilevered. Drilled excavations for soldier piles will require the use of drilling fluids to prevent caving and to maintain an opened hole for pile installation.

The active earth pressure behind any shoring depends primarily on the allowable movement, type of backfill materials, backfill slopes, wall inclination, surcharges, and any hydrostatic pressures.

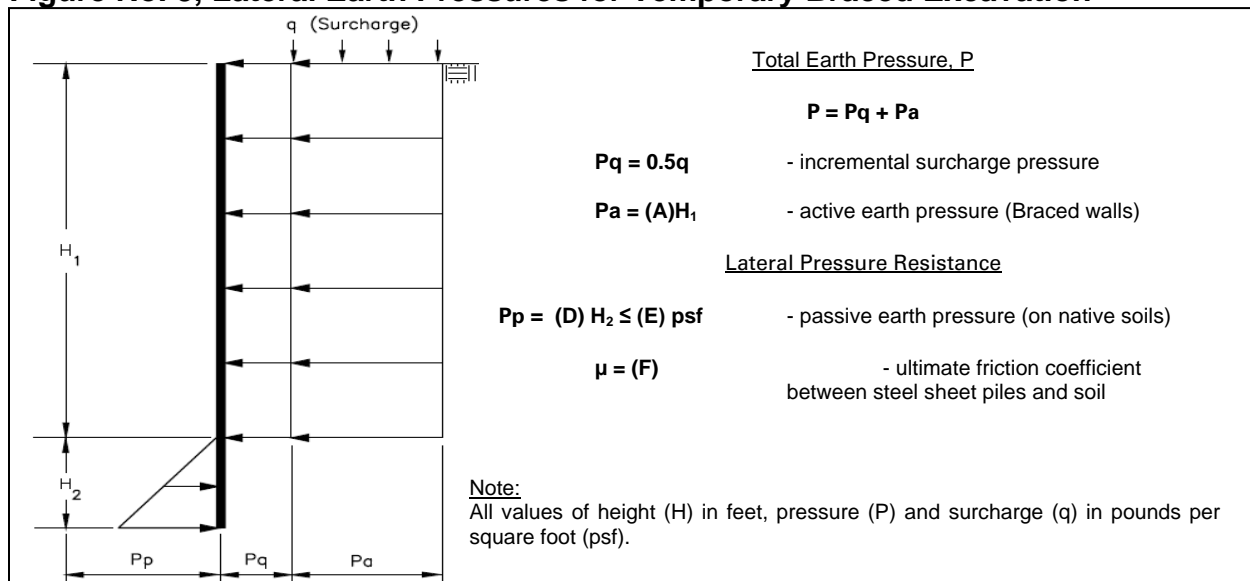
The lateral earth pressures to be used in the design of shoring is presented in the following table.

Table No. 13, Lateral Earth Pressures for Temporary Shoring

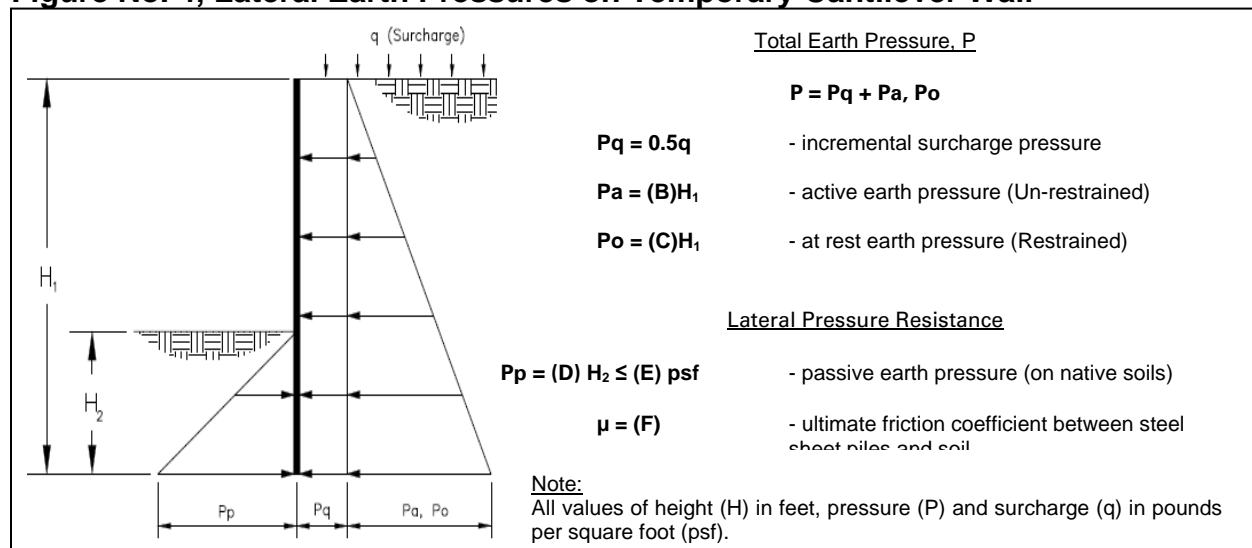
Lateral Resistance Soil Parameters*	Value
Active Earth Pressure (Braced Shoring) (psf) (A)	30
Active Earth Pressure (Cantilever Shoring) (psf) (B)	46
At-Rest Earth Pressure (Cantilever Shoring) (psf) (C)	68
Passive earth pressure (psf per foot of depth) (D)	250
Maximum allowable bearing pressure against native soils (psf) (E)	2,500
Coefficient of friction between sheet pile and native soils, fs (F)	0.25

* Parameters A through F are used in Figures No. 3 and 4 below.

Restrained (braced) shoring systems should be designed based on Figure No. 3, *Lateral Earth Pressures for Temporary Braced Excavation* to support a uniform rectangular lateral earth pressure.

Figure No. 3, Lateral Earth Pressures for Temporary Braced Excavation

Unrestrained (cantilever) design of cantilever shoring consisting of soldier piles spaced at least two diameters on-center or sheet piles, can be based on Figure No. 4, *Lateral Earth Pressures on Temporary Cantilever Wall*.

Figure No. 4, Lateral Earth Pressures on Temporary Cantilever Wall

The provided pressures assume no hydrostatic pressures. If hydrostatic pressures are allowed to build up, the incremental earth pressures below the ground-water level should be reduced by 50 percent and added to hydrostatic pressure for total lateral pressure.

Passive resistance includes a safety factor of 1.5. The upper 1 foot for passive resistance should be ignored unless the surface is confined by a pavement or slab.

In addition to the lateral earth pressure, surcharge pressures due to miscellaneous loads, such as soil stockpiles, vehicular traffic or construction equipment located adjacent to the shoring, should be included in the design of the shoring. A uniform lateral pressure of 100 psf should be included in the upper 10 feet of the shoring to account for normal vehicular and construction traffic within 10 feet of the trench excavation. As previously mentioned, all shoring should be designed and installed in accordance with state and federal safety regulations.

The contractor should have provisions for soldier pile and sheet pile removal. All voids resulting from removal of shoring should be filled. The method for filling voids should be selected by the contractor, depending on construction conditions, void dimensions and available materials. The acceptable materials, in general, should be non-deleterious, and able to flow into the voids created by shoring removal (e.g., concrete slurry, "pea" gravel, etc.).

Excavations for the proposed pipeline should not extend below a 1:1 horizontal: vertical (H:V) plane extending from the bottom of any existing structures, utility lines or streets.

Any proposed excavation should not cause loss of bearing and/or lateral supports of the existing utilities or streets.

If the excavation extends below a 1:1 (H: V) plane extending from the bottom of the existing structures, utility lines or streets, a maximum of 10 feet of slope face parallel to the existing improvement should be exposed at a time to reduce the potential for instability. Backfill should be accomplished in the shortest period of time and in alternating sections.

12.0 CLOSURE

This report is prepared for the project described herein and is intended for use solely by WEBB, EMWD and their authorized agents, to assist in the design and construction of the proposed project. Our findings and recommendations were obtained in accordance with generally accepted professional principles practiced in geotechnical engineering. We make no other warranty, either expressed or implied.

Converse Consultants is not responsible or liable for any claims or damages associated with interpretation of available information provided to others. Field exploration identifies actual soil conditions only at those points where samples are taken, when they are taken. Data derived through sampling and laboratory testing is extrapolated by Converse employees who render an opinion about the overall soil conditions. Actual conditions in areas not sampled may differ. In the event that changes to the project occur, or additional, relevant information about the project is brought to our attention, the recommendations contained in this report may not be valid unless these changes and additional relevant information are reviewed, and the recommendations of this report are modified or verified in writing. In addition, the recommendations can only be finalized by observing actual subsurface conditions revealed during construction. Converse cannot be held responsible for misinterpretation or changes to our recommendations made by others during construction.

As the project evolves, continued consultation and construction monitoring by a qualified geotechnical consultant should be considered an extension of geotechnical investigation services performed to date. The geotechnical consultant should review plans and specifications to verify that the recommendations presented herein have been appropriately interpreted, and that the design assumptions used in this report are valid. Where significant design changes occur, Converse may be required to augment or modify the recommendations presented herein. Subsurface conditions may differ in some locations from those encountered in the explorations, and may require additional analyses and, possibly, modified recommendations.

Design recommendations given in this report are based on the assumption that the recommendations contained in this report are implemented. Additional consultation may be prudent to interpret Converse's findings for contractors, or to possibly refine these recommendations based upon the review of the actual site conditions encountered during construction. If the scope of the project changes, if project completion is to be delayed, or if the report is to be used for another purpose, this office should be consulted.

13.0 REFERENCES

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Appendix A

Field Exploration

APPENDIX A

FIELD EXPLORATION

Our field investigation included alignments reconnaissance and a subsurface exploration program consisting of drilling soil borings. During the alignment reconnaissance, the surface conditions were noted, and the borings were marked at locations reviewed and approved by Brad Sackett with WEBB. The approximate boring locations were established in the field with reference to existing streets and other visible features. The locations should be considered accurate only to the degree implied by the method used. Permit was obtained from the City of Murrieta prior to the drilling on Los Alamos Road and Ruth Ellen Way, no permit was required for the remaining borehole locations.

Fifteen exploratory borings (BH-01 through BH-15) were drilled on October 18 and October 19, 2022, along the pipeline alignments to investigate the subsurface conditions. BH-01 was terminated due to possible utility conflict, BH-04, and BH-05 were terminated due to large concentration of aggregate. The borings details are presented in the following table.

Table No. A-1, Summary of Boring Information

Boring No.	Location	Boring Depth (ft, bgs)		Groundwater Depth (ft, bgs)	Date Completed
		Proposed	Completed		
BH-01	Los Alamos Road ^t	10.0	5.0**	N/E	10/19/2022
BH-02	Ruth Ellen Way ^t	10.0	11.5	N/E	10/19/2022
BH-03	Celia Road	10.0	11.4	N/E	10/18/2021
BH-04	Celia Road	10.0	6.0*	N/E	10/18/2021
BH-05	Celia Road	10.0	6.5*	N/E	10/18/2021
BH-06	Mary Place	10.0	10.3	N/E	10/18/2021
BH-07	Mary Place	10.0	10.3	N/E	10/18/2021
BH-08	Mary Place	10.0	10.6	N/E	10/18/2021
BH-09	Mary Place	10.0	11.5	N/E	10/18/2021
BH-10	Mason Avenue ^v	10.0	10.5	N/E	10/18/2021
BH-11	Mason Avenue ^v	10.0	10.9	N/E	10/18/2021
BH-12	Los Alamos Road ^t	10.0	10.3	N/E	10/19/2022
BH-13	Los Alamos Road ^t	10.0	11.3	N/E	10/19/2022
BH-14	Los Alamos Road ^t	10.0	10.4	N/E	10/19/2022

Boring No.	Location	Boring Depth (ft, bgs)		Groundwater Depth (ft, bgs)	Date Completed
		Proposed	Completed		
BH-15	Los Alamos Road ^t	10.0	10.2	N/E	10/19/2022
Note: - NE = not encountered. * Refusal due to large concentration of aggregate. **Refusal due to potential utility conflict ^t =pavement cored, and core replaced with Pro Select Anchoring Adhesive and dyed black to match road surface. ^v = pavement drilled directly into and patched with cold patch asphalt concrete.					

The boring locations on Los Alamos Road and Ruth Ellen Way (BH-01, BH-02 and BH-12 through BH-15) were cored with coring machine, the remainder of the locations were not cored. Borings were then drilled using a truck-mounted drill rig equipped with 8-inch diameter hollow-stem augers. Encountered materials were continuously logged by a Converse geologist and classified in the field by visual classification in accordance with the Unified Soil Classification System. Where appropriate, the field descriptions and classifications have been modified to reflect laboratory test results.

Relatively undisturbed samples were obtained using California Modified Samplers (2.4 inches inside diameter and 3.0 inches outside diameter) lined with thin sample rings. The steel ring sampler was driven into the bottom of the borehole with successive drops of a 140-pound driving weight falling 30 inches. Blow counts at each sample interval are presented on the boring logs. Samples were retained in brass rings (2.4 inches inside diameter and 1.0 inch in height) and carefully sealed in waterproof plastic containers for shipment to the Converse laboratory. Bulk samples of typical soil types were also obtained.

Following the completion of logging and sampling, the borings were backfilled with soil cuttings mixed with cement and compacted by pushing down with an auger using the drill rig weight.

Borings (BH-03 through BH-09) were backfilled with soil cuttings and compacted by pushing down with an auger using drill rig weight due to the borings being located on dirt road. The surface of the borings that penetrated Los Alamos Road and Ruth Ellen Way (BH-01, BH-02 and BH-12 through BH-15), were patched with cored asphalt concrete piece and glued into place with Pro Select Anchoring Adhesive and dyed black. The borings that penetrated Mason Avenue (BH-10 and BH-11), were patched with cold patch asphalt.

If construction is delayed, the surface may settle over time. We recommend the owner monitor the boring locations and backfill any depressions that might occur or provide protection around the boring locations to prevent trip and fall injuries from occurring near the area of any potential settlement.

For a key to soil symbols and terminology used in the boring logs, refer to Drawing No. A-1a through A-1c, *Unified Soil Classification and Key to Boring Log Symbols*. For logs of borings, see Drawing Nos. A-2 through A-16, *Logs of Borings*.

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS
			GRAPH	LETTER	
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
				GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
	SAND AND SANDY SOILS	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
			SM	SILTY SANDS, SAND - SILT MIXTURES	
			SC	CLAYEY SANDS, SAND - CLAY MIXTURES	
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
			SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50	
		CH			INORGANIC CLAYS OF HIGH PLASTICITY
		OH			ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
	HIGHLY ORGANIC SOILS				

FIELD AND LABORATORY TESTS	
C	Consolidation (ASTM D 2435)
CL	Collapse Potential (ASTM D 4546)
CP	Compaction Curve (ASTM D 1557)
CR	Corrosion, Sulfates, Chlorides (CTM 643-99; 417; 422)
CU	Consolidated Undrained Triaxial (ASTM D 4767)
DS	Direct Shear (ASTM D 3080)
EI	Expansion Index (ASTM D 4829)
M	Moisture Content (ASTM D 2216)
OC	Organic Content (ASTM D 2974)
P	Permeability (ASTM D 2434)
PA	Particle Size Analysis (ASTM D 6913 [2002])
PI	Liquid Limit, Plastic Limit, Plasticity Index (ASTM D 4318)
PL	Point Load Index (ASTM D 5731)
PM	Pressure Meter
PP	Pocket Penetrometer
R	R-Value (CTM 301)
SE	Sand Equivalent (ASTM D 2419)
SG	Specific Gravity (ASTM D 854)
SW	Swell Potential (ASTM D 4546)
TV	Pocket Torvane
UC	Unconfined Compression - Soil (ASTM D 2166)
	Unconfined Compression - Rock (ASTM D 7012)
UU	Unconsolidated Undrained Triaxial (ASTM D 2850) Unit
UW	Weight (ASTM D 2937)

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

BORING LOG SYMBOLS

DRILLING METHOD SYMBOLS			
	Auger Drilling		Mud Rotary Drilling
	Dynamic Cone or Hand Driven		Diamond Core

SAMPLE TYPE

	STANDARD PENETRATION TEST Split barrel sampler in accordance with ASTM D-1586-84 Standard Test Method
	DRIVE SAMPLE 2.42" I.D. sampler (CMS).
	DRIVE SAMPLE No recovery
	BULK SAMPLE
	GROUNDWATER WHILE DRILLING
	GROUNDWATER AFTER DRILLING
	Dist. Disturbed

UNIFIED SOIL CLASSIFICATION AND KEY TO BORING LOG SYMBOLS



Converse Consultants

Project Name: EMWD Los Alamos Hills Pipeline
Project Location: Los Alamos Road, Ruth Allen Way,
Celia Road, Mary Place, and Mason Avenue
City of Murrieta, Riverside County, California
For: Webb Associates

Project No.
22-81-144-02

Drawing
A-1a

CONSISTENCY OF COHESIVE SOILS

Descriptor	Unconfined Compressive Strength (tsf)	SPT Blow Counts	Pocket Penetrometer (tsf)	CA Sampler	Torvane (tsf)	Field Approximation
Very Soft	<0.25	< 2	<0.25	<3	<0.12	Easily penetrated several inches by fist
Soft	0.25 - 0.50	2 - 4	0.25 - 0.50	3 - 6	0.12 - 0.25	Easily penetrated several inches by thumb
Medium Stiff	0.50 - 1.0	5 - 8	0.50 - 1.0	7 - 12	0.25 - 0.50	Can be penetrated several inches by thumb with moderate effort
Stiff	1.0 - 2.0	9 - 15	1.0 - 2.0	13 - 25	0.50 - 1.0	Readily indented by thumb but penetrated only with great effort
Very Stiff	2.0 - 4.0	16 - 30	2.0 - 4.0	26 - 50	1.0 - 2.0	Readily indented by thumbnail
Hard	>4.0	>30	>4.0	>50	>2.0	Indented by thumbnail with difficulty

APPARENT DENSITY OF COHESIONLESS SOILS

Descriptor	SPT N ₆₀ Value (blows / foot)	CA Sampler
Very Loose	<4	<5
Loose	4 - 10	5 - 12
Medium Dense	11 - 30	13 - 35
Dense	31 - 50	36 - 60
Very Dense	>50	>60

MOISTURE

Descriptor	Criteria
Dry	Absence of moisture, dusty, dry to the touch
Moist	Damp but no visible water
Wet	Visible free water, usually soil is below water table

PERCENT OF PROPORTION OF SOILS

Descriptor	Criteria
Trace (fine)/ Scattered (coarse)	Particles are present but estimated to be less than 5%
Few	5 to 10%
Little	15 to 25%
Some	30 to 45%
Mostly	50 to 100%

SOIL PARTICLE SIZE

Descriptor		Size
Boulder		> 12 inches
Cobble		3 to 12 inches
Gravel	Coarse	3/4 inch to 3 inches
	Fine	No. 4 Sieve to 3/4 inch
Sand	Coarse	No. 10 Sieve to No. 4 Sieve
	Medium	No. 40 Sieve to No. 10 Sieve
	Fine	No. 200 Sieve to No. No. 40 Sieve
Silt and Clay		Passing No. 200 Sieve

PLASTICITY OF FINE-GRAINED SOILS

Descriptor	Criteria
Nonplastic	A 1/8-inch thread cannot be rolled at any water content.
Low	The thread can barely be rolled, and the lump cannot be formed when drier than the plastic limit.
Medium	The thread is easy to roll, and not much time is required to reach the plastic limit; it cannot be rerolled after reaching the plastic limit. The lump crumbles when drier than the plastic limit.
High	It takes considerable time rolling and kneading to reach the plastic limit. The thread can be rerolled several times after reaching the plastic limit. The lump can be formed without crumbling when drier than the plastic limit.

CEMENTATION/ Induration

Descriptor	Criteria
Weak	Crumbles or breaks with handling or little finger pressure.
Moderate	Crumbles or breaks with considerable finger pressure.
Strong	Will not crumble or break with finger pressure.

NOTE: This legend sheet provides descriptions and associated criteria for required soil description components only. Refer to Caltrans Soil and Rock Logging, Classification, and Presentation Manual (2010), Section 2, for tables of additional soil description components and discussion of soil description and identification.

UNIFIED SOIL CLASSIFICATION AND KEY TO BORING LOG SYMBOLS

Converse Consultants

Project Name: EMWD Los Alamos Hills Pipeline
 Project Location: Los Alamos Road, Ruth Allen Way,
 Celia Road, Mary Place, and Mason Avenue
 City of Murrieta, Riverside County, California
 For: Webb Associates

Project No.
22-81-223-02

Drawing No.
A-1b

LEGEND OF ROCK MATERIALS

IGNEOUS ROCK



SEDIMENTARY ROCK



METAMORPHIC ROCK

BEDDING SPACING

Description	Thickness/Spacing
Massive	Greater than 10 ft
Very Thickly Bedded	3 ft - 10 ft
Thickly Bedded	1 ft - 3 ft
Moderately Bedded	4 in - 1 ft
Thinly Bedded	1 in - 4 in
Very Thinly Bedded	1/4 in - 1 in
Laminated	Less than 1/4 in

WEATHERING DESCRIPTORS FOR INTACT ROCK

	Diagnostic Features					
Description	Chemical Weathering-Discoloration-Oxidation		Mechanical Weathering and Grain Boundary Conditions	Texture and Leaching		General Characteristics
	Body of Rock	Fracture Surfaces		Texture	Leaching	
Fresh	No discoloration, not oxidized	No discoloration or oxidation	No separation, intact (tight)	No change	No leaching	Hammer rings when crystalline rocks are struck.
Slightly Weathered	Discoloration or oxidation is limited to surface of, or short distance from, fractures; some feldspar crystals are dull	Minor to complete discoloration or oxidation of most surfaces	No visible separation, intact (tight)	Preserved	Minor leaching of some soluble minerals	Hammer rings when crystalline rocks are struck. Body of rock not weakened.
Moderately Weathered	Discoloration or oxidation extends from fractures usually throughout; Fe-Mg minerals are "rusty"; feldspar crystals are "cloudy"	All fracture surfaces are discolored or oxidized	Partial separation of boundaries visible	Generally preserved	Soluble minerals may be mostly leached	Hammer does not ring when rock is struck. Body of rock is slightly weakened.
Intensely Weathered	Discoloration or oxidation throughout; all feldspars and Fe-Mg minerals are altered to clay to some extent; or chemical alteration produces in situ disaggregation, grain boundary conditions	All fracture surfaces are discolored or oxidized; surfaces friable	Partial separation, rock is friable; in semi-arid conditions, granitics are disaggregated	Texture altered by chemical disintegration (hydration, argillation)	Leaching of soluble minerals may be complete	Dull sound when struck with hammer; usually can be broken with moderate to heavy manual pressure or by light hammer blow without reference to planes of weakness such as incipient or hairline fractures or veinlets. Rock is significantly weakened.
Decomposed	Discolored or oxidized throughout, but resistant minerals such as quartz may be unaltered; all feldspars and Fe-Mg minerals are completely altered to clay		Complete separation of grain boundaries (disaggregated)	Resembles a soil; partial or complete remnant rock structure may be preserved; leaching of soluble minerals usually complete		Can be granulated by hand. Resistant minerals such as quartz may be present as "stringers" or "dikes".

PERCENT CORE RECOVERY (REC)

$$\frac{\sum \text{Length of the recovered core pieces (in.)}}{\text{Total length of core run (in.)}} \times 100$$

ROCK QUALITY DESIGNATION (RQD)

$$\frac{\sum \text{Length of intact core pieces} \geq 4 \text{ in.}}{\text{Total length of core run (in.)}} \times 100$$

RQD* indicates soundness criteria not met.

ROCK HARDNESS

Description	Criteria
Extremely Hard	Cannot be scratched with a pocketknife or sharp pick. Can only be chipped with repeated heavy hammer blows
Very Hard	Cannot be scratched with a pocketknife or sharp pick. Breaks with repeated heavy hammer blows.
Hard	Can be scratched with a pocketknife or sharp pick with difficulty (heavy pressure). Breaks with heavy hammer blows.
Moderately Hard	Can be scratched with a pocketknife or sharp pick with light or moderate pressure. Breaks with moderate hammer blows
Moderately Soft	Can be grooved 1/16 in. deep with a pocketknife or sharp pick with moderate or heavy pressure. Breaks with light hammer blow or heavy manual pressure.
Soft	Can be grooved or gouged easily with a pocketknife or sharp pick with light pressure, can be scratched with fingernail. Breaks with light to moderate manual pressure.
Very Soft	Can be readily indented, grooved or gouged with fingernail, or carved with a pocketknife. Breaks with light manual pressure.

Fracturing Spacing

Description	Observed Fracture Density
Unfractured	No fractures
Very Slightly Fractured	Core lengths greater than 3 ft.
Slightly Fractured	Core lengths mostly from 1 to 3 ft.
Moderately Fractured	Core lengths mostly 4 in. to 1 ft.
Intensely Fractured	Core lengths mostly from 1 to 4 in.
Very Intensely Fractured	Mostly chips and fragments

REFERENCE Caltrans Soil and Rock Logging, Classification, and Presentation Manual (2010).

BEDROCK CLASSIFICATION AND KEY TO BORING LOG SYMBOLS**Converse Consultants**

Project Name: EMWD Los Alamos Hills Pipeline
 Project Location: Los Alamos Road, Ruth Allen Way, Celia Road, Mary Place, and Mason Avenue
 City of Murrieta, Riverside County, California
 For: Webb Associates

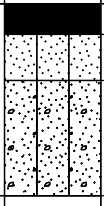


Project No.
22-81-144-02

Drawing No.
A-1c

Date Drilled: 10/19/2022 Logged by: Stephen McPherson Checked By: Hashmi Quazi

Equipment: 8" DIAMETER HOLLOW STEM AUGER Driving Weight and Drop: 140 lbs / 30 in

Ground Surface Elevation (ft): 1274 Depth to Water (ft, bgs): NOT ENCOUNTERED

Depth (ft)	Graphic Log	SUMMARY OF SUBSURFACE CONDITIONS This log is part of the report prepared by Converse for this project and should be read together with the report. This summary applies only at the location of the Boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	SAMPLES		BLOWS	MOISTURE (%)	DRY UNIT WT. (pcf)	OTHER
			DRIVE	BULK				
5		<p>6" CEMENT CONCRETE/ 4" AGGREGATE BASE</p> <p>ARTIFICIAL FILL</p> <p>SILTY SAND (SM): fine to coarse-grained, trace clay, moist, brown.</p> <p>ALLUVIUM</p> <p>SILTY SAND (SM): fine to coarse-grained, few to little gravel up to 3.0 inches maximum dimension, medium dense, moist, yellowish brown.</p> <p>End of boring at 5.0' feet bgs refusal due to potential conflict with utility. Groundwater not encountered. Borehole backfilled with soil cuttings mixed with cement and compacted by pushing down with an auger using drill rig weight,. Pavement patched with cut core and glued into place with Pro Select Anchoring Adhesive dyed black on 10/19/2022.</p>			13/10/10	5	117	SE


Converse Consultants

Project Name: EMWD Los Alamos Hills
 Project Location: Los Alamos Road, Ruth Allen Way, Celia Road,
 Mary Place, and Mason Avenue
 City of Murrieta, Riverside County, California
 For: Webb Associates

Project No.
22-81-144-02

Drawing No.
A-2

Log of Boring No. BH-02-Ruth Ellen Way

Date Drilled: 10/19/2022 Logged by: Stephen McPherson Checked By: Hashmi Quazi

Equipment: 8" DIAMETER HOLLOW STEM AUGER Driving Weight and Drop: 140 lbs / 30 in

Ground Surface Elevation (ft): 1290 Depth to Water (ft, bgs): NOT ENCOUNTERED

Depth (ft)	Graphic Log	SUMMARY OF SUBSURFACE CONDITIONS This log is part of the report prepared by Converse for this project and should be read together with the report. This summary applies only at the location of the Boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	SAMPLES		BLOWS	MOISTURE (%)	DRY UNIT WT. (pcf)	OTHER
			DRIVE	BULK				
		4" CEMENT CONCRETE/ 9" AGGREGATE BASE						
		ARTIFICIAL FILL SILTY SAND (SM): fine to coarse-grained, scattered gravel up to 0.8 inches maximum dimension. trace clay, dense, moist, brown.			14/20/33	9	132	PA
5		ALLUVIUM SILTY SAND (SM): fine to coarse-grained, scattered gravel up to 2.0 inches maximum dimension. trace clay, dense, moist, gray.			14/18/25	10	127	
		-@7.5': few to little gravel up to 2 inches maximum dimension, very dense.			50-5"	11	103	
10		Scattered to few gravel up to 1 inch maximum dimension -@10.0': scattered to few gravel up to 1 inch maximum dimension, brown.			18/20/43	9	113	
		End of boring at 11.5' feet bgs. Groundwater not encountered. Borehole backfilled with soil cuttings mixed with cement and compacted by pushing down with an auger using drill rig weight. Pavement patched with cut core and glued into place with Pro Select Anchoring Adhesive dyed black on 10/19/2022.						



Converse Consultants

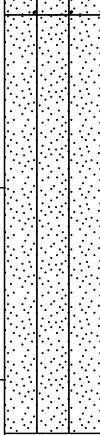







Project Name: EMWD Los Alamos Hills
Project Location: Los Alamos Road, Ruth Allen Way, Celia Road,
Mary Place, and Mason Avenue
City of Murrieta, Riverside County, California
For: Webb Associates

Project No. **22-81-144-02** Drawing No. **A-3**

Date Drilled: 10/18/2022 Logged by: Stephen McPherson Checked By: Hashmi Quazi

Equipment: 8" DIAMETER HOLLOW STEM AUGER Driving Weight and Drop: 140 lbs / 30 in

Ground Surface Elevation (ft): 1287 Depth to Water (ft, bgs): NOT ENCOUNTERED

Depth (ft)	Graphic Log	SUMMARY OF SUBSURFACE CONDITIONS This log is part of the report prepared by Converse for this project and should be read together with the report. This summary applies only at the location of the Boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	SAMPLES		BLOWS	MOISTURE (%)	DRY UNIT WT. (pcf)	OTHER
			DRIVE	BULK				
5		ARTIFICIAL FILL SILTY SAND (SM): fine to coarse-grained, scattered gravel up to 3 inches maximum dimension, scattered cobbles up to 8 inches maximum dimension, brown.			3/12/17	6	118	
		ALLUVIUM SILTY SAND (SM): fine to coarse-grained, trace clay, medium dense, moist, dark brown.			6/15/20	23	107	DS
		-@7.5': few clay, pinhole porosity.			6/14/19	8	126	CR, CP
		-@10.0': very dense.			17/46/50-4"	2	102	*disturbed
		End of boring at 11.4' feet bgs. Groundwater not encountered. Borehole backfilled with soil cuttings and compacted with weight of drill rig on 10/18/2022.						

**Converse Consultants**

Project Name: EMWD Los Alamos Hills
 Project Location: Los Alamos Road, Ruth Allen Way, Celia Road,
 Mary Place, and Mason Avenue
 City of Murrieta, Riverside County, California
 For: Webb Associates

Project No.
22-81-144-02

Drawing No.
A-4

Date Drilled: 10/18/2022 Logged by: Stephen McPherson Checked By: Hashmi Quazi

Equipment: 8" DIAMETER HOLLOW STEM AUGER Driving Weight and Drop: 140 lbs / 30 in

Ground Surface Elevation (ft): 1311 Depth to Water (ft, bgs): NOT ENCOUNTERED

Depth (ft)	Graphic Log	SUMMARY OF SUBSURFACE CONDITIONS This log is part of the report prepared by Converse for this project and should be read together with the report. This summary applies only at the location of the Boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	SAMPLES		BLOWS	MOISTURE (%)	DRY UNIT WT. (pcf)	OTHER
			DRIVE	BULK				
5		ARTIFICIAL FILL GRAVELY SAND WITH SILT (SP): fine to coarse-grained, scattered gravel up to 3 inches maximum dimension, scattered cobbles up to 8 inches maximum dimension, brown.			4/7/6	8	118	PA
		ALLUVIUM GRAVELY SAND WITH SILT (SP): fine to coarse-grained, scattered to few gravel up to 3 inches maximum dimension, trace clay, very desiccated, medium dense, moist, brown.			18/22/43	22	90	
10		CLAY WITH GRAVEL (CL): hard, moist, dark brown. -@6.0': yellowish brown.						
End of boring at 6.0' feet bgs due to refusal due to large concentration of aggregate. Groundwater not encountered. Borehole backfilled with soil cuttings and compacted with weight of drill rig on 10/18/2022.								

**Converse Consultants**

Project Name: EMWD Los Alamos Hills
 Project Location: Los Alamos Road, Ruth Allen Way, Celia Road,
 Mary Place, and Mason Avenue
 City of Murrieta, Riverside County, California
 For: Webb Associates

Project No.
22-81-144-02

Drawing No.
A-5

Date Drilled: 10/18/2022 Logged by: Stephen McPherson Checked By: Hashmi Quazi

Equipment: 8" DIAMETER HOLLOW STEM AUGER Driving Weight and Drop: 140 lbs / 30 in

Ground Surface Elevation (ft): 1332 Depth to Water (ft, bgs): NOT ENCOUNTERED

Depth (ft)	Graphic Log	SUMMARY OF SUBSURFACE CONDITIONS This log is part of the report prepared by Converse for this project and should be read together with the report. This summary applies only at the location of the Boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	SAMPLES		BLOWS	MOISTURE (%)	DRY UNIT WT. (pcf)	OTHER
			DRIVE	BULK				
5		ARTIFICIAL FILL SILTY SAND (SM): fine to coarse-grained, scattered gravel up to 3 inches maximum dimension, scattered cobbles up to 8 inches maximum dimension, brown.			8/14/34	7	127	CR
		ALLUVIUM SILTY SAND (SM): fine to medium-grained, trace clay, pinhole porosity, dense, moist, dark brown. -@5.0': very dense.			13/17/50-3"	9	126	DS
		End of boring at 6.5' feet bgs due to refusal due to large concentration of aggregate. Groundwater not encountered. Borehole backfilled with soil cuttings and compacted with weight of drill rig on 10/18/2022.						

**Converse Consultants**

Project Name: EMWD Los Alamos Hills
 Project Location: Los Alamos Road, Ruth Allen Way, Celia Road,
 Mary Place, and Mason Avenue
 City of Murrieta, Riverside County, California
 For: Webb Associates

Project No.
22-81-144-02

Drawing No.
A-6

Date Drilled: 10/18/2022 Logged by: Stephen McPherson Checked By: Hashmi Quazi

Equipment: 8" DIAMETER HOLLOW STEM AUGER Driving Weight and Drop: 140 lbs / 30 in

Ground Surface Elevation (ft): 1356 Depth to Water (ft, bgs): NOT ENCOUNTERED

Depth (ft)	Graphic Log	SUMMARY OF SUBSURFACE CONDITIONS This log is part of the report prepared by Converse for this project and should be read together with the report. This summary applies only at the location of the Boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	SAMPLES		BLOWS	MOISTURE (%)	DRY UNIT WT. (pcf)	OTHER
			DRIVE	BULK				
5		ARTIFICIAL FILL SILTY SAND (SM): fine to coarse-grained, scattered gravel up to 3 inches maximum dimension, scattered cobbles up to 8 inches maximum dimension, brown.			13/14/26	5	123	
		ALLUVIUM SILTY SAND (SM): fine to coarse-grained, scattered gravel up to 1 inch in maximum dimension, trace clay, dense, dry, brownish red.			23/50-3"	4	110	PA
		-@5.0': very dense, roots, yellowish brown.			50-3"	2	99	*disturbed
		-@10.0': grayish brown.			50-3"	2	112	*disturbed
10		End of boring at 10.3' feet bgs. Groundwater not encountered. Borehole backfilled with soil cuttings and compacted with weight of drill rig on 10/18/2022.						

**Converse Consultants**

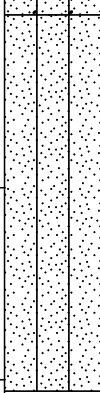





Project Name: EMWD Los Alamos Hills
 Project Location: Los Alamos Road, Ruth Allen Way, Celia Road,
 Mary Place, and Mason Avenue
 City of Murrieta, Riverside County, California
 For: Webb Associates

Project No. 22-81-144-02
 Drawing No. A-7

Date Drilled: 10/18/2022 Logged by: Stephen McPherson Checked By: Hashmi Quazi

Equipment: 8" DIAMETER HOLLOW STEM AUGER Driving Weight and Drop: 140 lbs / 30 in

Ground Surface Elevation (ft): 1341 Depth to Water (ft, bgs): NOT ENCOUNTERED

Depth (ft)	Graphic Log	SUMMARY OF SUBSURFACE CONDITIONS This log is part of the report prepared by Converse for this project and should be read together with the report. This summary applies only at the location of the Boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	SAMPLES		BLOWS	MOISTURE (%)	DRY UNIT WT. (pcf)	OTHER
			DRIVE	BULK				
5		ARTIFICIAL FILL SILTY SAND (SM): fine to coarse-grained, scattered gravel up to 3 inches maximum dimension, scattered cobbles up to 8 inches maximum dimension, brown. ALLUVIUM SILTY SAND (SM): fine to medium-grained, trace clay, medium dense, dry, reddish-brown. -@5.0': very dense. -@7.5': yellowish brown.			12/10/12	6	114	SE, CP
					11/33/50	1	130	DS
					50-3"	3	108	*disturbed
					50-4"	3	68	*disturbed
10		End of boring at 10.3' feet bgs. Groundwater not encountered. Borehole backfilled with soil cuttings and compacted with weight of drill rig on 10/18/2022.						


Converse Consultants

Project Name: EMWD Los Alamos Hills
 Project Location: Los Alamos Road, Ruth Allen Way, Celia Road,
 Mary Place, and Mason Avenue
 City of Murrieta, Riverside County, California
 For: Webb Associates

Project No.
22-81-144-02

Drawing No.
A-8

Date Drilled: 10/18/2022 Logged by: Stephen McPherson Checked By: Hashmi Quazi

Equipment: 8" DIAMETER HOLLOW STEM AUGER Driving Weight and Drop: 140 lbs / 30 in

Ground Surface Elevation (ft): 1353 Depth to Water (ft, bgs): NOT ENCOUNTERED

Depth (ft)	Graphic Log	SUMMARY OF SUBSURFACE CONDITIONS This log is part of the report prepared by Converse for this project and should be read together with the report. This summary applies only at the location of the Boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	SAMPLES		BLOWS	MOISTURE (%)	DRY UNIT WT. (pcf)	OTHER
			DRIVE	BULK				
5		ARTIFICIAL FILL SILTY SAND (SM): fine to coarse-grained, scattered gravel up to 3 inches in maximum dimension, scattered cobbles up to 8 inches in maximum dimension, brown.			8/44/50-3"	3	138	
		ALLUVIUM SILTY SAND (SM): fine to coarse-grained, scattered gravel up to 0.5 inches in maximum dimension, very dense, dry, yellowish brown.			40/50-4"	5	115	CR, PA
		-@7.5": grayish brown.			50-4"	2	120	*disturbed
					48/50-1"	3	69	*disturbed
10		End of boring at 10.6' feet bgs. Groundwater not encountered. Borehole backfilled with soil cuttings and compacted with weight of drill rig on 10/18/2022.						

**Converse Consultants**

Project Name: EMWD Los Alamos Hills
 Project Location: Los Alamos Road, Ruth Allen Way, Celia Road,
 Mary Place, and Mason Avenue
 City of Murrieta, Riverside County, California
 For: Webb Associates

Project No.
22-81-144-02

Drawing No.
A-9

Date Drilled: 10/18/2022 Logged by: Stephen McPherson Checked By: Hashmi Quazi

Equipment: 8" DIAMETER HOLLOW STEM AUGER Driving Weight and Drop: 140 lbs / 30 in

Ground Surface Elevation (ft): 1375 Depth to Water (ft, bgs): NOT ENCOUNTERED

Depth (ft)	Graphic Log	SUMMARY OF SUBSURFACE CONDITIONS This log is part of the report prepared by Converse for this project and should be read together with the report. This summary applies only at the location of the Boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	SAMPLES		BLOWS	MOISTURE (%)	DRY UNIT WT. (pcf)	OTHER
			DRIVE	BULK				
5		ARTIFICIAL FILL SILTY SAND (SM): fine to coarse-grained, scattered gravel up to 3 inches maximum dimension, scattered cobbles up to 8 inches maximum dimension, brown. ALLUVIUM SILTY SAND (SM): fine to coarse-grained, trace clay, dense, moist, dark brown. -@5.0': very desiccated, dry. -@7.5': pinhole porosity, moist.			6/27/29	6	125	DS
					14/18/22	6	119	
					14/22/30	7	127	
					16/20/22	12	114	
10		End of boring at 11.5' feet bgs. Groundwater not encountered. Borehole backfilled with soil cuttings and compacted with weight of drill rig on 10/18/2022.						



Converse Consultants

Project Name: EMWD Los Alamos Hills
 Project Location: Los Alamos Road, Ruth Allen Way, Celia Road,
 Mary Place, and Mason Avenue
 City of Murrieta, Riverside County, California
 For: Webb Associates

Project No.
 22-81-144-02

Drawing No.
 A-10

Date Drilled: 10/18/2022 Logged by: Stephen McPherson Checked By: Hashmi Quazi

Equipment: 8" DIAMETER HOLLOW STEM AUGER Driving Weight and Drop: 140 lbs / 30 in

Ground Surface Elevation (ft): 1381 Depth to Water (ft, bgs): NOT ENCOUNTERED

Depth (ft)	Graphic Log	SUMMARY OF SUBSURFACE CONDITIONS This log is part of the report prepared by Converse for this project and should be read together with the report. This summary applies only at the location of the Boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	SAMPLES		BLOWS	MOISTURE (%)	DRY UNIT WT. (pcf)	OTHER
			DRIVE	BULK				
		4" CEMENT CONCRETE/ 3" AGGREGATE BASE						
		ALLUVIUM						
		SILTY SAND (SM): fine to coarse-grained, trace clay, medium dense, moist, yellowish brown.			11/13/19	7	128	
5		-@5.0': very dense.			50-6"	11	113	SE
					50-4"	6	107	
10		SAND (SP): fine to coarse-grained, trace clay, very dense, moist, yellowish brown.			50-6"	5	114	
		End of boring at 10.5' feet bgs. Groundwater not encountered. Borehole backfilled with soil cuttings, compacted using the weight of the drill rig and patched with cold patch on 10/18/2022.						



Converse Consultants

Project Name: EMWD Los Alamos Hills
 Project Location: Los Alamos Road, Ruth Allen Way, Celia Road,
 Mary Place, and Mason Avenue
 City of Murrieta, Riverside County, California
 For: Webb Associates

Project No.
 22-81-144-02

Drawing No.
 A-11

Date Drilled: 10/18/2022 Logged by: Stephen McPherson Checked By: Hashmi Quazi

Equipment: 8" DIAMETER HOLLOW STEM AUGER Driving Weight and Drop: 140 lbs / 30 in

Ground Surface Elevation (ft): 1375 Depth to Water (ft, bgs): NOT ENCOUNTERED

Depth (ft)	Graphic Log	SUMMARY OF SUBSURFACE CONDITIONS This log is part of the report prepared by Converse for this project and should be read together with the report. This summary applies only at the location of the Boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	SAMPLES		BLOWS	MOISTURE (%)	DRY UNIT WT. (pcf)	OTHER
			DRIVE	BULK				
		2" CEMENT CONCRETE/ 4" AGGREGATE BASE						
		ALLUVIUM						
		SILTY SAND (SM): fine to coarse-grained, trace clay, medium dense, moist, dark brown.						
5		-@5.0': pinhole porosity.			8/9/12	5	123	CR
		-@7.5': dense.			10/11/4	5	115	
10		-@10.0': brownish gray, very dense.			10/17/28	8	117	DS
		-@10.0': brownish gray, very dense.			26/50-5"	5	127	
		End of boring at 10.9' feet bgs. Groundwater not encountered. Borehole backfilled with soil cuttings, compacted using the weight of the drill rig and patched with cold patch on 10/18/2022.						



Converse Consultants

Project Name: EMWD Los Alamos Hills
 Project Location: Los Alamos Road, Ruth Allen Way, Celia Road,
 Mary Place, and Mason Avenue
 City of Murrieta, Riverside County, California
 For: Webb Associates

Project No.
 22-81-144-02

Drawing No.
 A-12

Date Drilled: 10/19/2022 Logged by: Stephen McPherson Checked By: Hashmi Quazi

Equipment: 8" DIAMETER HOLLOW STEM AUGER Driving Weight and Drop: 140 lbs / 30 in

Ground Surface Elevation (ft): 1374 Depth to Water (ft, bgs): NOT ENCOUNTERED

Depth (ft)	Graphic Log	SUMMARY OF SUBSURFACE CONDITIONS This log is part of the report prepared by Converse for this project and should be read together with the report. This summary applies only at the location of the Boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	SAMPLES		BLOWS	MOISTURE (%)	DRY UNIT WT. (pcf)	OTHER
			DRIVE	BULK				
		5" CEMENT CONCRETE/ 2" AGGREGATE BASE						
		ARTIFICIAL FILL						
		SILTY SAND (SM): fine to coarse-grained, scattered gravel up to 0.5 inches in maximum dimension, trace clay, pinhole porosity, very dense, moist, brown.			7/32/35	4	127	SE, PA
5		ALLUVIUM						
		SILTY SAND (SM): fine to coarse-grained, scattered gravel up to 0.5 inches in maximum dimension, trace clay, pinhole porosity, medium dense, moist, brown.			5/6/7	4	110	
		-@7.5': caliche.			8/10/13	3	115	
10		-@10.0': fragments of rock.			50-4"	3	117	*disturbed
		End of boring at 10.3' feet bgs. Groundwater not encountered. Borehole backfilled with soil cuttings mixed with cement and compacted by pushing down with an auger using drill rig weight. Pavement patched with cut core and glued into place with Pro Select Anchoring Adhesive dyed black on 10/19/2022.						


Converse Consultants

Project Name: EMWD Los Alamos Hills
 Project Location: Los Alamos Road, Ruth Allen Way, Celia Road,
 Mary Place, and Mason Avenue
 City of Murrieta, Riverside County, California
 For: Webb Associates

Project No. 22-81-144-02
 Drawing No. A-13

Date Drilled: 10/19/2022 Logged by: Stephen McPherson Checked By: Hashmi Quazi

Equipment: 8" DIAMETER HOLLOW STEM AUGER Driving Weight and Drop: 140 lbs / 30 in

Ground Surface Elevation (ft): 1351 Depth to Water (ft, bgs): NOT ENCOUNTERED

Depth (ft)	Graphic Log	SUMMARY OF SUBSURFACE CONDITIONS This log is part of the report prepared by Converse for this project and should be read together with the report. This summary applies only at the location of the Boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	SAMPLES		BLOWS	MOISTURE (%)	DRY UNIT WT. (pcf)	OTHER
			DRIVE	BULK				
		5" CEMENT CONCRETE/ 4" AGGREGATE BASE						
		ARTIFICIAL FILL						
		SILTY SAND (SM): fine to coarse-grained, scattered gravel up to 1 inch maximum dimension, trace clay, medium dense, moist, light brown.			13/24/18	5	127	
5		ALLUVIUM						
		SILTY SAND (SM): fine to coarse-grained, trace clay, dense, moist, brown.			12/24/38	7	128	DS CP
		-@5.0': very dense.			15/24/50-6"	9	117	
		-@7.5': very dense.						
10		-@10.0': fragments of rockk.			13/42/50-3"	6	135	
		End of boring at 10.3' feet bgs. Groundwater not encountered. Borehole backfilled with soil cuttings mixed with cement and compacted by pushing down with an auger using drill rig weight. Pavement patched with cut core and glued into place with Pro Select Anchoring Adhesive dyed black on 10/19/2022.						



Converse Consultants

Project Name: EMWD Los Alamos Hills
 Project Location: Los Alamos Road, Ruth Allen Way, Celia Road,
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 City of Murrieta, Riverside County, California
 For: Webb Associates

Project No. 22-81-144-02 Drawing No. A-14

Date Drilled: 10/19/2022 Logged by: Stephen McPherson Checked By: Hashmi Quazi

Equipment: 8" DIAMETER HOLLOW STEM AUGER Driving Weight and Drop: 140 lbs / 30 in

Ground Surface Elevation (ft): 1344 Depth to Water (ft, bgs): NOT ENCOUNTERED

Depth (ft)	Graphic Log	SUMMARY OF SUBSURFACE CONDITIONS This log is part of the report prepared by Converse for this project and should be read together with the report. This summary applies only at the location of the Boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	SAMPLES		BLOWS	MOISTURE (%)	DRY UNIT WT. (pcf)	OTHER
			DRIVE	BULK				
		5" CEMENT CONCRETE/ 4" AGGREGATE BASE						
		ARTIFICIAL FILL SILTY SAND (SM): fine to coarse-grained, trace clay, very dense, moist, reddish-brown.			14/43/50-5"	4	134	PA
5		ALLUVIUM SILTY SAND (SM): fine to coarse-grained, trace clay, very dense, moist, yellowish brown.			24/34/50-4"	10	114	
					50-4"	9	94	
10					50-5"	3	101	*disturbed
		End of boring at 10.4' feet bgs. Groundwater not encountered. Borehole backfilled with soil cuttings mixed with cement and compacted by pushing down with an auger using drill rig weight, pavement patched with cut core and glued into place with Pro Select Anchoring Adhesive dyed black on 10/19/2022.						



Converse Consultants

Project Name: EMWD Los Alamos Hills
 Project Location: Los Alamos Road, Ruth Allen Way, Celia Road,
 Mary Place, and Mason Avenue
 City of Murrieta, Riverside County, California
 For: Webb Associates

Project No.
 22-81-144-02

Drawing No.
 A-15

Date Drilled: 10/19/2022 Logged by: Stephen McPherson Checked By: Hashmi Quazi

Equipment: 8" DIAMETER HOLLOW STEM AUGER Driving Weight and Drop: 140 lbs / 30 in

Ground Surface Elevation (ft): 1321 Depth to Water (ft, bgs): NOT ENCOUNTERED

Depth (ft)	Graphic Log	SUMMARY OF SUBSURFACE CONDITIONS This log is part of the report prepared by Converse for this project and should be read together with the report. This summary applies only at the location of the Boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	SAMPLES		BLOWS	MOISTURE (%)	DRY UNIT WT. (pcf)	OTHER
			DRIVE	BULK				
		5" CEMENT CONCRETE/ 2" AGGREGATE BASE						
		ARTIFICIAL FILL						
		SILTY SAND (SM): fine to coarse-grained, trace clay, very desiccated, very dense, moist, brown.			21/50-4"	5	123	
5		ALLUVIUM			24/50-3"	7	113	
		SILTY SAND (SM): fine to coarse-grained, trace clay, moderately to very desiccated, very dense, moist, gray.						
		BEDROCK			50-4"	10	94	
10		Undifferentiated Gabbro with Hornblende						
		EXCAVATES AS SILTY SAND (SM): fine to coarse-grained, very desiccated, very dense, moist, gray.			50-2"			
		End of boring at 10.2' feet bgs. Groundwater not encountered. Borehole backfilled with soil cuttings mixed with cement and compacted by pushing down with an auger using drill rig weight. Pavement patched with cut core and glued into place with Pro Select Anchoring Adhesive dyed black on 10/19/2022.						



Converse Consultants

Project Name: EMWD Los Alamos Hills
 Project Location: Los Alamos Road, Ruth Allen Way, Celia Road,
 Mary Place, and Mason Avenue
 City of Murrieta, Riverside County, California
 For: Webb Associates

Project No.
 22-81-144-02

Drawing No.
 A-16

Appendix B

Laboratory Testing Program

APPENDIX B

LABORATORY TESTING PROGRAM

Tests were conducted in our laboratory on representative soil samples for the purpose of classification and evaluation of their physical properties and engineering characteristics. The amount and selection of tests were based on the geotechnical parameters required for this project. Test results are presented herein and on the Logs of Borings, in Appendix A, *Field Exploration*. The following is a summary of the various laboratory tests conducted for this project.

In-Situ Moisture Content and Dry Density

In-situ dry density and moisture content tests were performed on relatively undisturbed ring samples, in accordance with ASTM Standard D2216 and D2937 to aid soils classification and to provide qualitative information on strength and compressibility characteristics of the alignment's soils. For test results, see the Logs of Boring in Appendix A, *Field Exploration*.

Sand Equivalent

Four representative soil samples were tested in accordance with the ASTM Standard D2419 test method to determine the sand equivalent. The test results are presented in the following table.

Table No. B-1, Sand Equivalent Test Results

Boring No.	Street	Depth (feet)	Soil Description	Sand Equivalent
BH-01	Los Alamos Road	0.8 – 5.0	Silty Sand (SM)	34
BH-07	Mary Place	0.8 – 5.0	Silty Sand (SM)	23
BH-10	Mason Avenue	5.0 – 10.0	Silty Sand (SM)	29
BH-12	Los Alamos Road	0.6 – 5.0	Silty Sand (SM)	21

Soil Corrosivity

Four representative soil samples were tested to determine minimum electrical resistivity, pH, and chemical content, including soluble sulfate and chloride concentrations. The purpose of these tests was to determine the corrosion potential of soils when placed in contact with common construction materials. These tests were performed by AP Engineering and Testing, Inc. (Pomona, CA) in accordance with Caltrans Test Methods 643, 422 and 417. Test results are presented in the following table.

Table No. B-2, Summary of Soil Corrosivity Test Results

Boring No.	Street	Depth (feet)	pH	Soluble Sulfates (CA 417) (ppm)	Soluble Chlorides (CA 422) (ppm)	Min. Resistivity (CA 643) (Ohm-cm)
BH-03	Celia Way at Celia Way	5.0-10.0	7.6	35	26	2,107
BH-05	Celia Way at Mary Place	1.0 – 5.0	7.4	38	27	2,208
BH-08	Mary Place.	5.0 – 10.0	7.4	16	19	10,248
BH-11	Mason Avenue	0.5 – 5.0	7.3	35	24	2,045

Grain-Size Analyses

To assist in classification of soils, mechanical grain-size analyses were performed on six select samples in accordance with the ASTM Standard D6913 test method. Grain-size curves are shown in Drawing Nos. B-1a and B-1b, *Grain Size Distribution Results* and results are presented in the below table.

Table No. B-3, Grain Size Distribution Test Results

Boring No.	Street	Depth (ft)	Soil Classification	% Gravel	% Sand	%Silt	%Clay
BH-02	Ruth Ellen Way	1.1-5.0	Silty Sand (SM)	10.0	67.7	22.3	
BH-04	Celia Road	1.0–6.0	Gravelly Sand with Silt (SP)	33.0	38.5	28.5	
BH-06	Mary Place	5.0–10.0	Silty Sand (SM)	0.0	83.6	16.4	
BH-08	Mary Place	5.0–10.0	Silty Sand (SM)	2.0	79.2	18.8	
BH-12	Los Alamos Road	0.6-5.0	Silty Sand (SM)	7.0	60.6	32.4	
BH-14	Los Alamos Road	0.8-5.0	Silty Sand (SM)	6.0	63.6	30.4	

Maximum Density and Optimum Moisture Content

Laboratory maximum dry density-optimum moisture content relationship tests were performed on three representative bulk samples. The tests were conducted in accordance with the ASTM Standard D1557 test method. The test results are presented in Drawing Nos. B-2a and B-2b, *Moisture-Density Relationship Results*, and are summarized in the following table.

Table No B-4, Summary of Moisture-Density Relationship Results

Boring No.	Boring No./ Street	Depth (feet)	Soil Description	Optimum Moisture (%)	Maximum Density (lb/cft)
BH-03	Celia Road	5.0-10.0	Silty Sand (SM), Dark Brown	4.4	136.0
BH-07	Mary Place	0.8-5.0	Silty Sand (SM), Dark Brown	7.2	135.0
BH-13	Los Alamos Road	5.0-10.0	Silty Sand (SM), Brown	4.8	131.0

Direct Shear

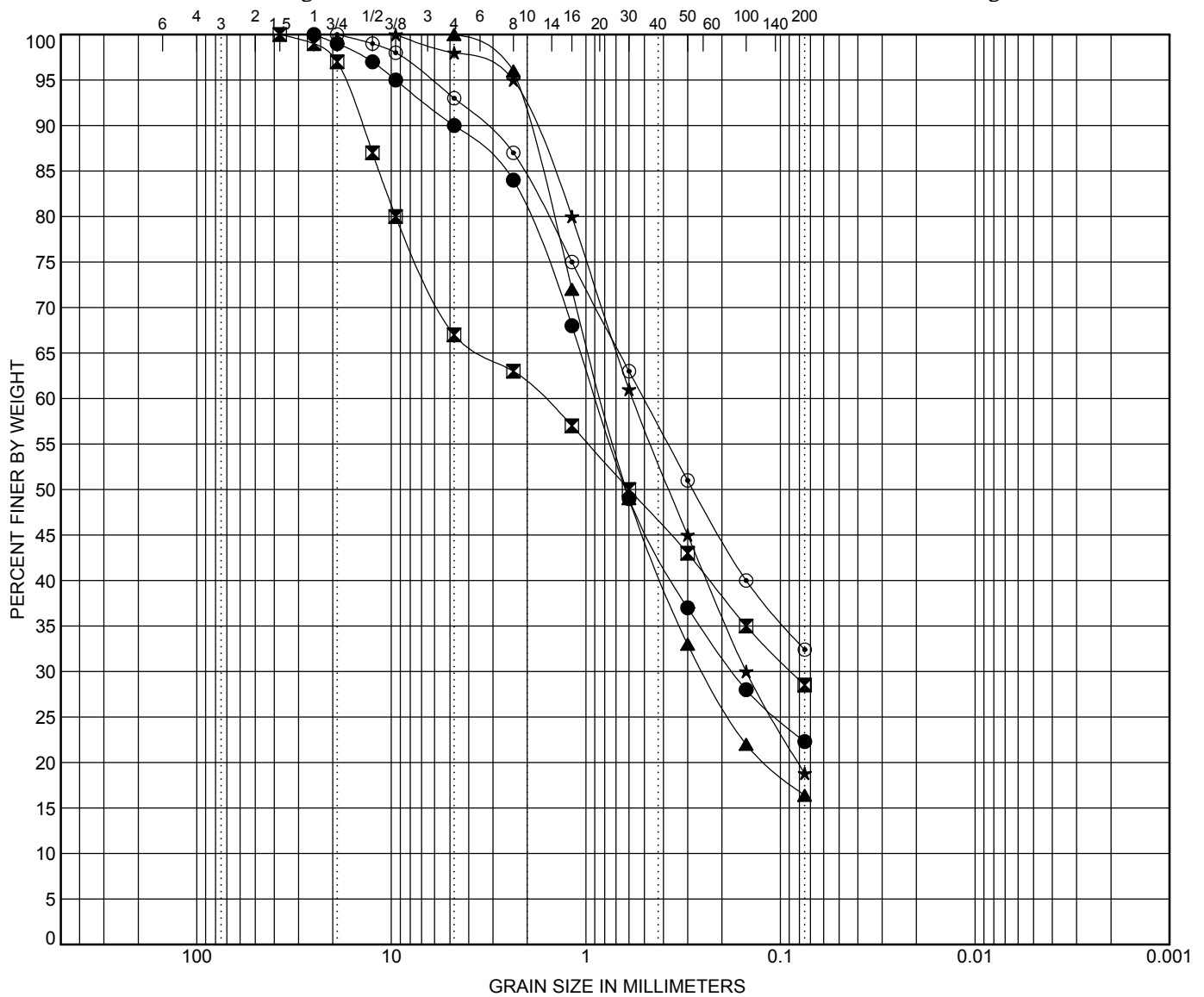
Six direct shear tests were performed on relatively undisturbed samples under soaked condition in accordance with ASTM Standard 3080. For each test, 3 samples contained in a brass sampler ring were placed, one at a time, directly into the test apparatus and subjected to a range of normal loads appropriate for the anticipated conditions. The samples were then sheared at a constant strain rate of 0.02 inch/minute. Shear deformation was recorded until a maximum of about 0.25-inch shear displacement was achieved. Ultimate strength was selected from the shear-stress deformation data and plotted to determine the shear strength parameters. For test results, including sample density and moisture content, see Drawing Nos. B-3 through B-08, *Direct Shear Test Results*, and in the following table.

Table No. B-5, Summary of Direct Shear Test Results

Boring No.	Boring No./ Street	Depth (feet)	Soil Description	Peak Strength Parameters	
				Friction Angle (degrees)	Cohesion (psf)
BH-03	Celia Road	5.0-6.5	Silty Sand (SM)	31	380
BH-05	Celia Road and Mary Place	5.0-6.3	Silty Sand (SM)	41	110
BH-07	Los Alamos Road	5.0-6.5	Silty Sand (SM)	25	540
BH-09	Mary Place	5.0-6.5	Silty Sand (SM)	31	290
BH-11	Mason Avenue	7.5-9.0	Silty Sand (SM)	30	250
BH-13	Los Alamos Road	5.0-6.5	Silty Sand (SM)	36	200

Sample Storage

Soil samples presently stored in our laboratory will be discarded 30 days after the date of this report, unless this office receives a specific request to retain the samples for a longer period.



Boring No.	Depth (ft)	Description					LL	PL	PI	Cc	Cu
● BH-02-Ruth Ellen Way	1.1-5.0	SILTY SAND (SM)									
⊠ BH-04-Celia Road	1.0-6.0	GRAVELY SAND WITH SILT (SP)									
▲ BH-06-Mary Place	5.0-10.0	SILTY SAND (SM)									
★ BH-08-Mary Place	5-10	SILTY SAND (SM)									
⊙ BH-12-Los Alamos Road	0.6-5.0	SILTY SAND (SM)									
Boring No.	Depth (ft)	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay		
● BH-02-Ruth Ellen Way	1.1-5.0	25	0.888	0.175		10.0	67.7	22.3			
⊠ BH-04-Celia Road	1.0-6.0	37.5	1.669	0.088		33.0	38.5	28.5			
▲ BH-06-Mary Place	5.0-10.0	4.75	0.829	0.248		0.0	83.6	16.4			
★ BH-08-Mary Place	5-10	9.5	0.575	0.15		2.0	79.2	18.8			
⊙ BH-12-Los Alamos Road	0.6-5.0	19	0.505			7.0	60.6	32.4			

GRAIN SIZE DISTRIBUTION RESULTS

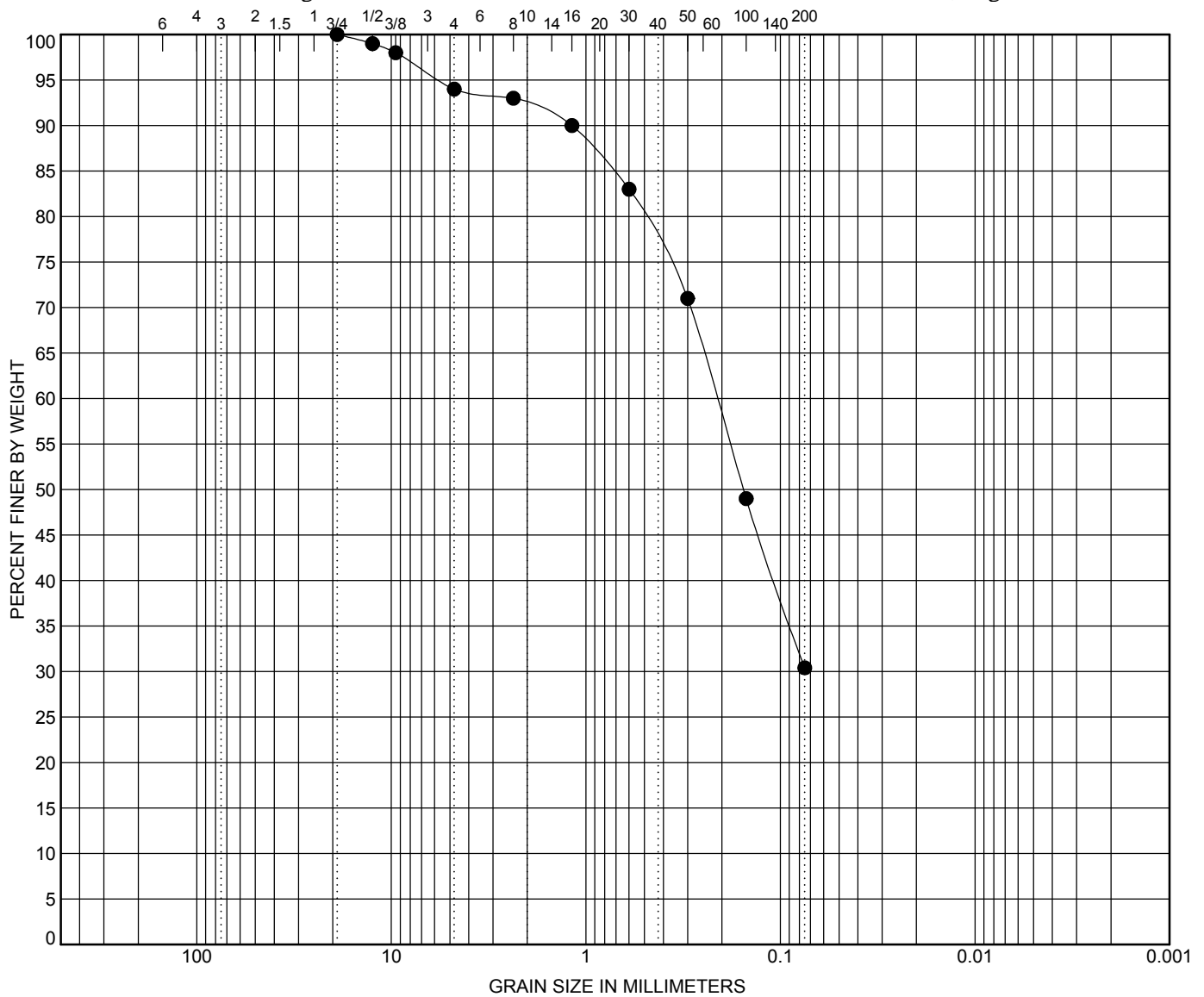


Converse Consultants

Project Name: EMWD Los Alamos Hills
 Project Location: Los Alamos Road, Ruth Allen Way, Celia Road,
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 City of Murrieta, Riverside County, California
 For: Webb Associates

Project No.
 22-81-144-02

Drawing No.
 B-1a



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Boring No.		Depth (ft)	Description					LL	PL	PI	Cc	Cu
●	BH-14-Los Alamos Road	0.8-5.0	SILTY SAND (SM)									
Boring No.		Depth (ft)	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay		
●	BH-14-Los Alamos Road	0.8-5.0	19	0.212			6.0	63.6	30.4			

GRAIN SIZE DISTRIBUTION RESULTS

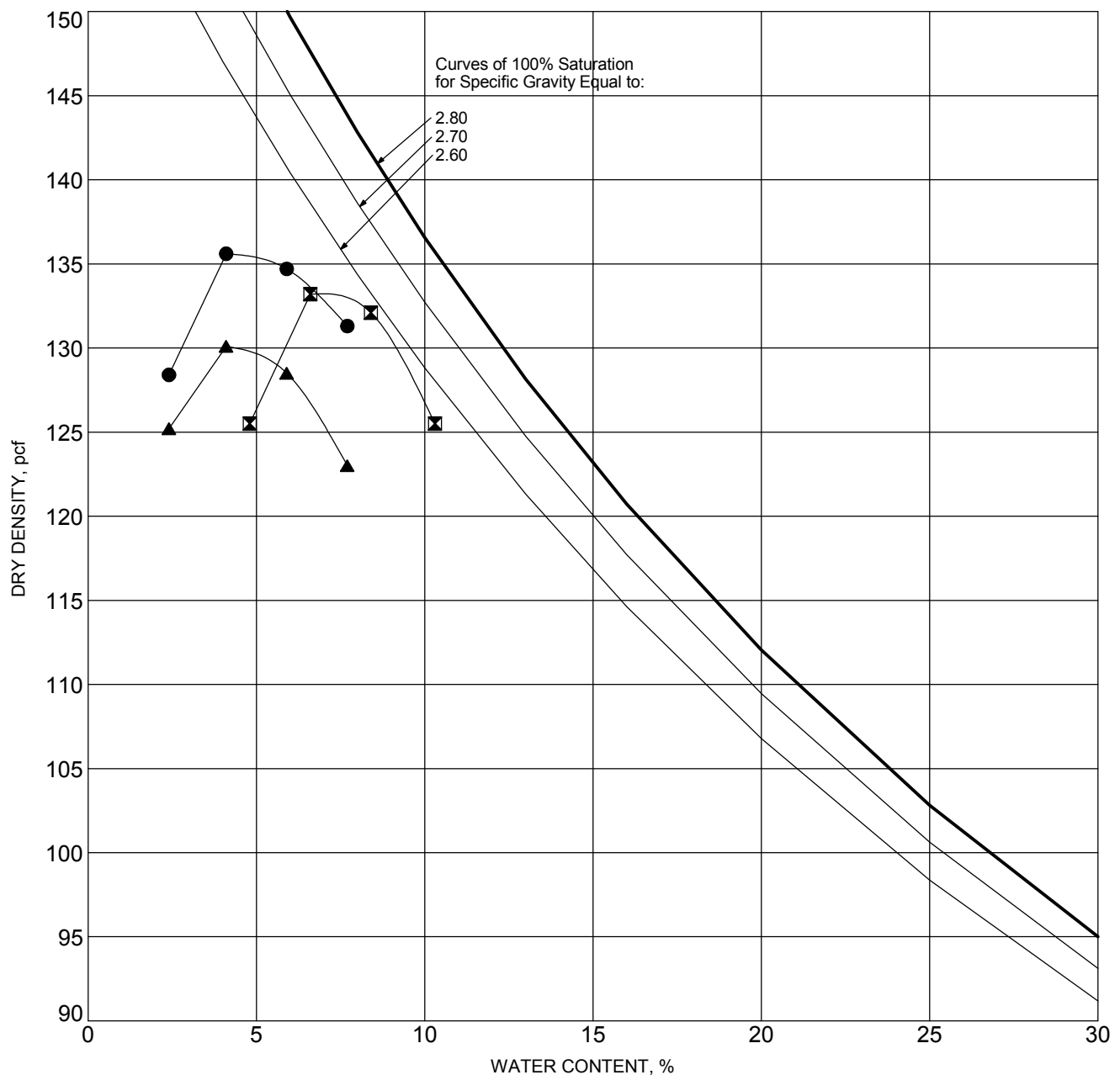


Converse Consultants

Project Name: EMWD Los Alamos Hills
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 For: Webb Associates

Project No.
 22-81-144-02

Drawing No.
 B-1b



SYMBOL	BORING NO.	DEPTH (ft)	DESCRIPTION	ASTM TEST METHOD	OPTIMUM WATER, %	MAXIMUM DRY DENSITY, pcf
●	BH-03-Celia Road	5.0-10.0	SILTY SAND (SM), DARK BROWN	D1557 A	4.4	136
⊠	BH-07-Mary Place	0-5.0	SILTY SAND (SM), REDDISH BROWN	D1557 A	7.2	135
▲	BH-13-Los Alamos Road	5.0-10.0	SILTY SAND (SM), BROWN	D1557 A	4.8	131

MOISTURE-DENSITY RELATIONSHIP RESULTS

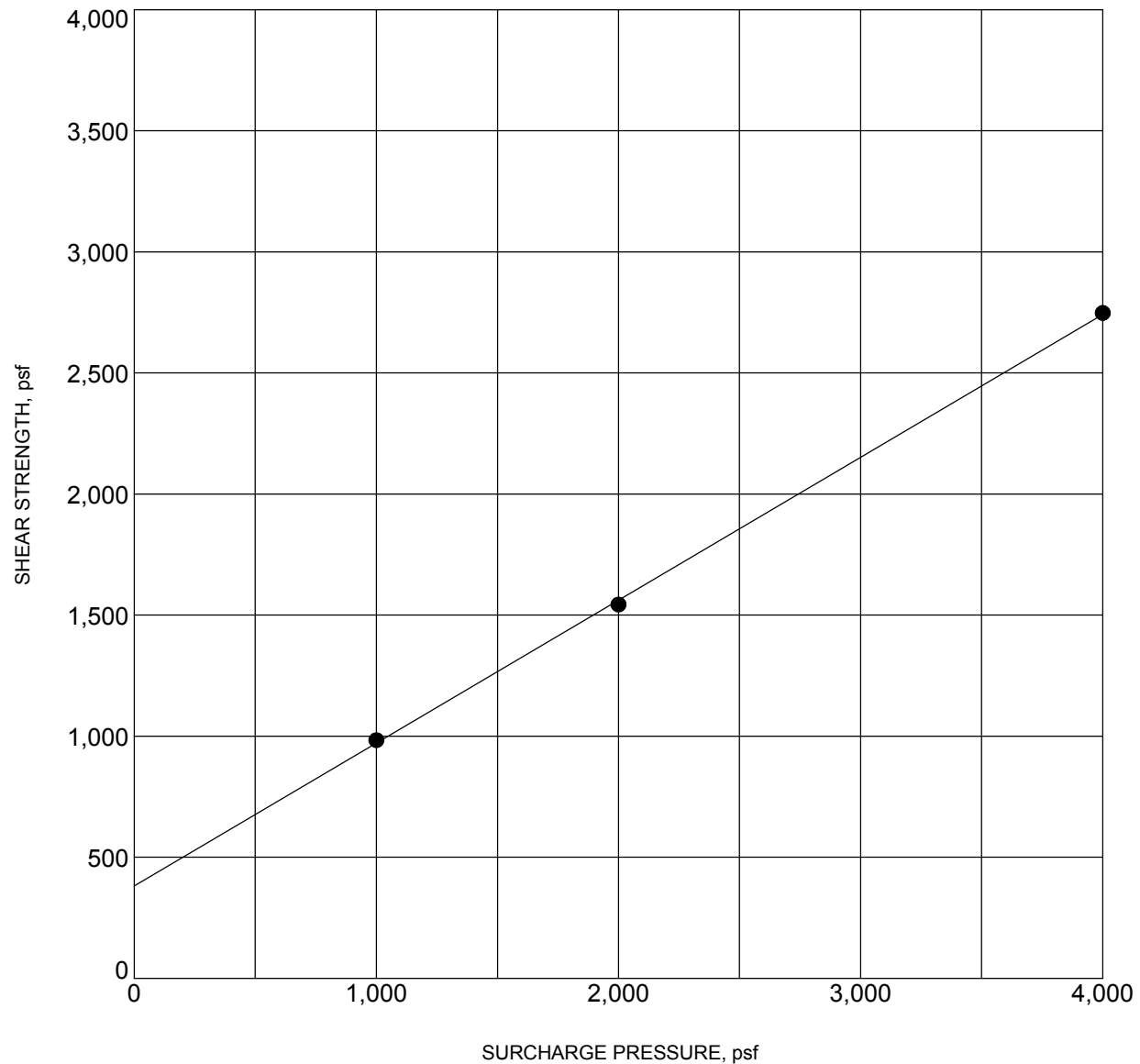


Converse Consultants

Project Name: EMWD Los Alamos Hills
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 For: Webb Associates

Project No.
22-81-144-02

Drawing No.
B-2



BORING NO. :	BH-03-Celia Road	DEPTH (ft) :	5.0-10.0
DESCRIPTION :	SILTY SAND (SM)		
COHESION (psf) :	380	FRICTION ANGLE (degrees):	31
MOISTURE CONTENT (%) :	23.0	DRY DENSITY (pcf) :	107.0

NOTE: Ultimate Strength.

DIRECT SHEAR TEST RESULTS

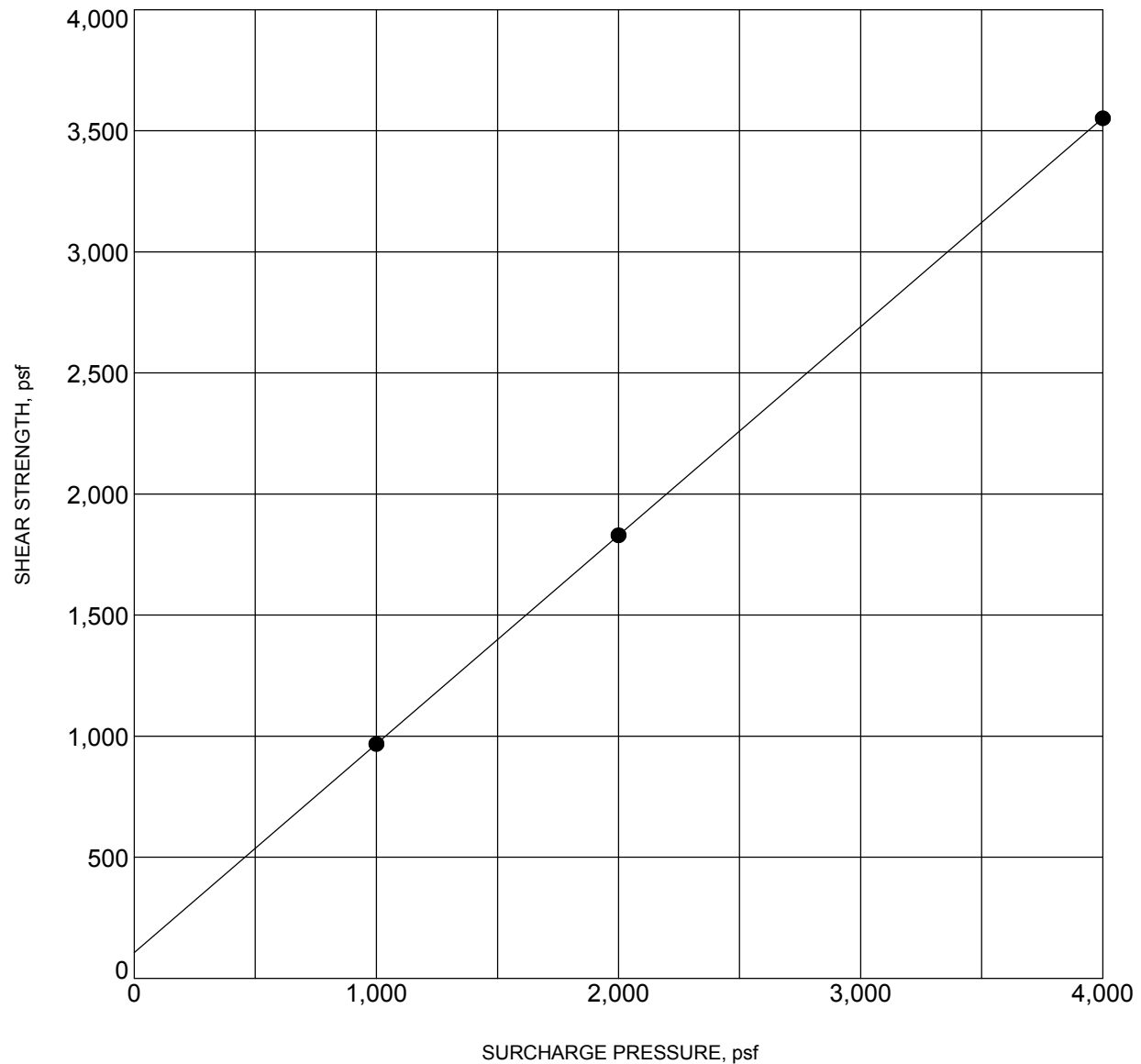


Converse Consultants

Project Name: EMWD Los Alamos Hills
 Project Location: Los Alamos Road, Ruth Allen Way, Celia Road,
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 For: Webb Associates

Project No.
22-81-144-02

Drawing No.
B-3



BORING NO.	:	BH-05-Celia Road	DEPTH (ft)	:	5.0-6.5
DESCRIPTION	:	SILTY SAND(SM)			
COHESION (psf)	:	110	FRICTION ANGLE (degrees):	:	41
MOISTURE CONTENT (%)	:	9.0	DRY DENSITY (pcf)	:	126.0

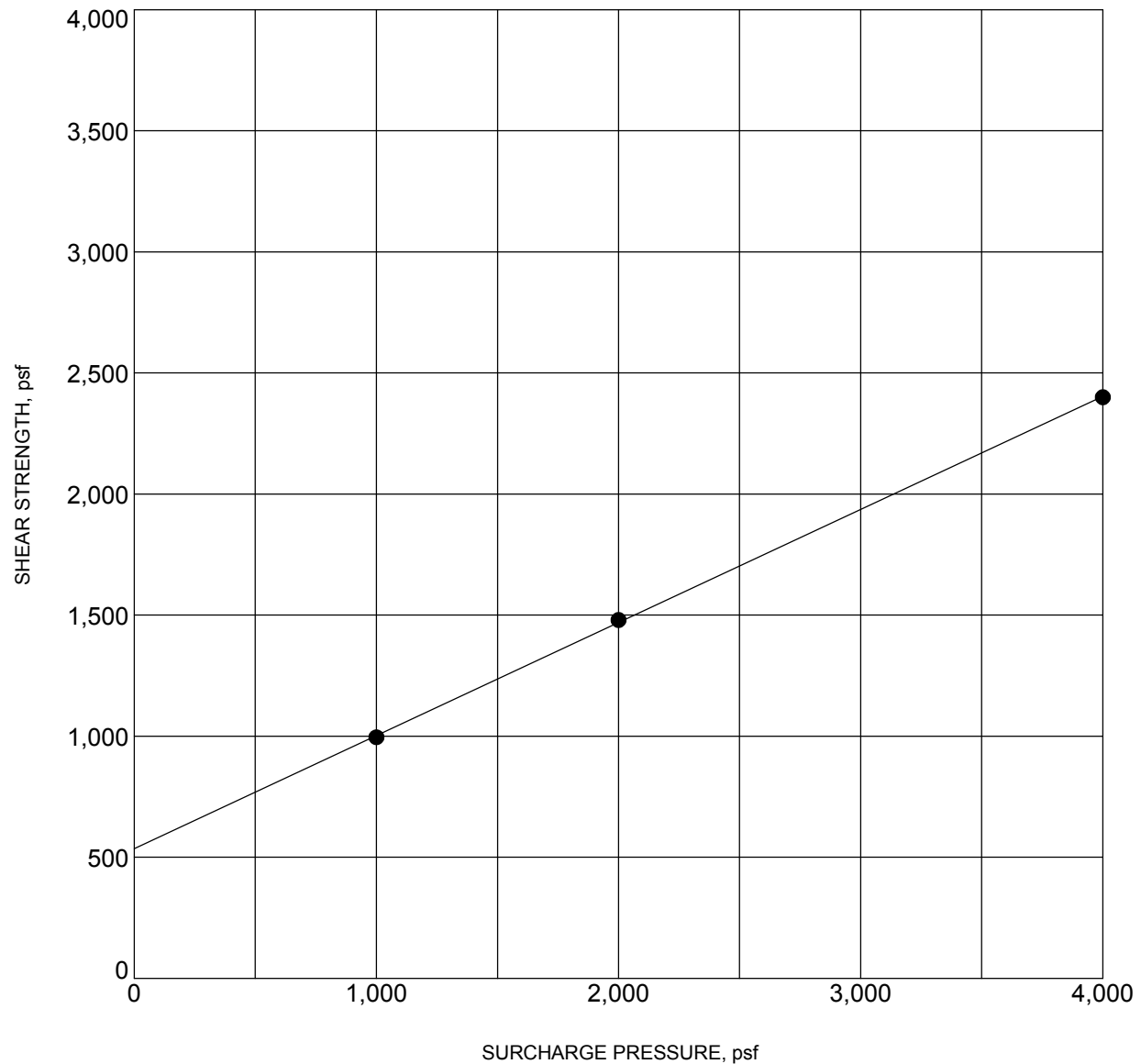
NOTE: Ultimate Strength.

DIRECT SHEAR TEST RESULTS**Converse Consultants**

Project Name: EMWD Los Alamos Hills
 Project Location: Los Alamos Road, Ruth Allen Way, Celia Road,
 Mary Place, and Mason Avenue
 City of Murrieta, Riverside County, California
 For: Webb Associates

Project No.
22-81-144-02

Drawing No.
B-4



BORING NO. :	BH-07-Mary Place	DEPTH (ft) :	5.0-6.5
DESCRIPTION :	SILTY SAND(SM)		
COHESION (psf) :	540	FRICTION ANGLE (degrees):	25
MOISTURE CONTENT (%) :	1.0	DRY DENSITY (pcf) :	130.0

NOTE: Ultimate Strength.

DIRECT SHEAR TEST RESULTS

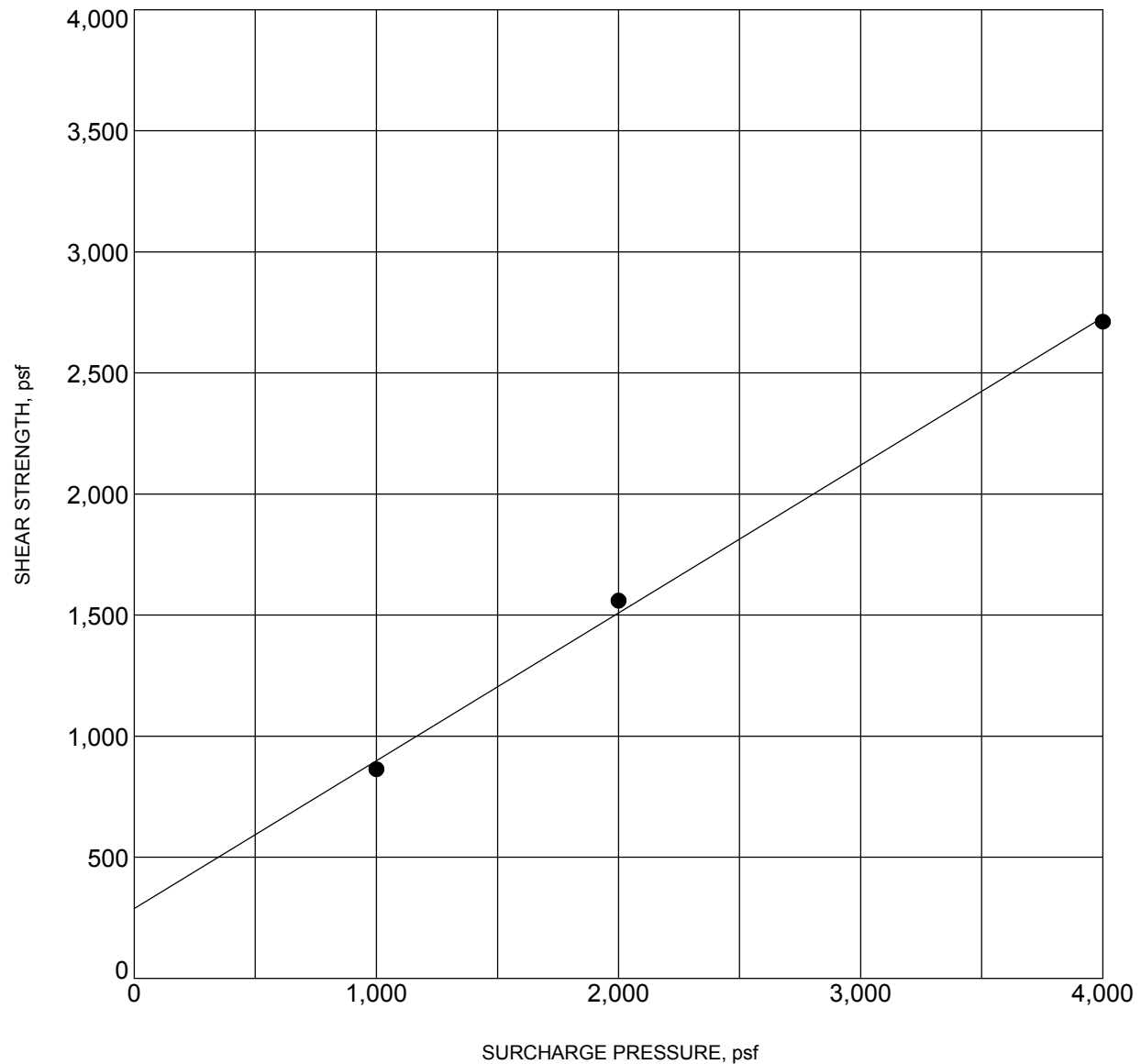


Converse Consultants

Project Name: EMWD Los Alamos Hills
 Project Location: Los Alamos Road, Ruth Allen Way, Celia Road,
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 City of Murrieta, Riverside County, California
 For: Webb Associates

Project No.
22-81-144-02

Drawing No.
B-5



BORING NO. :	BH-09-Mary Place	DEPTH (ft) :	5.0-6.5
DESCRIPTION :	SILTY SAND(SM)		
COHESION (psf) :	290	FRICTION ANGLE (degrees):	31
MOISTURE CONTENT (%) :	6.0	DRY DENSITY (pcf) :	119.0

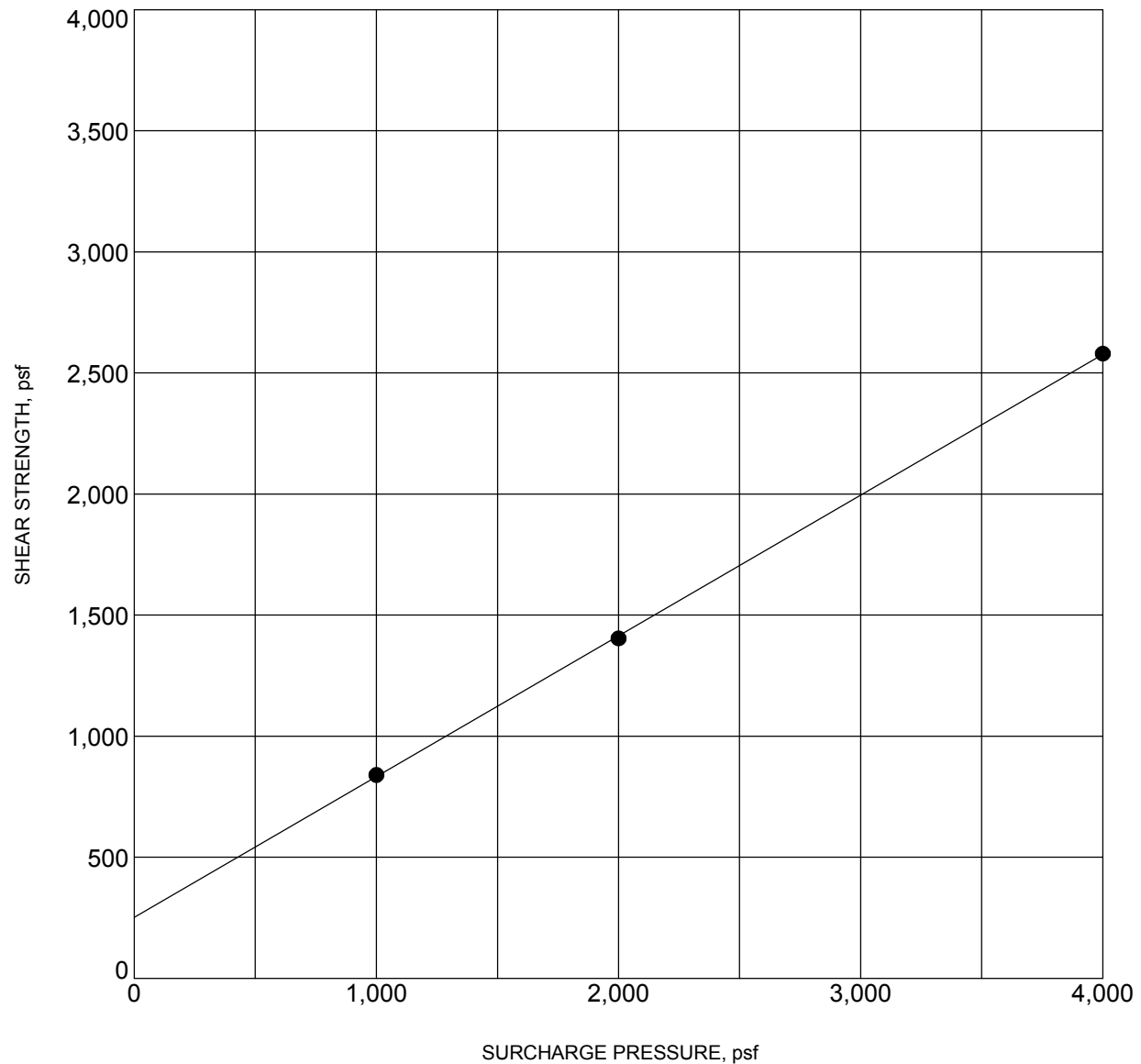
NOTE: Ultimate Strength.

DIRECT SHEAR TEST RESULTS**Converse Consultants**

Project Name: EMWD Los Alamos Hills
 Project Location: Los Alamos Road, Ruth Allen Way, Celia Road,
 Mary Place, and Mason Avenue
 City of Murrieta, Riverside County, California
 For: Webb Associates

Project No.
22-81-144-02

Drawing No.
B-6



BORING NO.	:	BH-11-Mason Avenue	DEPTH (ft)	:	7.5-9.0
DESCRIPTION	:	SILTY SAND (SM)			
COHESION (psf)	:	250	FRICTION ANGLE (degrees):	:	30
MOISTURE CONTENT (%)	:	8.0	DRY DENSITY (pcf)	:	117.0

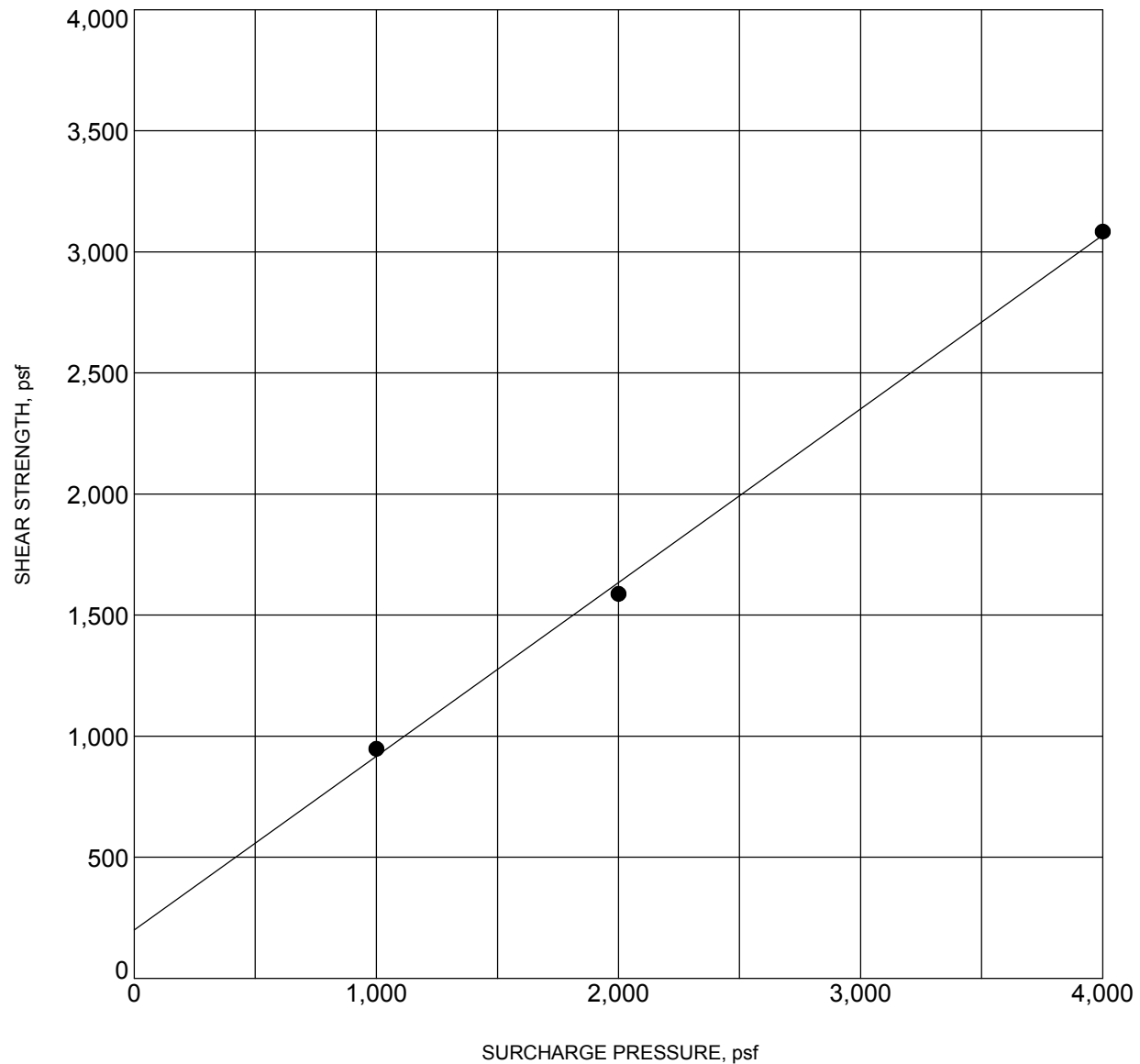
NOTE: Ultimate Strength.

DIRECT SHEAR TEST RESULTS**Converse Consultants**

Project Name: EMWD Los Alamos Hills
 Project Location: Los Alamos Road, Ruth Allen Way, Celia Road,
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 City of Murrieta, Riverside County, California
 For: Webb Associates

Project No.
22-81-144-02

Drawing No.
B-7



BORING NO. :	BH-13-Los Alamos Road	DEPTH (ft) :	5.0-6.5
DESCRIPTION :	SILTY SAND (SM)		
COHESION (psf) :	200	FRICTION ANGLE (degrees):	36
MOISTURE CONTENT (%) :	7.0	DRY DENSITY (pcf) :	128.0

NOTE: Ultimate Strength.

DIRECT SHEAR TEST RESULTS**Converse Consultants**

Project Name: EMWD Los Alamos Hills
 Project Location: Los Alamos Road, Ruth Allen Way, Celia Road,
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 City of Murrieta, Riverside County, California
 For: Webb Associates

Project No.
22-81-144-02

Drawing No.
B-8



Finance, Audit, Insurance, and Real Property Committee

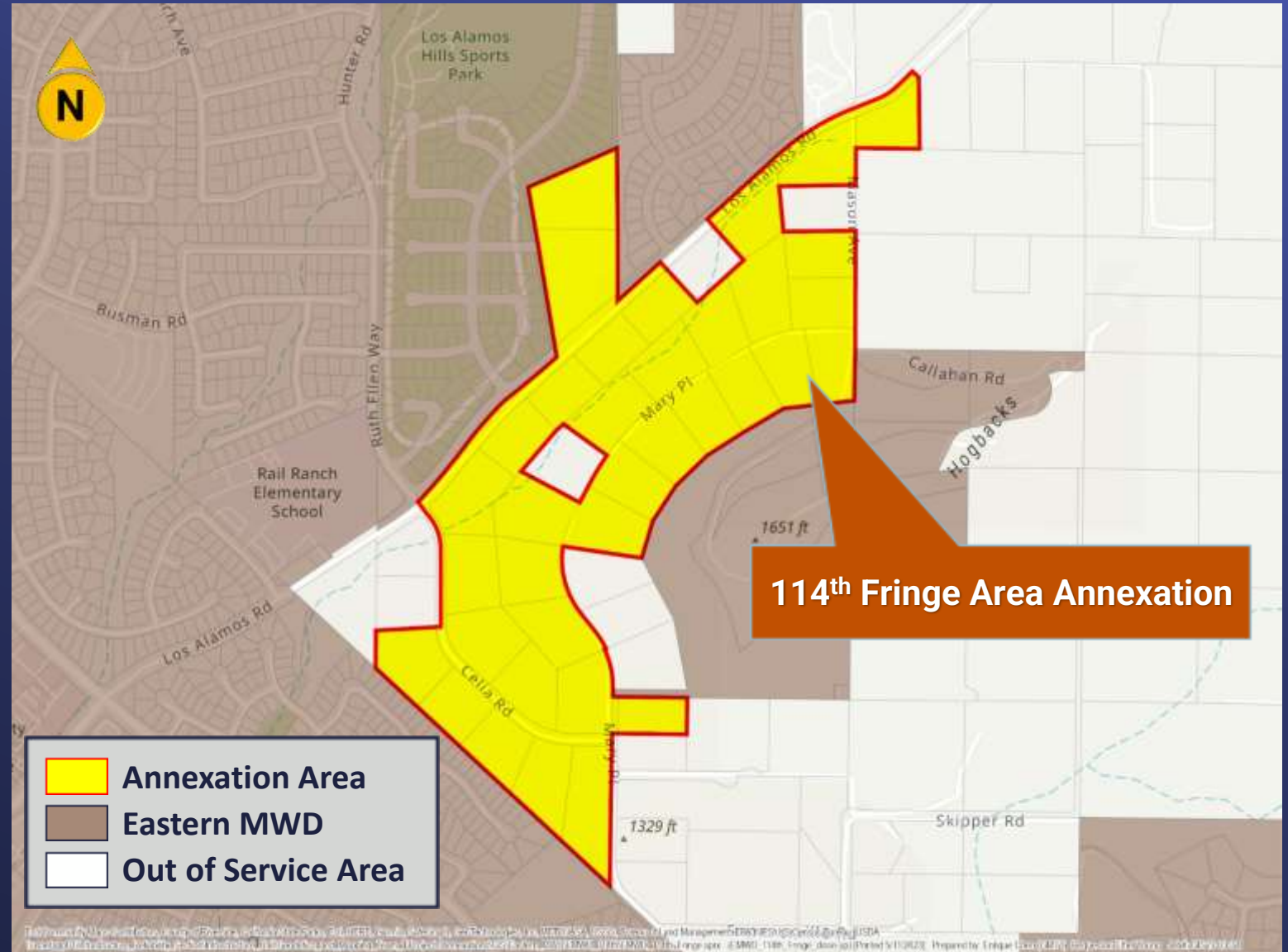
114th Fringe Area Annexation to EMWD and Metropolitan

Item 7-6

July 11, 2023

Annexation Site Map

Gross Area = 108.56 Acres
Public Road = 11.81 Acres



Key Provisions

- Annexation area is 108.56 acres with 11.81 acres in public roads leaving a net area of 96.75 acres.
- Total fees are \$665,156.25
- Water use estimate is 53.23 AF/Y
- Annexation request is compliant with current policies and requirements

Board Options

Option 1:

- Review and consider the Lead Agency's adopted Mitigated Negative Declaration and take related CEQA actions, and adopt resolution for 114th Fringe Area Annexation to Eastern MWD and Metropolitan

Option 2:

- Decline the Request

Board Options

Staff Recommendations

- Option 1





● **Board of Directors**

Finance, Audit, Insurance, and Real Property Committee

7/11/2023 Board Meeting

7-7

Subject

Award a \$359,725 contract to Mesa Energy Systems Inc. for the repair of the heating, ventilation, and air conditioning (HVAC) chiller #2 located at the Metropolitan Headquarters Building; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

The Metropolitan Headquarters Building's HVAC system is equipped with cooling towers, chillers, and air handlers that circulate chilled liquids for the comfort cooling of the occupants. One of the three chillers is currently inoperable due to a leak that has developed from the condenser tube bundle and an obsolete variable speed drive (VSD). These repairs are required to restore the chiller unit. This equipment is original to the building's infrastructure, installed in 1997.

Timing and Urgency

The guidelines from the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) recommend indoor air temperatures are maintained between 68 F to 74 F in the winter and 72 F to 80 F in the summer. Peak demand months, from August through October, typically require the operation of two chiller units to ensure that ASHRAE guidelines are met, and the building is properly cooled. Maintaining the functionality of all three chillers provides increased operational redundancy and allows staff to remove a chiller from service to perform scheduled maintenance and repairs. This action awards a contract to repair the chiller to ensure HVAC system reliability at headquarters and avoid service disruptions.

Details

Background

Metropolitan's Headquarters Building is a 522,682 square-foot concrete-frame structure consisting of a 12-story high-rise tower attached to a five-story wing. The Headquarters Building includes office space for approximately 850 Metropolitan staff and meeting space for the Board of Directors and members of the public. Metropolitan occupied the Headquarters Building in 1998. The business functions located in this building are critical for maintaining the continuity of Metropolitan's day-to-day operations.

An assessment was conducted on the three chiller units to identify the current conditions and determine the remaining useful life. There were two key takeaways from the assessment. The assessment determined that one of the three chillers, chiller #2, has diminished operationally at a higher rate than the other two units and requires immediate major repairs to ensure system reliability. The condenser tubes have extreme pitting, which resulted in a system failure. The existing variable speed drive is obsolete, and replacement parts are no longer available. Staff will also take this opportunity to increase the operational efficiencies of the chiller plant. Chillers #1 and #3 are on one electrical circuit breaker, and chiller #2 is on another breaker. While chiller #2 is unavailable, chillers #1 and #3 will run simultaneously. Consequently, energy costs have increased by approximately \$12,000 annually due to a higher electrical demand on an individual circuit breaker, resulting in a higher cost per kilowatt hour. Following the repair of chiller #2, Metropolitan can balance the electrical demand and operate the equipment in a more efficient manner. Lastly, the assessment also determined that the chillers have reached the end of their useful life and require replacement. A Capital Improvement Project has been submitted for the

replacement of all three chillers and is currently in the study phase. Due to the amount of time to perform design and construction activities, the replacement project will be completed in approximately 3 to 5 years.

Summary of Recommended Work

Headquarters Chiller #2 Repair

The scope of the construction repair contract consists of replacing the condenser tubes, reconditioning compressor components, and replacement of the VSD. Performing the repairs will maintain reliable comfort cooling and minimize potential service interruptions of Metropolitan's Headquarters Building.

Award of Construction Contract (Mesa Energy Systems Inc.)

Request for Proposal No. 2079 for Metropolitan Headquarters Building HVAC Chiller #2 Repair was advertised on May 11, 2023. As shown in **Attachment 1**, bids were received and opened on June 15, 2023. The bid from Mesa Energy Systems Inc. in the amount of \$359,725 complies with the requirements of the specifications. The engineer's estimate for this project was \$332,000. For this contract, Metropolitan established a Small Business Enterprise (SBE) participation level of at least 25 percent of the bid amount. Mesa Energy Systems Inc. has partnered with an SBE firm and thus achieves 25 percent participation. See **Attachment 2** for the list of subcontractors for this contract, and **Attachment 3** for the Location Map.

Policy

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not subject to CEQA because it involves the operation, repair, maintenance, replacement, reconstruction, or minor alteration of existing public or private structures, facilities, or mechanical equipment, involving negligible or no expansion of use and will have substantially the same purpose and capacity.

Accordingly, the proposed action qualifies under Class 1 and Class 2 (Sections 15301 and 15302) of the State CEQA Guidelines.

CEQA determination for Option #2:

None required

Board Options

Option #1

Award a \$359,725 contract to Mesa Energy Systems Inc. for the repair of heating, ventilation, and air conditioning chiller #2 located at the Metropolitan Headquarters Building.

Fiscal Impact: Expenditure of \$359,725 in O&M funds. All expenditures will be incurred in the current biennium and have been previously authorized.

Business Analysis: This option will enhance the reliability of the heating, ventilation, and air conditioning (HVAC) system for the building occupants and facility infrastructure at the Metropolitan Headquarters Building.

Option #2


Do not proceed with the repair at this time.

Fiscal Impact: None

Business Analysis: Under this option, staff would operate the building's heating, ventilation, and air conditioning system without operational redundancy. This approach would lead to further deterioration of the other two chiller units and potential building-wide shutdowns.

Staff Recommendation

Option #1

 7/3/2023
Shane O. Chapman Date
Assistant General Manager/Operations

 7/5/2023
Adel Hagekhalil Date
General Manager

Attachment 1 – Abstract of Bids**Attachment 2 – Subcontractors for Low Bidder****Attachment 3 – Location Map**

Ref# rpdm12693310

Abstract of Bids

The Metropolitan Water District of Southern California

Abstract of Bids Received on June 15, 2023, at 2:00 P.M.

Specifications No. 2079 Metropolitan Headquarters Building HVAC Chiller #2 Repair

The work consists of the removal and replacement of 532 condenser tubes and epoxy coat condenser barrel, replacement of the variable speed drive, remove pre-rotation vanes; clean housing and replace frozen parts, replace seals and gaskets, test and run unit.

Engineer's Estimate: \$332,000

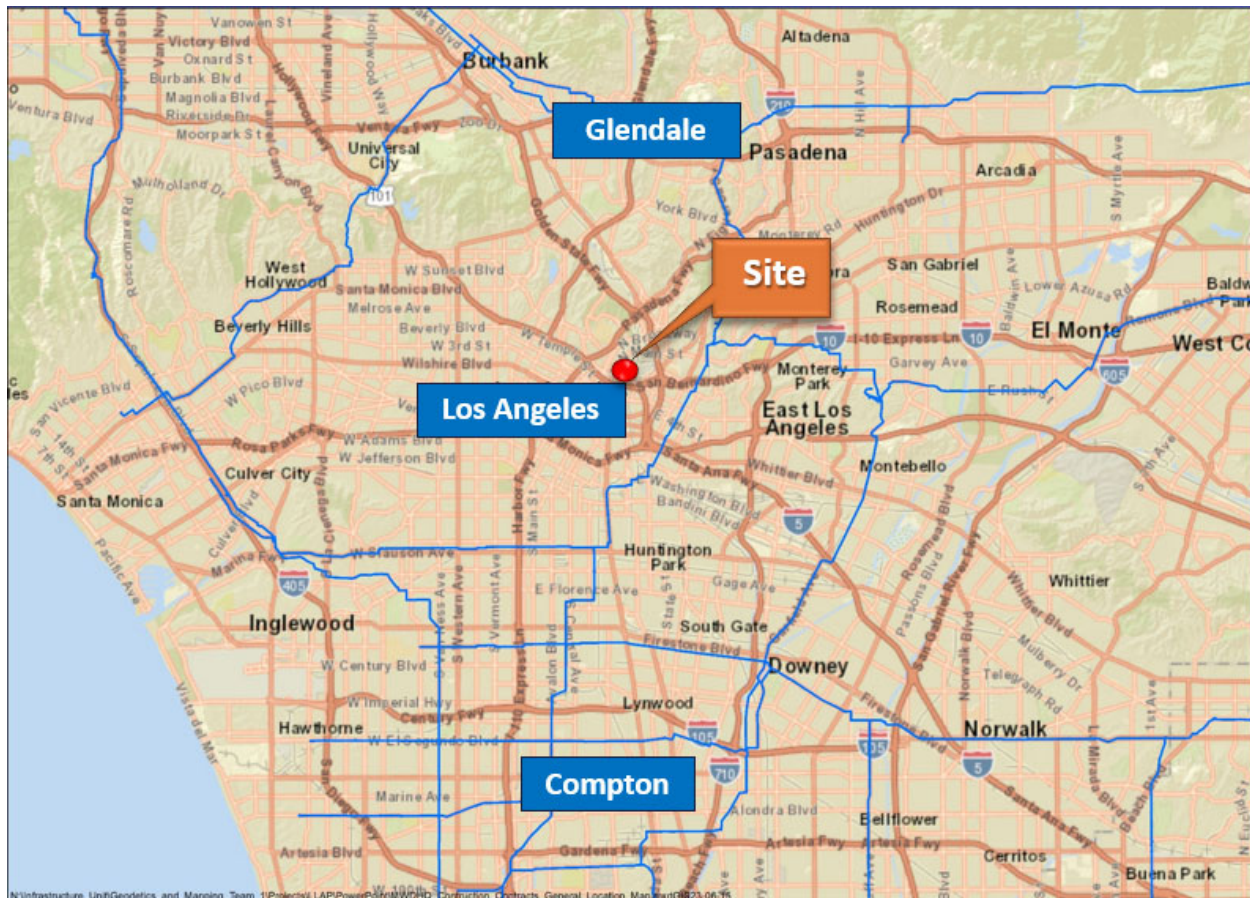
Bidder and Location	Total ¹
ACCO Engineered Systems Inc. ² Pasadena, CA	\$354,313
EMCOR Services/Mesa Energy Systems Irvine, CA	\$359,725

¹ Small Business Enterprise (SBE) participation level was set at 25%

² ACCO Engineered Systems Inc. was considered non-responsive as they did not meet the established SBE participation level

The Metropolitan Water District of Southern California**Subcontractors for Low Bidder****Specifications No. 2079
Metropolitan Headquarters Building
HVAC Chiller #2 Repair****Low Bidder: EMCOR Services/Mesa Energy Systems**

Subcontractor and Location
Mistras Group Inc. Chino, CA

Location Map



Finance, Audit, Insurance, & Real Property Committee

Metropolitan Headquarters Building HVAC Chiller Repair

Item 7-7

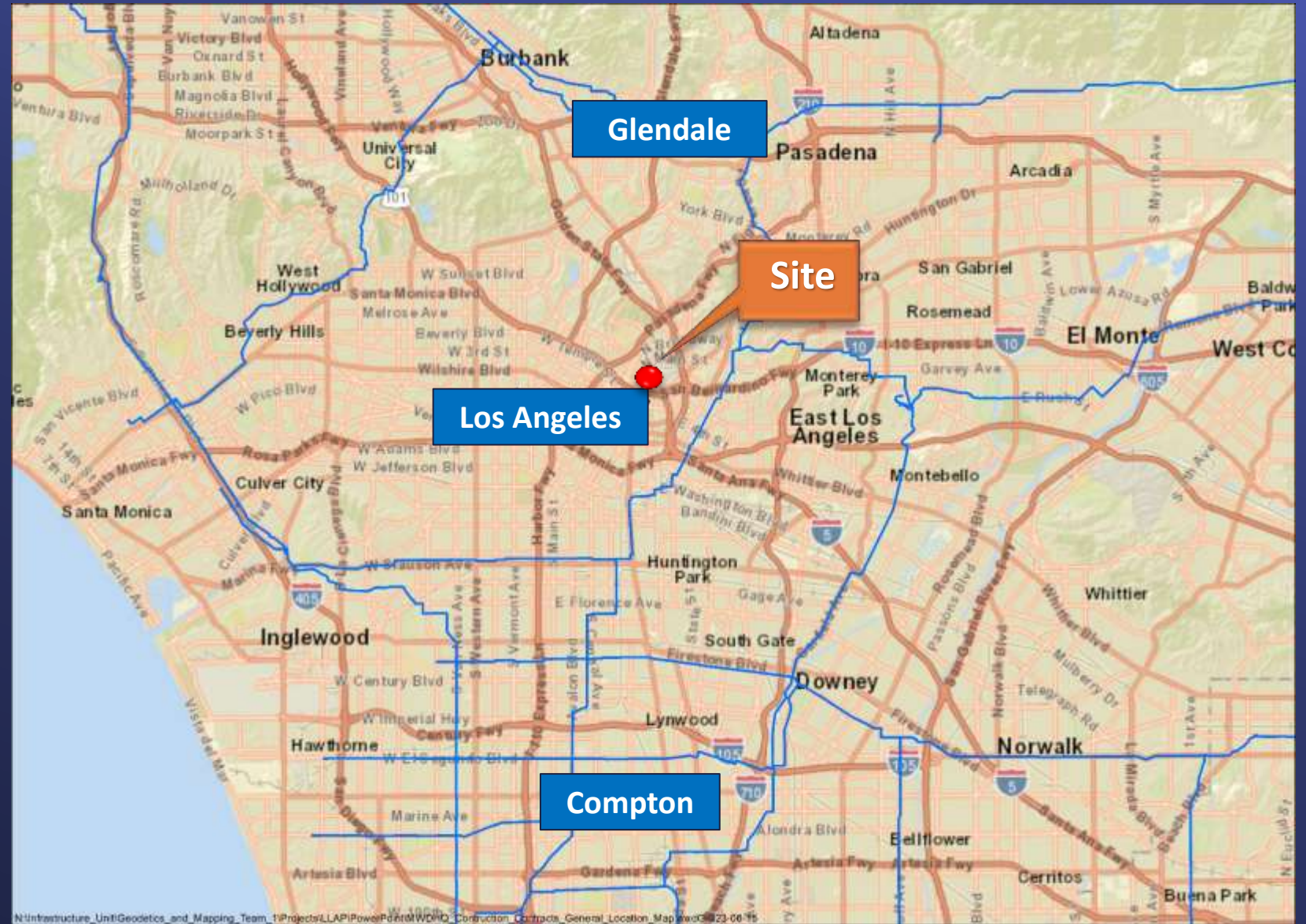
July 11, 2023

MWD HQ Building HVAC Chiller Repair

Current Action

- Award a \$359,725 contract to Mesa Energy Systems, Inc. for the repair of chiller #2 located at the Headquarters building.

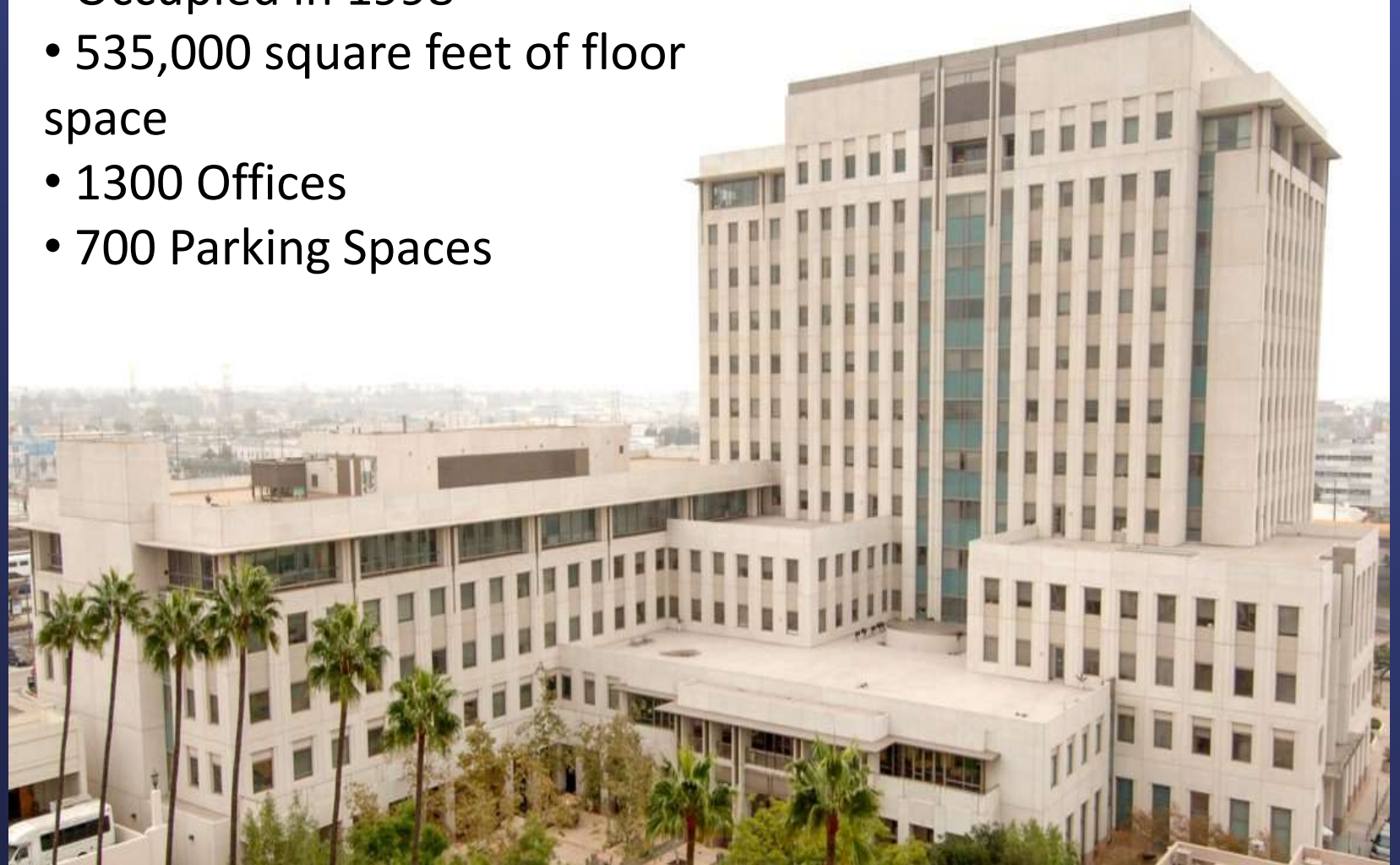
General Location Map



Background

Overview

- Occupied in 1998
- 535,000 square feet of floor space
- 1300 Offices
- 700 Parking Spaces



Background

- Building HVAC System
- Provides cooling for critical systems and comfort cooling
- Indoor air temperature standards, 68 F to 80 F
- Original building infrastructure



Chillers



Cooling Towers



Air Handler

Chiller Repair

- Testing has identified progressive failures, pitting, and corrosion
- Lack of operational redundancy
- Replace condenser tubes, variable speed drive, and ancillary equipment
- Capital Improvement Project –Chiller replacement



Bid Results Specifications No. 2079

Bids Received	June 15, 2023
No. of Bidders	2*
Lowest Responsive Bidder	Mesa Energy Systems, Inc
Low Bid	\$359,725
Engineer's Estimate	\$332,000
SBE Participation*	25%

*The apparent low bidder was deemed non-responsive as they did not meet the SBE participation level

*SBE (Small Business Enterprise) participation level set at 25%

Board Options

Option No. 1

- Award a \$359,725 contract to Mesa Energy Systems, Inc. for the repair of heating, ventilation and air conditioning (HVAC) chiller #2 located at the Metropolitan Headquarters building.

Option No. 2

- Do not authorize the agreement.

Board Options

Staff Recommendations

- Option No. 1





● **Board of Directors**

Finance, Audit, Insurance, and Real Property Committee

7/11/2023 Board Meeting

7-8

Subject

Approve General Auditor's Business Plan for fiscal year 2023/24; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

The General Auditor's Business Plan (**Attachment 1**) describes strategic goals, services available to Metropolitan, the process to identify audit and advisory projects, and resultant planned work to be executed during fiscal year 2023/24.

This action requests that the Board approve the General Auditor's Business Plan for fiscal year 2023/24, which is presented for consideration in accordance with the Metropolitan Administrative Code and professional internal auditing standards.

Timing and Urgency

The business plan approval is appropriate at this time in order to approve proposed work for fiscal year 2023/24. A delay in approval may affect the Office of the General Auditor's ability to perform its mission and scope of work prescribed in the Metropolitan Administrative Code.

Details

Background

Effective internal auditing requires thorough planning coupled with nimble responsiveness to quickly changing risks. To add value and improve Metropolitan's internal control effectiveness, the Office of the General Auditor's priorities should align with Metropolitan's objectives and should address the risks with the greatest potential to affect Metropolitan's ability to achieve those objectives.

Risk Assessment Process

The General Auditor is responsible for identifying internal audit engagements based on a risk assessment performed at least annually. The General Auditor and staff work together with Metropolitan management and the Board to understand the organization; identify, assess, and prioritize risks; estimate resources required to perform work; propose the work plan; solicit feedback; finalize and communicate the plan; assess risks throughout the fiscal year; and update the plan and communicate updates.

To help ensure the Office of the General Auditor's limited resources are effectively utilized, a risk-based assessment is used to select and prioritize audit assignments. The risk assessment considered seven factors, including impact factors (loss/material exposure, strategic risk), likelihood factors (control environment, complexity, assurance coverage, management concern), and velocity (how fast a risk can affect Metropolitan). The risk factors used in this process are the same factors commonly used by private companies and other public agencies. The outcome of this process is a risk score for each auditable unit of Metropolitan. A higher audit risk score does not mean that a business area/process is being managed ineffectively or that internal control is not adequate.

Resource Plan

The Office of the General Auditor is comprised of 11 professional audit team members and one administrative professional (district temp). Team member audit experience includes operational, financial, performance, fraud, and information technology. Total productive hours available for portfolio services is approximately 12,700 hours after allowances for benefits and non-productive time (e.g., training, staff meetings, HR activities). Additional time is then deducted for administration and other activities, a contingency reserve, a supplemental training initiative, board requests, and special projects resulting in approximately 7,700 hours available for audit and advisory projects.

Policy

Metropolitan Water District Administrative Code Section 2703: General Auditor's Report

Metropolitan Water District Administrative Code Section 6451: Audit Department Charter

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA (Public Resources Code Section 21065, State CEQA Guidelines Section 15378) because it would not cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and it involves continuing administrative or maintenance activities, such as purchases for supplies, personnel-related actions, general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed action is not defined as a project under CEQA because it involves organizational or administrative activities of governments that will not result in direct or indirect physical changes in the environment (Section 15378(b)(5) of the state CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Approve General Auditor's Business Plan for fiscal year 2023/24.

Fiscal Impact: None

Business Analysis: This option will authorize the General Auditor to proceed with planned audit and advisory projects that add value and improve Metropolitan's operations.

Option #2


Do not approve the General Auditor's Business Plan for fiscal year 2023/24.

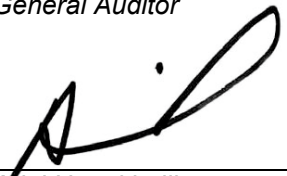
Fiscal Impact: None

Business Analysis: This option may impact the General Auditor's ability to perform audit work and other duties prescribed by the Metropolitan Administrative Code.

Staff Recommendation

Option #1



6/29/2023
Scott Suzuki
General Auditor
Date

7/6/2023
Adel Hagekhalil
General Manager
Date**Attachment 1 – General Auditor’s Business Plan for FY 2023/24**

Ref# a12694444

DRAFT – PENDING BOARD APPROVAL



Office of General Auditor __

General Auditor's Business Plan for FY 2023/24

July 11, 2023



Executive Summary

Background

The mission of the Office of the General Auditor is to provide independent, professional, and objective assurance and consulting services designed to add value and improve Metropolitan's operations. We help Metropolitan accomplish its objectives by using a proactive and systematic approach to evaluate and recommend improvements to the effectiveness of risk management, internal control, and governance processes.

Professional internal audit standards require we establish a risk-based plan to determine the priorities of our office that are consistent with Metropolitan's goals and objectives. Our methodology will be to perform focused audits and provide advisory services that evaluate important areas of Metropolitan and provide timely results.

We completed an audit risk assessment by gaining an understanding of Metropolitan's business operations through documentation reviews, interviews with management, and discussions with the Board. The results facilitated our efforts to identify and measure risks and prioritize potential audits and advisory projects for the Audit Plan. Our approach is to provide coverage of the most important aspects of the areas identified. We may make exceptions to this approach when there are carryforward audits from the prior year, where there has been recent audit coverage, or if our professional judgment dictates otherwise.

Results

Our fiscal year 2023/24 Audit Plan includes **23** scheduled audits, including seven new and 16 carried forward audits from fiscal year 2022/23. Additionally, we plan to cover six advisory projects.

Our audit risk assessment identified opportunities for our office to provide audit or advisory services in the following areas:

- Power Operations & Planning
- Human Resources
- Cybersecurity
- Business Continuity
- Water Conveyance & Distribution
- Administrative Services
- Sustainability, Resilience, and Innovation
- Board of Directors
- Revenue & Budget

Due to limited staffing resources, our Audit Plan includes projects addressing the highest identified audit risk areas. If resources become available in fiscal year 2023/24, we will incorporate additional risk areas into the Audit Plan. While we will re-evaluate the audit risk assessment periodically during the fiscal year, any risk areas not incorporated into the Audit Plan by fiscal year-end will be re-evaluated for inclusion in our fiscal year 2024/25 Audit Plan.

Diamond Valley Lake, pictured in spring 2023, proved to be the cornerstone of Metropolitan's supply reliability during times of drought. The reservoir provided water to meet demands by being drawn down and now will receive surplus supplies from the State Water Project as they become available.

DRAFT – PENDING BOARD APPROVAL

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Date: July 11, 2023

To: Adán Ortega, Jr., Board Chair
Members of the Board of Directors

From: Scott Suzuki, CPA, CIA, CISA, CFE, General Auditor

Subject: General Auditor's Business Plan for Fiscal Year 2023/2024

The Office of the General Auditor is pleased to present our Business Plan for fiscal year 2023/24 in accordance with Metropolitan Administrative Code Section 2703 and International Standards for the Professional Practice of Internal Auditing issued by The Institute of Internal Auditors.

The Business Plan is the result of careful analysis of Metropolitan documents and data, numerous risk discussions with Metropolitan managers, and Board input on specific risks and internal control concerns.

Our office is charged with determining whether Metropolitan's network of risk management, internal control, and governance processes are designed effectively and functioning as intended by management. To execute this charge, we plan to perform a series of audits and advisory projects, 29 in total, during the fiscal year 2023/24 (23 audit projects and six advisory projects).

The last several years have brought extraordinary challenges for Metropolitan staff due to fluctuating weather conditions, climate whiplash, and an unprecedented pandemic. In many cases, these events have altered how we perform our business and have forced Metropolitan to adjust and innovate how we deliver on our core mission.

Our mission is to add value by recommending improvements to Metropolitan's operations while maintaining transparency and trust in the work we perform. We will do this by working collaboratively with all levels of the Metropolitan team and identifying risks and opportunities that evolve under our changing environment, which will contribute to ensuring Metropolitan's resources have the maximum impact on the communities and the member agencies we serve.

We appreciate the opportunity to serve Metropolitan by offering independent, professional, and objective audit and advisory services and appreciate the cooperation provided by the Metropolitan team during our audit risk assessment project.

If you have any questions regarding our business plan, please do not hesitate to contact me directly at 213.217.6528 or Deputy General Auditor Kathryn Andrus at 213.217.7213.

Attachments

DRAFT – PENDING BOARD APPROVAL

Other report recipients:

General Manager

General Counsel

Ethics Officer

Board Executive Officer

External Auditor

DRAFT – PENDING BOARD APPROVAL**TABLE OF CONTENTS****Business Plan****1 Department Overview**

An introduction to our office

2 Strategic Goals

Our goals for fiscal year 2023/24

Audit Risk Assessment**3 Audit Risk Assessment Process**

A description of our project planning and methodology

5 Audit Risk Assessment Summary

A description of project results

Audit Plan**7 Service Portfolio**

An overview of the services we provide

8 Planned Engagements

Projects we plan to perform during fiscal year 2023/24

Appendix A: Additional Information**12 Assurance Coverage**

A crosswalk of risk areas to auditable areas and associated projects

14 Resource Plan

An overview of our resources that will be deployed to work on the Audit Plan

15 Organization Chart

Our internal reporting structure

16 Standards

References to relevant professional internal audit standards

DRAFT – PENDING BOARD APPROVAL**BUSINESS PLAN****DEPARTMENT OVERVIEW**

The General Auditor provides independent, professional, and objective advice to the Board and Metropolitan management in accordance with the professional standards issued by The Institute of Internal Auditors. To maintain independence, the General Auditor reports directly to the Board through the Finance, Audit, Insurance, and Real Property Committee.

The goal of the General Auditor is to assist Metropolitan's Board and management in improving business and financial practices. To carry out this effort, the General Auditor oversees a team of audit professionals who determine whether Metropolitan activities, programs, or agreements comply with policies, procedures, and applicable regulations. The team proactively addresses issues, focusing on risk management, internal control, and governance processes.

Towards this goal, our office is charged with determining if Metropolitan's network of risk management, internal control, and governance processes (as designed and represented by management), are adequate and functioning in a manner to ensure:

- ◆ Risks are appropriately identified, managed, and monitored.
- ◆ Significant financial, managerial, and operating information is accurate, reliable, and timely.
- ◆ Employees' actions comply with policies, standards, procedures, and applicable laws and regulations.
- ◆ Resources are acquired economically, used efficiently, and adequately protected.
- ◆ Programs, plans, and objectives are achieved.
- ◆ Quality and continuous improvement are fostered in Metropolitan's control process.
- ◆ Significant legislative or regulatory issues are recognized and addressed appropriately.

Our office carries out its responsibilities in accordance with the Audit Department Charter specified in the Metropolitan Administrative Code Section 6451.



DRAFT – PENDING BOARD APPROVAL**STRATEGIC GOALS**

Our strategic goals for FY 2023/24 are:

- Build and strengthen relationships with the Finance, Audit, Insurance, and Real Property Committee and the 38-member Board of Directors by developing trust and establishing credibility and reliability.
- Initiate robust risk conversations with the Subcommittee on Audits and the Board.
- Develop and execute an annual Audit Plan that is bold, strategic, and addresses any outstanding audit recommendations, along with timelines for implementation.
- Strengthen the operations of the organization by providing independent and objective advice in accordance with The Institute of Internal Auditors' International Standards for the Professional Practice of Internal Auditing.
- Take steps toward creating a high-performing, inclusive, and innovative team of audit professionals noted for valuing diversity, workplace equity, shared vision, and mission.



DRAFT – PENDING BOARD APPROVAL**AUDIT RISK ASSESSMENT****AUDIT RISK ASSESSMENT PROCESS**

The General Auditor's objective is to add value and improve Metropolitan's effectiveness and efficiency.

Our strategy to accomplish this is through planning, nimble responsiveness, aligning our priorities with Metropolitan's objectives, and auditing the risks with the greatest potential to affect Metropolitan's ability to achieve its objectives.

The chief audit executive must establish a risk-based plan to determine the priorities of the internal audit activity, consistent with the organization's goals – International Professional Practices Framework (IPPF) Standard 2010

There are eight primary steps in performing and maintaining the audit risk assessment and Audit Plan:

1. Understand the organization.
2. Identify, assess, and prioritize risks.
3. Coordinate with other assurance providers.
4. Estimate resources.
5. Propose the plan and solicit feedback.
6. Finalize and communicate the plan.
7. Assess risks continuously.
8. Update plan and communicate updates.

The General Auditor team developed the Audit Plan using this process, which is designed to ensure a thorough and comprehensive risk evaluation; facilitate effective communication with the Board, management, and other stakeholders; and allocate sufficient resources to perform the planned projects.

As part of identifying, assessing, and prioritizing risks, we looked at the following risk factors:

Impact Factors

1. Loss/Material Exposure. Dollar values at risk, annual expenses, number of transactions, impact on other areas of Metropolitan, degree of reliance on IT.
2. Strategic Risk. Public perception/reputation, economic conditions, volatility, significance to the General Manager's business plan/strategy, degree of regulation, recent changes.



DRAFT – PENDING BOARD APPROVALLikelihood Factors

3. Control Environment. Degree of process isolation, degree of formalization, newness of processes/applications, third-party reliance, management turnover, management monitoring, policy and procedures.
4. Complexity. Degree of automation, degree of required specialization, level of technical detail, complexity of structure, frequency of change.
5. Assurance Coverage. Type of engagement, other reviews, second-line coverage, current audit/follow-up.
6. Board & Management Concern. Quantity and specificity of concerns shared during interviews and meetings.

Speed Factor

7. Velocity. How fast a risk can affect Metropolitan.

We obtained input from management in key business areas to identify and quantify the risks Metropolitan faces. We also looked at goals and objectives laid out in various Metropolitan documents, including the financial statements, annual reports, the Integrated Resources Plan, the Climate Action Management Plan, monthly General Manager reports, Board and Committee meeting agendas and minutes, and the biennial budget.

Our audit universe was defined as 35 auditable units and generally evolved around functional areas of Metropolitan. All Metropolitan departments, groups, sections, and units are included as auditable units except for our office. We scored each factor and sorted each auditable unit according to a total risk score to identify auditable units with higher audit risks.

An auditable unit with a higher audit risk score indicates the services or functions it is responsible for are a higher risk activity because of factors including, but not limited to, having a large amount of expenditures and/or revenues, having a high level of liquid assets such as cash, undergoing significant change (e.g., organizational structure, business process, IT), processing complex transactions, or having a high degree of public interest. A higher audit risk score indicates that if something were to go wrong, it could have a greater impact on Metropolitan.



DRAFT – PENDING BOARD APPROVAL**AUDIT RISK ASSESSMENT SUMMARY**

Our audit risk assessment results show that five auditable units are considered higher risk, 24 moderate risk, and six lower risk. Below are Metropolitan’s auditable units in their respective risk categories in alphabetical order.

HIGHER AUDIT RISK

- | | | |
|-----------------------|-------------------------------|-----------------------------------|
| • Business Continuity | • Human Resources | • Water Conveyance & Distribution |
| • Cybersecurity | • Power Operations & Planning | |

A higher audit risk score DOES NOT mean that a business area/process is being managed ineffectively or that internal control is not adequate.

MODERATE AUDIT RISK

- | | | |
|------------------------------------|--|--|
| • Administrative Services | • External Affairs | • Sustainability, Resilience, and Innovation |
| • Bay Delta Initiatives | • Information Technology | • Treasury & Debt Management |
| • Board of Directors | • Infrastructure Reliability & Program Management (PM) | • Water Operations & Planning |
| • Diversity, Equity, and Inclusion | • Office of the General Manager | • Water Quality |
| • Employee Relations | • Operational Safety & Regulation | • Water Resource Implementation |
| • Engineering Planning | • Operations Support | • Water Resource Planning |
| • Environmental Planning | • Real Property | • Water Treatment |
| • Equal Employment Opportunity | • Revenue & Budget | |
| | • Security | |

LOWER AUDIT RISK

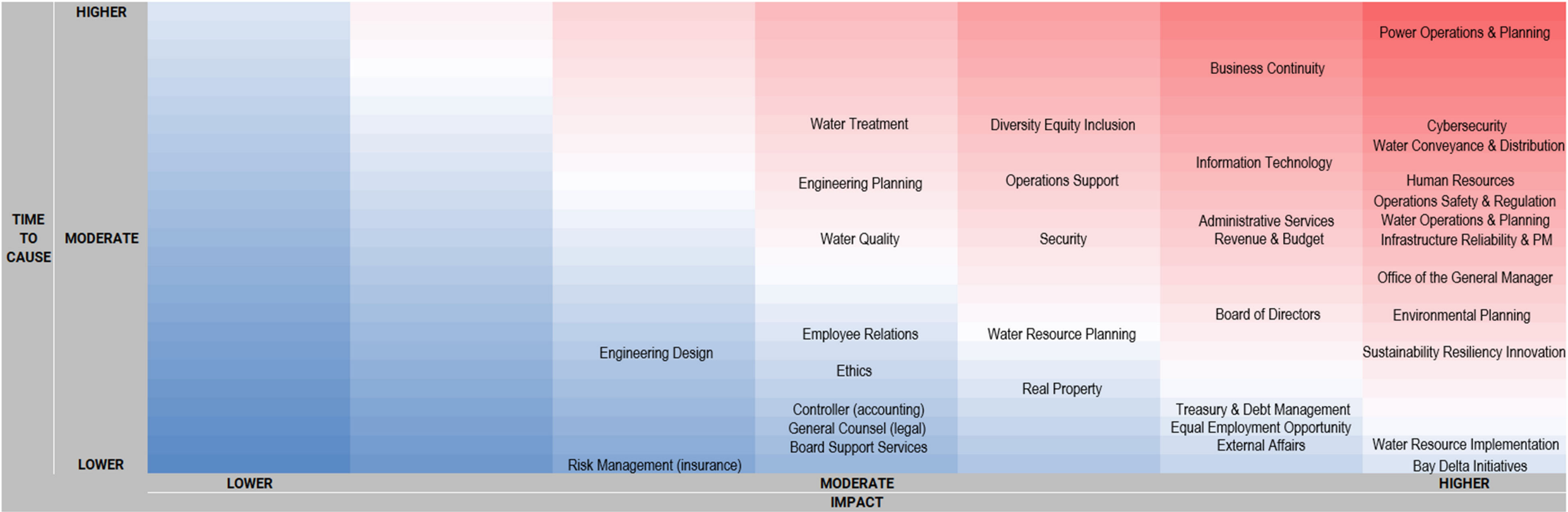
- | | | |
|---------------------------|----------------------|-------------------------------|
| • Board Support Services | • Engineering Design | • General Counsel (legal) |
| • Controller (accounting) | • Ethics | • Risk Management (insurance) |



DRAFT – PENDING BOARD APPROVAL

HEAT MAP

The diagram below shows the relationship between time to cause (likelihood + velocity) vs. impact for each Metropolitan auditable area.



DRAFT – PENDING BOARD APPROVAL**AUDIT PLAN****SERVICE PORTFOLIO**

Our core portfolio includes the following services:

1 Operational & Compliance Audits

These projects provide assurance focusing on internal control design, implementation, and/or maintenance in core business operations. The criteria used for our internal control audits is the Committee of Sponsoring Organizations of the Treadway Commission (COSO) internal control framework. Projects can also include an assessment of policy, contractual, and/or regulatory compliance.

2 Information Technology Audits

Information technology is pervasive in Metropolitan's system of internal control. These projects focus on general information technology controls (e.g., user access, change management, business continuity) or specialized cybersecurity controls (e.g., IT asset management, data protection, malware defense).

3 Advisory Services

These projects include providing consulting services to Metropolitan functions primarily in support of major business changes (e.g., new application implementation, re-organization, new service line); however, they can also include ad-hoc on-demand advice.

4 Follow-Up Reviews

Follow-up reviews of observations from prior audits to monitor the implementation progress of recommended corrective actions. The amount of follow-up necessary depends on the severity of the issue and the type of corrective action.

5 Administration & Other Activities

These include the annual audit risk assessment and audit plan; TeamMate+ training and implementation; on-demand advisory services; annual reporting; quality assessment & improvement program; and contractually required assistance to external auditors.



DRAFT – PENDING BOARD APPROVAL**PLANNED ENGAGEMENTS**

Planned engagements are based upon approximately 12,700 productive hours provided by nine audit professionals with time allocated for administrative duties. Audit hours for the general auditor and deputy general auditor are not included in the productive hour total. Higher audit risk areas are given priority for project assignment over moderate and lower audit risk areas. Once all higher audit risk areas are assigned an audit, additional moderate audit risk areas are selected at the discretion of the General Auditor. Projects may also be assigned based on Board direction or as mandated by law/regulation. Lastly, recurring audits are generally not assigned unless determined as higher risk or mandated by law/regulation.

The following table provides planned audit and advisory engagements and includes preliminary objectives and project budgeting:

SUBJECT	PRELIMINARY SCOPE	PRELIMINARY BUDGET
Operational & Compliance Audits		
1. Power Purchasing	Review Metropolitan power purchases	200
2. State Audit Monitoring	Review implementation status of State Auditor recommendations	200
3. Recruiting	Review recruiting procedures and technology	800
4. Water Supply Disaster Preparedness & Business Continuity	Review Metropolitan's planned response to water supply interruption	800
5. CRA Maintenance	Review conveyance maintenance program/processes	800
6. Data Governance	Review Metropolitan's data governance strategy	800
7. Reserves/Rate Stabilization Fund <i>Board Directed from FY 2022/23</i>	Determine if reserves are maintained in accordance with Metropolitan Administrative Code	400
8. Fallowed Land <i>Board Directed from FY 2022/23</i>	Determine if contracted fallowed land acreage agrees to actual fallowed land acreage	400
9. Project Controls & Reporting System (PCRS) <i>Carryforward from FY 2022/23</i>	Review administration of the Project Controls and Reporting System.	200



DRAFT – PENDING BOARD APPROVAL**Operational & Compliance Audits (con't)**

10. Real Property Business Management System <i>Carryforward from FY 2022/23</i>	Review administration of Real Property Business Management System Project.	200
11. Fuel Regulations Compliance <i>Carryforward from FY 2022/23</i>	Review compliance with regulations and policies.	200
12. Surplus Personal Property – Equipment <i>Carryforward from FY 2022/23</i>	Review retirement and disposal of surplus equipment and property.	160
13. Employee Tuition Reimbursement Program <i>Carryforward from FY 2022/23</i>	Review reimbursements for policy compliance.	80
14. CRA Discharge Line Isolation Couplings <i>Carryforward from FY 2022/23</i>	Review administration of the CRA Discharge Line Isolation Couplings Rehabilitation Project	40
15. IBI Group <i>Carryforward from FY 2022/23</i>	Review administration of the consulting agreements.	40
16. Kennedy/Jenks Consultants, Inc. <i>Carryforward from FY 2022/23</i>	Review administration of the consulting agreements.	40
17. PlanNet Consulting, LLC <i>Carryforward from FY 2022/23</i>	Review administration of the consulting agreements.	40
18. 1Cyber Security Resources (CSR), Inc. <i>Carryforward from FY 2022/23</i>	Review administration of the consulting agreements.	40
19. ResourceXperts <i>Carryforward from FY 2022/23</i>	Review administration of the consulting agreements.	40
20. Website Design & Implementation <i>Carryforward from FY 2022/23</i>	Review internal controls over site design and implementation.	40



DRAFT – PENDING BOARD APPROVAL**Information Technology Audits**

21. Cybersecurity: Inventory & Control of Enterprise Assets	Determine if an enterprise asset inventory is established and maintained.	400
22. Oracle Application Security <i>Carryforward from FY 2022/23</i>	Assess Oracle security controls.	80
23. Cybersecurity – Ransomware <i>Carryforward from FY 2022/23</i>	Evaluate ransomware preparedness.	40

Advisory Services

24. Risk Oversight Committee	To advise on committee matters.	NA
25. Grants	To advise on the new grants management function.	200
26. Board Expense Policy	To advise on Board expense policy.	200
27. WINS (Water Information Network System)	To advise on new application implementation.	80
28. SCADA (Supervisory Control and Data Acquisition)	To advise on new application implementation.	80
29. PeopleSoft Time & Labor	To advise on new application implementation.	80

Follow-Up Reviews

Follow-Up on Operational & Compliance Audits	Follow-up on management's implementation of our audit recommendations.	810
--	--	-----

Administration & Other Activities

External Audit Support	800
Annual Audit Risk Assessment & Audit Plan	360
Quality Assessment & Improvement Program	200
TeamMate+ Training & Implementation	200
On-Demand Advisory Services	80
Annual Report	40

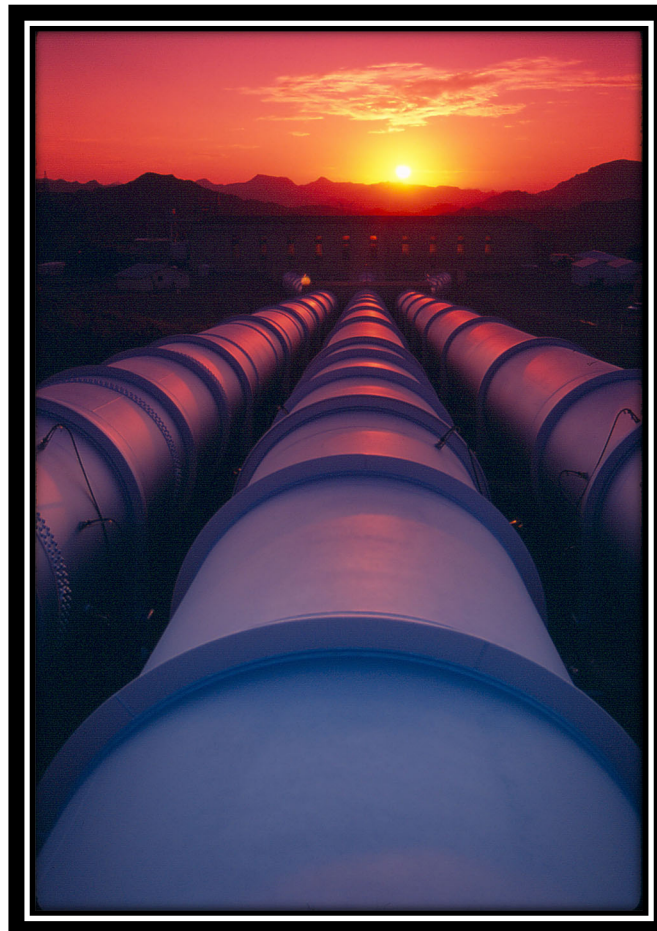


DRAFT – PENDING BOARD APPROVAL

The General Auditor's Audit Plan is subject to change for such events where the General Auditor assesses it is warranted to substitute, postpone, or cancel a scheduled audit due to timing, priority, resources, and/or other risk considerations. Such modifications will be noted in the periodic status reports submitted to the Subcommittee on Audits. The acceptance of the status reports authorizes any changes noted and amends the Audit Plan.

PROJECT TEAM

- ◆ Kathryn Andrus, CPA, Deputy General Auditor
- ◆ Chris Gutierrez, Audit Program Manager
- ◆ Arturo Castro, Principal Auditor
- ◆ Sherman Hung, CISA, Principal Auditor
- ◆ Andrew Lin, CPA, CIA, CIGA, Principal Auditor
- ◆ Leo Roldan, CPA, CIA, CGMA, Principal Auditor
- ◆ Lina Tan, Principal Auditor
- ◆ Neena Mehta, Senior Deputy Auditor
- ◆ Bonita Leung, CPA, CIA, CRMA, CGMA, Deputy Auditor III
- ◆ Faviola Sanchez, Deputy Auditor III



DRAFT – PENDING BOARD APPROVAL**APPENDIX A: ADDITIONAL INFORMATION****ASSURANCE COVERAGE**

Specific risks identified as part of the audit risk assessment process are mapped to their associated auditable areas, and resultant planned engagements (planned engagement number) or internal audit methodology as shown below:

RISK	AUDITABLE AREA	ENGAGEMENT/ METHODOLOGY
Power costs	Power Operations & Planning	Power Purchasing (1) Risk Oversight Committee (advisory) (24)
State Audit status	Human Resources	State Audit Monitoring (2)
Recruiting	Human Resources	Recruiting (3)
Cybersecurity	Cybersecurity	Cybersecurity: Inventory & Control of Enterprise Assets (21)
Earthquake, Delta failure	Business Continuity	Water Supply Disaster Preparedness & Business Continuity (4)
Water system maintenance	Water Conveyance & Distribution	CRA Maintenance (5)
Data classification	Administrative Services	Data Governance (6)
Grant compliance	Sustainability, Resilience & Innovation	Grants (advisory) (25)
Board governance	Board of Directors	Board Expense Policy (advisory) (26)
Reserves	Revenue & Budget	Reserves/Rate Stabilization Fund (7)
Cost savings/culture	NA	Efficiency/Economy Project Objectives



DRAFT – PENDING BOARD APPROVAL

Specific risks identified as part of the audit risk assessment process are mapped to auditable areas and will be added to the Audit Plan as resources become available:

RISK	AUDITABLE AREA
Chemical safety	Water Treatment
California Air Resources Board regulation compliance/readiness	Operations Support
Asset management	Infrastructure Reliability & Program Management
Enterprise risk management	Office of the General Manager
Property protection, trespassing	Security
Desert housing, leases/revenue, permits	Real Property

Additionally, essential cybersecurity topics that will not be covered due to resource limitations are:

- Software asset inventory and control.
- Enterprise asset and software configuration.
- Account management.
- Access control management.
- Continuous vulnerability management.
- Audit log management.
- E-mail and web browsing protection.
- Malware defense.
- Network infrastructure.
- Security awareness.
- Service provider management.
- Incident response management.



DRAFT – PENDING BOARD APPROVAL**RESOURCE PLAN**

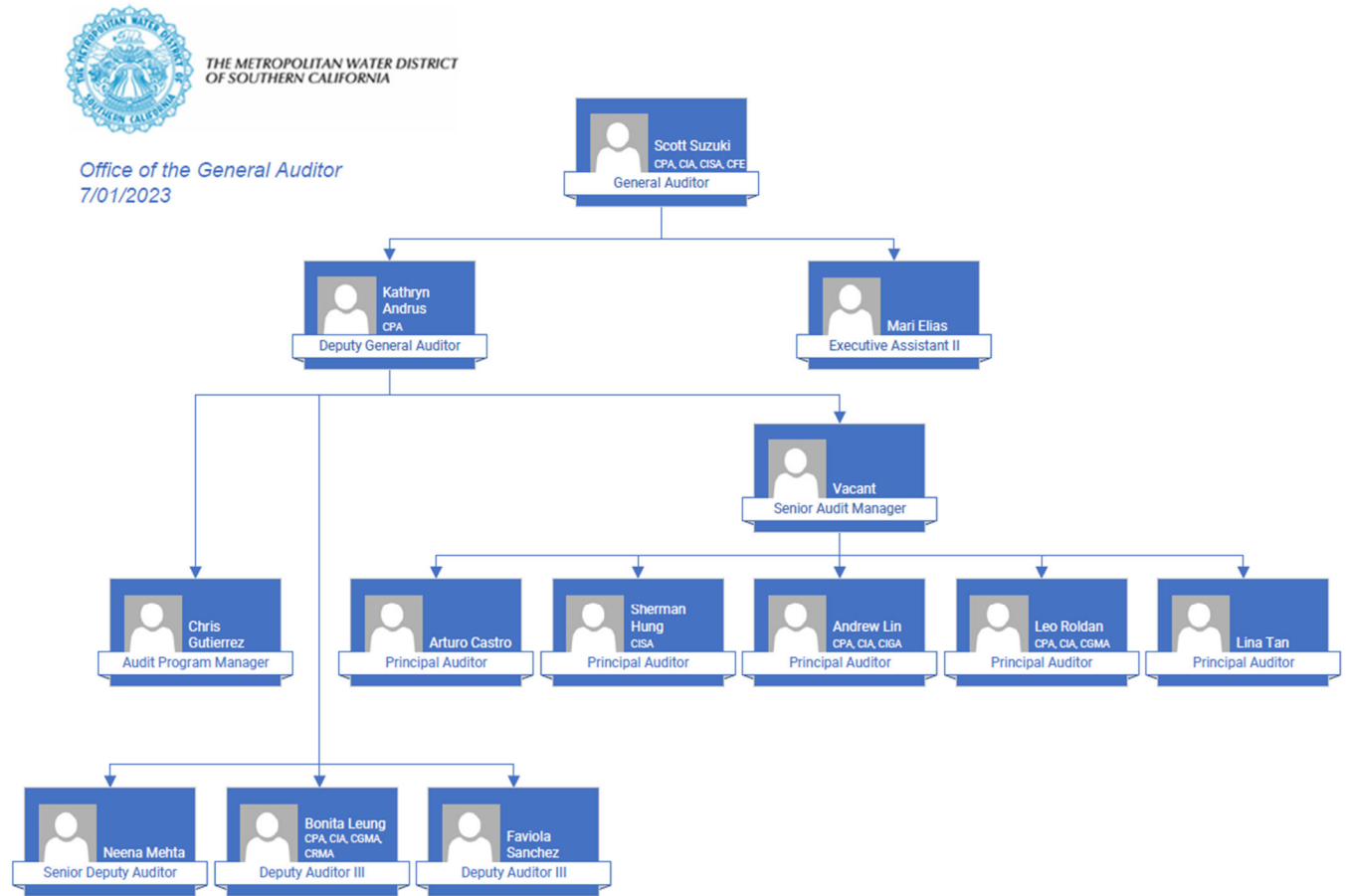
The department is comprised of 11 professional audit team members and one administrative professional. Team member audit experience includes financial, operational, compliance, performance, fraud, and information technology. Five members are licensed Certified Public Accountants (CPA), four are Certified Internal Auditors (CIA), and two are Certified Information System Auditors (CISA). Other professional certifications held include Certified Fraud Examiner (CFE), Chartered Global Management Accountant (CGMA), Certification in Risk Management Assurance (CRMA), and Certified Inspector General Auditor (CIGA).

The total productive hours available for portfolio services is 12,698 hours after allowances for benefits and non-productive time (e.g., training, staff meetings, HR activities). Additional time is then deducted for administration and other activities, a contingency reserve, a supplemental training initiative, Board requests, and special projects, resulting in 7,718 hours available for audit and advisory projects.

While all five higher-risk auditable areas are covered by existing team resources, a number of cybersecurity areas (see page 13 above) WILL NOT be covered by internal resources. Our office will investigate additional staffing, co-sourcing, or outsourcing opportunities to cover these important technical areas.



DRAFT – PENDING BOARD APPROVAL
ORGANIZATION CHART



DRAFT – PENDING BOARD APPROVAL**STANDARDS**

The following are references to conformance with relevant International Professional Practices Framework (IPPF) standards.

2010 – Planning

The chief audit executive must establish a risk-based plan to determine the priorities of the internal audit activity, consistent with the organization's goals.

- 💧 The internal audit activity's plan of engagements must be based on a documented risk assessment, undertaken at least annually. The input of senior management and the Board must be considered in this process.
- 💧 The chief audit executive must identify and consider the expectations of senior management, the Board, and other stakeholders for internal audit opinions and other conclusions.
- 💧 The chief audit executive should consider accepting proposed consulting engagements based on the engagement's potential to improve management of risks, add value, and improve the organization's operations. Accepted engagements must be included in the plan.

2020 – Communication & Approval

The chief audit executive must communicate the internal audit activity's plans and resource requirements, including significant interim changes, to senior management and the Board for review and approval. The chief audit executive must also communicate the impact of resource limitations.

2100 – Nature of Work

The internal audit activity must evaluate and contribute to the improvement of the organization's governance, risk management, and control processes using a systematic, disciplined, and risk-based approach. Internal audit credibility and value are enhanced when auditors are proactive and their evaluations offer new insights and consider future impact.



DRAFT – PENDING BOARD APPROVAL**2110 – Governance**

The internal audit activity must assess and make appropriate recommendations to improve the organization's governance processes for: (1) making strategic and operational decisions, (2) overseeing risk management and control, (3) promoting appropriate ethics and values within the organization, (4) ensuring effective organizational performance management and accountability, (5) communicating risk and control information to appropriate areas of the organization, (6) coordinating the activities of, and communicating information among the Board, external and internal auditors, other assurance providers, and management.

- The internal audit activity must evaluate the design, implementation, and effectiveness of the organization's ethics-related objectives, programs, and activities.
- The internal audit activity must assess whether the information technology governance of the organization supports the organization's strategies and objectives.

2120 – Risk Management

The internal audit activity must evaluate the effectiveness and contribute to the improvement of risk management processes.

- The internal audit activity must evaluate risk exposures relating to the organization's governance, operations, and information systems regarding the: (1) Achievement of the organization's strategic objectives; (2) Reliability and integrity of financial and operational information; (3) Effectiveness and efficiency of operations and programs; (4) Safeguarding of assets; and (5) Compliance with laws, regulations, policies, procedures, and contracts.
- The internal audit activity must evaluate the potential for the occurrence of fraud and how the organization manages fraud risk.
- During consulting engagements, internal auditors must address risk consistent with the engagement's objectives and be alert to the existence of other significant risks.
- Internal auditors must incorporate knowledge of risks gained from consulting engagements into their evaluation of the organization's risk management processes.
- When assisting management in establishing or improving risk management processes, internal auditors must refrain from assuming any management responsibility by actually managing risks.



DRAFT – PENDING BOARD APPROVAL**2130 – Control**

The internal audit activity must assist the organization in maintaining effective controls by evaluating their effectiveness and efficiency and by promoting continuous improvement.

- ◆ The internal audit activity must evaluate the adequacy and effectiveness of controls in responding to risks within the organization's governance, operations, and information systems regarding the: (1) Achievement of the organization's strategic objectives; (2) Reliability and integrity of financial and operational information; (3) Effectiveness and efficiency of operations and programs; (4) Safeguarding of assets; (5) Compliance with laws, regulations, policies, procedures, and contracts.
- ◆ Internal auditors must incorporate knowledge of controls gained from consulting engagements into evaluation of the organization's control processes.





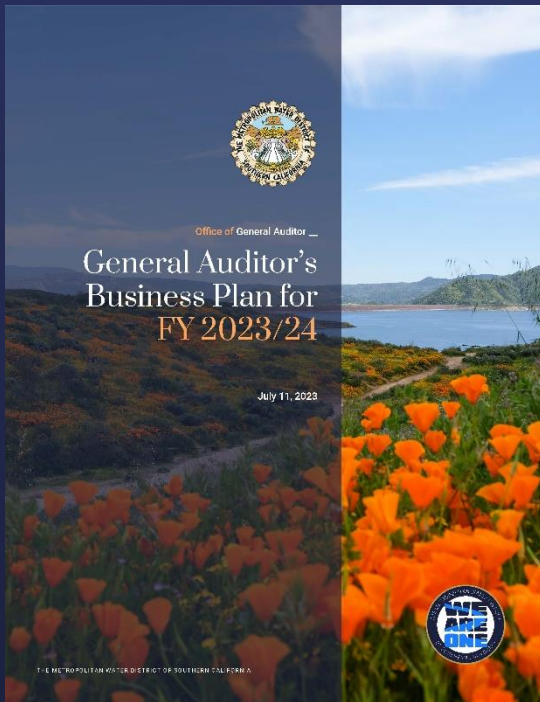
Finance, Audit, Insurance, and Real Property
Committee

General Auditor Business Plan Fiscal Year 2023/24

Item 7-8

July 11, 2023

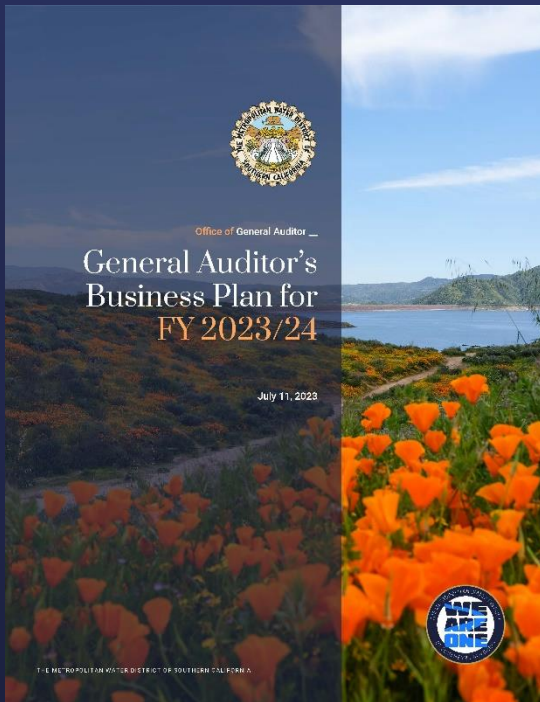
Business Plan



Department Overview

- Provide independent, professional, and objective advice to the Board and Metropolitan management in accordance with professional internal audit standards
- Assist Metropolitan's Board and management in improving business and financial practices
- Proactively address issues, focusing on risk management, internal control, and governance processes
- Carry out responsibilities in accordance with the Audit Department Charter specified in the Metropolitan Administrative Code Section 6451

Business Plan



Strategic Goals

- Build and strengthen relationships with Board
- Develop trust
- Establish credibility and reliability
- Conduct robust risk conversations with the Board
- Develop and execute bold and strategic Audit Plan
- Address outstanding audit recommendations
- Provide independent and objective advice
- Conform to professional audit standards
- Create high-performing, inclusive, and innovative audit team
- Value diversity, equity, vision, and mission

Audit Risk Assessment

Water Treatment	Diversity Equity Inclusion	Business Continuity	Power Operations & Planning
Engineering Planning	Operations Support	Information Technology	Cybersecurity Water Conveyance & Distribution
Water Quality	Security	Administrative Services Revenue & Budget	Human Resources Operations Safety & Regulation Water Operations & Planning Infrastructure Reliability & PM
Employee Relations	Water Resource Planning	Board of Directors	Office of the General Manager Environmental Planning
Ethics	Real Property	Treasury & Debt Management Equal Employment Opportunity External Affairs	Sustainability Resiliency Innovation
Controller (accounting) General Counsel (legal) Board Support Services			Water Resource Implementation Bay Delta Initiatives
MODERATE IMPACT		HIGHER	

Audit Risk Assessment Process

The chief audit executive must establish a risk-based plan to determine the priorities of the internal audit activity, consistent with the organization's goals – International Professional Practices Framework (IPPF) Standard 2010

1. Understand the organization
2. Identify, assess, and prioritize risks
3. Coordinate with other providers
4. Estimate resources
5. Propose plan and solicit feedback
6. Finalize and communicate plan
7. Assess risks continuously
8. Update plan and communicate updates

Audit Risk Assessment Summary

Higher Audit Risk Areas

- Business Continuity
- Cybersecurity
- Human Resources
- Power Operations & Planning
- Water Conveyance & Distribution

NOTE: A higher audit risk score DOES NOT mean that a business area/process is being managed ineffectively or that internal control is not adequate.

Audit Risk Assessment

		Business Continuity	Power Operations & Planning
Water Treatment	Diversity Equity Inclusion	Information Technology	Cybersecurity Water Conveyance & Distribution
Engineering Planning	Operations Support	Administrative Services Revenue & Budget	Human Resources Operations Safety & Regulation Water Operations & Planning Infrastructure Reliability & PM
Water Quality	Security	Board of Directors	Office of the General Manager Environmental Planning
Employee Relations	Water Resource Planning	Treasury & Debt Management Equal Employment Opportunity External Affairs	Sustainability Resiliency Innovation Water Resource Implementation Bay Delta Initiatives
Ethics	Real Property		
Controller (accounting) General Counsel (legal) Board Support Services			
MODERATE IMPACT			HIGHER

Audit Plan



Service Portfolio

1. Operational & Compliance Audits

2. Information Technology Audits

3. Advisory Services

4. Follow-Up Reviews

5. Administration & Other Activities

Audit Plan



Planned Engagements

Operational & Compliance Audits

1. Power Purchasing
2. State Audit Monitoring
3. Recruiting
4. Water Supply Disaster Preparedness & Business Continuity
5. CRA Maintenance
6. Data Governance

Information Technology Audit

7. Cybersecurity: Inventory & Control of Enterprise Assets

Audit Plan



Carryforward Engagements

Operational & Compliance Audits

8. Reserves/Rate Stabilization Fund
9. Fallowed Land
10. Project Controls & Reporting System (PCRS)
11. Real Property Business Management System
12. Fuel Regulations Compliance
13. Surplus Personal Property – Equipment
14. Employee Tuition Reimbursement Program
15. CRA Discharge Line Isolation Couplings
16. IBI Group
17. Kennedy/Jenks Consultants, Inc.
18. PlanNet Consulting, LLC

Audit Plan



Carryforward Engagements (con't)

19. 1Cyber Security Resources (CSR), Inc.

20. ResourceXperts

21. Website Design & Implementation

22. Oracle Application Security

Information Technology Audit

23. Cybersecurity: Ransomware

Audit Plan



Advisory Engagements

24. Risk Oversight Committee (Power Operations & Planning)

25. Grants

26. Board Expense Policy

27. WINS (Water Information Network System)

28. SCADA (Supervisory Control & Data Acquisition)

29. PeopleSoft Time & Labor

Audit Plan



Administration & Other Activities

- External Audit Support
- Annual Audit Risk Assessment & Audit Plan
- Quality Assessment & Improvement Program
- TeamMate+ Training & Implementation
- On-Demand Advisory Services
- Annual Report

Assurance Coverage

Specific risks covered by planned engagements:

RISK	ENGAGEMENT
Power costs	Power Purchasing Risk Oversight Committee (advisory)
State Audit status	State Audit Monitoring
Recruiting	Recruiting
Cybersecurity	Inventory & Control of Enterprise Assets
Earthquake, Delta failure	Water Supply Disaster Preparedness & Business Continuity
Water system maintenance	CRA Maintenance
Data classification	Data Governance

Additional
Information



Assurance Coverage (con't)

RISK	ENGAGEMENT
Grant compliance	Grants (advisory)
Board governance	Board Expense Policy (advisory)
Reserves	Reserves/Rate Stabilization Fund
Cost savings/culture	Efficiency/Economy Project Objectives

Additional
Information



Assurance Coverage (con't)

Specific risks NOT covered at this time:

RISK	AUDITABLE AREA
Chemical Safety	Water Treatment
CARB regulation compliance/ readiness	Operations Support (WSO)
Asset management	Infrastructure Reliability & Program Management
Enterprise Risk Management	Office of the General Manager
Property protection, trespassing	Security
Desert housing, leases/revenue, permits	Real Property

Additional
Information



Additional Information



Assurance Coverage (con't)

Specific cybersecurity risks NOT covered at this time:

- Software asset inventory and control
- Enterprise asset and software configuration
- Account management
- Access control management
- Continuous vulnerability management
- Audit log management
- E-mail and web browsing protection
- Malware defense
- Network infrastructure
- Security awareness
- Service provider management
- Incident response management

Additional Information



Resource Plan

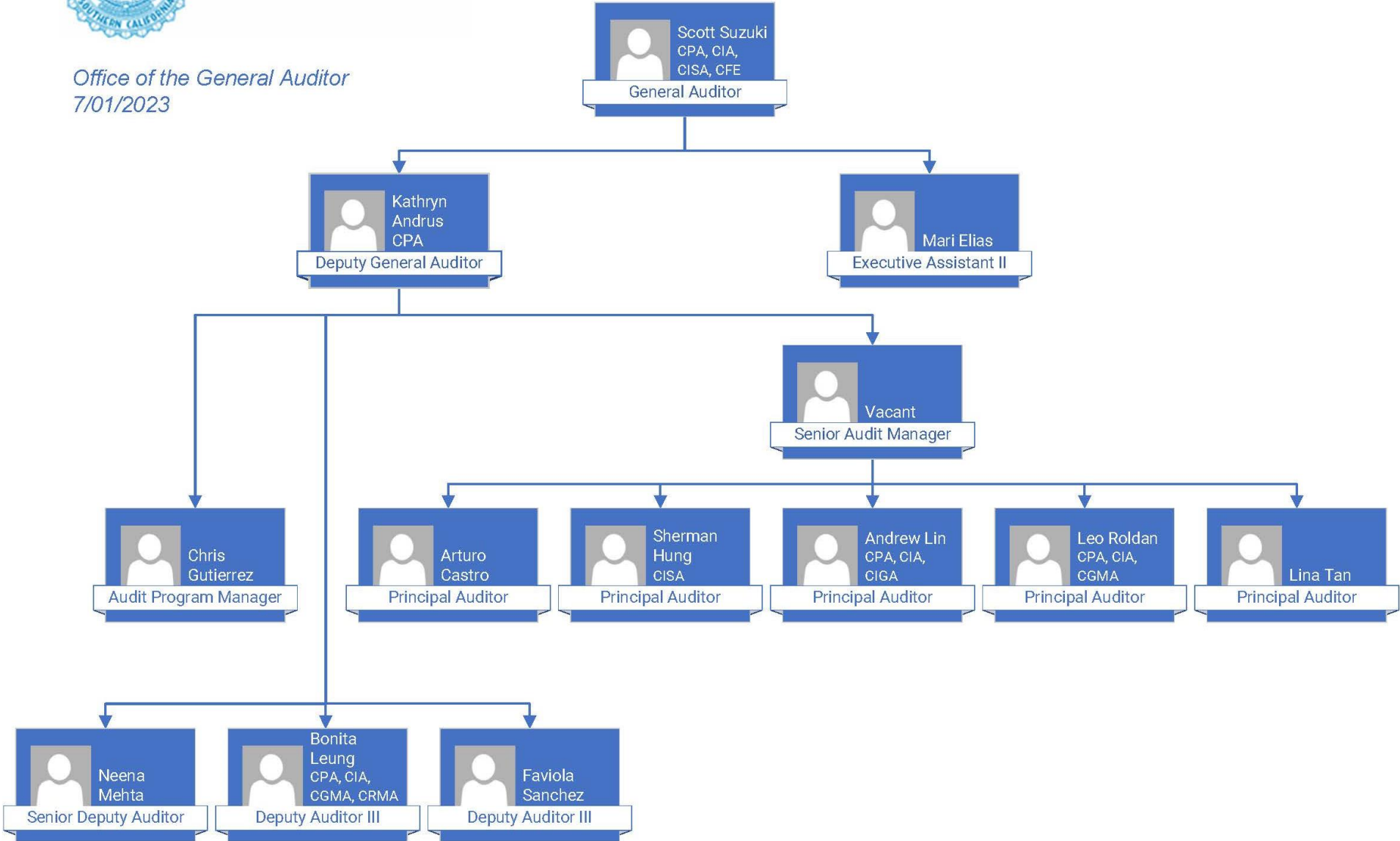
- Eleven professional audit team members and one administrative professional
- Audit experience includes financial, operational, compliance, performance, fraud, and information technology
- Five licensed CPAs
- Four Certified Internal Auditors (CIA) and two Certified Information Systems Auditors (CISA)
- 12,698 productive hours of which 7,718 are net project hours
- All five higher-risk auditable areas will be covered
- 12 cybersecurity areas WILL NOT be covered

Organization Chart

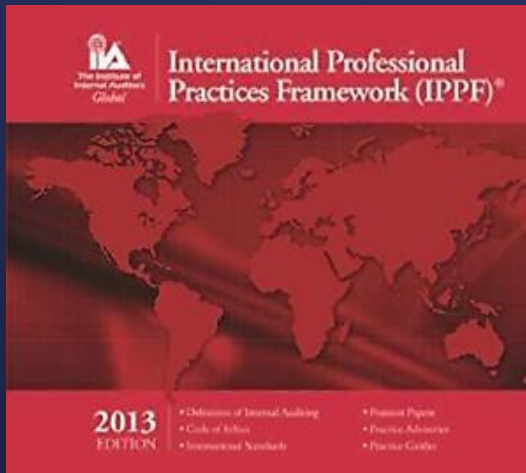


THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Auditor
7/01/2023



Additional Information



Standards

International Professional Practices Framework (IPPF)
standards applicable to this project:

- 2010 Planning
- 2020 Communication & Approval
- 2100 Nature of Work
- 2110 Governance
- 2120 Risk Management
- 2130 Control

Board Options

Option 1:

- Approve General Auditor's Business Plan for fiscal year 2023/24

Option 2:

- Do not approve the General Auditor's Business Plan for fiscal year 2023/24

Board Options

Staff Recommendations

- Option 1





● **Board of Directors**
Engineering, Operations, and Technology Committee

7/11/2023 Board Meeting

8-1

Subject

Award a \$3,740,792 contract to M.S. Construction Management Group Inc. to replace a portion of the existing fire sprinkler system's piping and network components at Metropolitan's Headquarters Building; the General Manager has determined that the proposed action is exempt from CEQA

Executive Summary

Metropolitan regularly performs assessments of the Headquarters Building fire sprinkler system to ensure that the 25-year-old system provides reliable fire/life safety protection for all building occupants and facility infrastructure. A recently completed series of assessments determined that a large portion of the fire sprinkler piping in the building's parking garage level P1 has deteriorated and needs to be replaced. This action awards a construction contract to replace a portion of the fire sprinkler piping network components in level P1 of the Headquarters Building.

Details

Background

Metropolitan's Headquarters Building is a 522,682 square-foot, concrete-frame structure with a 12-story high-rise tower attached to a five-story wing. The Headquarters Building was constructed by a developer in the 1990s under a development agreement with Metropolitan. The business functions located in this building are critical for maintaining the continuity of Metropolitan's day-to-day operations. The occupants of the Headquarters Building include Metropolitan staff and frequent visitors such as the Board of Directors and members of the public. The building has a fire sprinkler system which was part of the original building's construction. The fire sprinkler system is an integral part of the fire/life safety protection system for building occupants and facility infrastructure. The fire sprinkler piping network distributes fire water to the building parking garage levels P1 and P2 and each of the stories on the high-rise tower and the wing.

The fire sprinkler system in the building is the type referred to as a "wet pipe" system which means that the piping system is continuously pressurized with water. This type of system is potentially susceptible to corrosion due to the continuous presence of stagnant water in the pipe. This potential corrosive condition is mitigated by conducting periodic piping inspections, performing drain tests to measure the sprinkler system's water pressure, and early identification of corrosion indicators like plugged sprinklers and pinhole leaks.

Despite regular maintenance, the main fire sprinkler piping in level P1 developed pinhole-sized leaks that led to the replacement of approximately 350 feet of piping over the last several years. In August 2020, Metropolitan staff performed a comprehensive assessment of the building fire sprinkler system with the support of technical experts in the field. The inspections involved video capture of selected fire sprinkler piping mains and collecting and testing water samples and piping material. The investigation revealed significant corrosion of the fire sprinkler piping in level P1 due to iron-related bacteria in the fire-protection water. This condition, known as microbiologically-induced corrosion, causes the rapid development of pinhole-sized leaks and highly obstructive pipe interior biological growths. Other floors in the building were found to be in good condition with no significant leak risk at this time.

Final design to replace fire sprinkler piping network components in level P1 is now complete, and staff recommends moving forward with award of a construction contract at this time. The design of the replacement

piping and equipment will ensure longer life of the system due to improved design and maintenance capabilities. For example, the improved design capabilities include increased wall pipe thickness, additional air vents at high points to remove trapped air in the piping (reduces corrosion), and installation of additional isolation valves that will allow isolation/maintenance activities without draining the entire system. The scope of work for this project has been coordinated with the ongoing construction of the fire alarm and smoke control systems upgrades at the Headquarters Building.

Budget Impact

In accordance with the April 2022 action on the biennial budget for fiscal years 2022/23 and 2023/24, the General Manager will authorize staff to proceed with the replacement of fire sprinkler piping network components in level P1 of the Headquarters Building, pending board award of the contract described below. Based on the current Capital Investment Plan (CIP) expenditure forecast, funds for the work to be performed pursuant to this action during the current biennium are available within the CIP Appropriation for Fiscal Years 2022/23 and 2023/24 (Appropriation No. 15525). This project anticipates an expenditure of \$5.7 million in capital funds. All expenditures will be incurred in the current biennium and have been previously authorized. This project has been reviewed in accordance with Metropolitan's CIP prioritization criteria and was approved by Metropolitan's CIP evaluation team to be included in the System Reliability Program.

Headquarters Building Fire Sprinkler Level P1 Replacement – Construction

The scope of the construction contract consists of replacement of approximately 2,300 linear feet of the existing horizontal fire sprinkler piping in level P1 of the Headquarters Building. This represents approximately 50 percent of the fire sprinkler piping on the P1 level. The work also includes replacement of ancillary isolation valves and fire hydrant connections, as well as installation of new control valves, air vents at high points of the system, and domestic water piping to the existing stairwell sump pumps. Metropolitan forces will perform equipment start-up and testing, fire alarm system integration support for isolation valves, and dewatering and refilling of fire water piping during replacement. Construction work will be performed during non-business hours to maintain Metropolitan's day-to-day operations at the Headquarters building. An enhanced level of on-site security services will be provided during outage of the fire sprinkler system.

A total of \$5.7 million is required for this work. In addition to the construction contract amount, allocated funds for professional services include: \$170,000 for enhanced security services, which will be provided by Securitas under an existing board-authorized agreement; and \$120,000 for technical support during construction by Carollo Engineers Inc. under an existing professional services agreement. Allocated funds for Metropolitan staff include: \$216,000 for Metropolitan construction, as described above; \$473,000 for construction management and inspection; \$206,000 for submittal review and record drawings preparation; \$378,000 for permitting, contract administration, and project management; and \$396,208 for the remaining budget.

Attachment 1 provides the allocation of the required funds. The total estimated cost to complete the project, including the amount allocated to date and funds allocated for the work described in this action, is \$6.46 million.

Award of Construction Contract (M.S. Construction Management Group Inc.)

Specification No. 2007 for replacement of fire sprinkler piping network components in level P1 of the Headquarters Building was advertised for bids on April 6, 2023. As shown in **Attachment 2**, two bids were received and opened on May 24, 2023. The low bid from M.S. Construction Management Group Inc., in the amount of \$3,740,792, complies with the requirements of the specifications. The second bid was \$6.66 million, while the engineer's estimate for this project was \$4.2 million. For this contract, Metropolitan established a Small Business Enterprise participation level of at least 25 percent of the bid amount. M.S. Construction Management Group Inc. has committed to meet this level of participation. The subcontractors for this contract are listed in **Attachment 3**.

This action awards a \$3,740,792 contract to M.S. Construction Management Group Inc. to replace existing fire sprinkler piping network components in level P1 of the Headquarters Building. As described above, Metropolitan staff will perform construction management and inspection. Engineering Services' performance metric target range for construction management and inspection of projects with construction greater than \$3 million is 9 to 12 percent. For this project, the performance metric goal for inspection is 11.5 percent of the total construction

cost. The total cost of construction for this project is \$4,126,792, which includes the amount of the contract (\$3,740,792), Metropolitan construction activities (\$216,000), and on-site security services (\$170,000).

Alternatives Considered

During the design process, staff considered replacing portions of the fire sprinkler piping as failures occurred. However, this method is not cost-effective since the fire sprinkler piping is deteriorating at a rapid pace, and potential failures are unpredictable. The selected alternative involves replacing a portion of the existing fire sprinkler network components, including main piping in level P1, isolation valves and appurtenant equipment, along with installing new isolation valves and air vents to prevent the development of microbiologically-induced corrosion in the replaced piping. This approach was preferred as it will maintain the long-term operational reliability of the Headquarters' fire/life protection system and provide the best value to Metropolitan.

Summary

This action awards a \$3,740,792 contract to M.S. Construction Management Group Inc. to replace existing fire sprinkler piping network components in level P1 at Metropolitan's Headquarters Building. See **Attachment 1** for the Allocation of Funds, **Attachment 2** for the Abstract of Bids, **Attachment 3** for the listing of Subcontractors for Low Bidder, and **Attachment 4** for the Location Map.

Project Milestone

June 2024 – Completion of construction

Policy

Metropolitan Water District Administrative Code Section 8121: General Authority of the General Manager to Enter Contracts

Metropolitan Water District Administrative Code Section 8140: Competitive Procurement

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

By Minute Item 21997, dated April 11, 2022, the Board appropriated a total of \$600 million for projects identified in the Capital Investment Plan for Fiscal Years 2022/23 and 2023/24.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is categorically exempt under the provisions of CEQA and the State CEQA Guidelines. The proposed action involves repair, maintenance, permitting, leasing, or minor alterations of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use, or replacement or reconstruction of existing structures and facilities that will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structures replaced. Accordingly, the proposed action qualifies for Class 1 and Class 2 (Sections 15301 and 15302 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Award a \$3,740,792 contract to M.S. Construction Management Group Inc. to replace a portion of the existing fire sprinkler system's piping and network components at Metropolitan's Headquarters Building.

Fiscal Impact: Expenditure of \$5.7 million in capital funds. All expenditures will be incurred in the current biennium and have been previously authorized.

Business Analysis: This option will enhance reliability of the fire/life safety protection system for building occupants and facility infrastructure at the Headquarters building.

Option #2

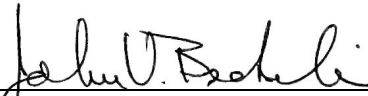

Do not proceed with the project at this time.

Fiscal Impact: None

Business Analysis: Under this option, staff would continue to replace portions of the fire sprinkler system as failures occur. This approach would lead to further deterioration of the fire sprinkler piping and potential building-wide shutdowns.

Staff Recommendation

Option #1

 _____ John V. Bednarski Manager/Chief Engineer Engineering Services	6/16/2023 Date
 _____ Adel Hagekhalil General Manager	6/27/2023 Date

Attachment 1 – Allocation of Funds

Attachment 2 – Abstract of Bids

Attachment 3 – Subcontractors for Low Bidder

Attachment 4 – Location Map

Ref# es12684449

Allocation of Funds for Headquarters Building Fire Sprinkler Level P1 Replacement

	Current Board Action (Jul. 2023)
Labor	
Investigations & Conceptual Design	\$ -
Final Design	-
Owner Costs (Program mgmt., permitting, envir. monitoring)	378,000
Submittals Review & Record Drwgs.	206,000
Construction Inspection & Support	473,000
Metropolitan Force Construction	186,000
Materials & Incidentals	30,000
Professional/Technical Services	-
Carollo Engineers Inc.	120,000
Securitas	170,000
Right-of-Way	-
Equipment Use	-
Contracts	-
M.S. Construction Management Inc.	3,740,792
Remaining Budget	396,208
Total	\$ 5,700,000

The amount expended to date for the Headquarters Fire Sprinkler Level P1 Replacement is approximately \$760,000. The total estimated cost to complete this project, including the amount appropriated to date and funds allocated for the work described in this action, is \$6.46 million.

The Metropolitan Water District of Southern California

Abstract of Bids Received on May 24, 2023, at 2:00 P.M.

Specifications No. 2007

Headquarters Building Fire Sprinkler Level P1 Replacement

The work consists of replacement of existing horizontal fire main piping, ancillary isolation valves, and fire hydrant connections from the parking-level P1 fire pump room to the stairwell vertical risers piping connections; installation of new control valves, and 2-inch domestic water piping to the existing stairwell sump pumps; and coordination of fire watch to meet Los Angeles Fire Department requirements, as specified and shown on the drawings.

Engineer's estimate: \$4,200,000

Bidder and Location	Total	SBE \$	SBE %	Met SBE¹
M.S. Construction Management Group Inc. Dana Point, CA	\$3,740,792	\$1,952,220	52%	Yes
Pro-Craft Construction Inc. Redlands, CA	\$6,656,000	-	-	-

¹ Small Business Enterprise (SBE) participation level established at 25% for this contract.

The Metropolitan Water District of Southern California
Subcontractors for Low Bidder
Specifications No. 2007
Headquarters Building Fire Sprinkler Level P1 Replacement

Low bidder: M.S. Construction Management Group Inc.

Subcontractor	Service Category; Specialty
Streamline Fire Protection Inc. Signal Hill, CA	Fire Sprinkler System
K.E. Rodgers Inc. Redlands, CA	Plumbing
PMK Professional Inc. Irvine, CA	Electrical/Fire Alarm
Commerce Coating Services Torrance, CA	Painting/Coating





Engineering, Operations, & Technology Committee

Headquarters Building Fire Sprinkler Level P1 Replacement

Item 8-1

July 10, 2023

Headquarters Fire Sprinklers

Current Action

- Award a \$3,740,792 contract to M.S. Construction Management Group Inc. to replace a portion of the existing fire sprinkler system's piping and network components at Metropolitan's Headquarters Building

Headquarters Fire Sprinklers

Background

- Headquarters Building Fire Sprinkler System
 - Constructed in the 1990s
 - Provides fire/life safety protection for all building occupants & facility infrastructure
 - A large portion of the fire sprinkler piping in the building's parking garage level P1 has deteriorated



Headquarters Fire Sprinklers



Pipe End Condition

Background

- Wet Pipe fire sprinkler system is susceptible to microbiological-induced corrosion (MIC)
- Approx. 350 feet of piping in level P1 has been replaced after developing pinhole-sized leaks
- Other floors were found to be in good condition with no significant leak risk

Positive
Indication of
MIC



Externally-
presenting
corrosion
buildup on
existing fire
sprinkler
piping

Headquarters Fire Sprinklers

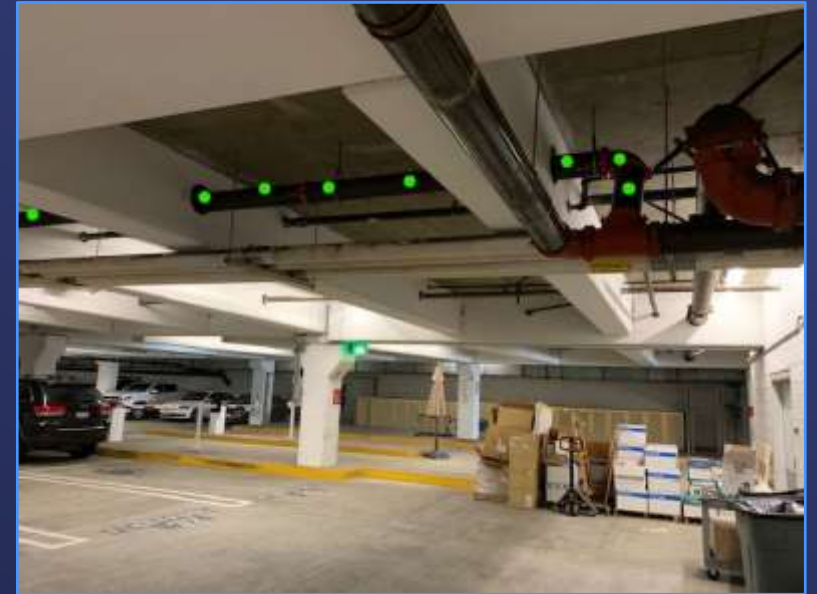
Alternatives Considered

- Replace portions of the fire sprinkler piping as failure occurs
 - Not cost-effective
- Selected Alternative – Replace a portion of the existing fire sprinkler main piping in level P1
 - Includes new isolation valves & air vents to minimize & limit the development of corrosion
 - Maintains the long-term operational reliability of the fire/life protection system

Headquarters Fire Sprinklers

Scope of Work – Contractor

- Replace approx. 2,300 ft of horizontal fire sprinkler piping in level P1
- Install new control valves & air vents at high points of the system
- Replace isolation valves & fire hydrant connections
- Install domestic water piping to existing stairwell sump pumps



Parking Garage Level P1

Headquarters Fire Sprinklers

Scope of Work – Metropolitan

- Construction management & inspection
- Contract admin., outreach & PM
- Force Construction
 - Equipment start-up & testing
 - Fire Alarm system integration support for isolation valves
 - Dewatering & refilling of fire water piping during replacement

Headquarters Fire Sprinklers

Carollo Engineers Inc. – No Action Required

- Engineer of Record
- Provide technical support during construction
- NTE amount: \$120,000

Securitas – No Action Required

- Provide enhanced level of on-security services during outage of the fire sprinkler system
- NTE amount: \$170,000

Bid Results

Specifications No. 2007

Bids Received	May 24, 2023
No. of Bidders	2
Lowest Responsible Bidder	M.S. Construction Management Group Inc.
Low Bid	\$3,740,792
Other Bid	\$6,660,000
Engineer's Estimate	\$4,200,000
SBE Participation*	52%

*SBE (Small Business Enterprise) participation level set at 25%

Allocation of Funds

Headquarters Fire Sprinklers

Metropolitan Labor	
Owner Costs (Proj. Mgmt., Contract Admin.)	\$ 378,000
Construction Inspection & Support	473,000
Construction	186,000
Submittals Review, Tech. Support, Record Dwgs.	206,000
Materials & Incidentals	30,000
Professional/Technical Services	
Carollo Engineers Inc.	120,000
Securitas	170,000
Contract – M.S. Construction Management Inc.	3,740,792
Remaining Budget	396,208
<hr/>	
Total	\$ 5,700,000

Project Schedule



Board Options

- Option #1
Award a \$3,740,792 contract to M.S. Construction Management Group Inc. to replace a portion of the existing fire sprinkler system's piping and network components at Metropolitan's Headquarters Building.
- Option #2
Do not proceed with the project at this time.

Staff Recommendation

- Option #1





• **Board of Directors**
Legal and Claims Committee

7/10/2023 Board Meeting

8-2

Subject

Approve amendment of the Metropolitan Water District Administrative Code to delete the requirement that matters may not be placed on consent if a roll call vote is required and increase the cost of items that may be placed on the Consent Calendar from \$2 million to \$10 million; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

The proposed amendment to the Administrative Code regarding the Consent Calendar (1) will delete the requirement that matters may not be placed on consent if a roll call vote is required; and (2) will increase the maximum cost of items that may be placed on the Consent Calendar from \$2 million to \$10 million. This amendment will expedite Board (and committee) consideration of matters in compliance with the requirements of the Brown Act. The Brown Act requires a roll call vote when members of the Board are participating remotely. This amendment will not change the authority of the General Manager or members of the Board to remove items on consent for separate deliberation and vote.

Details

This letter proposes to amend Metropolitan Water District Administrative Code Section 2121 regarding the Consent Calendar. The proposed amendment will delete a requirement that matters may not be placed on consent if a roll call vote is required and will increase the maximum cost of items on consent from \$2 million to \$10 million.

The following proposed amendment is to Division II, Chapter 1, Article 2, Section 2121 subsection (c) with overstrikes reflecting deletions and underlining reflecting additions:

§ 2121. Consent Calendar.

(a) Consent Calendar items shall be set forth in a separate section of the Board's agenda.

(b) Matters for the Consent Calendar shall be recommended by the Department Heads and shall be submitted to the Board Executive Secretary not less than seven working days prior to the meeting of the Board and, except as provided below, pertinent materials sufficient to enable a member to formulate an opinion on each Consent Calendar item shall be included with the agenda mailed to directors. Such materials need not be included with the agenda as to matters which are to be considered in committee in closed session, but such materials shall be available at the meeting of the Board for distribution to directors who request them.

(c) Matters may not be placed on the Consent Calendar ~~if a roll call vote is required;~~ if a vote other than a simple majority is required; or if the amount involved is ~~\$2,000,000~~ \$10,000,000 or more.

The following proposed amendment is as it will appear in the Administrative Code if the changes are approved:

§ 2121. Consent Calendar.

(a) Consent Calendar items shall be set forth in a separate section of the Board's agenda.

(b) Matters for the Consent Calendar shall be recommended by the Department Heads and shall be submitted to the Board Executive Secretary not less than seven working days prior to the meeting of the Board and, except as provided below, pertinent materials sufficient to enable a member to formulate an opinion on each Consent Calendar item shall be included with the agenda mailed to directors. Such

materials need not be included with the agenda as to matters which are to be considered in committee in closed session, but such materials shall be available at the meeting of the Board for distribution to directors who request them.

(c) Matters may not be placed on the Consent Calendar if a vote other than a simple majority is required or if the amount involved is \$10,000,000 or more.

The purpose of placing items on the Consent Calendar is to expedite Board (and committee) consideration of matters and thus allow members to devote more time to other matters. The proposed amendment, to the requirement that matters may not be placed on consent if a roll call vote is required, allows items to be placed on consent that do not otherwise require a separate roll call vote. The Brown Act requires a roll call vote when members of the Board are participating in a Board or committee meeting remotely. The current practice is to approve the Consent Calendar with a single vote. The proposed amendment to increase the maximum cost of items on consent to \$10 million will allow more items to be included on the Consent Calendar. The current limit of \$2 million was adopted in 1991. Due to inflation, the magnitude of projects that may be placed on the Consent Calendar will not be significantly increased. The proposed amendment will not change the authority of the General Manager or individual members of the Board to remove an item from the Consent Calendar for separate deliberation and vote at the time of consideration.

Policy

Metropolitan Water District Code Section 2121: Consent Calendar

Metropolitan Water District Code Section 2122: Committee Procedure

Metropolitan Water District Code Section 2123: Board Meeting Procedure

Metropolitan Water District Code Section 11104: Delegation of Responsibilities

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA (Public Resources Code Section 21065, State CEQA Guidelines Section 15378) because it would not cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and it involves the creation of government funding mechanisms or other government fiscal activities which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines). In addition, the proposed action is not defined as a project under CEQA because it involves organizational or administrative activities of governments that will not result in direct or indirect physical changes in the environment (Section 15378(b)(5) of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Approve amendment of the Metropolitan Water District Administrative Code to delete the requirement that matters may not be placed on consent if a roll call is required and increase the cost of items that may be placed on the Consent Calendar from \$2 million to \$10 million.

Fiscal Impact: None

Business Analysis: Approval will expedite consideration of undisputed or non-controversial matters and thus allow members to devote more time to other matters.

Option #2


Do not approve amendment of the Metropolitan Water District Administrative Code to delete the requirement that matters may not be placed on consent if a roll call is required and increase the cost of items that may be placed on the Consent Calendar from \$2 million to \$10 million.

Fiscal Impact: None

Business Analysis: Approval will not expedite consideration of undisputed or non-controversial matters.

Staff Recommendation

Option #1



Marcia Scully
General Counsel

6/28/2023

Date

Ref# I12690863



Legal & Claims Committee

Approve Amendment to the Administrative Code

Item 8-2

July 10, 2023

Current Consent Calendar Requirements

Admin Code § 2121(c). Consent Calendar

(c) Matters prohibited from being placed on Consent:

- if a roll call vote is required;
- if a vote other than simple majority is required; or
- If the amount involved is \$2,000,000 or more.

Requested Change

Admin Code § 2121(c). Consent Calendar

(c) Matters prohibited from being placed on Consent:

- ~~if a roll call vote is required;~~
- if a vote other than simple majority is required; or
- If the amount involved is ~~\$2,000,000~~ **\$10,000,000** or more.

Construction Contracts Data (based on years?)

Percentages of Items Needing Board Approval

Value	% of CIP Spend on Consent	% of CIP Spend NOT on Consent	% of Jobs Awarded on Consent	% of Jobs Awarded NOT on Consent
Up to \$2M	3%	97%	38%	62%
Up to \$5M	10%	90%	60%	40%
Up to \$10M	20%	80%	75%	25%

Options

Option #1

Approve amendment of the Metropolitan Water District Administrative Code to delete the requirement that matters may not be placed on consent if a roll call is required and increase the cost of items that may be placed on the Consent Calendar from \$2 million to \$10 million.

Option #2

Do not approve amendment of the Metropolitan Water District Administrative Code to delete the requirement that matters may not be placed on consent if a roll call is required and increase the cost of items that may be placed on the Consent Calendar from \$2 million to \$10 million.





● **Board of Directors**
Engineering, Operations, and Technology Committee

7/11/2023 Board Meeting

8-3

Subject

Award a \$16,490,000 contract to J. F. Shea Construction Inc. to replace equipment storage buildings at three Colorado River Aqueduct pumping plants; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

Storage buildings at the Colorado River Aqueduct (CRA) pumping plants are used to protect and secure supplies and equipment from the extreme desert environment. The original 70-year-old storage buildings at three pumping plants (Hinds, Eagle Mountain, and Iron Mountain) have deteriorated due to corrosion and structural deficiencies and are no longer usable. Replacement of these original buildings is needed to protect equipment, parts, and other mechanical/electrical supplies which are stored at each site from premature deterioration due to weather damage. This action awards a construction contract to furnish and install a total of six new pre-engineered metal buildings, two each at three pumping plants.

Details

Background

The CRA is a 242-mile-long conveyance system that transports water from the Colorado River to Lake Mathews in Riverside County. The CRA was placed into service in 1941. It consists of five pumping plants, 124 miles of tunnels, 63 miles of canals, and 55 miles of conduits, siphons, and reservoirs.

Between 1950 and 1955, several metal storage buildings with timber frames and a storage capacity of less than 2,000 square feet each were built at the Gene, Hinds, Eagle Mountain, and Iron Mountain pumping plants to store, protect, and secure CRA-related material and maintenance equipment from the extreme desert environment. Items stored at these buildings include portable equipment; large mechanical and electrical parts such as circuit breakers, disconnect switches, and pumps; spooled wire and cable; lifting fixtures used for maintenance of motors and valves; and general tools and supplies for various maintenance specialties such as plumbing, electrical, carpentry, paint, welding, construction, and vehicle/equipment maintenance.

The storage buildings have deteriorated after 70 years of service. The wooden frames have decayed due to fungal dry rot, and the metal walls and roof panels are significantly rusted. The storage buildings no longer seal properly to prevent rain and dust from entering the interiors and are not insulated. These buildings are not equipped with lights, fans, or electrical service. Following a comprehensive assessment of CRA storage needs, it was determined that refurbishment of the existing buildings is impractical, and staff recommends the replacement of these original storage buildings with new prefabricated, code-compliant buildings.

In October 2014, Metropolitan's Board authorized the replacement of two of these existing storage buildings at Gene Pumping Plant, which at the time were the most deteriorated structures, and construction was completed in 2015. The current project will replace the remaining deteriorated storage buildings with two new storage buildings at each of the three CRA pumping plants: Hinds, Eagle Mountain, and Iron Mountain. The new prefabricated buildings will be constructed of steel and installed on concrete slab foundations. The new buildings will have a total of approximately 27,700 square feet of interior storage space. The improved storage space will support ongoing maintenance activities along the CRA and upcoming capital rehabilitation work at the pumping plants. Buildings are located at each site to minimize the time required to retrieve spare parts.

Design of the new storage buildings is complete, and staff recommends award of a construction contract at this time.

Budget Impact

In accordance with the April 2022 action on the biennial budget for fiscal years 2022/23 and 2023/24, the General Manager authorized staff to proceed with installation of the storage buildings, pending board award of the construction contract described below. Based on the current Capital Investment Plan (CIP) expenditure forecast, funds for the work to be performed pursuant to this action during the current biennium are available within the CIP Appropriation for Fiscal Years 2022/23 and 2023/24 (Appropriation No. 15525). This project anticipates an expenditure of \$20.8 million in capital funds. Approximately \$4.0 million will be incurred in the current biennium and has been previously authorized. The remaining funds from this action will be accounted for in the next biennial budget. This project has been reviewed in accordance with Metropolitan's CIP prioritization criteria and was approved by Metropolitan's CIP evaluation team to be included in the CRA Reliability Program.

Hinds, Eagle Mountain, and Iron Mountain Pumping Plants Storage Buildings – Construction

The scope of the contract includes: (1) site work, including grading of the sites to provide access and improve drainage, asphalt paving around the new buildings, replacement of security fencing near the building sites, and new concrete foundation pads; (2) installation of a firewater line and fire hydrant at each building for fire protection; (3) demolition of existing storage buildings at the Hinds and Eagle Mountain pumping plants to provide space for the new buildings; and (4) procurement and installation of six pre-engineered metal storage buildings, two at each pumping plant. Metropolitan forces will perform site clearing in advance of the contract; integrate the fire alarm system into the Supervisory Control and Data Acquisition system; and procure and install ventilation exhaust fans in each building to accommodate the desert environment.

A total of \$20.8 million is required to perform this work. In addition to the amount of the contract described below, other funds to be allocated include \$159,000 for Metropolitan force activities as described above; \$1,830,000 for construction management and inspection; \$617,000 for submittal review, technical support during construction, responding to requests for information, and preparation of record drawings; \$680,000 for environmental monitoring, contract administration, Project Labor Agreement (PLA) administration, and project management; and \$1,024,000 for remaining budget.

Attachment 1 provides the allocation of the required funds. The total estimated cost to complete the storage buildings installation, including the amount allocated to date and funds allocated for the work described in this action, is approximately \$22.8 million.

Award of Construction Contract (J. F. Shea Construction Inc)

Specifications No. 2000A for the furnishing and installation of storage buildings at Hinds, Eagle Mountain, and Iron Mountain was advertised for bids on March 10, 2023. As shown in **Attachment 2**, two bids were received and opened on April 20, 2023. The low bid from J. F. Shea Construction Inc. in the amount of \$16,490,000 complies with the requirements of the specifications. The other bid was approximately \$19.7 million, while the engineer's estimate for this project was \$17,500,000. For this contract, Metropolitan established a Small Business Enterprise participation level of at least 25 percent of the bid amount. J. F. Shea Construction Inc. has committed to meet this level of participation. The subcontractors for this contract are listed in **Attachment 3**. This contract will be conducted under the terms of Metropolitan's PLA.

As described above, Metropolitan staff will perform construction management and inspection. Engineering Services' performance metric target range for construction management and inspection of projects with construction greater than \$3 million is 9 to 12 percent. For this project, the performance metric goal for construction management and inspection is 11.0 percent of the total construction cost. The total cost of construction for this project is \$16,649,000, which includes the amount of the contract (\$16.49 million), and Metropolitan force activities and supplies (\$159,000).

Alternatives Considered

In the conceptual design phase of this project, staff considered various building types, including tilt-up concrete, concrete masonry unit (CMU), and prefabricated steel buildings, to use in the building construction. Multiple factors were considered before selecting a construction method and building type, including the purpose of the

building, building size, life span, construction duration, and costs. During the conceptual design phase of the project, a value engineering (VE) assessment of many project factors, including the type of building construction, was conducted. The VE process confirmed that for the intended purpose of the buildings as warehouses, the use of prefabricated metal buildings was an appropriate choice when compared to other building construction methods.

Overall, prefabricated steel buildings are preferred for equipment and material storage at CRA facilities because of their lower cost and versatility. Due to their relatively lightweight construction, prefabricated steel buildings do not require an overly complex foundation system and have a superior spanning capacity than concrete. Prefabricated steel buildings are the better option for structures that require longer bays and spans. Metal construction is also a much more flexible and durable construction material than concrete. This means steel structures are much more resistant to natural disasters such as earthquakes. In comparison, both CMU and tilt-up buildings require a more robust foundation and greater number of internal support columns due to their greater weight to resist seismic loading conditions. These required design features create limitations in terms of usable interior square footage.

The expected service life of all three of these types of buildings are comparable as long as the building are maintained properly. CMU and tilt-up construction is expected to last approximately 100 years, while prefabricated buildings have an expected service life of 70 years. Key maintenance differences between the buildings include the roofing systems. The prefabricated buildings will typically have a standing seam metal roof, while the CMU and tilt-up buildings will have built-up roofing systems. Metropolitan's recent experience with roof systems is that standing seam roofs have life expectancies of more than 50 years, while built-up roof systems typically need to be replaced every 30 years.

The VE and conceptual engineering processes also determined that tilt-up and CMU buildings are more expensive options (approximately \$13 and \$11 million more, respectively) than prefabricated steel buildings when taking into account the location of the construction activities at Metropolitan's remote desert CRA facilities. The primary driver for this cost differential is the relative increase in on-site construction labor required for both CMU and tilt-up construction when compared to prefabricated buildings. Prior experience with desert construction at Metropolitan facilities has demonstrated that labor costs for desert construction are significantly higher when compared to labor costs for similar projects that are located close to metropolitan development. Consequently, the costs for prefabricated buildings are lower, in part because they require less on-site construction effort to erect.

Based on bids received for this project, the CRA desert prefabricated metal storage buildings have a cost of \$8 million for 27,700 square feet of enclosed storage area (the remainder of the contractor's bid amount is for site preparation and infrastructure development to support the buildings). This equates to a building cost of approximately \$291 per square foot. By comparison, and based on conceptual engineering estimates, the per square foot costs for the tilt-up and CMU buildings of an equivalent configuration and enclosed storage area are \$477 and \$442 per square foot, respectively. This equates to the prefabricated metal buildings being more than 33 percent less expensive to construct than the other two building types.

Staff recommends proceeding with pre-engineered metal buildings because they are cost-effective and are consistent with the intended purpose of the structures. Furthermore, additional costs would be incurred for site investigations and design for alternative structure types. The storage buildings are necessary to support planned capital projects, such as the CRA Main Pump Rehabilitation and Sump System Replacement projects, as well as for efficiently performing CRA maintenance activities.

Summary

This action awards a \$16,490,000 contract to J. F. Shea Construction Inc. for furnishing and installation of pre-engineered metal storage buildings at the Hinds, Eagle Mountain, and Iron Mountain pump plants. See **Attachment 1** for the Allocation of Funds, **Attachment 2** for the Abstract of Bids, **Attachment 3** for the Listing of Subcontractors for Low Bidder, and **Attachment 4** for the Location Map.

Project Milestone

January 2026 – Completion of construction

Policy

Metropolitan Water District Administrative Code Section 8121: General Authority of the General Manager to Enter Contracts

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

By Minute Item 52778, dated April 12, 2022, the Board appropriated a total of \$600 million for projects identified in the Capital Investment Plan for Fiscal Years 2022/2023 and 2023/2024.

By Minute Item 50554, dated August 16, 2016, the Board authorized preliminary design to replace storage buildings at the Hinds, Eagle Mountain, and Iron Mountain Pumping Plants.

California Environmental Quality Act (CEQA)

Option #1:

The proposed action is categorically exempt under the provisions of CEQA and the State CEQA Guidelines. The proposed action involves operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use and no possibility of significantly impacting the physical environment. In addition, the proposed action includes the replacement and reconstruction of existing structures and facilities where the new structure will be located on the same site and as the structure replaced and will have the same purpose and capacity as the structure replaced. Further, the proposed action includes construction of limited numbers of new, small facilities or structures. Finally, the proposed action includes minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry or agricultural purposes. Accordingly, the proposed action qualifies under Class 1, Class 2, Class 3, and Class 4 (Sections 15301, 15302, 15303, and 15304 of the State CEQA Guidelines).

Option #2:

None required

Board Options

Option #1

Award a \$16,490,000 contract to J. F. Shea Construction Inc. for furnishing and installation of pre-engineered storage buildings at the Hinds, Eagle Mountain, and Iron Mountain pumping plants.

Fiscal Impact: Expenditure of \$20.8 million in capital funds. Approximately \$4.0 million will be incurred in the current biennium and has been previously authorized. The remaining funds from this action will be accounted for in the next biennial budget.

Business Analysis: This option will protect important CRA maintenance equipment and supplies from premature deterioration. Recent supply chain issues have demonstrated the importance of stocking critical maintenance material and equipment spares near the operating facility.

Option #2

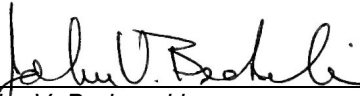
Do not proceed with the project at this time.

Fiscal Impact: None

Business Analysis: This option would forgo an opportunity to protect Metropolitan's assets and may result in premature deterioration of equipment and increased replacement costs.

Staff Recommendation

Option #1



John V. Bednarski
Manager/Chief Engineer
Engineering Services

7/6/2023

Date



Adel Hagekhalil
General Manager

7/7/2023

Date

Attachment 1 – Allocation of Funds**Attachment 2 – Abstract of Bids****Attachment 3 – Listing of Subcontractors****Attachment 4 – Location Map**

Ref# es12694785

Allocation of Funds for Hinds, Eagle Mountain, and Iron Mountain Pumping Plants Storage Buildings

	Current Board Action (Jul. 2023)
Labor	
Studies & Investigations	\$ -
Final Design	-
Owner Costs (Program mgmt., envir. monitoring)	680,000
Submittals Review & Record Drwgs.	617,000
Construction Inspection & Support	1,830,000
Metropolitan Force Construction	128,000
Materials & Supplies	20,000
Incidental Expenses	11,000
Professional/Technical Services	-
Right-of-Way	-
Equipment Use	-
Contracts	-
J. F. Shea Construction, Inc.	16,490,000
Remaining Budget	1,024,000
Total	\$ 20,800,000

The total amount expended to date for the Hinds, Eagle Mountain, and Iron Mountain Pumping Plants Storage Buildings Project is approximately \$2.0 million. The total estimated cost to complete, including the amount appropriated to date and funds allocated for the work described in this action, is \$22.8 million.

The Metropolitan Water District of Southern California

Abstract of Bids Received on April 20, 2023, at 2:00 P.M.

Specifications No. 2000A

Hinds, Eagle Mountain, and Iron Mountain Pumping Plants Storage Buildings

The work includes furnishing and constructing six prefabricated buildings, two at each pumping plant, on new slab foundations; demolition of existing storage buildings; grading; utility installation; installation of fire sprinkler systems; asphalt paving; and replacement of security fencing.

Engineer's estimate: \$17,460,000

Bidder and Location	Total	SBE \$	SBE %	Met SBE¹
J. F. Shea Construction Inc. Walnut, CA	\$16,490,000	\$5,462,384	33%	Yes
Cattrac Construction Inc Fontana, CA	\$19,668,656	-	-	-

¹ Small Business Enterprise (SBE) participation level established at 25% for this contract.

The Metropolitan Water District of Southern California

Subcontractors for Low Bidder

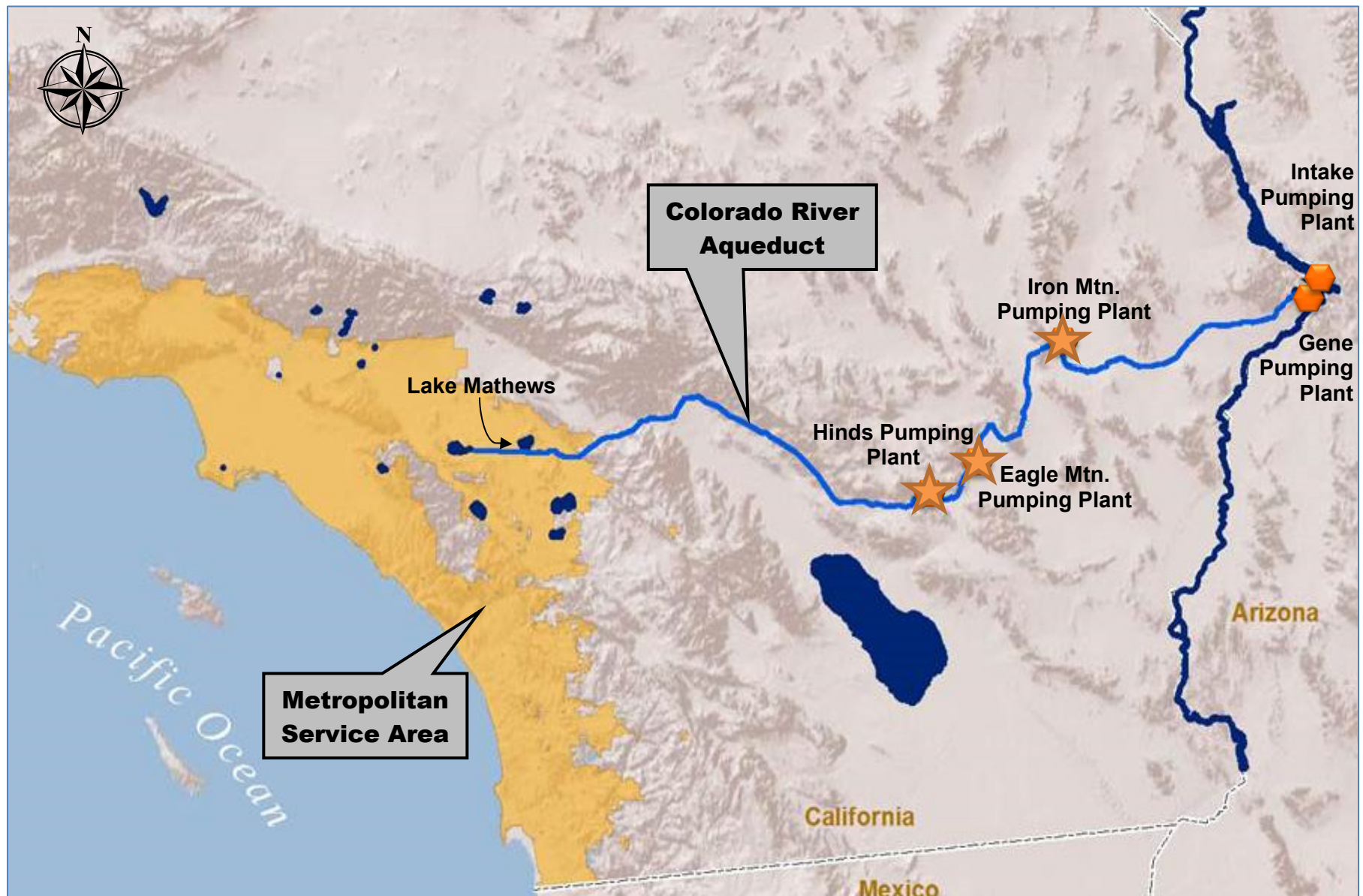
Specifications No. 2000A

Hinds, Eagle Mountain, and Iron Mountain Pumping Plants Storage Buildings

Low bidder: J. F. Shea Construction Inc.

Subcontractor	Service Category; Specialty
Hardy & Harper Inc. Lake Forest, CA	Paving
Environmental Construction Group Inc. Signal Hill, CA	Demo & Abatement
MDB General Engineering Inc Irvine, CA	Earthwork
Crown Fence Santa Fe Springs, CA	Fencing
EBS General Engineering Inc. Corona, CA	Sitework Concrete
Southwest V-Ditch Inc. Riverside, CA	Gunite
Qualco Fire Protection Inc. Santa Fe Springs, CA	Fire Protection
K&S Excavating Inc. Anaheim, CA	Trenching & Backfill
South Valley Construction and Develop. Inc. Murrieta, CA	Pre-Engineered Metal Building
Overhead Door Company of Inland Empire Colton, CA	Overhead Doors
Techno Coatings Anaheim, CA	Paint
LA Steel Services Corona, CA	Rebar
Leed Electric Inc. Santa Fe Springs, CA	Electrical

Location Map





Engineering, Operations, & Technology Committee

Colorado River Aqueduct Pumping Plants Storage Buildings

Item 8-3

July 10, 2023

Colorado River Aqueduct Equipment Storage Buildings

Current Action

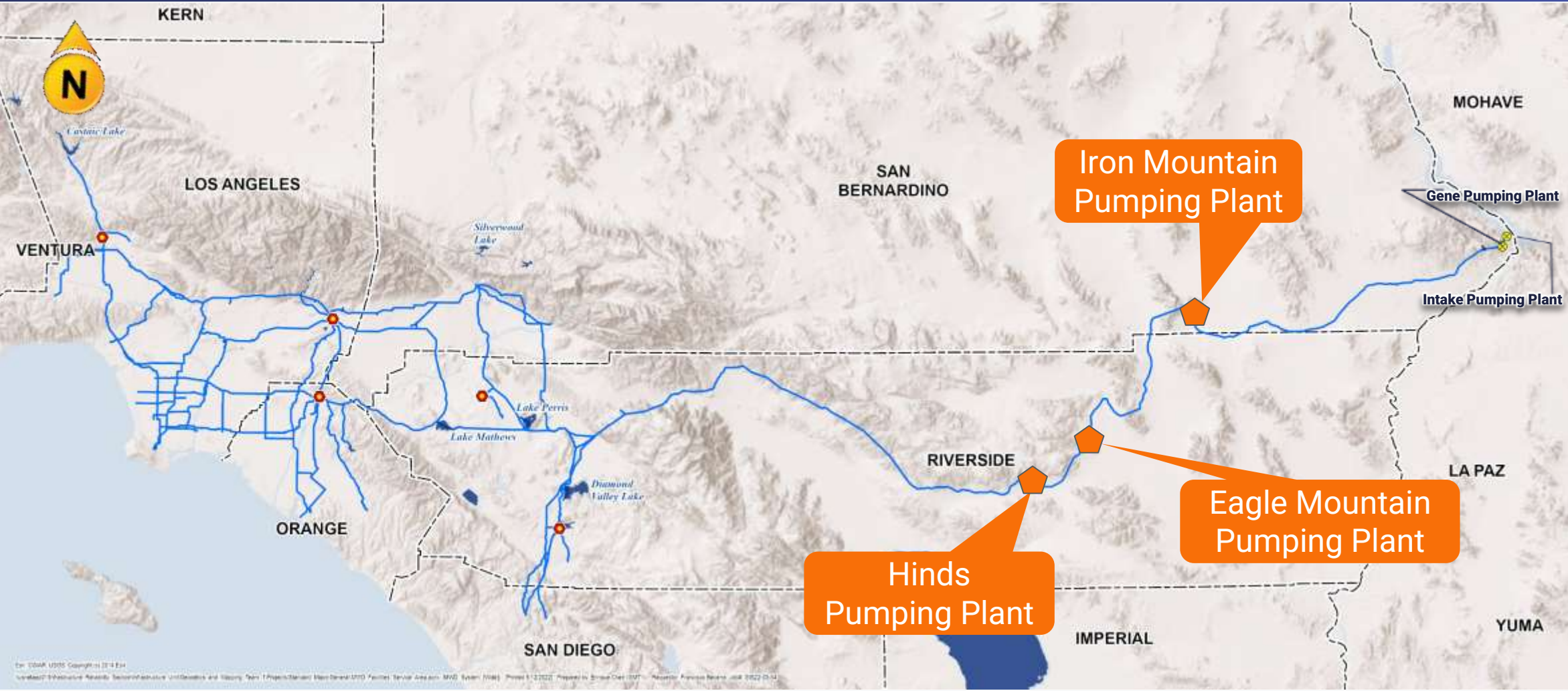
- Award a \$16,490,000 contract to J. F. Shea Construction Inc. to replace storage buildings at Hinds, Eagle Mountain, & Iron Mountain pumping plants

Colorado River Aqueduct Equipment Storage Buildings

Agenda

- Background
- Design Process & Criteria
- Alternatives Considered
- Action
 - Scope
 - Allocation of Funds
 - Schedule
 - Options

Project Location



Background

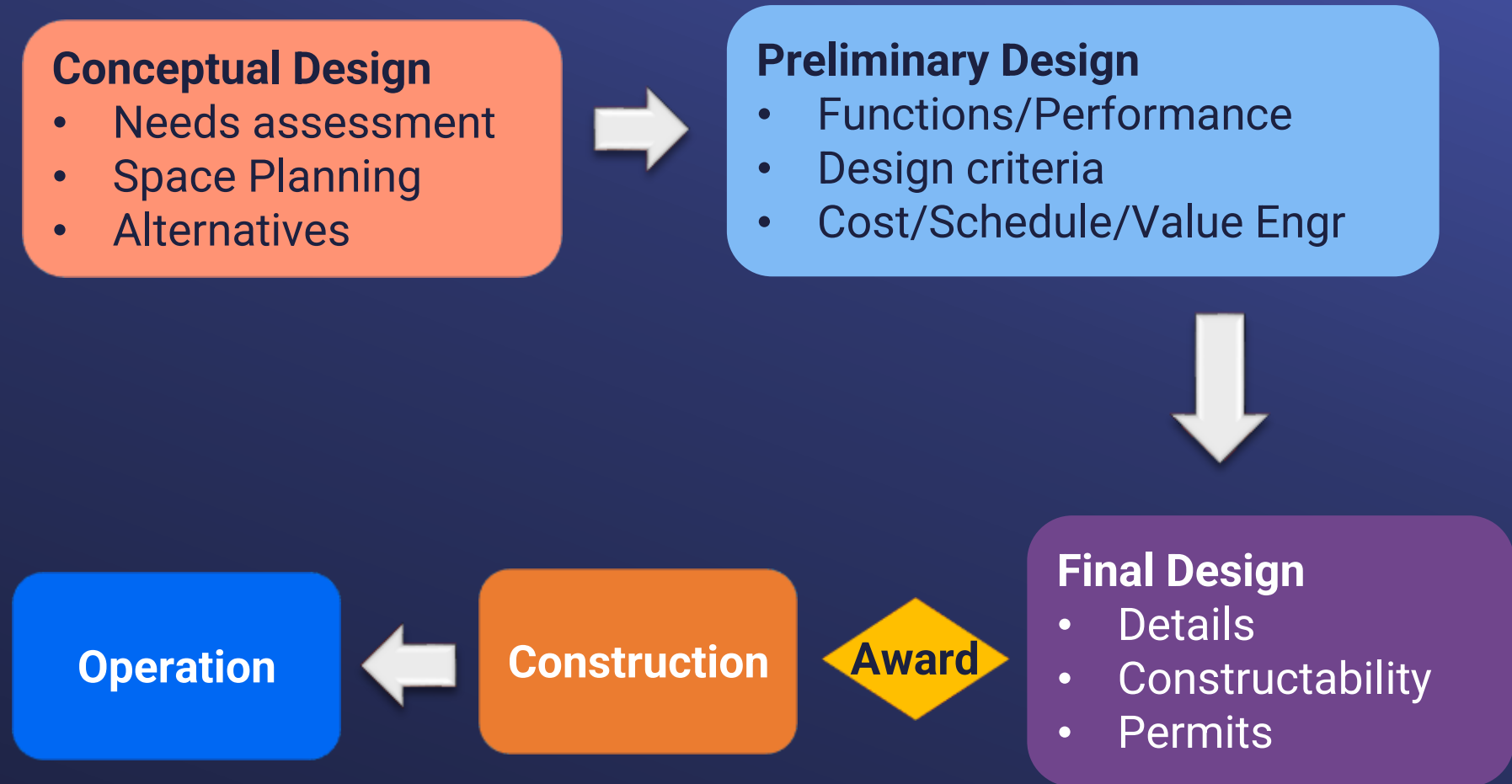
- Metal storage buildings built in 1950s
 - Decayed wooden frames
 - Metal walls & roof panels deteriorated
 - Limited storage capacity
- Gene Pumping Plant storage buildings were replaced in 2015
- Replacement of storage buildings at Hinds, Eagle & Iron Mtn. pumping plants needed



Iron Mtn. Storage Building (Existing)

Colorado River Aqueduct Equipment Storage Buildings

Engineering Design Process



Colorado River Aqueduct Equipment Storage Buildings

Building Evaluation Criteria

- Site selection
- Functions & Space
 - Building occupancy (conveyance, treatment, workshop, administration, or storage)
 - Area & height requirements
- Design criteria
 - Building code & fire requirements
 - Seismic/geotechnical design
- Heating, ventilation & air conditioning requirements
- Environmental, sustainability & aesthetics
- Balance of functional needs, code, cost & schedule

Colorado River Aqueduct Equipment Storage Buildings

Metropolitan Building Types

- La Verne Shops: Tilt-up Concrete
- Mills Warehouse: Concrete Masonry
- Lake Mathews Storage: Pre-Engineered Metal Building
- CRA Electrical Aux. System: Cast-In-Place Concrete



La Verne Machine Shops



Mills Warehouse



Lake Mathews Storage

Colorado River Aqueduct Equipment Storage Buildings



Sumps Equipment
Delivery at Iron Mtn

July 10, 2023

CRA Storage Needs

- Maintain inventories & supplies critical to CRA operation & maintenance
- Store equipment & parts to support operations:
 - Circuit breakers, disconnect switches, portable generators, pumps, motors, valves, & piping
 - Custom-built lifting frames for maintenance of motors & valves
- Provide equipment storage for CIP projects
 - CRA Main Pump Reliability Program
 - Sump System Replacement Project
 - Motor Cable Replacement Project

Colorado River Aqueduct Equipment Storage Buildings

CRA Storage Building Requirements

- Seismic resilient structures: San Andreas Fault is 20 to 25 miles from 3 sites
- Maximum interior volume for storage flexibility
 - Forklift & vehicle drive-thru access
 - Clear height (18 ft)
 - Open floor space up to 4,800 sq ft
- Adjacency requirements
 - Proximity to pumping plants to minimize parts retrieval time
 - Separate maintenance & pump crew buildings
- Insulation & ventilation requirements for better energy efficiency & environment control

Colorado River Aqueduct Equipment Storage Buildings

Site Selection

- Project team partnered with Desert staff to locate new storage buildings
 - Space constraints considered
 - Located to minimize time to retrieve equipment & parts
 - Coordinated with future projects
 - 6 buildings across 3 separate facilities
- Site work required for CRA buildings
 - Site grading & erosion control
 - Roadway & pavement
 - Electrical & water line extension from main plant
 - Fire protection systems & hydrants needed



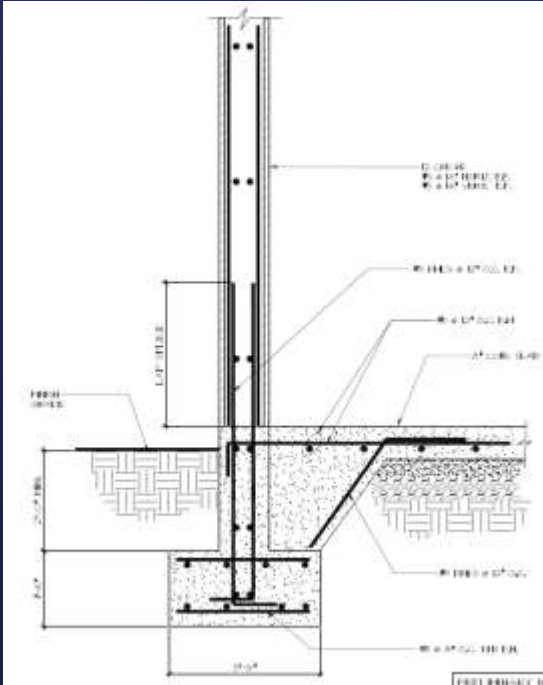
Eagle Mtn. Pumping Plant
Storm Inundation

July 10, 2023

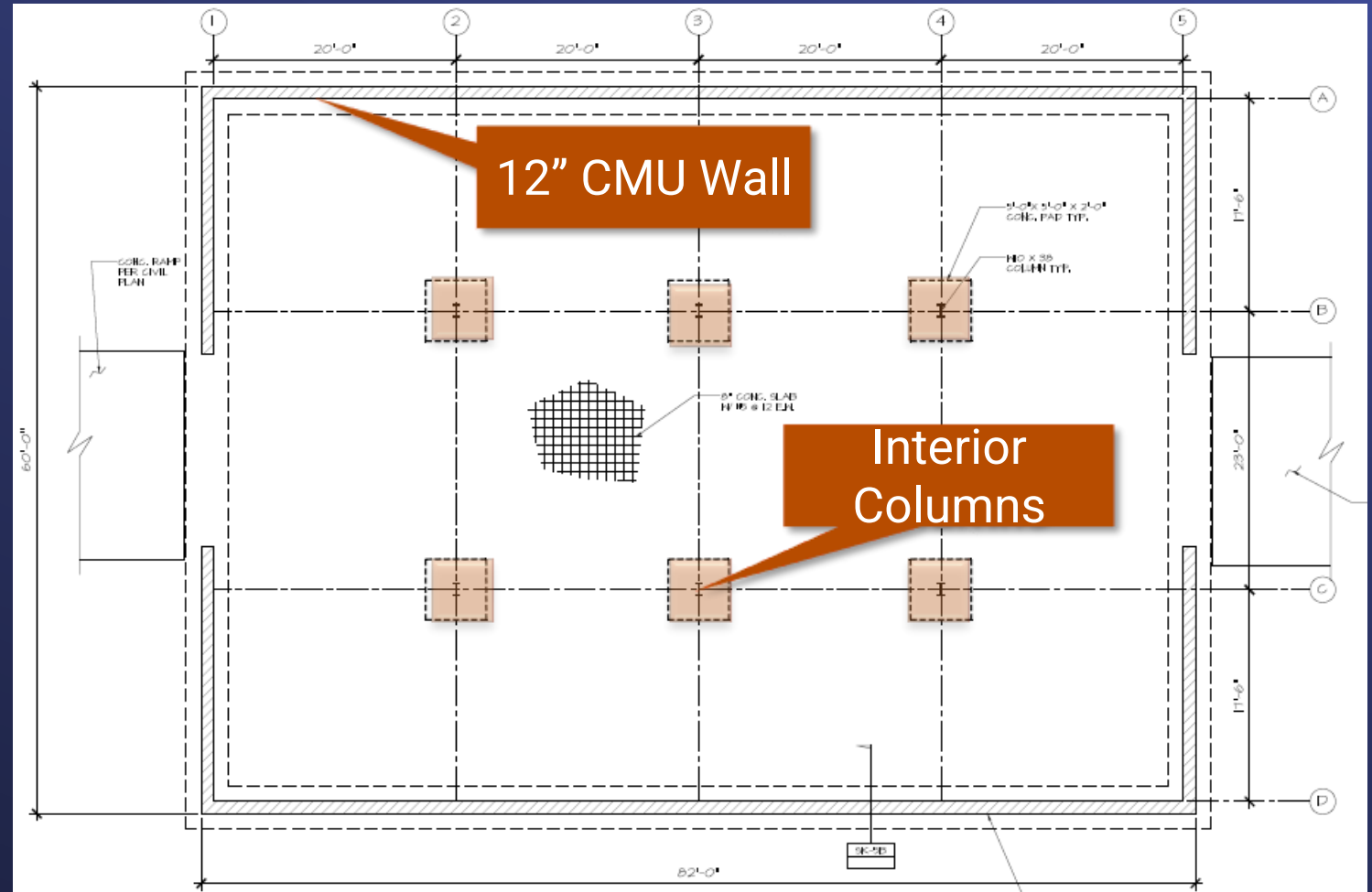
Colorado River Aqueduct Equipment Storage Buildings

Building Alternative 1 – Concrete masonry

- Description: Concrete masonry units (CMU) filled w/grout, mortar joints & reinforcement



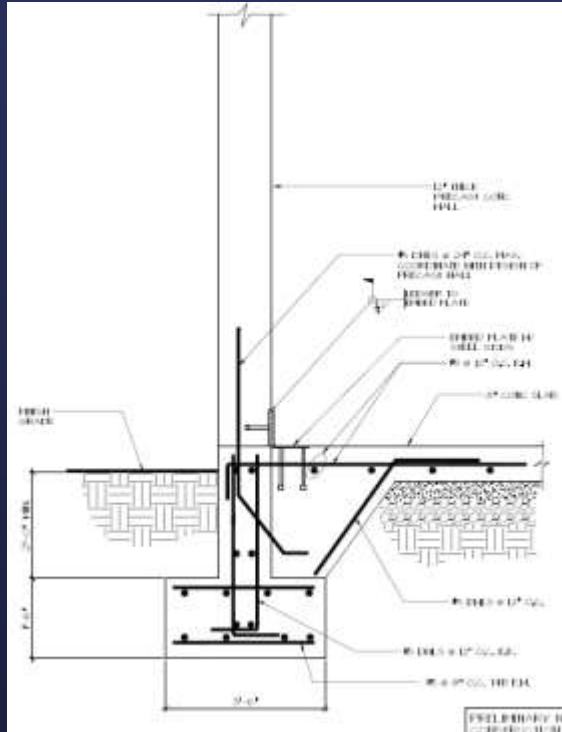
Wall Foundation



Colorado River Aqueduct Equipment Storage Buildings

Building Alternative 1 – Concrete masonry

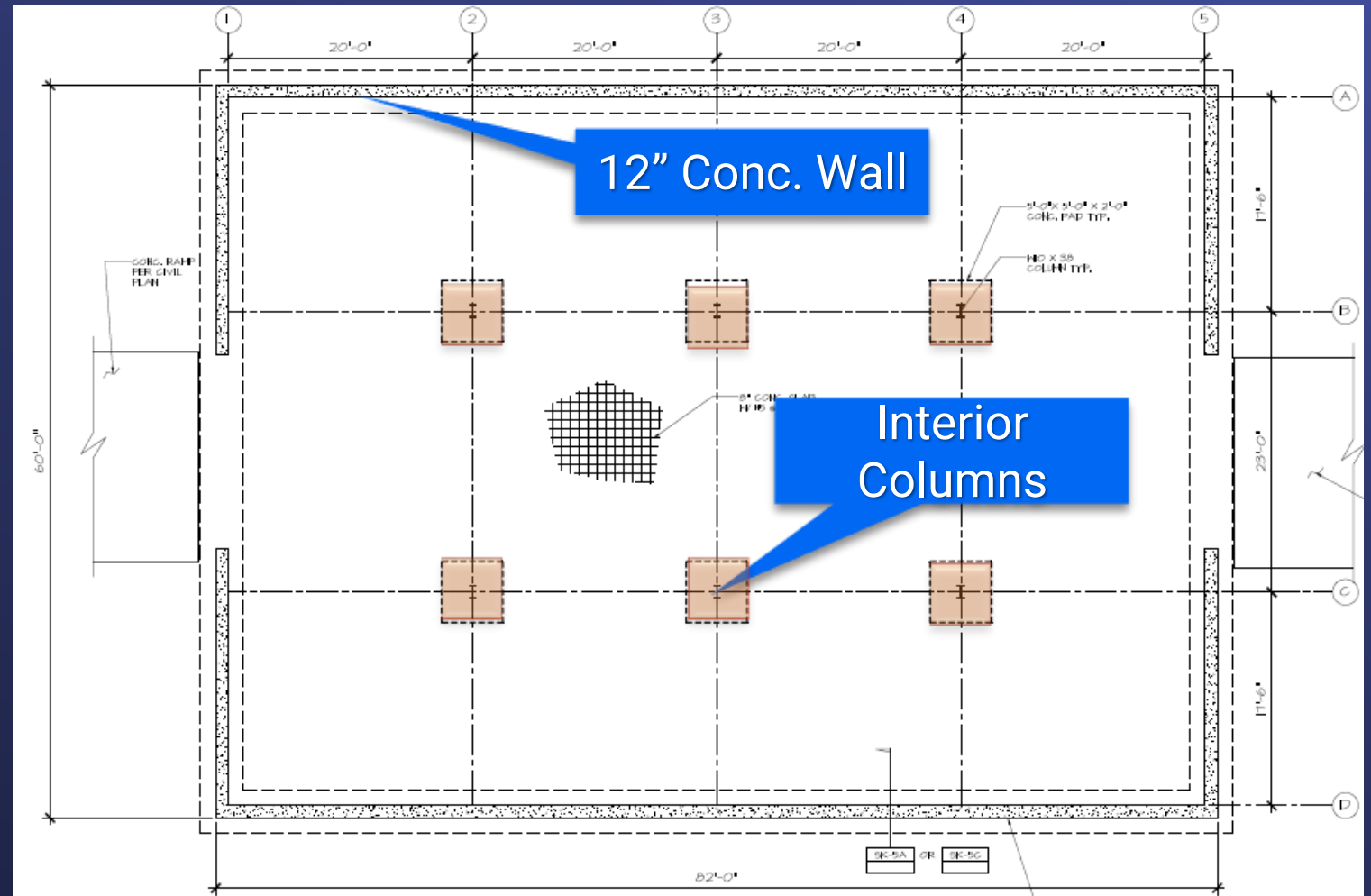
- Pros
 - Life span – 100 years (except roofing)
- Cons
 - Heavier structure with increased seismic loads
 - Higher labor & material costs
 - Interior columns required for cost-effective construction which limits space flexibility
- Estimated contract amount – \$24 to 26 M
 - \$32 to 34 M for design, bidding, & construction costs
- Estimated construction duration:
 - 3.5 years



Wall Foundation

Building Alternative 2 – Tilt-Up concrete

- Description: Reinforced concrete panels cast on site, tilted up & connected in place



Colorado River Aqueduct Equipment Storage Buildings

Building Alternative 2 – Tilt-Up concrete

- Pros
 - Life span – 100 years (except roofing)
- Cons
 - Heavier structure with increased seismic loads
 - High labor & material costs
 - Interior columns required for cost-effective construction which limits space flexibility
- Estimated contract amount – \$26 to 28 M
 - \$34 to \$36 M for design, bidding, & construction costs
- Estimated construction duration:
 - 3 years
- Precast concrete: special transportation permit required

Colorado River Aqueduct Equipment Storage Buildings



Lake Mathews
Storage Building

July 10, 2023

Building Alternative 3 – PE Metal Building

- Description: Pre-engineered by P.E. per MWD criteria, & assembled on site with Metropolitan inspection
- Pros
 - Steel moment frame is seismic/wind resilient while meeting clear span & height requirements
 - High quality shop fabrication (IAS certified)
 - Efficient construction sequence (less on-site labor)
 - Shortest construction duration (2 years)
 - Lowest cost when compared to alternatives
- Cons
 - Life span – 70 years (except roofing)
- Selected Alternative
 - Value engineering conducted to identify & implement cost saving measures

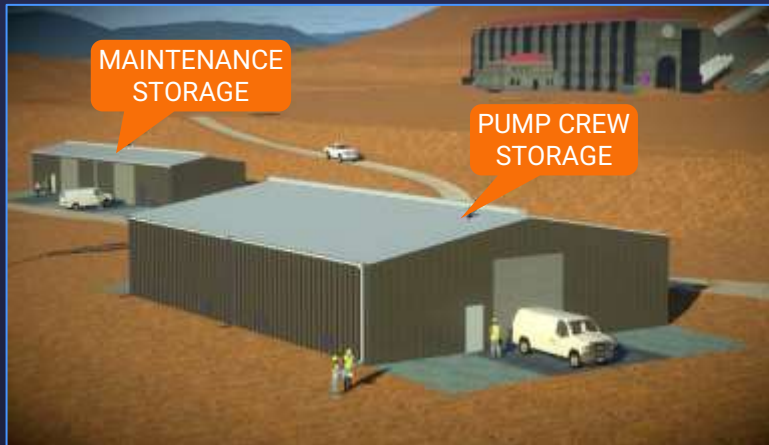
Engineering, Operations, & Technology Committee

Item #8-3 Slide 16

625

Contractor – Scope of Work

- Demolish existing storage buildings
- Procure & install six pre-engineered metal storage buildings
- Grading for access & drainage improvements
- Construct concrete foundation pads, asphalt paving & fencing
- Install fire protection system – new firewater lines & hydrants



Hinds Storage Buildings



Eagle Mtn. Storage Buildings



Iron Mtn. Storage Buildings

Bid Results

Specifications No. 2000A*

Bids Received	April 20, 2023
No. of Bidders	2
Lowest Responsible Bidder	J. F. Shea Construction Inc.
Low Bid	\$16,490,000
Other Bid	\$19,668,656
Engineer's Estimate	\$17,460,000
SBE Participation**	33%

* This contract will be conducted under the terms of Metropolitan's project labor agreement

** SBE (Small Business Enterprise) participation level set at 25%

Colorado River Aqueduct Equipment Storage Buildings

Metropolitan - Scope of Work

- Integration of fire alarm system with SCADA
- Installation of ventilation exhaust fans
- Construction management & inspection
- Submittals review & preparation of record drawings
- Environmental monitoring
- Project management, project labor agreement administration & project controls

Allocation of Funds

CRA Storage Buildings at Hinds, Eagle Mtn. & Iron Mtn. Pumping Plants

Metropolitan Labor

Owners Costs (Proj. Mgmt., Contract Admin., Envir. Support) \$ 680,000

Construction Inspection & Support 1,830,000

Force Construction 128,000

Submittals Review, Tech. Support, Record Dwgs. 617,000

Materials & Incidentals 31,000

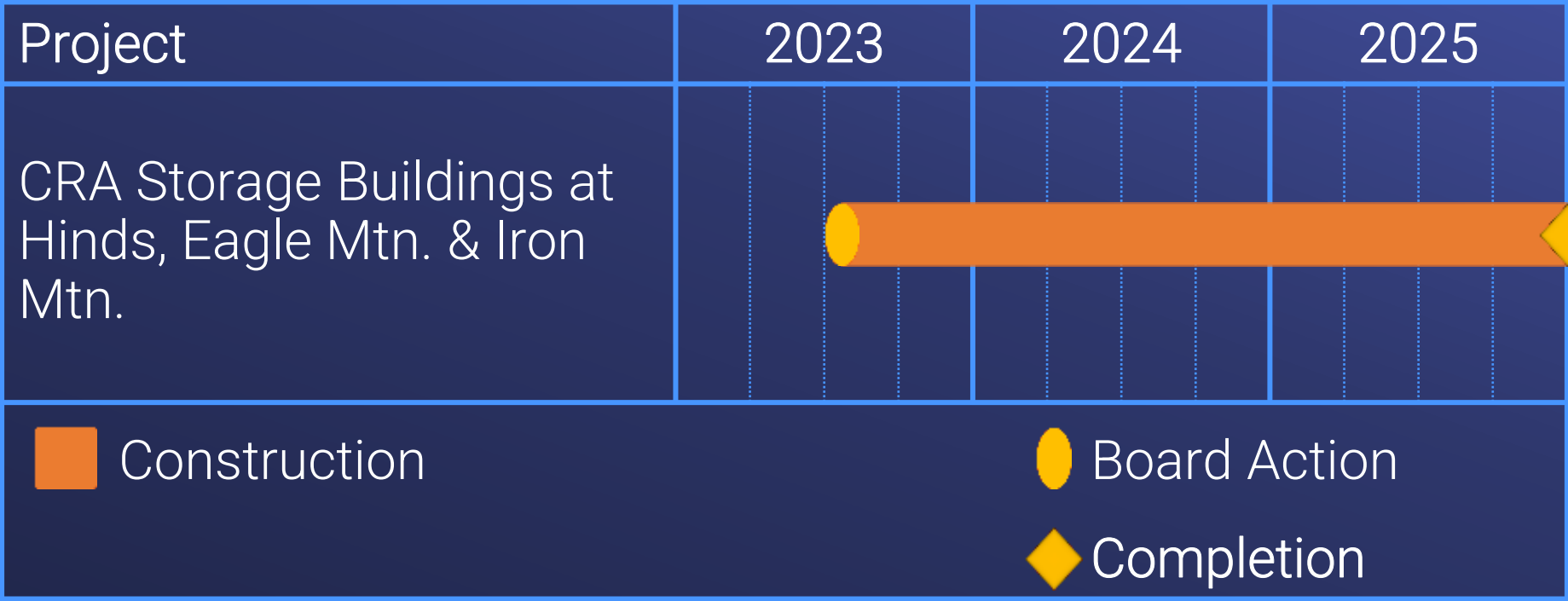
Contracts

J. F. Shea Construction Inc. 16,490,000

Remaining Budget 1,024,000

Total \$ 20,800,000

Project Schedule



Board Options

- Option #1

Award a \$16,490,000 contract to J. F. Shea Construction Inc. for furnishing and installation of pre-engineered storage buildings at the Hinds, Eagle Mountain, and Iron Mountain pumping plants.

- Option #2

Do not proceed with the project at this time.

Staff Recommendation

- Option #1





• Conservation Board Report July 2023

Summary

This report provides a summary of conservation activity and expenditures for May 2023.

Purpose

Informational

Detailed Report

Conservation Expenditures – FY2022/23 & FY2023/24 ⁽¹⁾

	Paid ⁽²⁾	Committed ⁽³⁾
Regional Devices	\$6.2 M	\$7.0 M
Member Agency Administered	\$7.0 M	\$5.4 M
Turf Replacement	\$20.0 M	\$38.1 M
Advertising	\$5.6 M	\$1.4 M
Other	\$1.9 M	\$1.5 M
TOTAL	\$40.7 M	\$53.4 M

(1) The Conservation Program biennial expenditure authorization is \$86 million.

(2) Paid as of 7/1/2022 - 5/31/2023. Financial reporting on cash basis.

(3) Committed dollars as of June 10, 2023

Summary of Expenditures in May 2023: \$1,917,175 (1)

Lifetime Water Savings to be achieved by all rebates in May 2023: 7,717 AF

FY2022/23-FY2023/24: 56,971 AF lifetime water savings



Turf Replacement Rebates:

May: 1,346,575 ft² removed

FY2022/23-FY2023/24: 9,391,121 ft² removed



Clothes Washers:

May: 720 units rebated

FY2022/23-FY2023/24: 12,256 units rebated



Smart Controllers:

May: 665 units rebated

FY2022/23-FY2023/24: 8,938 units rebated



Toilets:

May: 1,389 units rebated

FY2022/23-FY2023/24: 23,193 units rebated



Rain Barrels and Cisterns:

May: 220 units rebated

FY2022/23-FY2023/24: 3,288 units rebated



Sprinkler Nozzles:

May: 3,330 units rebated

FY2022/23-FY2023/24: 22,200 units rebated

(1) Expenditures may include advertising and Water Savings Incentive Program activity in addition to the incentives highlighted above.



- **Board of Directors**

Legislation, Regulatory Affairs, and Communications Committee

7/11/2023 Board Meeting

9-2

Subject

Governor Newsom's Infrastructure Trailer Bill Package

Executive Summary

Governor Newsom issued an executive order and proposed several budget trailer bills to implement his infrastructure permitting and project review reform plan to assist the state in meeting its climate goals. Metropolitan may be able to directly benefit from three of the streamlining proposals: California Environmental Quality Act (CEQA) administrative record preparation, expedited CEQA judicial review for qualifying water-related infrastructure projects, and a new permitting pathway for incidental take of fully protected species. Three may indirectly affect Metropolitan: progressive design-build authority for the California Department of Transportation (Caltrans) and California Department of Water Resources (DWR), green financing programs for federal Inflation Reduction Act (IRA) funding, and equity in workforce development. These proposals are discussed below.

On June 29, Metropolitan issued a letter in support of the infrastructure package. This letter highlighted the importance of infrastructure streamlining and the urgency of bringing projects online as quickly as possible to combat the effects of climate change, while noting that there are elements in the package that need additional work. Out of the proposals outlined that apply directly or indirectly to Metropolitan, two of them (expedited CEQA judicial review and permitting for incidental take of fully protected species) were amended to include extensive compliance requirements and create vulnerabilities to litigation. However, the overall package provides advantages and potential financial benefits that could accrue to the district.

The Legislature approved the streamlining package on July 5. It now awaits the Governor's signature.

Details

Background

Climate resilience is a top priority for Governor Newsom and the Legislature. On May 19, 2023, Governor Newsom issued Executive Order N-8-23 (**Attachment 1**), proposing a number of measures to streamline projects to expedite construction across the state, accelerating the building of clean infrastructure. The measures are intended to facilitate and streamline project approval and completion to maximize California's share of federal infrastructure dollars and expedite the implementation of projects that meet the state's economic, climate, and social goals.

To advance the package, the Legislature introduced a series of budget trailer bills (**Attachment 2**). The original proposed package would have applied streamlining provisions to the Delta Conveyance Project and included specific amendments to the Delta Reform Act; however, those provisions are not part of the final package.

Among the bills that the Legislature agreed to move forward, three could affect Metropolitan projects directly, and three others could affect the district indirectly through state infrastructure and workforce development programs.

Metropolitan's Board adopted 2023 Legislative Priorities and Principles include support for administrative and legislative actions and funding to expedite the development of new local resources (including recycled water and direct potable reuse, groundwater, stormwater, and desalination projects) without compromising the operational, financial, water quality, regulatory, environmental, and customer interests of water and wastewater agencies.

Proposals with Direct Application to Metropolitan

Fully Protected Species Permitting – SB 147

This proposal maintains Fully Protected Species (FPS) provisions while establishing an alternative process to authorize the incidental take of FPS. The proposal goes beyond California Endangered Species Act incidental take permit requirements and includes meeting the conservation standard in the Natural Community Conservation Planning Act, among other requirements. The bill also removes certain animals as fully protected, including the American peregrine falcon, brown pelican, and thicktail chub because the first two are recovered, and the third is extinct.

FPS are found in the Delta, in portions of Metropolitan's service area (notably near the Foothill Feeder), and in and along the Lower Colorado River. Authorizing the California Department of Fish and Wildlife to issue permits that would minimize and fully mitigate impacts to FPS would, as a practical matter, allow for more options to address the needs of fully protected species than the current legal regime while reducing risks for permittees.

While this alternative may have benefits over current FPS regulations, the requirements are extensive and may make permit terms infeasible or cost prohibitive and could create other litigation risks for permittees. Combined, these aspects make it unlikely Metropolitan would seek to use this process, but amendments could address those concerns.

CEQA Administrative Record Preparation – SB 149

The administrative record comprises the CEQA documents (a negative declaration, mitigated negative declaration or EIR, findings, mitigation plans, and any statement of overriding considerations), all comments, and every record the lead CEQA agency relied upon in preparing its CEQA document. Ordinarily, the administrative record is the entirety of the evidentiary record in CEQA litigation. Under existing law, a plaintiff may elect to prepare the administrative record. After which, the lead agency lodges the certified record with the court, which is the first step toward adjudicating the merits. When petitioners elect to prepare the record, it often delays the litigation, which can significantly expand the workload and time required.

SB 149 would authorize a lead agency to cancel the plaintiff's election and prepare the record itself if the lead agency agrees to bear all costs to prepare the record and cannot recover those costs even if it prevails in the litigation.

Further, SB 149 would amend the definition of the administrative record to exclude internal agency communications that are "logistical in nature," including meeting invitations and scheduling communications. It would also mandate that any records subject to any Evidence Code privilege (including attorney-client communications and attorney work product) and any records exempted from disclosure under the Public Records Act (PRA) (including records subject to the deliberative process privilege) "shall not be included" in the administrative record consistent with existing law.

Overall, the provisions above would be beneficial to Metropolitan as they could lower CEQA litigation costs and shorten litigation timelines. However, mandating that privileged and PRA-exempt records not be included precludes lead agencies from voluntarily waiving privileges or PRA exemptions. While waiver is rare, there is no policy reason to mandate exclusion.

CEQA Option for Expedited Judicial Review – SB 149

This CEQA amendment would provide expedited judicial review for qualifying, governor-certified infrastructure projects, and require that any litigation, including any appeals, must be resolved within 270 days of litigation being filed, if feasible. Certain water-related infrastructure projects may qualify for certification, including

recycled water, repairs to canals (e.g., the California Aqueduct subsidence repair), and some Prop 1 Water Storage Infrastructure Projects. The bill expressly excludes the Delta Conveyance Project and ocean water desalinization projects from qualifying.

The governor cannot certify a project unless it meets the following requirements:

- The applicant must agree to pay all trial court and court of appeal costs in hearing and deciding any case challenging the lead agency’s action on a certified project under CEQA;
- The applicant must agree to pay the costs to prepare the administrative record concurrent with the CEQA review process and cannot recover those costs even if the plaintiffs lose;
- For a project for which environmental review has commenced, the applicant must demonstrate that the administrative record is being prepared in accordance with a specified process for preparing the administrative record (explained below); and
- The greenhouse gas emissions from the project must be mitigated to the extent feasible, which goes beyond CEQA’s requirement to mitigate only if impacts are significant, and then only to less than significant (if feasible).

In addition, the project applicant must avoid or mitigate significant environmental impacts in any disadvantaged community (DAC), which goes beyond CEQA’s requirements, and enter into a binding and enforceable agreement to comply prior to certification of the EIR.

The process for preparing the administrative record for any governor-certified infrastructure project must follow certain onerous and potentially costly specifications, including preparing the administrative record concurrently with the environmental review process. It requires the posting of all documents and other materials on the lead agency’s internet website in a “readily accessible format” commencing with the release date of the draft EIR, necessitating comments also be submitted in a “readily accessible” electronic format. While expedited judicial review is beneficial in concept, unless amended, the prerequisites may make this option infeasible or costly to implement.

Proposals with Indirect Application to Metropolitan

Green Financing Programs for Federal IRA Funding – SB 124

This proposal would allow DWR to work through the California Infrastructure and Development Bank (IBank)¹ to access federal funding provided in the IRA to supplement or subsidize financing of projects that reduce greenhouse gas emissions.

This program enables IBank to use its financing tools to facilitate the use of tax credits under the IRA for the benefit of clean energy/renewable projects in collaboration with municipally owned assets. For the State Water Project (SWP), DWR’s direct investment in qualifying projects could lower its capital costs, which would ultimately be passed on to Metropolitan and other SWP contractors.

This bill makes it clear that when DWR makes an investment, either for the SWP or the Strategic Reserve, any benefits derived from direct pay (i.e., cash payment) will serve to the benefit of the program making the investment. The approach ensures that the investing program actually sees the discounted cost of procurement and that the intended beneficiaries of the investment receive all of the benefits of that investment. In the case of the State Water Project, the funds come from the State Water Contractors, and the benefits of direct pay would offset SWP costs.

¹ IBank is the State of California’s general purpose financing authority. The Legislature created IBank in 1994 to finance public infrastructure and private development that promote a healthy climate for jobs, contribute to a strong economy, and improve the quality of life in California communities.

Progressive Design-Build Authority for Caltrans and DWR – SB 146

This bill would revise existing law that allows the Department of General Services to use a progressive design-build (PDB) procurement process through January 1, 2025, for the construction of up to three capital outlay projects, as-determined by the Department of General Services and the Department of Finance. SB 146 would allow Caltrans and DWR to use PDB for the construction of up to eight public works projects per department estimated to exceed \$25 million. The bill would extend the sunset date to December 31, 2033.

By utilizing PDB and awarding a project contract prior to the completion of all design work, DWR can potentially reduce overall costs and execute shorter project delivery schedules. This could lead to reduced costs for SWP-related projects-resulting in cost savings being passed on to Metropolitan.

Equity in Workforce Development – SB 150

This bill is intended to help develop procurement models to enhance the state's training and access pipeline for jobs while ensuring community benefits on infrastructure and manufacturing investments.

The bill authorizes state agencies to enter into or require a project labor agreement for projects with total construction costs over \$35 million if the agreement also includes provisions to address community benefits through partnerships with existing construction careers programs, local hire goals, coordination with job fairs for construction apprenticeship programs, or other methods agreed upon to promote employment and training opportunities for veterans and individuals in disadvantaged communities.

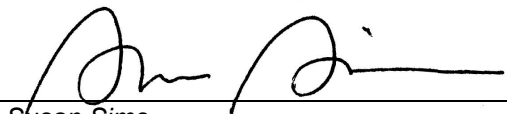

This bill is aligned with Metropolitan's values and would benefit the district by building the next generation of the state's construction workforce.

Policy

By Minute Item 53051, 2023 Metropolitan Legislative Priorities and Principles, Legislative Priority A.1 and Legislative Principles II.B, III.B., IV.A.8, V.D.1

Fiscal Impact

Unknown at this time.

 _____ Susan Sims Group Manager, External Affairs	7/6/2023 _____ Date
 _____ Adel Hagekhalil General Manager	7/7/2023 _____ Date

Attachment 1 – Executive Order N-8-23, dated May 19, 2023

Attachment 2 –Budget Trailer Bills

Ref# EA12689162

**EXECUTIVE DEPARTMENT
STATE OF CALIFORNIA**

EXECUTIVE ORDER N-8-23

WHEREAS California is poised to become the fourth largest economy in the world, and our continued growth and prosperity depends on our ability to create quality jobs, accelerate our transition to clean energy, urgently address the climate crisis, and build a transportation network for the 21st century; and

WHEREAS modernizing our energy, water, transportation, and communications infrastructure will deliver improvements to benefit all Californians for decades to come, and will require that the State move forward on major projects with speed and determination; and

WHEREAS President Joseph R. Biden and the 117th Congress enacted historic laws supporting infrastructure modernization, including by providing roughly \$1.2 trillion through 2026 in the Infrastructure Investment and Jobs Act (IIJA), and \$391 billion over ten years for climate-related investments in the Inflation Reduction Act (IRA); and

WHEREAS California has augmented these federal investments with over \$50 billion in state funding for infrastructure and will invest more than \$180 billion over the next ten years, creating over 400,000 jobs; and

WHEREAS major infrastructure projects have too often been bogged down in regulatory processes and a siloed approach to permitting and regulatory approvals; and

WHEREAS California has launched an all-of-government approach, working across agencies to deliver projects at the scale and pace necessary to maximize federal investment and deliver the benefit from that investment to all California communities, especially those that historically have not shared equitably in the benefits of infrastructure investment or have borne disproportionate burdens of development projects; and

WHEREAS disasters caused by climate change—including extreme heat, wildfires, flooding, and drought—pose unprecedented stress to the State's energy infrastructure, and accelerating California's progress towards 100 percent clean electricity, as well as meeting our carbon neutrality goal, by 2045 necessitates modernizing our electric grid and building out a safe, reliable, resilient, affordable, and clean energy system of the future; and

WHEREAS the changing climate requires adaptation and innovation to diversify water supplies, expand our water sources, and efficiently use existing water sources to permanently strengthen California's water resiliency, and State agencies must coordinate their efforts to provide equitable benefits from water infrastructure improvements to present and future generations; and

WHEREAS much of California's multimodal transportation system was constructed decades ago and requires modernization, and my Executive Orders N-19-19 and N-79-20, and the subsequent California Climate Action Plan for Transportation Infrastructure (CAPTI), provide an investment framework prioritizing clean and sustainable transportation for people and goods through

mass transit, rail, bicycle, and pedestrian transportation, as well as zero-emission vehicles; and

WHEREAS my Executive Order N-19-21 directs State agencies to develop programs that support efficient port operations and goods movement in order to enhance the State's economic prosperity and competitiveness; and

WHEREAS reliable, affordable highspeed broadband is critical to full participation in California's society and economy, and an estimated 675,000 Californians are unserved, and 2 million Californians are underserved, by reliable, affordable, highspeed broadband service; and

WHEREAS recent historic infrastructure investments by the State and federal government provide an opportunity to enhance the State's training pipeline for quality jobs through apprenticeships and high-road training partnerships, and California has made significant investments to promote new plans and strategies to diversify local economies and develop sustainable industries that create high-quality, broadly accessible jobs, including a \$600 million community economic resilience fund; and

WHEREAS in 2021 President Biden signed Executive Order 14008, Tackling the Climate Crisis at Home and Abroad, establishing the Justice40 Initiative with a goal that 40 percent of the overall benefits of certain federal investments, in the aggregate across all covered programs, flow to disadvantaged communities that are marginalized, underserved, and overburdened by pollution, and all Justice40-covered programs are required to engage in stakeholder consultation to ensure that community stakeholders are meaningfully involved in determining program benefits; and

WHEREAS California has sought to be a national leader in advancing equity and opportunity, including by supporting communities that have suffered inequitable infrastructure development, reaping limited benefits while shouldering a disproportionate share of the burdens of such development, and will therefore strive to exceed the federal goal of 40 percent of the overall benefits flowing to disadvantaged communities for Justice40-covered programs; and

WHEREAS California was one of the first states to recognize environmental justice as a factor in the planning process, directing governmental entities to engage meaningfully with, and provide technical assistance to, populations and communities most impacted by pollution in all phases of the environmental and land use decision-making process, including low-income and disadvantaged communities that have traditionally been most impacted by environmental harms and have not shared equitably in the economic opportunities that accompany major infrastructure projects; and

WHEREAS Executive Order B-10-11 and my Executive Order N-15-19 require State agencies to engage in consultation with California Native American tribes regarding policies that may affect tribal communities, and Executive Order N-16-22 directs State agencies to update their strategic plans to reflect the use of data analysis and inclusive practices to more effectively advance equity and to respond to identified disparities, and to take additional actions to embed equity considerations in policies and practices, including by engaging with historically disadvantaged communities impacted by the agency's work.

NOW, THEREFORE, I, GAVIN NEWSOM, Governor of the State of California, in accordance with the authority vested in me by the State Constitution and statutes, do hereby issue the following order to become effective immediately:

IT IS HEREBY ORDERED THAT:

1. The Senior Counselor on Infrastructure shall convene an Infrastructure Strike Team (Strike Team) to work across State agencies to maximize federal and state funding opportunities for California innovation and infrastructure projects. The Strike Team shall be composed of the Director of Finance, the Director of the Governor's Office of Business and Economic Development, the Director of the Office of Planning and Research, the Tribal Affairs Secretary, the Secretary of Transportation, the Secretary of the Natural Resources Agency, the Secretary of Business, Consumer Services, and Housing, the Secretary of Food and Agriculture, the Secretary of Labor and Workforce Development, the Secretary for Environmental Protection, and the Secretary of Government Operations. The President of the California Public Utilities Commission is requested to participate on the Strike Team.
2. The Strike Team shall:
 - a. Identify projects on which to focus streamlining efforts, particularly those presenting significant challenges but also significant opportunities for infrastructure and job creation, and hold departments and agencies accountable to deliver results in an expedited and effective fashion; and
 - b. Support coordination between federal, state, tribal, and local government, as well as among State agencies, on project review, permitting, and approvals; and
 - c. Support infrastructure in a particular sector by prioritizing complementary investments in adjacent sectors (e.g., transportation and energy investments that support housing projects); and
 - d. Share challenges and best practices across agencies, and identify opportunities for improvement.

The Strike Team shall track the status of individual projects identified pursuant to this Paragraph as they move through design, permitting, and construction phases, and use common metrics to measure progress and identify opportunities for streamlining government operations.

3. The Strike Team shall create working groups focused on each of the following issues: transportation, energy, hydrogen, environmental remediation, broadband, water, the CHIPS and Science Act, and zero-emission vehicles. The working groups shall focus on prioritizing funding for projects that achieve multiple benefits. The working groups shall:
 - a. Establish dashboards to track progress, including number of projects, project locations, schedules, milestones, funding, federal application and encumbrance deadlines, awards

received, workforce development, and progress toward equity goals; and


- b. Coordinate among agencies to facilitate fast and effective project delivery, eliminating duplication, avoiding conflicting assessments, and shortening permitting timelines through concurrent versus sequential processes and reviews, as well as identify opportunities to align program criteria and achieve cross-sectoral goals; and
 - c. Identify potential statutory and regulatory changes to facilitate and streamline project approval and completion, and elevate proposed changes to the Strike Team for consideration; and
 - d. Identify opportunities to leverage state and federal funding to address workforce needs and accelerate the retraining and upskilling of workers, especially those most at risk of job displacement; and
 - e. Raise awareness of available state and federal funding opportunities, including information about eligibility, program and application requirements, and application deadlines, among appropriate tribal, local, regional, non-profit, and community-based partners, including historically disadvantaged partners.
4. The California State Transportation Agency (CalSTA) shall establish an interagency Task Force on Third Parties, with participation from the California High Speed Rail Authority, the California Department of Transportation, the California Department of Water Resources, the California Department of Fish and Wildlife, and other state agencies as appropriate to, upon direction from the Strike Team and utilizing existing resources, assist major infrastructure projects by working with private parties to obtain approvals and facilitate agreements necessary to relocate utilities or mitigate project impacts and allow construction to commence sooner, along with appropriate community engagement and tribal consultation. The California Public Utilities Commission is requested to participate in the interagency Task Force on Third Parties.
5. The Governor's Office of Business and Economic Development, in collaboration with the California Energy Commission, the California Air Resources Board, and other State agencies as appropriate, shall identify opportunities to support local permitting of clean energy infrastructure and zero emission vehicle infrastructure, along with appropriate community engagement and tribal consultation, including, but not limited to, sharing and encouraging the adoption of best practices, connecting local governments to technical resources to support permit approval, and enhancing state and local collaboration. The California Public Utilities Commission is requested to collaborate on this effort.
6. State agencies subject to my authority shall implement the directives in this Order consistent with the directives in Executive Order N-16-22 on embedding equity, increasing opportunities for all, and addressing disparities, including, but not limited to, any action plans developed under Paragraph 3 of that Order to increase access to the grant or contract selection process for IJJA investments for small and

disadvantaged business enterprises and to meaningfully engage with Tribal governments, nonprofits, and community organizations, where applicable.

I FURTHER DIRECT that as soon as hereafter possible, this Order be filed with the Office of the Secretary of State and that widespread publicity and notice be given to this Order.

This Order is not intended to, and does not, create any rights or benefits, substantive or procedural, enforceable at law or in equity, against the State of California, its agencies, departments, entities, officers, employees, or any other person.

IN WITNESS WHEREOF I have hereunto set my hand and caused the Great Seal of the State of California to be affixed this 19th day of May 2023.



GAVIN NEWSOM
Governor of California

ATTEST:

SHIRLEY N. WEBER, PH.D.
Secretary of State

AMENDED IN ASSEMBLY JUNE 26, 2023

SENATE BILL**No. 124****Introduced by Committee on Budget and Fiscal Review**

January 18, 2023

~~An act relating to the Budget Act of 2023.~~ *An act to amend Sections 63048.93 and 63048.95 of the Government Code, to amend Sections 25355.5, 25371.3, 25373, and 25792 of the Public Resources Code, to amend Sections 454.53, 712, 712.1, and 712.8 of, and to add Section 913.20 to, the Public Utilities Code, and to amend Sections 80400, 80710, and 80720 of, and to add Sections 12935.5 and 80700.5 to, the Water Code, relating to energy, and making an appropriation therefor, to take effect immediately, bill related to the budget.*

LEGISLATIVE COUNSEL'S DIGEST

SB 124, as amended, Committee on Budget and Fiscal Review.
~~Budget Act of 2023.~~ *Energy.*

(1) The Bergeson-Peace Infrastructure and Economic Development Bank Act establishes the California Infrastructure and Economic Development Bank (I-Bank) in the Governor's Office of Business and Economic Development, governed by a board of directors. The act, among other things, authorizes the I-Bank to make loans, issue bonds, and provide financial assistance for various types of projects that qualify as economic development or public development facilities.

The Climate Catalyst Revolving Loan Fund Act of 2020 authorizes the I-Bank, under the Climate Catalyst Revolving Loan Fund Program, to provide financial assistance to any eligible sponsor or participating party for eligible climate catalyst projects, as defined, either directly to the sponsor or participating party or to a lending or financial institution, as specified. The act, beginning in the 2021–22 fiscal year,

SB 124

— 2 —

requires the I-Bank to adopt a climate catalyst financing plan, as specified, after meeting and conferring with authorized consulting agencies concerning specific categories of climate catalyst projects. The act establishes the Climate Catalyst Revolving Loan Fund, a continuously appropriated fund, in the state treasury for the purpose of implementing the objectives and provisions of act.

This bill, beginning in the 2023–24 fiscal year, would require a climate catalyst financing plan to authorize the I-Bank to provide financial assistance and to use all financing authorities provided under the Bergeson-Peace Infrastructure and Economic Development Bank Act in its implementation of a climate catalyst financing plan. The bill would additionally authorize specified state agencies to provide consultation on climate catalyst projects to leverage federal funding available under the United States Environmental Protection Agency's Greenhouse Gas Reduction Fund, as provided, and would authorize the Climate Catalyst Revolving Loan Fund to receive moneys from the federal government and funds sourced from federal appropriations, as specified. The bill would require use of the moneys and funds to comply with specified criteria.

(2) Existing law requires the State Energy Resources Conservation and Development Commission (Energy Commission) and the State Air Resources Board, on or before December 31, 2024, to prepare a Transportation Fuels Transition Plan and requires the Energy Commission and the state board to prepare the plan in consultation with the state's fuel producers and refiners and a multistakeholder, multiagency workgroup, including the California Environmental Protection Agency and the Natural Resources Agency, that is convened by the Energy Commission and the state board.

This bill would instead require the Energy Commission, the state board, the California Environmental Protection Agency, and the Natural Resources Agency to convene the multistakeholder, multiagency workgroup and would require the workgroup to consist of members representing specified interests and groups, including the state's fuel producers and refiners.

Existing law, beginning on June 26, 2023, establishes the Independent Consumer Fuels Advisory Committee within the Energy Commission to advise the Energy Commission and the Division of Petroleum Market Oversight. Existing law specifies that the committee has access to all information submitted to the Energy Commission or to the division necessary to fulfill its duties.

This bill would instead specify that the committee has access to aggregated or otherwise anonymized information submitted to the Energy Commission or to the division necessary to fulfill its duties under conditions as the Energy Commission determines necessary to ensure that public disclosure of specific information does not result in an unfair competitive disadvantage to the person supplying the information or adversely affect market competition.

(3) Existing law creates the Demand Side Grid Support Program, and requires the Energy Commission to implement and administer the program to incentivize dispatchable customer load reduction and backup generation operation as on-call emergency supply and load reduction for the state's electrical grid during extreme events. Existing law requires entities with generation or load reduction assets that are incentivized pursuant to the Distributed Electricity Backup Assets Program to participate in the program, and requires all energy produced as a result of the program to be settled at a relevant reference energy price.

This bill would delete the requirements that those entities participate in the program and the produced energy be settled at a relevant reference energy price.

(4) Existing law requires the PUC to convene or continue, until August 26, 2025, an independent peer review panel to conduct an independent review of enhanced seismic studies and surveys of the Diablo Canyon Units 1 and 2 powerplant, as specified. Existing law also establishes the Independent Safety Committee for Diablo Canyon until, at least, the United States Nuclear Regulatory Commission operating permit for the Diablo Canyon powerplant has ceased.

This bill would require that the independent peer review panel continue until August 26, 2030. The bill would require that the Independent Safety Committee for Diablo Canyon continue until the Diablo Canyon powerplant has ceased operations and make other changes related to that committee.

(5) Existing law establishes the California Water Resources Development Bond Fund and continuously appropriates moneys in the fund to the Department of Water Resources to provide for the acquisition, construction, and completion of certain state water facilities and for additions to the State Water Resources Development System, as specified. Existing law requires the department to procure eligible renewable energy resources and zero-carbon resources to satisfy the state agency obligations imposed on the system, as specified.

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The federal Inflation Reduction Act of 2022, among other things, authorizes specified entities, including the state and any political subdivision of the state, to elect to receive direct payments, rather than credits, for their participation in, or actions related to, certain federal incentives.

This bill would establish the California Water Resources Development Bond Account within the fund, and would continuously appropriate all moneys in the account to the department to provide for the acquisition, construction, and completion of certain state water facilities and for additions to the State Water Resources Development System, as specified. By establishing a continuously appropriated account, the bill would make an appropriation. The bill would require the department, if it elects to receive a direct payment, rather than a credit, pursuant to the federal Inflation Reduction Act in connection with its procurement of eligible renewable energy resources and zero-carbon resources, as described above, to deposit those payments directly into the account, as specified. The bill would require use of the payments to comply with specified criteria.

(6) Existing law establishes the Department of Water Resources Electricity Supply Reliability Reserve Fund and continuously appropriates moneys in the fund to the department for purposes of implementing projects, purchases, and contracts to carry out specified purposes, constructing, owning, and operating, or contracting for the construction and operation of, contracting for the purchase of electricity from, or financing actions to secure resources for summer reliability or to preserve the option to extend the life of specified facilities, and reimbursing electrical corporations for the value of imported energy or import capacity products that were delivered or capable of being delivered between July 1, 2022, and on or before September 30, 2022, and were procured at above-market costs or in excess of procurement authorizations set by the PUC and above the requirements needed to serve the electrical corporation's bundled customers in support of summer electric service reliability.

The bill would authorize the department, for activities it undertakes for the purposes described above, to obtain applicable credits pursuant to the federal Inflation Reduction Act of 2022. If the department elects for direct payment of those applicable credits, the bill would require that those payments be deposited directly into the Department of Water Resources Electricity Supply Reliability Reserve Fund, as specified,

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thereby making an appropriation. The bill would require use of the payments to comply with specified criteria.

(7) This bill would make legislative findings and declarations as to the necessity of a special statute for the Diablo Canyon powerplant.

(8) Under existing law, a violation of the Public Utilities Act or any order, decision, rule, direction, demand, or requirement of the PUC is a crime.

Because certain of the above provisions would be part of the act and a violation of a PUC action implementing this bill's requirements would be a crime, the bill would impose a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

(9) This bill would declare that it is to take effect immediately as a bill providing for appropriations related to the Budget Bill.

~~This bill would express the intent of the Legislature to enact statutory changes relating to the Budget Act of 2023.~~

Vote: majority. Appropriation: ~~no~~-yes. Fiscal committee: ~~no~~ yes. State-mandated local program: ~~no~~-yes.

The people of the State of California do enact as follows:

1 SECTION 1. Section 63048.93 of the Government Code is
2 amended to read:

3 63048.93. (a) The bank is hereby authorized and empowered
4 to provide financial assistance under the Climate Catalyst
5 Revolving Loan Fund Program to any eligible sponsor or
6 participating party either directly or to a lending or financial
7 institution, in connection with the financing or refinancing of a
8 climate catalyst project, in accordance with an agreement or
9 agreements, between the bank and the sponsor or participating
10 party, including, but not limited to, tribes, either as a sole lender
11 or in participation or syndication with other lenders.

12 (b) Chapter 3.5 (commencing with Section 11340) of Part 1 of
13 Division 3 of Title 2 does not apply to any climate catalyst
14 financing plan or any criteria, priorities, and guidelines adopted
15 by the bank in connection with the Climate Catalyst Revolving

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1 Loan Fund Program or any other program of the bank. However,
2 any climate catalyst financing plan shall be posted on the bank's
3 internet website in a conspicuous location at least 30 calendar days
4 before a bank board meeting at which the climate catalyst financing
5 plan will be considered for approval.

6 (c) (1) Repayments of financing made under the Climate
7 Catalyst Revolving Loan Fund Program shall be deposited into
8 the appropriate account created within the Climate Catalyst
9 Revolving Loan Fund.

10 (2) The bank shall establish a separate account for each category
11 of climate catalyst projects identified by each paragraph of
12 subdivision (f). For purposes of paragraph (3) of subdivision (f),
13 the Clean Energy Transmission Financing Account is hereby
14 created in the Climate Catalyst Revolving Loan Fund.

15 (d) (1) (A) Beginning in the ~~2021–2022~~ 2021–22 fiscal year,
16 the bank shall meet and confer with the consulting agencies
17 concerning the specific categories of climate catalyst project
18 corresponding to each agency as provided in subdivision (f).
19 Thereafter, the bank board shall adopt, by majority vote of the
20 bank board, a climate catalyst financing plan. Before the bank
21 board meeting in which the bank board will first consider adoption
22 of the financing plan, each consulting agency shall submit a letter
23 to the bank board discussing any areas of support and any areas
24 of disagreement with the financing plan under consideration.

25 (B) *Beginning in the 2023–24 fiscal year, adoption of a climate*
26 *catalyst financing plan by the bank board shall authorize the bank*
27 *to provide financial assistance and to use all financing authorities*
28 *provided under this division in its implementation of a climate*
29 *catalyst financing plan.*

30 (2) Following bank board approval, the climate catalyst
31 financing plan shall be posted on the bank's internet website.

32 (3) If the bank board has not approved a climate catalyst
33 financing plan, then a climate catalyst financing plan shall not be
34 in effect until approved by the bank board.

35 (e) (1) A climate catalyst financing plan shall remain in effect
36 until superseded by a revised climate catalyst financing plan.
37 Commencing the first fiscal year following adoption of the initial
38 climate catalyst financing plan, and in each fiscal year thereafter,
39 the bank shall contact each consulting agency to discuss potential
40 revisions to the climate catalyst financing plan last approved by

1 the bank board. Following each consultation, the bank board shall
2 consider adopting, by majority vote, a revised climate catalyst
3 financing plan reflecting any material revisions to the prior climate
4 catalyst financing plan.

5 (2) A modified climate catalyst financing plan shall only be
6 considered for approval if no consulting agencies propose material
7 revisions to the financing plan then in effect.

8 (3) If the bank board does not adopt a proposed revised climate
9 catalyst financing plan, the existing climate catalyst financing plan
10 shall remain in effect.

11 (f) Beginning with the ~~2021–2022~~ 2021–22 fiscal year, the
12 consulting agencies and corresponding areas of climate catalyst
13 projects they will provide consultation on shall be as follows:

14 (1) The Natural Resources Agency for climate catalyst projects
15 that relate to sustainable vegetation management, forestry practices,
16 and timber harvesting products. Eligible climate catalyst project
17 categories include, but are not limited to, all of the following:

18 (A) Clean energy production, except combustion biomass
19 conversion.

20 (B) Advanced construction materials.

21 (C) Forestry equipment needed to achieve the state’s goals for
22 forest and vegetation management treatments.

23 (2) The Department of Food and Agriculture for climate catalyst
24 projects that relate to agricultural improvements that enhance the
25 climate or lessen impacts to the climate resulting from in-force
26 agricultural practices. Eligible climate catalyst project categories
27 include, but are not limited to, all of the following:

28 (A) Onfarm and food processing renewable energy, including
29 both electricity and fuels, and bioenergy, to be used or distributed
30 onsite.

31 (B) Energy, water, and materials efficiency.

32 (C) Methane reduction projects, using best practice approaches
33 consistent with state policy goals, excluding dairy digesters and
34 biogas unless used or distributed onsite.

35 (D) Energy storage or microgrids.

36 (E) Equipment replacement.

37 (3) (A) The State Energy Resources Conservation and
38 Development Commission and the Public Utilities Commission
39 for climate catalyst projects that are clean energy transmission
40 projects. If multiple projects seek funding, the consulting agencies

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1 shall prioritize, based on state policy, potential projects that meet
2 the conditions in subparagraph (B), and on financial considerations
3 as determined by the bank. Eligible climate catalyst project
4 categories in this paragraph shall comply with the conditions set
5 forth in this paragraph, and include, but are not limited to, both of
6 the following:

7 (i) Clean energy transmission project infrastructure that is
8 necessary to connect the transmission project into the applicable
9 California balancing authority area.

10 (ii) Other necessary technical elements of transmission
11 infrastructure, including but not limited to, environmental planning,
12 permitting, and preconstruction costs for a project.

13 (B) The initial climate catalyst project or projects funded under
14 this paragraph shall support the development of a new transmission
15 line or transmission lines to deliver to the system operated by the
16 Independent System Operator zero-carbon, firm electricity from
17 new resources located in the Salton Sea region.

18 (C) Eligible projects shall meet all of the following conditions:

19 (i) Have at least one interconnection point within a California
20 balancing authority area.

21 (ii) The applicant or its affiliates have previously completed a
22 transmission project in California.

23 (iii) Will primarily deliver electricity to the Independent System
24 Operator balancing authority area from clean resources located in
25 identified resource areas that do not have adequate deliverability
26 to a California balancing authority area.

27 (iv) Support new high voltage, defined as 200 kilovolts or
28 higher, transmission projects or upgrades of existing transmission
29 lines and substations to high voltage that are consistent with the
30 state's reliability and greenhouse gas policy objectives.

31 (v) Priority shall be given to transmission projects that have not
32 already been approved through the Independent System Operator's
33 transmission planning process or projects that have not been
34 recently studied in the Independent System Operator's transmission
35 planning process and found to be unneeded or uneconomical.

36 (vi) Financial considerations as determined by the bank.

37 (vii) Consistency with state policy as determined by the
38 consulting agencies.

39 (D) The bank shall not finance a project unless the entity
40 completing the transmission project has entered into a project labor

1 agreement that, at a minimum, meets the requirements of Section
2 2500 of the Public Contract Code and includes all of the following:

3 (i) Provisions requiring payment of prevailing wages, in
4 accordance with Article 1 (commencing with Section 1720) of
5 Chapter 1 of Part 7 of Division 2 of the Labor Code, to all
6 construction workers employed in the construction of the project
7 and for enforcement of that obligation through an arbitration
8 procedure.

9 (ii) Targeted hiring provisions, including a targeted hiring plan,
10 on a craft-by-craft basis to address job access for local,
11 disadvantaged, or underrepresented workers, as defined by a
12 relevant local agency.

13 (iii) Apprenticeship utilization provisions that commit all parties
14 to increasing the share of work performed by state-registered
15 apprentices above the state-mandated minimum ratio required in
16 Section 1777.5 of the Labor Code.

17 (iv) Apprenticeship utilization provisions that commit all parties
18 to hiring and retaining a certain percentage of state-registered
19 apprentices that have completed the Multi-Craft Core
20 preapprenticeship training curriculum referenced in subdivision
21 (t) of Section 14005 of the Unemployment Insurance Code.

22 (E) Consultation on a potential transmission project does not
23 constitute approval of that project by the Public Utilities
24 Commission or the State Energy Resources Conservation and
25 Development Commission under their decisionmaking authority,
26 if that authority exists.

27 (F) Consultation on, or evaluation of, a transmission project by
28 the bank does not indicate the bank's approval. The bank shall
29 consider the credit and financial aspects of the project before
30 determining whether to approve and finance the project.

31 (4) (A) The State Energy Resources Conservation and
32 Development Commission or the Public Utilities Commission for
33 climate catalyst projects to leverage federal financing funds that
34 relate to projects that avoid, reduce, use, or sequester air pollutants
35 or anthropogenic emissions of greenhouse gases as defined in
36 Section 16513 of Title 42 of the United States Code, as amended.

37 (B) Projects described in subparagraph (A) shall not be funded
38 until the United States Department of Energy is able to finance
39 projects that do not meet the criteria in Section 16513(a)(2) of

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1 Title 42 of the United States Code. This subparagraph shall become
2 inoperative on July 1, 2024.

3 (5) (A) *The Governor's Office of Business and Economic*
4 *Development, Treasurer's Office, State Energy Resources*
5 *Conservation and Development Commission, California*
6 *Environmental Protection Agency, State Air Resources Board,*
7 *Public Utilities Commission, Natural Resources Agency,*
8 *Department of Conservation, Department of Resources Recycling*
9 *and Recovery, and other relevant agencies, as determined by these*
10 *agencies, for climate catalyst projects to leverage federal funding*
11 *available under the United States Environmental Protection*
12 *Agency's Greenhouse Gas Reduction Fund (Section 7434 of Title*
13 *42 of the United States Code) and related implementing statutes*
14 *and regulations.*

15 (B) *Eligible climate catalyst project categories shall comply*
16 *with the climate and equity goals in the state's climate change*
17 *scoping plan developed pursuant to Section 38561 of the Health*
18 *and Safety Code.*

19 (g) (1) The bank may engage in outreach activities to inform
20 disadvantaged participating parties and disadvantaged sponsors
21 of the categories of financial assistance potentially available within
22 the Climate Catalyst Revolving Loan Fund Program. The outreach
23 efforts may include, but are not limited to, all of the following:

24 (A) Conferring with the consulting agencies.

25 (B) Conferring with the Governor's Office of Business and
26 Economic Development.

27 (C) Direct contact with existing bank clients and customers that
28 operate within the boundaries of a disadvantaged community.

29 (D) Consulting with governmental entities, individuals, and
30 business entities engaged in providing, or assisting the obtaining
31 of, financial assistance for disadvantaged sponsors or participating
32 parties, including, but not limited to, business and industrial
33 development corporations and minority enterprise small business
34 investment companies. The executive director, on behalf of the
35 bank, may enter into service contracts for this purpose. Section
36 10295 and Article 4 (commencing with Section 10335) of Chapter
37 2 of Part 2 of Division 2 of the Public Contract Code do not apply
38 to those service contracts.

39 (2) The criteria, priorities, and guidelines adopted for the
40 Climate Catalyst Revolving Loan Fund Program may include

1 potential options for applying interest rate or fee subsidies for
2 disadvantaged participating parties or disadvantaged sponsors
3 seeking financial assistance from the bank under the Climate
4 Catalyst Revolving Loan Fund Program. The bank may offer
5 reduced application fees to disadvantaged sponsors or participating
6 parties seeking financial assistance under the Climate Catalyst
7 Revolving Loan Fund Program.

8 (3) The bank may offer technical assistance to disadvantaged
9 sponsors or participating parties potentially seeking financial
10 assistance under the Climate Catalyst Revolving Loan Fund
11 Program. The executive director, on behalf of the bank, may enter
12 into service contracts to provide, or assist with the provision of,
13 the technical assistance. Section 10295 and Article 4 (commencing
14 with Section 10335) of Chapter 2 of Part 2 of Division 2 of the
15 Public Contract Code do not apply to those service contracts.

16 (h) All financial assistance under the Climate Catalyst Revolving
17 Loan Fund Program approved by the bank board shall be consistent
18 with the climate catalyst financing plan then in effect.

19 (i) (1) The bank shall prepare, and the bank board shall approve
20 by majority vote of the board, criteria, priorities, and guidelines
21 for the provision of financial assistance under the Climate Catalyst
22 Revolving Loan Fund Program. The bank board's approval of any
23 financial assistance for a climate catalyst project shall take into
24 consideration those criteria, priorities, and guidelines together with
25 the climate catalyst financing plan currently in effect. The criteria,
26 priorities, and guidelines shall include, as factors for determining
27 whether to approve the provision of financial assistance, the ability
28 of the sponsor or participating party potentially receiving financial
29 assistance to satisfy any obligation incurred and the return of capital
30 to the Climate Catalyst Revolving Loan Fund.

31 (2) The bank board may consider additional factors when
32 determining whether to approve financial assistance for a climate
33 catalyst project, taking into consideration the climate catalyst
34 financing plan.

35 (3) The bank shall consider applications for financial assistance
36 as they are received, on an ongoing basis, if there are available
37 moneys remaining within the Climate Catalyst Revolving Loan
38 Fund to provide that financial assistance. The bank board's
39 determination of whether to approve applications for financial

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1 assistance shall be based on the climate catalyst financing plan in
2 effect at the time the bank received the application.

3 (j) The bank shall provide financial assistance only for climate
4 catalyst projects that the bank board approved before July 1, 2025.

5 (k) The bank is hereby authorized and empowered to enter into
6 an agreement with the consulting agencies, or any other state
7 agency as approved by the bank's board, to operate a program to
8 provide financial assistance to any eligible sponsor or participating
9 party either directly or to a lending or financial institution, in
10 connection with the financing or refinancing of an eligible project,
11 in accordance with such agreement or agreements. Information
12 shared among consulting agencies and the bank, or between any
13 consulting agency and the bank, does not constitute the waiver of
14 any Public Records Act exemption applicable to each entity.

15 *SEC. 2. Section 63048.95 of the Government Code is amended*
16 *to read:*

17 63048.95. (a) (1) There is hereby created in the State Treasury
18 the Climate Catalyst Revolving Loan Fund for the purpose of
19 implementing the objectives and provisions of this article. The
20 Climate Catalyst Revolving Loan Fund shall be separate from any
21 other fund or account created under this division.

22 (2) Obligations of the bank incurred in connection with the
23 activities authorized under this article shall be payable solely from
24 moneys within the Climate Catalyst Revolving Loan Fund. No
25 other fund or account of the bank shall be available or shall be
26 used for the payment of obligations incurred in connection with
27 this article.

28 (3) Within the Climate Catalyst Revolving Loan Fund there
29 shall also be established a Climate Catalyst Revolving Loan
30 Account, a Climate Catalyst Guarantee and Credit Enhancement
31 Account, a Climate Catalyst Securities Acquisition Account, and
32 additional accounts and subaccounts that the bank may establish.

33 (b) (1) (A) Notwithstanding Section 13340, moneys, except
34 as provided in subparagraphs (B) and (C), in the Climate Catalyst
35 Revolving Loan Fund are continuously appropriated, without
36 regard to fiscal year, for the support of the bank and shall be
37 available for expenditure for the purposes as stated in this article.

38 (B) Moneys in the Climate Catalyst Revolving Loan Fund
39 received pursuant to a federal appropriation are available for
40 expenditure only upon appropriation by the Legislature.

1 (C) Moneys in the Climate Catalyst Revolving Loan Fund shall
2 be available for expenditure to support administrative costs only
3 upon appropriation by the Legislature.

4 (2) This subdivision shall not limit the authority of the bank to
5 expend funds directly related to the servicing of approved debt,
6 payments on credit enhancements or guarantees, acquisition of
7 securities of any sponsor or participating party in connection with
8 a climate catalyst project, or any other purpose in connection with
9 providing financial assistance to a sponsor or participating party
10 in connection with a climate catalyst project as set forth in this
11 article.

12 (c) Not more than 5 percent of any bond proceeds administered
13 by the bank in connection with the activities of the bank authorized
14 under this article may be expended to cover the costs of issuance,
15 as that terminology is defined under Section 147(g) of the Internal
16 Revenue Code (26 U.S.C. Sec. 147(g)).

17 (d) (1) (A) *Notwithstanding any other provision of this division,*
18 *the Climate Catalyst Revolving Loan Fund may receive moneys*
19 *from the federal government and funds sourced from federal*
20 *appropriations.*

21 (B) *Use of the moneys and funds described in subparagraph*
22 *(A) shall be consistent with all of the following:*

23 (i) *The money and funds shall be expended for a purpose that*
24 *is consistent with state law.*

25 (ii) *Acceptance of the moneys and funds does not impose on the*
26 *state any requirement to commit or expend new state funds for any*
27 *program or purpose.*

28 (iii) *The use of the moneys and funds shall be consistent with*
29 *the priorities described in subdivision (a) of Section 38590.1 of*
30 *the Health and Safety Code.*

31 (2) *Within 10 days of any nonstate moneys and funds being*
32 *deposited in the Climate Catalyst Revolving Loan Fund, the bank*
33 *shall provide written notice to the Joint Legislative Budget*
34 *Committee, who shall provide a copy of the notice to the relevant*
35 *policy committees. The notice shall include the source, purpose,*
36 *timeliness, and other relevant information as determined by the*
37 *bank.*

38 SEC. 3. *Section 25355.5 of the Public Resources Code, as*
39 *added by Section 5 of Chapter 1 of the Statutes of 2023, First*
40 *Extraordinary Session, is amended to read:*

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1 25355.5. (a) For purposes of this section, the following
2 definitions apply:

3 (1) “Gross gasoline refining margin excluding state program
4 costs” means the amount, expressed in dollars per barrel and
5 calculated by the commission on a monthly basis, equal to the
6 volume-weighted average rack price of wholesale gasoline sold
7 by a refiner in the state, less the volume-weighted fees or estimated
8 valuations of costs embedded in all of the refiner’s wholesale
9 gasoline sales associated with the low carbon fuel standard and
10 the cap and trade cap-at-the-rack program, less the refiner’s
11 volume-weighted average acquisition cost.

12 (2) “Maximum gross gasoline refining margin” means the
13 maximum amount of gross gasoline refining margin excluding
14 state program costs established under subdivision (b).

15 (3) “Volume-weighted average acquisition cost” means the
16 combined volume-weighted average of the refiner’s
17 volume-weighted average crude oil acquisition cost and the
18 refiner’s volume-weighted cost of acquiring refined gasoline
19 imported to California or received from an entity other than the
20 refiner.

21 (4) “Volume-weighted average rack price of wholesale gasoline”
22 means the combined volume-weighted average of the refiner’s
23 rack price of the branded and unbranded rack sales reported under
24 paragraph (5) of subdivision (b) of Section 25355.

25 (5) “Volume-weighted average crude oil acquisition cost” means
26 the amount reported as required by paragraph (2) of subdivision
27 (b) of Section 25355.

28 (b) The commission may, by regulation or order at a business
29 meeting, subject to the requirements of subdivision (f), set a
30 maximum gross gasoline refining margin.

31 (c) (1) If the commission sets a maximum gross gasoline
32 refining margin under subdivision (b), it shall also establish a
33 penalty for exceeding that maximum margin, by regulation or order
34 at a business meeting, subject to the requirements of subdivision
35 (f), that may be the same meeting described in subdivision (b).

36 (2) The penalty shall be a percentage of the amount by which
37 the refiner’s gross gasoline refining margin excluding state program
38 costs exceeds the maximum gross gasoline refining margin,
39 converted from dollars per barrel to dollars per gallon, multiplied
40 by the number of gallons sold by the refiner during the calendar

1 month for all transactions described in paragraph (6) of subdivision
2 (b) of Section 25355.

3 (3) Subject to subdivision (j), the penalty shall be tiered, such
4 that the penalty percentage shall increase with the amount by which
5 the refiner's gross gasoline refining margin excluding state program
6 costs exceeds the maximum gross gasoline refining margin, as
7 follows:

8 (A) Amounts earned by a refiner that exceed the maximum
9 gross gasoline refining margin by less than ten cents (\$0.10) per
10 gallon shall be subject to the base penalty percentage set by the
11 commission.

12 (B) Amounts earned by a refiner that exceed the maximum gross
13 gasoline refining margin ~~between by more than~~ ten cents (\$0.10)
14 ~~and less than or equal to~~ twenty cents ~~(\$0.20)~~ (\$0.20), inclusive,
15 per gallon shall be subject to a penalty percentage higher than the
16 base penalty percentage.

17 (C) Amounts earned by a refiner that exceed the maximum gross
18 gasoline refining margin by more than twenty cents (\$0.20) per
19 gallon shall be subject to a penalty percentage higher than the
20 penalty percentage set under subparagraph (B).

21 (d) In establishing a maximum gross gasoline refining margin
22 and penalty, the commission shall consider information reported
23 under subdivision (b) of Section 25355 and any other public data
24 and reports that it determines will assist its analysis. The
25 commission shall also consider confidential information submitted
26 pursuant to Sections 25354 and 25355. A refiner may submit
27 additional information and facts for the commission to consider
28 under an application for confidential designation pursuant to
29 Section 25364.

30 (e) The commission shall not set a maximum gross gasoline
31 refining margin or accompanying penalty under subdivisions (b)
32 and (c), respectively, unless it finds that the likely benefits to
33 consumers outweigh the potential costs to consumers. In making
34 that determination, the commission shall consider all factors that
35 in its discretion it deems relevant, including at a minimum all of
36 the following factors, although no one factor shall be determinative:

37 (1) Whether it is likely that the maximum gross gasoline refining
38 margin and penalty will lead to a greater imbalance between supply
39 and demand in the California transportation fuels market than
40 would exist without the maximum margin and penalty.

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1 (2) Whether it is likely that the maximum gross gasoline refining
2 margin and penalty will lead to higher average prices at the pump
3 on an annual basis than would exist without the maximum margin
4 and penalty.

5 (3) Whether case-by-case exemptions from the gross gasoline
6 refining maximum margin will be sufficient to ensure that
7 individual refiners have an opportunity to demonstrate the need
8 for a greater margin before they make decisions about production.

9 (f) Decisions of the commission under subdivision (b) to adopt
10 a regulation or order setting a maximum gross gasoline refining
11 margin, under subdivision (c) to adopt a regulation or order
12 establishing a penalty for exceeding the maximum gross gasoline
13 refining margin, under subdivision (e) regarding the benefits and
14 costs to consumers, and under subdivision (k) regarding
15 adjustments to, or rescission of, the maximum gross gasoline
16 refining margin or penalty, shall be made in accordance with all
17 of the following procedures:

18 (1) A notice and draft decision, regulation, or order shall be
19 posted publicly at least 30 days before the business meeting at
20 which adoption of the decision, regulation, or order will be
21 considered.

22 (2) The commission shall receive written comments on the draft
23 decision, regulation, or order.

24 (3) The commission shall hear public comment on the draft
25 decision, regulation, or order at its business meeting.

26 (g) If the commission has set a maximum gross gasoline refining
27 margin and penalty, the margin and penalty shall take effect 60
28 days following the commission's regulation or order establishing
29 the margin and penalty pursuant to subdivisions (b) and (c),
30 respectively. Within 15 days of the regulation or order establishing
31 a maximum gross gasoline refining margin and penalty, the
32 commission shall notify refiners by a means determined by the
33 commission that may include, but is not limited to, mail, email,
34 or internet website posting.

35 (h) If the commission has set a maximum gross gasoline refining
36 margin under subdivision (b), it shall be a violation of this section
37 for a refiner to exceed the maximum gross gasoline refining
38 margin.

1 (i) In addition to any other remedy that may be available, the
2 commission may petition a court to enjoin a refiner from violating
3 this section.

4 (j) The commission may impose an administrative civil penalty
5 for a violation of this section in the amounts established pursuant
6 to subdivision (c).

7 (k) The commission may, by regulation or order, at a business
8 meeting, subject to the requirements of subdivision (f), rescind or
9 adjust the maximum gross gasoline refining margin and the penalty
10 percentages and amounts specified in subdivisions (b) and (c) to
11 ensure that a sufficient, affordable, and fairly priced supply of
12 gasoline is available to Californians. A refiner may submit
13 information and facts for the commission to consider in support
14 of any rescission or adjustment under an application for
15 confidential designation pursuant to Section 25364. Rescission of,
16 or adjustments to, the maximum gross gasoline refining margin
17 and the penalty percentages and amounts specified in subdivisions
18 (b) and (c), respectively, pursuant to this subdivision shall be
19 effective on the first day of the calendar month at least 15 days
20 after the commission gives public notice of the rescission or
21 adjustment, unless the commission orders otherwise.

22 (l) Notwithstanding Section 25901 and except as provided in
23 subdivision (n), a petition for writ of mandate pursuant to Section
24 1085 of the Code of Civil Procedure shall be the exclusive remedy
25 available to challenge any regulation, order, decision, rule,
26 guideline, or adjudication of an exemption request adopted by the
27 commission under this section. The court's review shall be limited
28 exclusively to the record before the commission. Any petition shall
29 be filed within 30 days of the commission's decision.

30 (m) (1) The commission shall consider a refiner's request for
31 an exemption from the maximum gross gasoline refining margin
32 and shall grant the exemption upon a showing by the refiner, based
33 on competent and reliable evidence and subject to the commission's
34 review, examination, and investigation of the evidence, that an
35 application of the maximum gross gasoline refining margin would
36 be unconstitutional as applied to the refiner. The commission may,
37 in its discretion, grant a request for an exemption upon a showing
38 by the refiner of good cause for an exemption, subject to alternative
39 maximum margins or other conditions as the commission may set.

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(2) Any refiner seeking an exemption shall, at a minimum, file a statement with the commission, signed under penalty of perjury, setting forth the facts that form the basis for the request for exemption. A refiner may submit information and facts under an application for confidential designation pursuant to Section 25364 to support its application for an exemption.

(n) (1) Before imposing the administrative civil penalty under subdivision (j), the executive director of the commission shall issue and serve a complaint on the refiner, and the commission shall hold a hearing, adopt a decision, and require payment of the penalty in accordance with the procedures described in subdivisions (a) to (d), inclusive, of Section 25534.1.

(2) Judicial review and enforcement of an order imposing an administrative civil penalty under subdivision (j) may be had in accordance with the procedures described in subdivisions (a) and (b) of Section 25534.2.

(3) Penalties collected under this section shall be deposited into the Price Gouging Penalty Fund, which is hereby created in the State Treasury and shall be used, upon appropriation by the Legislature, to address any consequences of price gouging on Californians.

(4) The commission shall make public, on a quarterly basis, the name and address of each refiner that has exceeded the maximum gross gasoline refining margin for any month during the previous quarter, and the amount of administrative civil penalty to be assessed.

(o) The Administrative Procedure Act (Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code) does not apply to any regulation, order, decision, rule, guideline, adjudication of an exemption request, or adjustment of the maximum gross gasoline margin, adopted by the commission under this section.

(p) The California State Auditor shall begin, no earlier than January 1, 2032, and complete, no later than March 1, 2033, an audit and performance review of the maximum gross gasoline refining margin and penalty set pursuant to this section, ~~if the commission has set a maximum gross gasoline refining margin and penalty.~~ *section.* The California State Auditor shall make determinations in a report to the Legislature and the commission, by no later than June 1, 2033, as to whether this section is achieving

1 the intended goal to reduce gasoline price spikes and stabilize the
2 gasoline fuel supply market for California consumers. Within 60
3 days of the issuance of the report, the commission shall hear from
4 the California State Auditor at a business meeting of the
5 commission. If the California State Auditor concludes that the
6 maximum gross gasoline refining margin and penalty should be
7 terminated, then the commission shall cease implementing the
8 maximum gross gasoline refining margin and penalty provisions
9 no later than 180 days after the issuance of the report, unless the
10 Legislature has enacted subsequent legislation to extend the
11 maximum gross gasoline refining margin and penalty provisions
12 in the meantime.

13 *SEC. 4. Section 25371.3 of the Public Resources Code, as*
14 *added by Section 10 of Chapter 1 of the Statutes of 2023, First*
15 *Extraordinary Session, is amended to read:*

16 25371.3. On or before December 31, 2024, the commission
17 and the State Air Resources Board, taking into account findings
18 of the assessment conducted under Section 25371, shall prepare a
19 Transportation Fuels Transition Plan. The commission and the
20 State Air Resources Board shall determine the contents of the
21 report, but the report shall include, at a minimum, a discussion of
22 how to ensure that the supply of petroleum and alternative
23 transportation fuels is affordable, reliable, equitable, and adequate
24 to meet the demand for those transportation fuels described in the
25 most current scoping plan approved by the State Air Resources
26 Board under Section 38561 of the Health and Safety Code. The
27 report shall be prepared in consultation with ~~the state's fuel~~
28 ~~producers and refiners and~~ a multistakeholder, multiagency
29 ~~workgroup, including the California Environmental Protection~~
30 ~~Agency and the Natural Resources Agency, workgroup~~ convened
31 by the ~~commission~~ *commission, the California Environmental*
32 *Protection Agency, the Natural Resources Agency, and the State*
33 *Air Resources Board to identify mechanisms to plan for and*
34 *monitor progress toward the state's reliable, safe, equitable, and*
35 *affordable transition away from petroleum fuels in line with*
36 *declining instate petroleum demand. The workgroup shall consist*
37 *of members representing interests that include, but are not limited*
38 *to, environmental justice, labor, environmental protection, land*
39 *use, and public health, members representing the state's fuel*
40 *producers and refiners, and members representing relevant state,*

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1 *regional, and local agencies.* The Division of Petroleum Market
2 Oversight shall provide input to and otherwise support other
3 divisions of the commission in preparation of the plan.

4 *SEC. 5. Section 25373 of the Public Resources Code, as added*
5 *by Section 10 of Chapter 1 of the Statutes of 2023, First*
6 *Extraordinary Session, is amended to read:*

7 25373. (a) The commission and division shall be advised by
8 the Independent Consumer Fuels Advisory Committee which is
9 hereby established within the commission. The committee shall
10 consist of the following members:

11 (1) Six members appointed by the Governor as follows:

12 (A) A member who holds an academic appointment and has
13 knowledge of economics or business operations of the
14 transportation fuels market.

15 (B) A member representing the California petroleum fuels
16 industry.

17 (C) A member representing consumers.

18 (D) A member representing labor.

19 (E) A member with expertise in community, environmental, or
20 environmental justice issues.

21 (F) A member with expertise in antitrust law.

22 (2) One member appointed by the Speaker of the Assembly.

23 (3) One member appointed by the Senate Committee on Rules.

24 (b) (1) Except for the member described in subparagraph (B)
25 of paragraph (1) of, or subparagraph (D) of paragraph (1) of,
26 subdivision (a), no member of the committee shall have been
27 employed by, contracted with, or received direct compensation
28 from, a company that produces, refines, distributes, trades in,
29 markets, or sells any petroleum product in the preceding 12 months.

30 (2) Except for the member described in subparagraph (B) of
31 paragraph (1) of, or subparagraph (D) of paragraph (1) of,
32 subdivision (a), before accepting appointment, members of the
33 committee shall agree, in writing, not to be employed by, contract
34 with, or receive direct compensation from companies described
35 in paragraph (1) for the 12 months following the completion of
36 their service on the committee.

37 (c) Each member of the committee shall receive a per diem of
38 one hundred dollars (\$100) for each day actually spent in the
39 discharge of official duties, and shall be reimbursed for traveling

1 and other expenses necessarily incurred in the performance of
2 official duties.

3 (d) The duties, organization, and schedule of meetings of the
4 Independent Consumer Fuels Advisory Committee shall be
5 prescribed by the commission. The commission may delegate the
6 authority under this subdivision to the executive director of the
7 commission.

8 (e) The Independent Consumer Fuels Advisory Committee shall
9 have access to ~~all~~ *aggregated or otherwise anonymized* information
10 submitted to the commission or to the division necessary to fulfill
11 ~~its duties.~~ *duties under conditions as the commission determines*
12 *necessary to ensure that any public disclosure of the specific*
13 *information would not result in unfair competitive disadvantage*
14 *to the person supplying the information or adversely affect market*
15 *competition.* The members of the committee shall *also* agree, in
16 writing, to maintain the confidentiality of all information received.

17 (f) The executive director of the commission shall ensure that
18 any confidential information shared with the members of the
19 Independent Consumer Fuels Advisory Committee is subject to a
20 nondisclosure agreement and is maintained in a way that protects
21 it from inadvertent disclosure.

22 *SEC. 6. Section 25792 of the Public Resources Code is*
23 *amended to read:*

24 25792. (a) The Demand Side Grid Support Program is hereby
25 created. The commission shall implement and administer the
26 program to incentivize dispatchable customer load reduction and
27 backup generation operation as on-call emergency supply and load
28 reduction for the state's electrical grid during extreme events.

29 (b) The commission shall allocate moneys to develop a new
30 statewide program that provides incentives to reduce customer net
31 load during extreme events with upfront capacity commitments
32 and for per-unit reductions in net load. Eligible recipients may
33 include all energy customers in the state, except those enrolled in
34 demand response or emergency load reduction programs offered
35 by entities under the jurisdiction of the Public Utilities
36 Commission. The commission, in consultation with the Public
37 Utilities Commission, may adopt additional participation
38 requirements or limitations. Payments shall be made to any of the
39 following:

40 (1) Participating individual entities.

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1 (2) Participating aggregators of multiple energy customers.

2 (3) Participating local publicly owned electric utilities and
3 load-serving entities.

4 ~~(e) Entities with generation or load reduction assets that are~~
5 ~~incentivized pursuant to Article 2 (commencing with Section~~
6 ~~25791) shall participate in the program under this article.~~

7 ~~(d)~~

8 (c) Participants shall provide load reduction or backup
9 generation service, or both, in response to a dispatch by an
10 applicable California balancing authority of a California balancing
11 authority area in which participants are located during extreme
12 events.

13 ~~(e)~~

14 (d) The commission, in consultation with California balancing
15 authorities and the state board, shall adopt guidelines to determine
16 when to implement the program, including which resources are
17 dispatched first to minimize local pollution and emissions of
18 greenhouse gases. The dispatch order of resources in the program
19 shall follow a loading order that prioritizes, to the maximum extent
20 feasible to ensure electricity reliability, cost-effective demand
21 response and efficiency resources, then feasible, cost-effective
22 renewable and zero-emission resources, and then feasible,
23 cost-effective conventional resources. The guidelines shall also
24 consider the anticipated useful life of the resources in relation to
25 the state's climate and air quality requirements.

26 ~~(f)~~

27 (e) The state board, in consultation with the commission, shall
28 develop a plan, including determining the funding amounts
29 allocated after the dispatch of resources participating in the
30 program, to mitigate impacts from these resources.

31 ~~(g) All energy produced as a result of the program shall be~~
32 ~~settled at a relevant reference energy price derived either through~~
33 ~~the Independent System Operator market tariff or similar~~
34 ~~mechanism established and documented for an applicable~~
35 ~~California balancing authority area.~~

36 *SEC. 7. Section 454.53 of the Public Utilities Code is amended*
37 *to read:*

38 454.53. (a) It is the policy of the state that eligible renewable
39 energy resources and zero-carbon resources supply 90 percent of
40 all retail sales of electricity to California end-use customers by

1 December 31, 2035, 95 percent of all retail sales of electricity to
2 California end-use customers by December 31, 2040, 100 percent
3 of all retail sales of electricity to California end-use customers by
4 December 31, 2045, and 100 percent of electricity procured to
5 serve all state agencies by December 31, 2035. The achievement
6 of this policy for California shall not increase carbon emissions
7 elsewhere in the western grid and shall not allow resource
8 shuffling. The commission and Energy Commission, in
9 consultation with the State Air Resources Board, shall take steps
10 to ensure that a transition to a zero-carbon electric system for the
11 State of California does not cause or contribute to greenhouse gas
12 emissions increases elsewhere in the western grid, and is
13 undertaken in a manner consistent with clause 3 of Section 8 of
14 Article I of the United States Constitution. The commission, the
15 Energy Commission, the State Air Resources Board, and all other
16 state agencies shall incorporate this policy into all relevant
17 planning.

18 (b) The commission, Energy Commission, State Air Resources
19 Board, and all other state agencies shall ensure that actions taken
20 in furtherance of subdivision (a) do all of the following:

21 (1) Maintain and protect the safety, reliable operation, and
22 balancing of the electric system.

23 (2) Prevent unreasonable impacts to electricity, gas, and water
24 customer rates and bills resulting from implementation of this
25 section, taking into full consideration the economic and
26 environmental costs and benefits of renewable energy and
27 zero-carbon resources.

28 (3) To the extent feasible and authorized under law, lead to the
29 adoption of policies and taking of actions in other sectors to obtain
30 greenhouse gas emission reductions that ensure equity between
31 other sectors and the electricity sector.

32 (4) Not affect in any manner the rules and requirements for the
33 oversight of, and enforcement against, retail sellers and local
34 publicly owned utilities pursuant to the California Renewables
35 Portfolio Standard Program (Article 16 (commencing with Section
36 399.11) of Chapter 2.3) and Sections 454.51, 454.52, 9621, and
37 9622.

38 (5) *Not consider the energy, capacity, or any attribute from the*
39 *Diablo Canyon Unit 1 or Unit 2 powerplant after August 26, 2025,*
40 *in achieving the policy described in subdivision (a).*

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1 (c) ~~Nothing in this~~ This section ~~shall~~ *does not* affect a retail
2 seller's obligation to comply with the federal Public Utility
3 Regulatory Policies Act of 1978 (16 U.S.C. Sec. 2601 et seq.).

4 (d) The commission, Energy Commission, and State Air
5 Resources Board shall do all of the following:

6 (1) Use programs authorized under existing statutes to achieve
7 the policy described in subdivision (a).

8 (2) In consultation with all California balancing authorities, as
9 defined in subdivision (d) of Section 399.12, as part of a public
10 process, issue a joint report to the Legislature by January 1, 2021,
11 and at least every four years thereafter. The joint report shall
12 include all of the following:

13 (A) A review of the policy described in subdivision (a) focused
14 on technologies, forecasts, then-existing transmission, and
15 maintaining safety, environmental and public safety protection,
16 affordability, and system and local reliability.

17 (B) An evaluation identifying the potential benefits and impacts
18 on system and local reliability associated with achieving the policy
19 described in subdivision (a).

20 (C) An evaluation identifying the nature of any anticipated
21 financial costs and benefits to electric, gas, and water utilities,
22 including customer rate impacts and benefits.

23 (D) The barriers to, and benefits of, achieving the policy
24 described in subdivision (a).

25 (E) Alternative scenarios in which the policy described in
26 subdivision (a) can be achieved and the estimated costs and benefits
27 of each scenario.

28 (3) On or before December 1, 2023, and annually thereafter, in
29 consultation with California balancing authorities, as defined in
30 subdivision (d) of Section 399.12, and as part of, or an interim
31 addendum to, the quadrennial joint report required by paragraph
32 (2), as applicable, issue a joint reliability progress report that
33 reviews system and local reliability within the context of the policy
34 described in subdivision (a), with a particular focus on summer
35 reliability. The joint reliability progress report shall identify
36 challenges and gaps, if any, to achieving system and local reliability
37 and identify the amount and cause of any delays to achieving
38 compliance with all energy and capacity procurement requirements
39 set by the commission.

1 ~~(e) Nothing in this~~ *This section authorizes does not authorize*
2 the commission to establish any requirements on a nonmobile
3 self-cogeneration or cogeneration facility that served onsite load,
4 or that served load pursuant to an over-the-fence arrangement if
5 that arrangement existed on or before December 20, 1995.

6 (f) This section does not limit any entity, including local
7 governments, from accelerating their achievement of the state's
8 electric sector decarbonization targets.

9 *SEC. 8. Section 712 of the Public Utilities Code is amended*
10 *to read:*

11 712. (a) The commission shall convene, ~~or continue, and~~
12 *continue* until August 26, ~~2025, 2030~~, an independent peer review
13 panel to conduct an independent review of enhanced seismic
14 studies and surveys of the Diablo Canyon Units 1 and 2 powerplant,
15 including the surrounding areas of the facility and areas of nuclear
16 waste storage.

17 (b) The independent peer review panel shall contract with the
18 Energy Commission, the California Geological Survey of the
19 Department of Conservation, the California Coastal Commission,
20 the Alfred E. Alquist Seismic Safety Commission, the Office of
21 Emergency Services, and the County of San Luis Obispo to
22 participate on the panel and provide expertise.

23 (c) The independent peer review panel shall review the seismic
24 studies and hold public meetings.

25 (d) The commission shall make reports by the independent peer
26 review panel publicly available on the ~~Internet Web site~~ *internet*
27 *website* maintained by the commission.

28 *SEC. 9. Section 712.1 of the Public Utilities Code is amended*
29 *to read:*

30 712.1. (a) The Legislature finds and declares that in
31 commission Decision 88-12-083 (December 19, 1988) Re Pacific
32 Gas and Electric Company (30 CPUC.2d 189), the commission
33 created the Independent Safety Committee for Diablo Canyon to
34 make recommendations appropriate to enhance the safety of the
35 operation of the Diablo Canyon powerplant.

36 (b) ~~The Independent Safety Committee for Diablo Canyon is~~
37 ~~hereby established in the commission and has and shall continue~~
38 ~~to have the right of the Independent Safety Committee for Diablo~~
39 ~~Canyon established pursuant to commission Decision 88-12-083~~
40 *rights established pursuant to commission Decision 88-12-083,*

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1 *as amended by Decisions 07-01-028 and 21-09-003*, to conduct
2 annual examinations of the Diablo Canyon powerplant and make
3 additional site visits. The committee shall cease operations no
4 sooner than when the ~~United States Nuclear Regulatory~~
5 ~~Commission operating permit for the~~ Diablo Canyon powerplant
6 has ceased *operations* and ~~when~~ all spent nuclear fuel has been
7 moved to dry storage at the Diablo Canyon Independent Spent
8 Fuel Storage Installation.

9 (c) The Independent Safety Committee for Diablo Canyon shall
10 be composed of three experts, one each shall be appointed by the
11 Governor, the Attorney General, and the Chair of the Energy
12 Commission, from a list of candidates nominated by the President
13 of the commission that shall include not more than three qualified
14 candidates as alternatives to the reappointment of the appointing
15 authority's designated committee member whose term is expiring,
16 and which shall also include the incumbent committee member if
17 the member consents to being an additional candidate. The
18 incumbent as of August 1, 2022, may continue to serve their current
19 term until it expires.

20 (d) The commission shall ensure the funding of the Independent
21 Safety Committee for Diablo Canyon to attract qualified experts
22 during the period of extended ~~operations of the~~ Diablo Canyon
23 ~~powerplant~~, *powerplant operations*, as defined by Section 712.8.

24 (e) In addition to the duties and responsibilities set forth in
25 commission decisions, the Independent Safety Committee for
26 Diablo Canyon shall do both of the following:

27 (1) Consult with and incorporate into its assessments and
28 recommendations the independent peer review panel established
29 pursuant to Section 712.

30 (2) Transmit annually its findings and recommendations for
31 improved ~~safety~~ *safety, and any response required pursuant to*
32 *subdivision (f)*, to the Legislature, the Governor, the commission,
33 the Energy Commission, the United States Nuclear Regulatory
34 Commission, and the company licensed to operate the Diablo
35 Canyon Units 1 and ~~2~~ *2 powerplant*. The report transmitted to the
36 Legislature shall be in accordance with Section 9795 of the
37 Government Code.

38 (f) The company licensed to operate the Diablo Canyon Units
39 1 and 2 *powerplant* shall annually respond to the annual report

1 provided for in paragraph (2) of subdivision (e) and distribute its
2 response to the governmental entities specified in that paragraph.

3 *SEC. 10. Section 712.8 of the Public Utilities Code is amended*
4 *to read:*

5 712.8. (a) For purposes of this section, the following
6 definitions apply:

7 (1) “Current expiration dates” has the same meaning as defined
8 in Section 25548.1 of the Public Resources Code.

9 (2) “Diablo Canyon powerplant operations” has the same
10 meaning as defined in Section 25548.1 of the Public Resources
11 Code.

12 (3) “Load-serving entity” has the same meaning as defined in
13 Section 380.

14 (4) “Operator” has the same meaning as defined in Section
15 25548.1 of the Public Resources Code.

16 (b) (1) Ordering paragraphs (1) and (14) of commission
17 Decision 18-01-022 (January 11, 2018) Decision Approving
18 Retirement of Diablo Canyon Nuclear Power Plant, are hereby
19 invalidated.

20 (2) The commission shall reopen commission Application
21 16-08-006 and take other actions as are necessary to implement
22 this section.

23 (c) (1) (A) Notwithstanding any other law, within 120 days of
24 ~~the effective date of this section, the September 2, 2022, the~~
25 commission shall direct and authorize the operator of the Diablo
26 Canyon Units 1 and 2 to take all actions that would be necessary
27 to operate the powerplant beyond the current expiration dates, so
28 as to preserve the option of extended operations, until the following
29 retirement dates, conditional upon continued authorization to
30 operate by the United States Nuclear Regulatory Commission:

31 (i) For Unit 1, October 31, 2029.

32 (ii) For Unit 2, October 31, 2030.

33 (B) If the loan provided for by Chapter 6.3 (commencing with
34 Section 25548) of Division 15 of the Public Resources Code is
35 terminated under that chapter, the commission shall modify its
36 order under this paragraph and direct an earlier retirement date.

37 (C) Actions taken by the operator pursuant to the commission’s
38 actions under this paragraph, including in preparation for extended
39 operations, shall not be funded by ratepayers of any load-serving
40 entities, but may be funded by the loan provided for by Chapter

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1 6.3 (commencing with Section 25548) of Division 15 of the Public
2 Resources Code or other nonratepayer funds available to the
3 operator. The commission shall not allow the recovery from
4 ratepayers of costs incurred by the operator to prepare for, seek,
5 or receive any extended license to operate by the United States
6 Nuclear Regulatory Commission.

7 (2) (A) No later than December 31, 2023, and notwithstanding
8 the 180-day time limitation in subdivision ~~(b)~~ (a) of Section
9 25548.2 of the Public Resources Code, the commission shall direct
10 and authorize extended operations at the Diablo Canyon powerplant
11 until the new retirement dates specified in subparagraph (A) of
12 paragraph ~~(1)~~ of subdivision ~~(e)~~ (1).

13 (B) The commission shall review the reports and
14 recommendations of the Independent Safety Committee for Diablo
15 Canyon described in Section 712.1. If the Independent Safety
16 Committee for Diablo Canyon's reports or recommendations cause
17 the commission to determine, in its discretion, that the costs of
18 any upgrades necessary to address seismic safety or issues of
19 deferred maintenance that may have arisen due to the expectation
20 of the plant closing sooner are too high to justify incurring, or if
21 the United States Nuclear Regulatory Commission's conditions
22 of license renewal require expenditures that are too high to justify
23 incurring, the commission may issue an order that reestablishes
24 the current expiration dates as the retirement date, or that
25 establishes new retirement dates that are earlier than provided in
26 subparagraph (A) of paragraph (1), to the extent allowable under
27 federal law, and shall provide sufficient time for orderly shutdown
28 and authorize recovery of any outstanding uncollected costs and
29 fees.

30 (C) If the loan provided for by Chapter 6.3 (commencing with
31 Section 25548) of Division 15 of the Public Resources Code is
32 terminated under that chapter, the commission may issue an order
33 that reestablishes the current expiration dates as the retirement
34 date, or that establishes new retirement dates that are earlier than
35 provided in subparagraph (A) of paragraph (1), and shall provide
36 sufficient time for orderly shutdown and authorize recovery of any
37 outstanding uncollected costs and fees.

38 (D) If the commission determines that new renewable energy
39 and zero-carbon resources that are adequate to substitute for the
40 Diablo Canyon powerplant and that meet the state's planning

1 standards for energy reliability have already been constructed and
2 interconnected by the time of its decision, the commission may
3 issue an order that reestablishes the current expiration dates as the
4 retirement date, or that establishes new retirement dates that are
5 earlier than provided in subparagraph (A) of paragraph (1), and
6 shall provide sufficient time for orderly shutdown and authorize
7 recovery of any outstanding uncollected costs and fees.

8 (E) Any retirement date established under this paragraph shall
9 be conditioned upon continued authorization to operate by the
10 United States Nuclear Regulatory Commission. If the United States
11 Nuclear Regulatory Commission does not extend the current
12 expiration dates or renews the licenses for Diablo Canyon Units
13 1 or 2 for a period shorter than the extended operations authorized
14 by the commission, the commission shall modify any orders issued
15 under this paragraph to direct a retirement date that is the same as
16 the United States Nuclear Regulatory Commission license
17 expiration date.

18 (3) The commission shall do all things necessary and appropriate
19 to implement this section, including, but not limited to, allocating
20 financial responsibility for the extended operations of the Diablo
21 Canyon powerplant to customers of all load-serving entities and
22 ensuring completion of funding of the community impacts
23 mitigation settlement described in Section 712.7. The commission
24 shall not require any funds already disbursed or committed under
25 the community impacts mitigation settlement described in Section
26 712.7 to be returned because of extended operations of the Diablo
27 Canyon powerplant.

28 (4) Except as authorized by this section, customers of
29 load-serving entities shall have no other financial responsibility
30 for the costs of the extended operations of the Diablo Canyon
31 powerplant. In no event shall load-serving entities other than the
32 operator and their customers have any liability for the operations
33 of the Diablo Canyon powerplant.

34 (5) Consistent with Section 25548.4 of the Public Resources
35 Code, the commission shall collaborate with the Department of
36 Water Resources to oversee the operator's actions that are funded
37 by the loan provided for by Chapter 6.3 (commencing with Section
38 25548) of Division 15 of the Public Resources Code.

39 (d) The commission shall not increase cost recovery from
40 ratepayers for operations and maintenance expenses incurred by

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1 the operator during the period from August 1, 2022, to November
2 2, ~~2025~~, 2024, for Diablo Canyon Unit 1 and from August 1, 2022,
3 to August 26, 2025, for Diablo Canyon Unit 2, above the amounts
4 approved in the most recent general rate case for the operator
5 pursuant to commission proceeding A.21-06-021 (June 30, 2021)
6 Application of Pacific Gas and Electric Company for Authority,
7 Among Other Things, to Increase Rates and Charges for Electric
8 and Gas Service Effective on January 1, 2023.

9 (e) The commission shall order the operator to track all costs
10 associated with continued and extended operations of Diablo
11 Canyon Units 1 and 2. The commission shall authorize the operator
12 to establish accounts as necessary to track all costs incurred under
13 paragraph (1) of subdivision (c), all costs incurred under the loan
14 provided for by Chapter 6.3 (commencing with Section 25548) of
15 Division 15 of the Public Resources Code, all costs to be borne
16 only by the operator's ratepayers, all costs to be borne by ratepayers
17 of all load-serving entities, consistent with this section, and any
18 other costs as determined by the commission. Among these
19 accounts shall be a Diablo Canyon Extended Operations liquidated
20 damages balancing account, described in subdivisions (g) and (i).

21 (f) (1) Notwithstanding any approval of extended operations,
22 the commission shall continue to authorize the operator to recover
23 in rates all of the reasonable costs incurred to prepare for the
24 retirement of Diablo Canyon Units 1 and 2, including any
25 reasonable additional costs associated with decommissioning
26 planning resulting from the license renewal applications or license
27 renewals. The reasonable costs incurred to prepare for the
28 retirement of Diablo Canyon Power Plant Units 1 and 2 shall be
29 recovered on a fully nonbypassable basis from customers of all
30 load-serving entities subject to the commission's jurisdiction in
31 the operator's service territory, as determined by the commission,
32 except that the reasonable additional costs associated with
33 decommissioning planning resulting from the license renewal
34 applications or license renewals shall be recovered on a fully
35 nonbypassable basis from customers of all load-serving entities
36 subject to the commission's jurisdiction in the state.

37 (2) The commission shall continue to fund the employee
38 retention program approved in Decision 18-11-024 (December 2,
39 2018) Decision Implementing Senate Bill 1090 and Modifying
40 Decision 18-01-022, as modified to incorporate 2024, 2025, and

1 additional years of extended operations, on an ongoing basis until
2 the end of operations of both units with program costs tracked
3 under subdivision (e) and fully recovered in rates. Any additional
4 funding for the employee retention program beyond what was
5 already approved in commission Decision 18-11-024 shall be
6 submitted by the operator in an application for review by the
7 commission.

8 (3) The commission shall determine the amount or allocation
9 that the customers of all load-serving entities subject to the
10 commission's jurisdiction shall contribute towards the reasonable
11 additional costs of decommissioning planning resulting from the
12 license renewal applications or license renewals and shall authorize
13 the operator to recover in rates those costs through a nonbypassable
14 charge applicable to the customers of all load-serving entities
15 subject to the commission's jurisdiction in the state as set forth in
16 paragraph (1) of subdivision (I).

17 (4) The commission shall authorize the operator to recover in
18 rates all of the reasonable costs incurred to prepare for, respond
19 to, provide information to, or otherwise participate in or engage
20 the independent peer review panel under Section 712.

21 (5) In lieu of a rate-based return on investment and in
22 acknowledgment of the greater risk of outages in an older plant
23 that the operator could be held liable for, the commission shall
24 authorize the operator to recover in rates a volumetric payment
25 equal to six dollars and fifty cents (\$6.50), in 2022 dollars, for
26 each megawatthour generated by the Diablo Canyon powerplant
27 during the period of extended operations beyond the current
28 expiration dates, to be borne by customers of all load-serving
29 entities, and an additional volumetric payment equal to six dollars
30 and fifty cents (\$6.50), in 2022 dollars, to be borne by customers
31 in the service territory of the operator. The amount of the operating
32 risk payment shall be adjusted annually by the commission using
33 commission-approved escalation methodologies and adjustment
34 factors.

35 (6) (A) In lieu of a rate-based return on investment and in
36 acknowledgment of the greater risk of outages in an older plant
37 that the operator could be held liable for, the commission shall
38 authorize the operator to recover in rates a fixed payment of fifty
39 million dollars (\$50,000,000), in 2022 dollars, for each unit for
40 each year of extended operations, subject to adjustment in

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1 subparagraphs (B) to (D), inclusive. The amount of the fixed
2 payment shall be adjusted annually by the commission using
3 commission-approved escalation methodologies and adjustment
4 factors.

5 (B) In the first year of extended operations for each unit, the
6 operator shall continue to receive the full fixed payment during
7 periods in which a unit is out of service due to an unplanned outage
8 for nine months or less, and shall receive 50 percent of the payment
9 for months in excess of nine months that a unit is down.

10 (C) In the second year of extended operations, the operator shall
11 continue to receive the fixed payment during periods in which a
12 unit is out of service due to an unplanned outage for eight months
13 or less, and shall receive 50 percent of the payment for months in
14 excess of eight months that a unit is down.

15 (D) In each subsequent year of extended operations, the period
16 in which the full fixed payment is received during periods when
17 a unit ~~out~~ is *out* of service due to an unplanned outage shall decline
18 by one additional month.

19 (g) The commission shall authorize and fund as part of the
20 charge under paragraph (1) of subdivision (I), the Diablo Canyon
21 Extended Operations liquidated damages balancing account in the
22 amount of twelve million five hundred thousand dollars
23 (\$12,500,000) each month for each unit until the liquidated
24 damages balancing account has a balance of three hundred million
25 dollars (\$300,000,000).

26 (h) (1) The commission shall authorize the operator to recover
27 all reasonable costs and expenses necessary to operate Diablo
28 Canyon Units 1 and 2 beyond the current expiration dates,
29 including those in subdivisions (f) and (g), net of market revenues
30 for those operations and any production tax credits of the operator,
31 on a forecast basis in a new proceeding structured similarly to its
32 annual Energy Resource Recovery Account forecast proceeding
33 with a subsequent true-up to actual costs and market revenues for
34 the prior calendar year via an expedited Tier 3 advice letter process,
35 provided that there shall be no further review of the reasonableness
36 of costs incurred if actual costs are below 115 percent of the
37 forecasted costs. All costs shall be recovered as an operating
38 expense and shall not be eligible for inclusion in the operator's
39 rate base.

(2) As the result of any significant one-time capital expenditures during the extended operation period, the commission may authorize, and the operator may propose, cost recovery of these expenditures as operating expenses amortized over more than one year for the purpose of reducing rate volatility, at an amortization interest rate determined by the commission. The commission shall allow cost recovery if the costs and expenses are just and reasonable. Those costs and expenses are just and reasonable if the operator's conduct is consistent with the actions that a reasonable utility would have undertaken in good faith under similar circumstances, at the relevant point in time and with information that the operator should have known at the relevant point in time.

(3) If, as a result of the annual true-up for extended operations in paragraph (1), the commission determines that market revenues for the prior year exceeded the annual costs and expenses, including those in subdivisions (f) and (g), the commission shall direct that any available surplus revenues in an account created under subdivision (e) be credited solely to customers in the operator's service territory. For customers outside the operator's service territory, market revenues may be credited up to, but not to exceed, their respective annual costs and expenses. If excess funds remain in an account created under subdivision (e) as a result of market revenues exceeding costs and expenses in the final year of the extended operating period, after truing up the final operating year's market revenues against costs and expenses, the remaining funds shall be the sole source of loan repayment per the requirements provided under Chapter 6.3 (commencing with Section 25548) of Division 15 of the Public Resources Code, except that any federal funds received as described in paragraph ~~(2)~~ (1) of subdivision ~~(b)~~ (c) of Section 25548.3 of the Public Resources Code shall also be used to repay the loan. Ratepayer funds shall not otherwise be used in any manner to repay the loan provided for under Chapter 6.3 (commencing with Section 25548) of Division 15 of the Public Resources Code.

(i) (1) During any unplanned outage periods, the commission shall authorize the operator to recover reasonable replacement power costs, if incurred, associated with Diablo Canyon powerplant operations. If the commission finds that replacement power costs incurred when a unit is out of service due to an unplanned outage

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1 are the result of a failure of the operator to meet the reasonable
2 manager standard, then the commission shall authorize payment
3 of the replacement power costs from the Diablo Canyon Extended
4 Operations liquidated damages balancing account described in
5 subdivision (g).

6 (2) After commencing payments from the Diablo Canyon
7 Extended Operations liquidated damages balancing account under
8 the conditions described in paragraph (1), the commission shall
9 authorize the replenishment of the Diablo Canyon Extended
10 Operations liquidated damages balancing account in the amount
11 of twelve million five hundred thousand dollars (\$12,500,000) for
12 each unit for each month up to a maximum account balance of
13 three hundred million dollars (\$300,000,000).

14 (j) If the commission finds that the operator is requesting
15 recovery of costs that were previously authorized by the
16 commission or other state or federal agency or paid to the operator
17 for cost recovery, the commission may fine the operator an amount
18 up to three times the amount of the penalty provided in Section
19 2107 for each violation.

20 (k) If at any point during the license renewal process or extended
21 operations period the operator believes that, as a result of an
22 unplanned outage, an emergent operating risk, or a new compliance
23 requirement, the cost of performing upgrades needed to continue
24 operations of one or both units exceed the benefits to ratepayers
25 of the continued operation of doing so, the operator shall promptly
26 notify the commission. The commission shall promptly review
27 and determine whether expending funds to continue operations is
28 reasonable, will remain beneficial to ratepayers, and is in the public
29 interest or direct the operator to cease operations. The operator
30 shall take all actions necessary to safely operate or maintain the
31 Diablo Canyon powerplant pending the commission determination.

32 (l) (1) Any costs the commission authorizes the operator to
33 recover in rates under this section shall be recovered on a fully
34 nonbypassable basis from customers of all load-serving entities
35 subject to the commissions's jurisdiction, as determined by the
36 commission, except as otherwise provided in this section. The
37 recovery of these nonbypassable costs by the load-serving entities
38 shall be based on each customer's gross consumption of electricity
39 regardless of a customer's net metering status or purchase of
40 electric energy and service from an electric service provider,

1 community choice aggregator, or other third-party source of electric
2 energy or electricity service.

3 (2) The commission shall establish mechanisms, including
4 authorizing balancing and memorandum accounts and, as needed,
5 agreements with, or orders with respect to, electrical corporations,
6 community choice aggregators, and electric service providers, to
7 ensure that the revenues received to pay a charge or cost payable
8 pursuant to this section are recovered in rates from those entities
9 and promptly remitted to the entity entitled to those revenues.

10 (m) This section does not alter the recovery of costs, including
11 those previously approved by the commission, to operate Diablo
12 Canyon Units 1 and 2 until the current expiration dates.

13 (n) The commission shall halt disbursements from the Diablo
14 Canyon Nuclear Decommissioning Non-Qualified Trust, excluding
15 refunds to ratepayers.

16 (o) The commission, in consultation with the relevant federal
17 and state agencies and appropriate California Native American
18 tribes, shall, in a new or existing proceeding, determine the
19 disposition of the Diablo Canyon powerplant real property and its
20 surrounding real properties owned by the applicable public utility
21 or any legally related, affiliated, or associated companies, in a
22 manner that best serves the interests of the local community,
23 ratepayers, California Native American tribes, and the state. It is
24 the intent of the Legislature that the existing efforts to transfer
25 lands owned by the operator and Eureka Energy shall not be
26 impeded by the extension of the Diablo Canyon powerplant.

27 (p) Except as otherwise provided in this section, this section
28 does not alter or limit any proceeding of the commission relating
29 to the decommissioning of the Diablo Canyon powerplant.

30 (q) The Legislature finds and declares that the purpose of the
31 extension of the Diablo Canyon powerplant operations is to protect
32 the state against significant uncertainty in future demand resulting
33 from the state's ~~greenhouse-gas-reduction~~ *greenhouse gas*
34 *reduction* efforts involving electrification of transportation and
35 building energy end uses and regional climate-related weather
36 phenomenon, and to address the risk that currently ordered
37 procurement will be insufficient to meet this supply or that there
38 may be delays in bringing the ordered resources online on schedule.
39 Consequently, the continued operation of Diablo Canyon Units 1
40 and 2 beyond their current expiration dates shall not be factored

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1 into the analyses used by the commission or by load-serving entities
2 not subject to the commission's jurisdiction when determining
3 future generation and transmission needs to ensure electrical grid
4 reliability and to meet the state's ~~greenhouse-gas-emissions~~
5 *greenhouse gas emissions* reduction goals. To the extent the
6 commission decides to allocate any benefits or attributes from
7 extended operations of the Diablo Canyon powerplant, the
8 commission may consider the higher cost to customers in the
9 operator's service area.

10 ~~(r) Notwithstanding Section 10231.5 of the Government Code,~~
11 ~~in coordination with the Energy Commission, the Independent~~
12 ~~System Operator, and the Department of Water Resources, the~~
13 ~~commission shall submit, in accordance with Section 9795 of the~~
14 ~~Government Code, a report to the Legislature each year on the~~
15 ~~status of new resource additions and revisions to the state's electric~~
16 ~~demand forecast, and the impact of these updates on the need for~~
17 ~~keeping the Diablo Canyon powerplant online.~~

18 ~~(s)~~

19 (r) Any sale, mortgage, transfer of operational control, or any
20 other encumbrance of disposition of the Diablo Canyon powerplant
21 shall continue to be subject to Article 6 (commencing with Section
22 851).

23 ~~(t)~~

24 (s) (1) The operator shall submit to the commission for its
25 review, on an annual basis the amount of compensation earned
26 under paragraph (5) of subdivision (f), how it was spent, and a
27 plan for prioritizing the uses of such compensation the next year.
28 Such compensation shall not be paid out to shareholders. Such
29 compensation, to the extent it is not needed for Diablo Canyon,
30 shall be spent to accelerate, or increase spending on, the following
31 critical public purpose priorities:

32 (A) Accelerating customer and generator interconnections.

33 (B) Accelerating actions needed to bring renewable and
34 zero-carbon energy online and modernize the electrical grid.

35 (C) Accelerating building decarbonization.

36 (D) Workforce and customer safety.

37 (E) Communications and education.

38 (F) Increasing resiliency and reducing operational and system
39 risk.

(2) The operator shall not earn a rate of return for any of the expenditures described in paragraph (1) so that no profit shall be realized by the operator's shareholders. Neither the operator nor any of its affiliates or holding company may increase existing public earning per share guidance as a result of compensation provided under this section. The commission shall ensure no double recovery in rates.

~~(u)~~

(t) The commission shall verify at the conclusion of extended operations that the operator's sole compensation during the period of extended operations is limited to and in accordance with paragraphs (5) and (6) of subdivision (f) and shall be in lieu of a rate-based return on investment in the Diablo Canyon powerplant. Any excess funds remaining in an account created under subdivision (e) as a result of market revenues exceeding costs and expenses across the extended operating period, after truing up the final operating year's market revenues against costs and expenses, following loan repayment under paragraph (3) of subdivision (h), shall not be paid out to shareholders. Instead, such excess funds shall be returned in full to customers in a manner to be determined by the commission, except that any funds remaining in the Diablo Canyon Extended Operations liquidated damages balancing account specified in subdivisions (g) and (i), shall be returned to customers in the operator's service territory in a manner to be determined by the commission.

~~(v)~~

(u) The efforts to transfer lands owned by the operator and Eureka Energy, including North Ranch, Parcel P, South Ranch, and Wild Cherry Canyon, shall not be impeded by the extension of the operation of the Diablo Canyon powerplant.

~~(w)~~

(v) In the event of a final determination by the United States Department of Energy that the Diablo Canyon powerplant is not eligible for the Civil Nuclear Credit Program established by Section 18753 of Title 42 of the United States Code, subdivisions (d) to (m), inclusive, (p), (q), ~~(t)~~, (s), and ~~(u)~~ (t) shall cease to be operative, and the commission shall instead undertake ordinary ratemaking with respect to the Diablo Canyon powerplant.

SEC. 11. Section 913.20 is added to the Public Utilities Code, to read:

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1 913.20. *Notwithstanding Section 10231.5 of the Government*
2 *Code, in coordination with the Energy Commission, the*
3 *Independent System Operator, and the Department of Water*
4 *Resources, the commission shall submit a report to the Legislature*
5 *each year on the status of new resource additions and revisions*
6 *to the state's electric demand forecast, and the impact of these*
7 *updates on the need for keeping the Diablo Canyon powerplant*
8 *online.*

9 SEC. 12. *Section 12935.5 is added to the Water Code, to read:*
10 *12935.5. (a) There is hereby established, within the California*
11 *Water Resources Development Bond Fund, the California Water*
12 *Resources Development Bond Account.*

13 *(b) Notwithstanding Section 13340 of the Government Code,*
14 *all moneys in the account are continuously appropriated, without*
15 *regard to fiscal year, to the department and shall be available for*
16 *the purposes provided in Section 12935.*

17 *(c) Pursuant to Section 80400, payments of certain credits*
18 *received by the department are required to be deposited into the*
19 *account. The use of the payments shall be consistent with all of*
20 *the following:*

21 *(1) The payments shall be expended for a purpose that is*
22 *consistent with state law.*

23 *(2) Acceptance of the payments does not impose on the state*
24 *any requirement to commit or expend new state funds for any*
25 *program or purpose.*

26 *(3) The need exists to expend the payments during the 2023–24*
27 *fiscal year.*

28 *(4) The use of the payments shall be consistent with the priorities*
29 *described in subdivision (a) of Section 38590.1 of the Health and*
30 *Safety Code.*

31 SEC. 13. *Section 80400 of the Water Code is amended to read:*

32 *80400. (a) (1) The department shall procure eligible renewable*
33 *energy resources and zero-carbon resources to satisfy the state*
34 *agency obligations imposed on the State Water Resources*
35 *Development System, commonly known as the State Water Project,*
36 *pursuant to subdivision (a) of Section 454.53 of the Public Utilities*
37 *Code.*

38 *(2) If the department determines that the full achievement of*
39 *the state agency obligations imposed on the State Water Resources*
40 *Development System would require the early termination of an*

1 existing contract to procure fossil generation entered before January
2 1, 2010, and that early termination would result in significant
3 uneconomic costs, the department may defer procuring zero-carbon
4 electricity resource quantities equal to the amount of electricity
5 provided under the existing contract until no later than December
6 31, 2040.

7 (3) In the event that extraordinary circumstances, catastrophic
8 events, considerable supply chain disruptions and equipment
9 shortages, or threats of significant economic harm render full
10 achievement of the obligations imposed on the State Water
11 Resources Development System pursuant to subdivision (a) of
12 Section 454.53 of the Public Utilities Code infeasible, the Governor
13 may adjust the applicable deadline for the department's compliance
14 to the earliest feasible date, but that date shall be no later than
15 December 31, 2040.

16 (b) The department may satisfy all or a portion of the obligation
17 on the State Water Resources Development System pursuant to
18 subdivision (a) of Section 454.53 of the Public Utilities Code by
19 installing zero-carbon resources or eligible renewable energy
20 resources behind the meter on ~~the~~ State Water Resources
21 Development System property or properties to service its load.

22 (c) All resources procured pursuant to subdivision (a) after
23 February 1, 2022, shall satisfy both of the following criteria:

24 (1) The eligible renewable energy resources and zero-carbon
25 resources shall either be newly developed as a result of contracting
26 by the department or constitute incremental production from
27 existing resources and reach initial commercial operations on or
28 after January 1, 2023. This requirement may be satisfied if the
29 resource is newly developed by a local publicly owned electric
30 utility with the expectation that the output would be sold to the
31 department in support of the State Water Resources Development
32 System.

33 (2) The eligible renewable energy resources and zero-carbon
34 resources shall be located within California or have a first point
35 of interconnection to a California balancing authority.

36 (d) In conducting procurement pursuant to subdivision (a), the
37 department shall consider all of the following:

38 (1) Procurement commitments that may yield maximum
39 long-term employment, stimulate new economic activity, generate

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1 local and state tax revenues, and assist with the development of
2 new industries.

3 (2) Attributes, including resource adequacy, flexibility, and
4 integration value, the ability to provide firm clean electricity, and
5 local air quality benefits.

6 (3) The results of integrated resource planning modeling
7 conducted by the Public Utilities Commission pursuant to Section
8 454.52 of the Public Utilities Code.

9 (e) The department shall consider doing all of the following to
10 reduce the costs of any procurement made pursuant to this section:

11 (1) Coordinate with the California Infrastructure and Economic
12 Development Bank to make low-cost financing assistance available
13 to new projects included in any procurement commitments.

14 (2) Coordinate with other state agencies to identify incentives
15 from existing programs for new projects included in any
16 procurement commitments.

17 (3) (A) If reasonably expected to provide incremental benefits,
18 secure an ownership stake or royalties for any project or economic
19 activity resulting from a contractual commitment.

20 (B) (i) *Incremental benefits of ownership may include the*
21 *election by the department of payment of applicable credits*
22 *pursuant to the federal Inflation Reduction Act of 2022 (Public*
23 *Law 117-169). If the department elects for direct payment of those*
24 *applicable credits, those payments shall be deposited directly into*
25 *the California Water Resources Development Bond Account*
26 *created pursuant to Section 12935.5.*

27 (ii) *Within 10 days of any payments being deposited in the*
28 *California Water Resources Development Bond Account, described*
29 *in clause (i), the department shall provide written notice to the*
30 *Joint Legislative Budget Committee, who shall provide a copy of*
31 *the notice to the relevant policy committees. The notice shall*
32 *include the source, purpose, timeliness, and other relevant*
33 *information as determined by the department.*

34 (f) All resources procured pursuant to this section shall be used
35 first to meet the department's own electricity needs. A renewable
36 energy credit, as defined in Section 399.12 of the Public Utilities
37 Code, associated with the electricity used to satisfy the obligations
38 of the department and the State Water Resources Development
39 System under this section shall be retired and shall not be
40 transferred or resold.

(g) The department shall enter into an agreement to procure energy from a new energy generation facility only if the seller requires its contractors to use a multicraft project labor agreement, as defined in paragraph (1) of subdivision (b) of Section 2500 of the Public Contract Code, for construction of the facility. Those project labor agreements shall conform to the industry standard agreements recently used for other similar private projects, including side letters for high-voltage transmission and related work.

SEC. 14. Section 80700.5 is added to the Water Code, to read:
80700.5. This division shall be known, and may be cited, as the Electricity Supply Strategic Reliability Reserve Program.

SEC. 15. Section 80710 of the Water Code is amended to read:
80710. (a) The department, in consultation with the commission, shall implement projects, purchases, and contracts to carry out the purposes of Chapter 8.9 (commencing with Section 25790) of Division 15 of the Public Resources Code, including, but not limited to, the Distributed Electricity Backup Assets Program and the Demand Side Grid Support Program.

(b) (1) In furtherance of subdivision (a) and notwithstanding any other law, the department may construct, own and operate, or contract for the construction and operation of, contract for the purchase of electricity from, or finance through loans, reimbursement agreements, or other contracts actions to secure resources for summer reliability or to preserve the option to extend the life of only the following facilities:

(A) Extension of the operating life of existing nonnuclear generating facilities planned for retirement.

(B) New emergency and temporary power generators of five megawatts or more. If a generator is operated using diesel fuel, the department shall not operate it after July 31, 2023.

(C) New energy storage systems that are located outside of the coastal zone and the jurisdiction of the San Francisco Bay Conservation and Development Commission, of 20 megawatts or more, that are capable of discharging for at least two hours, and ~~with an operational date no later than December 31, 2024.~~ hours.

(D) Generation facilities that are located outside of the coastal zone and the jurisdiction of the San Francisco Bay Conservation and Development Commission and use clean, zero-emission fuel technology of any size to produce electricity.

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1 (E) Supporting the development of zero-emission generation
2 capacity with a point of interconnection at a California balancing
3 authority, with the majority of its capacity contracted for by a
4 load-serving entity that has a service area primarily in California,
5 with an operational date no later than December 31, 2024. For
6 purposes of this subparagraph, only a facility with a net qualifying
7 capacity of at least 50 percent of its nameplate capacity, as
8 estimated at 8:00 p.m. on a date in September, shall be eligible.

9 (2) In furtherance of subdivision (a) of Section 80700, the
10 department may reimburse electrical corporations, as defined in
11 Section 218 of the Public Utilities Code, for the value of imported
12 energy or import capacity products that was (A) delivered or
13 capable of being delivered between July 1, 2022, and on or before
14 September 30, 2022, and (B) was procured at above-market costs
15 or in excess of procurement authorizations set by the Public
16 Utilities Commission and above the requirements needed to serve
17 its bundled customers in support of summer electric service
18 reliability.

19 (c) ~~Facilities~~ *Facilities, except those new energy storage systems*
20 *described in subparagraph (C) of paragraph (1) of subdivision*
21 *(b) that charge from the electrical grid but do not otherwise use*
22 *any form of fossil fuel or fuel derived from fossil fuels*, constructed
23 by the department or under a contract with the department pursuant
24 to this division that use any form of fossil fuel shall only operate
25 as necessary to respond to extreme events, as defined in subdivision
26 (b) of Section 25790.5 of the Public Resources Code, and shall
27 not operate at any other time.

28 (d) Facilities constructed by the department or under a contract
29 with the department pursuant to this division shall not constitute
30 State Water Resources Development System facilities under
31 Chapter 8 (commencing with Section 12930) of Part 6 of Division
32 6.

33 (e) (1) The department shall consult with the commission, the
34 Public Utilities Commission, the Independent System Operator or
35 other applicable California balancing authorities, and the State Air
36 Resources Board in carrying out the purposes of this division.

37 (2) Beginning October 1, 2022, and at least every three months
38 thereafter, the department shall provide an update on the
39 investments made and being considered into the strategic reliability
40 reserve at a commission business meeting. The President of the

1 Public Utilities Commission or the president's designee and the
2 President of the Independent System Operator or the president's
3 designee shall attend the presentation.

4 (3) The department shall prioritize investments that do not
5 compete with generating facilities already planned for development
6 and disclosed by load-serving entities or local publicly owned
7 electric utilities.

8 (4) In fulfilling the requirements of this division to achieve
9 electricity reliability, the department shall prioritize investments
10 in feasible, cost-effective zero-emission resources, and then
11 feasible, cost-effective conventional resources.

12 (f) The department shall develop, execute, and implement
13 contracts covering power generation, operation and maintenance,
14 fuel management, site leases, power settlements, invoice
15 verification, billing, and other associated items. The department
16 shall also enter into contracts for external services to provide
17 specialized expertise.

18 (g) (1) Contracts entered into pursuant to this division,
19 amendments to those contracts during their terms, or contracts for
20 services reasonably related to those contracts, and entered on or
21 before December 31, 2023, shall not be subject to competitive
22 bidding or any other state contracting requirements, shall not
23 require the review, consent, or approval of the Department of
24 General Services or any other state department or agency, and are
25 not subject to the requirements of the State Contracting Manual,
26 the Public Contract Code, or the personal services contracting
27 requirements of Article 4 (commencing with Section 19130) of
28 Chapter 5 of Part 2 of Division 5 of Title 2 of the Government
29 Code.

30 (2) This subdivision shall not apply to any contract, grant, or
31 loan entered into for purposes of this chapter that does not directly
32 contribute to electrical grid reliability by October 31, 2027.

33 (3) This subdivision is inoperative December 1, 2026.

34 (h) For contracts entered into pursuant to this division,
35 amendments to those contracts during their terms, or contracts for
36 services reasonably related to those contracts, and executed after
37 December 31, 2023, Sections 10295, 10297, and 10340 of the
38 Public Contract Code do not apply to a contract that meets the
39 conditions established by the department for those contracts.

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(i) For contracts entered into pursuant to this division by the department after October 31, 2022, the department shall notify the commission *through an investment plan* of the terms, costs, and scope at a commission business meeting and the commission shall consider the investment plan for approval in a meeting held consistent with the terms of Chapter 3 (commencing with Section 25200) of Division 15 of the Public Resources Code. No less than 10 days after the commission approves the ~~contract, grant, investment, or loan~~, *investment plan*, the executive director of the commission shall give written notice to the Joint Legislative Budget Committee of the action.

(j) A contract entered into, or an approval granted by, the department pursuant to this division is not subject to the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) and regulations adopted pursuant to that act.

(k) The department may adopt guidelines to implement this division. The Administrative Procedure Act (Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code) does not apply to any regulation or guidelines adopted by the department pursuant to this division.

SEC. 16. Section 80720 of the Water Code is amended to read:

80720. (a) There is hereby established in the State Treasury the Department of Water Resources Electricity Supply Reliability Reserve Fund.

(b) Notwithstanding Section 13340 of the Government Code, all moneys in the fund are continuously appropriated to the department, without regard to fiscal years, and shall be available for the purposes of Chapter 2 (commencing with Section 80710).

(c) Obligations authorized and expenses incurred by the department in administering this division shall be payable solely from the fund.

(d) All revenues payable to the department for activities undertaken by the department under Chapter 2 (commencing with Section 80710) shall be deposited into the fund.

(e) The fund shall be separate and distinct from any other fund and moneys administered by the department and any interest earned on the moneys in the fund shall be used solely for purposes of this division.

(f) When fixed assets procured under the authority of this division are sold or otherwise disposed of, the revenue from the sale or disposition, including any gain or loss, measured by the difference between book value and selling price, shall be deposited into the fund and available to the department for purposes of Chapter 2 (commencing with Section 80710). Any remaining revenue from the sale or other disposition of fixed assets procured under the authority of this division shall be returned to the General Fund once all obligations of the department are satisfied after the wind down of this division and the closure of the fund. While any obligation of the department incurred under this division remains outstanding and not fully performed or discharged, the rights, powers, duties, and existence of the department shall not be diminished or impaired in any manner that will adversely affect the interests and rights of the holders of or parties to those obligations.

(g) (1) *For activities undertaken by the department pursuant to Chapter 2 (commencing with Section 80710), the department may obtain applicable credits pursuant to the federal Inflation Reduction Act of 2022 (Public Law 117-169). If the department elects for direct payment of those applicable credits, those payments shall be deposited directly into the fund.*

(2) *Within 10 days of any payments being deposited into the fund, described in paragraph (1), the department shall provide written notice to the Joint Legislative Budget Committee, who shall provide a copy of the notice to the relevant policy committees. The notice shall include the source, purpose, timeliness, and other relevant information as determined by the department.*

(3) *Use of the payments shall be consistent with all of the following:*

(A) *The payments shall be expended for a purpose that is consistent with state law.*

(B) *Acceptance of the payments does not impose on the state any requirement to commit or expend new state funds for any program or purpose.*

(C) *The need exists to expend the payments during the 2023–24 fiscal year.*

(D) *The use of the payments shall be consistent with the priorities described in subdivision (a) of Section 38590.1 of the Health and Safety Code.*

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1 *SEC. 17. The Legislature finds and declares that a special*
2 *statute is necessary and that a general statute cannot be made*
3 *applicable within the meaning of Section 16 of Article IV of the*
4 *California Constitution because of the unique circumstances*
5 *impacting the Diablo Canyon powerplant, as described in Chapter*
6 *6.3 (commencing with Section 25548) of Division 15 of the Public*
7 *Resources Code.*

8 *SEC. 18. No reimbursement is required by this act pursuant*
9 *to Section 6 of Article XIII B of the California Constitution because*
10 *the only costs that may be incurred by a local agency or school*
11 *district will be incurred because this act creates a new crime or*
12 *infraction, eliminates a crime or infraction, or changes the penalty*
13 *for a crime or infraction, within the meaning of Section 17556 of*
14 *the Government Code, or changes the definition of a crime within*
15 *the meaning of Section 6 of Article XIII B of the California*
16 *Constitution.*

17 *SEC. 19. This act is a bill providing for appropriations related*
18 *to the Budget Bill within the meaning of subdivision (e) of Section*
19 *12 of Article IV of the California Constitution, has been identified*
20 *as related to the budget in the Budget Bill, and shall take effect*
21 *immediately.*

22 ~~SECTION 1. It is the intent of the Legislature to enact statutory~~
23 ~~changes relating to the Budget Act of 2023.~~

O

AMENDED IN ASSEMBLY JUNE 26, 2023

SENATE BILL

No. 146

**Introduced by ~~Committee on Budget and Fiscal Review~~ Senator
Gonzalez and Assembly Member Friedman**

January 18, 2023

An act relating to the ~~Budget Act of 2023~~; to amend Section 13979.2 of, and to add and repeal Section 13979.4 of, the Government Code, to add and repeal Article 6.7 (commencing with Section 10215) of Chapter 1 of Part 2 of Division 2 of the Public Contract Code, and to add and repeal Article 6.5 (commencing with Section 217) of Chapter 1 of Division 1 of the Streets and Highways Code, relating to public resources, and declaring the urgency thereof, to take effect immediately.

LEGISLATIVE COUNSEL'S DIGEST

SB 146, as amended, ~~Committee on Budget and Fiscal Review~~ Gonzalez. ~~Budget Act of 2023~~. Public resources: infrastructure: contracting.

(1) Existing law authorizes the Secretary of Transportation to assume the responsibilities of the United States Secretary of Transportation under the federal National Environmental Policy Act of 1969 (NEPA) and other federal environmental laws for any railroad, public transportation, or multimodal project undertaken by state agencies, as specified. Existing law provides that the State of California consents to the jurisdiction of the federal courts with regard to the compliance, discharge, or enforcement of these responsibilities. Existing law repeals these provisions on January 1, 2025.

This bill would extend the above authorization to December 31, 2033. The bill would additionally authorize the Secretary of Transportation, consistent with, and subject to the requirements of, any memorandum

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of understanding between the state and federal government and upon the request of a local or regional agency with the authority to implement transportation projects, to assume responsibilities under the NEPA and other federal environmental laws for any railroad, local public transportation, or multimodal project implemented by the requesting local or regional agency. The bill would impose terms and conditions similar to those with respect to the above-described authority to assume those responsibilities for projects undertaken by state agencies, including providing consent for the jurisdiction of the federal courts, as provided. The bill would require the secretary to report to the transportation policy committees of the Legislature regarding the assumption of responsibilities under the NEPA requested by a local or regional agency by December 31, 2033. The bill would repeal these provisions on December 31, 2033.

(2) Existing law authorizes the Director of General Services to use the progressive design-build procurement process for the construction of up to 3 capital outlay projects, as jointly determined by the Department of General Services and the Department of Finance, and prescribes that process. Existing law defines “progressive design-build” as a project delivery process in which both the design and construction of a project are procured from a single entity that is selected through a qualifications-based selection at the earliest feasible stage of the project. Existing law, pursuant to the process, after selection of a design-build entity, authorizes the Department of General Services to contract for design and preconstruction services sufficient to establish a guaranteed maximum price, as defined. Existing law authorizes the department, upon agreement on a guaranteed maximum price, to amend the contract in its sole discretion, as specified. Existing law requires specified information to be verified under penalty of perjury.

This bill would authorize the Department of Water Resources and the Department of Transportation (departments) to use the progressive design-build procurement process for the construction of up to 8 public works projects per department for a project that is estimated to exceed \$25,000,000 in total price, and would prescribe that process. The bill would require each design-build entity, as defined, to submit specified information in a statement of qualifications that is to be verified under penalty of perjury. By expanding the crime of perjury, the bill would impose a state-mandated local program.

This bill would prescribe the process for the departments to determine which design-build entity offers the best value to the public for the

design-build project, as defined. The bill would require the selected design-build entity to provide payment and performance bonds and errors and omissions insurance coverage, as specified. The bill would, pursuant to the process, authorize the departments to contract for design and preconstruction services sufficient to establish a guaranteed maximum price, as defined. Upon agreement on a guaranteed maximum price, the bill would authorize the departments to amend a contract, as specified. The bill would also authorize the departments to solicit additional proposals if the departments and the design-build entity are unable to reach an agreement on a guaranteed maximum price. The bill would require the departments to submit, on or before January 1, 2034, to the Legislature a report containing specified information regarding the public works projects, commenced before January 1, 2033, that used the progressive design-build procurement process.

This bill would specify that the above provisions do not apply to procurement by the Department of Water Resources for the design or construction of through-Delta conveyance facilities of the Sacramento-San Joaquin Delta or seawater desalination projects.

(3) Existing law requires the Department of Transportation to improve and maintain state highways.

The State Contract Act generally provides for a contracting process by state agencies for public works of improvement pursuant to a competitive bidding process, under which bids are awarded to the lowest responsible bidder, with specified alternative procurement procedures authorized in certain cases. Other existing law authorizes certain state and local agencies to engage in job order contracting, as prescribed.

This bill, until December 31, 2033, would authorize the Department of Transportation to use job order contracting for certain transportation and public works projects, including, among others, those related to highway maintenance, installation of stormwater pollution control devices, and for facilities, systems, and traffic control devices needed to comply with the federal Americans with Disabilities Act of 1990, as provided. The bill would require the department to establish a procedure to prequalify job order contractors and to prepare a set of documents for each job order contract, as provided. The bill would require the department to prepare a request for bids for job order contracts that invites job order contractors to submit sealed bids in the manner prescribed by the department. The bill would also authorize the department, notwithstanding those other procedures, to award job order contracts for contracts within a specified cost range after obtaining

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written bid submittals from 2 or more certified small businesses or from 2 or more disabled veteran business enterprises, as provided.

This bill would authorize job order contracts to be executed for an initial contract term of no more than 12 months, with the option of extending or renewing the job order contract for 2 additional 12-month periods, as provided. The bill would require job order contractors to possess or obtain sufficient bonding and risk and liability insurance, as provided. The bill would require the department to publish, on or before July 1 of each year, until July 1, 2033, on its internet website regarding the status of all active job order contracts and those job order contracts that expired in the previous year, and to monitor job order contracts for compliance with federal and state labor laws.

This bill would repeal the above-described provisions relating to job order contracting on December 31, 2033.

(4) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

(5) This bill would declare that it is to take effect immediately as an urgency statute.

~~This bill would express the intent of the Legislature to enact statutory changes relating to the Budget Act of 2023.~~

Vote: ~~majority~~^{2/3}. Appropriation: no. Fiscal committee: ~~no~~-yes. State-mandated local program: ~~no~~-yes.

The people of the State of California do enact as follows:

1 SECTION 1. Section 13979.2 of the Government Code is
2 amended to read:
3 13979.2. (a) The secretary, on behalf of the agency, and any
4 department, office, or other unit within the agency with the
5 authority to implement transportation projects, may assume
6 responsibilities under the federal National Environmental Policy
7 Act of 1969 (42 U.S.C. Sec. 4321 et seq.) and other federal
8 environmental laws, pursuant to Section 327 of Title 23 of the
9 United States Code, for any railroad, public transportation, or
10 multimodal project.

(b) Before assuming the responsibilities set forth in subdivision (a) through execution of a memorandum of understanding between the State of California and the federal government, the secretary shall submit a copy of the draft memorandum of understanding to the Joint Legislative Budget Committee. Execution of the memorandum of understanding shall occur no sooner than 30 days after the secretary provides the draft memorandum of understanding to the Joint Legislative Budget Committee, or whatever lesser time after that notification that the chair of the joint committee, or the chair's designee, may determine.

(c) The State of California consents to the jurisdiction of the federal courts with regard to the compliance, discharge, or enforcement of any responsibilities assumed pursuant to subdivision (a).

(d) In any action brought pursuant to the federal laws described in subdivision (a) for a project for which responsibilities have been assumed pursuant to subdivision (a), no immunity from suit may be asserted pursuant to the Eleventh Amendment to the United States Constitution, and any immunity is hereby waived.

(e) No responsibility assumed pursuant to subdivision (a) may be delegated to any political subdivision of the state, such as a county, or its instrumentalities.

(f) This section does not affect the obligation of the secretary and all departments, offices, and other units within the agency to comply with state and federal law.

(g) Nothing in this section is intended to repeal or modify Section 820.1 of the Streets and Highways Code.

(h) This section shall not be construed as changing the requirements of the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code).

~~(h)~~
(i) This section shall remain in effect only until ~~January 1, 2025, December 31, 2033~~, and as of that date is repealed.

SEC. 2. Section 13979.4 is added to the Government Code, to read:

13979.4. (a) (1) Consistent with, and subject to the requirements of, any memorandum of understanding between the state and federal government, the secretary, upon the request of a local or regional agency with the authority to implement

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1 *transportation projects, may assume responsibilities under the*
2 *federal National Environmental Policy Act of 1969 (42 U.S.C. Sec.*
3 *4321 et seq.) and other federal environmental laws, pursuant to*
4 *Section 327 of Title 23 of the United States Code, for any railroad,*
5 *local public transportation, or multimodal project implemented*
6 *by the requesting local or regional agency.*

7 *(2) For purposes of this section, “local or regional agency”*
8 *includes, but is not limited to, a city, county, city and county,*
9 *special district, or joint powers authority.*

10 *(b) The secretary shall report to the transportation policy*
11 *committees of the Legislature regarding which local or regional*
12 *agencies requested that the secretary assume the authority under*
13 *the federal National Environmental Policy Act of 1969 (42 U.S.C.*
14 *Sec. 4321 et seq.) by December 31, 2033.*

15 *(3) A report to be submitted pursuant to paragraph (1) shall be*
16 *submitted in compliance with Section 9795 of the Government*
17 *Code.*

18 *(c) Before assuming the responsibilities set forth in subdivision*
19 *(a) through execution of a memorandum of understanding between*
20 *the State of California and the federal government, the secretary*
21 *shall submit a copy of the draft memorandum of understanding to*
22 *the Joint Legislative Budget Committee. Execution of the*
23 *memorandum of understanding shall occur no sooner than 30 days*
24 *after the secretary provides the draft memorandum of*
25 *understanding to the Joint Legislative Budget Committee, or*
26 *whatever lesser time after that notification that the chair of the*
27 *joint committee, or the chair’s designee, may determine.*

28 *(d) The State of California consents to the jurisdiction of the*
29 *federal courts with regard to the compliance, discharge, or*
30 *enforcement of any responsibilities assumed pursuant to*
31 *subdivision (a).*

32 *(e) In any action brought pursuant to the federal laws described*
33 *in subdivision (a) for a project for which responsibilities have*
34 *been assumed pursuant to subdivision (a), no immunity from suit*
35 *may be asserted pursuant to the Eleventh Amendment to the United*
36 *States Constitution, and any immunity is hereby waived.*

37 *(f) No responsibility assumed pursuant to subdivision (a) may*
38 *be delegated to any political subdivision of the state, such as a*
39 *county, or its instrumentalities.*

1 (g) *This section does not affect the obligation of the secretary*
2 *and all departments, offices, and other units within the agency to*
3 *comply with state and federal law.*

4 (h) *Nothing in this section is intended to repeal or modify*
5 *Section 820.1 of the Streets and Highways Code.*

6 (i) *This section shall not be construed as changing the*
7 *requirements of the California Environmental Quality Act (Division*
8 *13 (commencing with Section 21000) of the Public Resources*
9 *Code).*

10 (j) *This section shall remain in effect only until December 31,*
11 *2033, and as of that date is repealed.*

12 SEC. 3. *Article 6.7 (commencing with Section 10215) is added*
13 *to Chapter 1 of Part 2 of Division 2 of the Public Contract Code,*
14 *to read:*

15
16 *Article 6.7. Progressive Design-Build Projects*
17

18 *10215. For purposes of this article, the following definitions*
19 *apply:*

20 (a) *“Best value” means a value determined by evaluation of*
21 *objective criteria that may include, but are not limited to, cost*
22 *factors, price, features, functions, life-cycle costs, experience, and*
23 *past performance. A best value determination may involve the*
24 *selection of the lowest cost proposal meeting the interests of the*
25 *department and meeting the objectives of the project, or a tradeoff*
26 *between cost and other specified factors.*

27 (b) *“Construction subcontract” means each subcontract*
28 *awarded by the design-build entity to a subcontractor that will*
29 *perform work or labor or render service to the design-build entity*
30 *in or about the construction of the work or improvement, or a*
31 *subcontractor licensed by the State of California that, under*
32 *subcontract to the design-build entity, specially fabricates and*
33 *installs a portion of the work or improvement according to detailed*
34 *drawings contained in the plans and specifications produced by*
35 *the design-build team.*

36 (c) *“Department” means any department of the State of*
37 *California authorized pursuant to Section 10215.1 to utilize*
38 *progressive design-build contracting.*

39 (d) *“Design-build entity” means a corporation, limited liability*
40 *company, partnership, joint venture, or other legal entity that is*

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1 able to provide appropriately licensed contracting, architectural,
2 and engineering services as needed pursuant to a progressive
3 design-build contract.

4 (e) “Design-build project” means a capital project using the
5 progressive design-build construction procurement process
6 described in this article.

7 (f) “Design-build team” means the design-build entity itself and
8 the individuals and other entities identified by the design-build
9 entity as members of its team. Members shall include the general
10 contractor and, if utilized in the design of the project, all civil,
11 geotechnical, electrical, mechanical, and plumbing contractors.

12 (g) “Director” means the director of any department of the
13 State of California authorized pursuant to Section 10215.1 to
14 utilize progressive design-build contracting, or their designee.

15 (h) “Guaranteed maximum price” means the maximum payment
16 amount agreed upon by the department and the design-build entity
17 for the design-build entity to finish all remaining design,
18 preconstruction, and construction activities sufficient to complete
19 and close out the project.

20 (i) “Progressive design-build” means a project delivery process
21 in which the design, preconstruction services, and construction of
22 a project are procured, in one or more stages, from a single
23 design-build entity that is selected through a qualifications-based
24 selection at the earliest feasible stage of the project. However, the
25 progressive design-build model offers flexibility to retain a different
26 entity for the construction phase of the project, should the parties
27 be unable to agree, after a specified portion of the design phase
28 is complete, on a guaranteed maximum price for the construction
29 phase.

30 (j) “Qualifications-based selection” means the process by which
31 the department solicits for services from the design-build entities
32 and that best value is the basis of the award.

33 10215.1. (a) (1) Notwithstanding any other law, both of the
34 following departments may procure progressive design-build
35 contracts for public works projects for which the estimated price,
36 as determined pursuant to subdivision (a) of Section 10215.2,
37 exceeds twenty five million dollars (\$25,000,000):

38 (A) The Department of Water Resources as established in
39 Section 120 of the Water Code.

1 (B) *The Department of Transportation as established under*
2 *Part 5 (commencing with Section 14000) of Division 3 of Title 2*
3 *of the Government Code.*

4 (2) *This subdivision does not authorize a design-build-operate*
5 *contract for any project. A contract pursuant to this article may*
6 *provide for operations during a training or transitional period,*
7 *but shall not include long-term operations for any design-build*
8 *project.*

9 (3) *The progressive design-build authorization in this*
10 *subdivision shall not include the authority to perform construction*
11 *inspection services for projects on or interfacing with the state*
12 *highway system, which shall be performed by the Department of*
13 *Transportation consistent with Section 91.2 of the Streets and*
14 *Highways Code.*

15 (4) *The progressive design-build authorization in this*
16 *subdivision shall not include the authority to perform construction*
17 *inspection services for projects on the State Water Project or any*
18 *other state-owned or -operated water resources facility, which*
19 *shall be performed by the Department of Water Resources*
20 *consistent with Section 148 of the Water Code.*

21 (5) *A department described in paragraph (1) shall be limited*
22 *to utilizing progressive-design build contracts for no more than*
23 *eight design-build projects.*

24 (b) *The director of each department identified in subdivision*
25 *(a) shall develop guidelines for a standard departmental*
26 *conflict-of-interest policy, consistent with applicable law, regarding*
27 *the ability of a person or entity that performs services for the*
28 *department relating to the solicitation of a progressive design-build*
29 *project, to submit a statement of qualifications, a proposal, or both*
30 *as a design-build entity, or to join a design-build team.*

31 (c) *This article does not apply to procurement by the Department*
32 *of Water Resources for the design or construction of through-Delta*
33 *conveyance facilities of the Sacramento-San Joaquin Delta or*
34 *seawater desalination projects.*

35 10215.2. *The procurement process for progressive design-build*
36 *projects shall progress as follows:*

37 (a) *The department shall determine the scope and estimated*
38 *price of the design-build project. The determination may include,*
39 *but need not be limited to, the size, type, and desired design*

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1 *character of the project and any other information deemed*
2 *necessary to describe adequately the department's needs.*

3 *(b) The department shall prepare and issue a request for*
4 *qualifications. The request for qualifications shall include, but is*
5 *not limited to, all of the following elements:*

6 *(1) Identification of the basic scope and needs of the*
7 *design-build project or contract, the expected cost range, the*
8 *methodology that will be used by the department to evaluate*
9 *qualifications, the procedure for final selection of the design-build*
10 *entity, and any other information deemed necessary by the director*
11 *to inform interested parties of the contracting opportunity.*

12 *(2) Significant factors that the department reasonably expects*
13 *to consider in evaluating qualifications, including technical design*
14 *and construction expertise, and all other nonprice-related factors.*
15 *The department may require that a cost estimate, including the*
16 *detailed basis for the estimate, be included in the design-build*
17 *entities' responses and consider those costs in evaluating the*
18 *statements of qualifications.*

19 *(3) The relative importance or the weight assigned to each of*
20 *the factors identified in the request for qualifications.*

21 *(4) A request for a statement of qualifications with a template*
22 *for the statement that is prepared by the department. The*
23 *department shall require all of the following information in the*
24 *statement and indicate, in the template, that all of the following*
25 *information is required:*

26 *(A) If the design-build entity is a privately held corporation,*
27 *limited liability company, partnership, or joint venture, a listing*
28 *of all of the design-build entity's shareholders, partners, or*
29 *members who, at the time the statement of qualification is*
30 *submitted, the design-build entity knows will perform work on the*
31 *design-build project if the design-build entity is selected by the*
32 *department.*

33 *(B) Evidence that the members of the design-build team have*
34 *completed, or have demonstrated the experience, competency,*
35 *capability, and capacity to complete, projects of similar size, scope,*
36 *or complexity, and that proposed key personnel have sufficient*
37 *experience and training to competently manage and complete the*
38 *design and construction of the design-build project, and a financial*
39 *statement that ensures that the design-build entity has the capacity*
40 *to complete the design-build project.*

1 (C) The licenses, registration, and credentials required to design
2 and construct the design-build project, including, but not limited
3 to, information on the revocation or suspension of any license,
4 credential, or registration.

5 (D) Evidence that establishes that the design-build entity has
6 the capacity to obtain all required payment and performance
7 bonding, liability insurance, and errors and omissions insurance.

8 (E) Information concerning workers' compensation experience
9 history and a worker safety program.

10 (F) If the proposed design-build entity is a corporation, limited
11 liability company, partnership, joint venture, or other legal entity,
12 a copy of the organizational documents or agreement committing
13 to form the organization.

14 (G) An acceptable safety record. A design-build entity's safety
15 record shall be deemed acceptable if its experience modification
16 rate for the most recent three-year period is an average of 1.00
17 or less, and its average total recordable injury or illness rate and
18 average lost work rate for the most recent three-year period does
19 not exceed the applicable statistical standards for its business
20 category or if the design-build entity is a party to an alternative
21 dispute resolution system as provided for in Section 3201.5 of the
22 Labor Code.

23 (H) A full disclosure regarding each of the following, if
24 applicable:

25 (i) Any serious or willful violation of Part 1 (commencing with
26 Section 6300) of Division 5 of the Labor Code or the federal
27 Occupational Safety and Health Act of 1970 (Public Law 91-596),
28 settled or otherwise resolved against any member of the
29 design-build team.

30 (ii) Any debarment, disqualification, or removal of any member
31 of the design-build team or its owners, officers, or managing
32 employees from a federal, state, or local government public works
33 project.

34 (iii) Any instance in which a member of the design-build team,
35 or its owners, officers, or managing employees, submitted a bid
36 on a public works project and were found to be nonresponsive or
37 were found by an awarding body not to be a responsible bidder.

38 (iv) Any instance in which any member of the design-build team,
39 or its owners, officers, or managing employees, defaulted on a
40 construction contract.

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1 (v) Any violations of the Contractors State License Law, as
2 described in Chapter 9 (commencing with Section 7000) of Division
3 3 of the Business and Professions Code, by a member of the
4 design-build team or its owners, officers, or managing employees,
5 including alleged violations of Federal or state law regarding the
6 payment of wages, benefits, apprenticeship requirements, or
7 personal income tax withholding, or federal Insurance Contribution
8 Act withholding requirements settled against any member of the
9 design-build entity.

10 (vi) Any bankruptcy or receivership of any member of the
11 design-build team, including, but not limited to, information
12 concerning any work completed by a surety.

13 (vii) Any adverse claims, disputes, or lawsuits between the owner
14 of a public works project and any member of the design-build team
15 during the five years preceding submission of a bid under this
16 article, in which the claim, settlement, or judgment exceeded fifty
17 thousand dollars (\$50,000) and was settled or otherwise resolved
18 against the design-build entity or any member of the design-build
19 team. Information shall also be provided concerning any work
20 completed by a surety during this five-year period.

21 (viii) Any adverse claims, disputes, or lawsuits between any
22 member of the design-build team and any employee of that entity
23 during the five years preceding submission of a bid under this
24 article, in which the claim, settlement, or judgment exceeded fifty
25 thousand dollars (\$50,000) and was settled or otherwise resolved
26 against the entity.

27 (5) The information provided by a design-build entity in
28 response to a request for qualifications shall be certified under
29 penalty of perjury by the design-build entity and its general
30 partners or joint venture members.

31 (c) (1) Following the deadline for submission of a statement of
32 qualifications, the department shall review the submissions. The
33 department may evaluate submissions based solely upon the
34 information provided in each design-build entity's statement of
35 qualifications. The department may also interview some or all of
36 the design-build entities to further evaluate their qualifications
37 for the design-build project. The department may also hold
38 discussions or negotiations with design-build entities using the
39 process described in the department's request for qualifications.

1 (2) For each request for qualifications, the department shall
2 generate a final list of qualified design-build entities that
3 participated in the request for qualifications before entering into
4 negotiations for the contract or contracts to which the request for
5 qualifications applies.

6 (3) If submissions in response to a request for qualifications
7 provide sufficient information to determine which qualified
8 design-build entity has offered the best value to the public, the
9 department may enter into negotiations with that entity concerning
10 contract terms and award a contract for design and
11 preconstruction services to that entity. Such contract shall provide
12 for the subsequent negotiation of terms governing the construction
13 phase of the design-build project. If the department is unable to
14 negotiate a satisfactory contract with that entity for design and
15 preconstruction services, the department may undertake
16 negotiations with a separate qualified design-build entity that
17 participated in the request for qualifications process.

18 (4) If additional information is necessary to determine which
19 qualified design-build entity offers the best value to the public, the
20 department may prepare a further request for proposals, based
21 on the documents prepared as described in subdivision (a), that
22 invites qualified design-build entities identified pursuant to
23 paragraph (2) to submit competitive sealed proposals in the
24 manner prescribed by the department.

25 (d) Notwithstanding any other provision of this code, upon
26 issuance of a contract award, the director shall publicly announce
27 its award, identifying the design-build entity to which the award
28 is made, along with a statement regarding the basis of the award.
29 The statement regarding the contract award and the contract file
30 shall provide sufficient information to satisfy an external audit.

31 10215.3. (a) The design-build entity shall provide payment
32 and performance bonds for the design-build project in the form
33 and in the amount required by the director, which are issued by a
34 California admitted surety. The amount of the payment bond shall
35 not be less than the amount of the performance bond.

36 (b) The design-build contract shall require errors and omissions
37 insurance coverage for the design elements of the design-build
38 project.

39 (c) The department shall develop a standard form of payment
40 and performance bond for its design-build projects.

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1 10215.4. (a) After selecting a design-build entity for the design
2 and preconstruction phase, the department may enter into a
3 contract and direct the design-build entity to begin design and
4 preconstruction activities sufficient to establish a guaranteed
5 maximum price for the project.

6 (b) Subject to Section 13332.19 of the Government Code, if
7 otherwise applicable to the department, upon agreement of the
8 guaranteed maximum price for the design-build project, the
9 department, at its sole and absolute discretion, may amend its
10 contract with the design-build entity, or enter into a new contract,
11 and direct the entity to complete the remaining design,
12 preconstruction, and construction activities sufficient to complete
13 and close out the design-build project, and may add funds not
14 exceeding the guaranteed maximum price to the contract for these
15 activities. Any amendment of the existing contract or a new
16 contract with the design-build entity shall not require any
17 additional competitive process. This section does not require the
18 department to amend an existing contract or enter into a new
19 contract for remaining design, preconstruction, or construction
20 activities.

21 (c) If the cost for completing all remaining design,
22 preconstruction, and construction activities sufficient to complete
23 and close out the design-build project exceeds the guaranteed
24 maximum price, the costs exceeding the guaranteed maximum
25 price shall be the responsibility of the design-build entity. If the
26 cost for these activities is less than the guaranteed maximum price,
27 the design-build entity shall not be entitled to the difference
28 between the cost and the guaranteed maximum price. Any savings
29 provided to the department shall revert to the fund from which the
30 appropriation was made.

31 (d) If the department and the design-build entity do not reach
32 an agreement on a guaranteed maximum price or the department
33 otherwise elects not to have the design-build entity complete some
34 or all of the remaining work, the department may solicit proposals
35 to complete some or all of the remaining work from firms that
36 submitted a statement of qualifications pursuant to subdivision (b)
37 of Section 10215.2. The department may also, upon written
38 determination that it is in the best interest of the state to do so,
39 formally solicit proposals from other entities to complete all or
40 some of the remaining work, or complete the design-build project

1 *using other delivery methods. Subject to Section 13332.19 of the*
2 *Government Code, if otherwise applicable to the department, any*
3 *contract awarded shall be made on a best value basis.*

4 *10215.5. (a) The department, in each request for qualifications*
5 *or request for proposals, may identify specific types of*
6 *subcontractors that are required to be included in the design-build*
7 *entity's statement of qualifications. All construction subcontractors*
8 *that are identified in the statement of qualifications shall be*
9 *afforded all the protections of Chapter 4 (commencing with Section*
10 *4100) of Part 1.*

11 *(b) Following award of the design-build contract, except for*
12 *those construction subcontractors listed in the statement of*
13 *qualifications or proposal, the design-build entity shall proceed*
14 *as follows in awarding construction subcontracts with a value*
15 *exceeding one-half of 1 percent of the contract price allocable to*
16 *construction work:*

17 *(1) Provide public notice of availability of work to be*
18 *subcontracted in accordance with the publication requirements*
19 *applicable to the competitive bidding process of the department,*
20 *including a fixed date and time on which qualification statements,*
21 *bids, or proposals will be due.*

22 *(2) Establish reasonable qualification criteria and standards.*

23 *(3) Award the subcontract either on a best value basis or to the*
24 *lowest responsible bidder. The process may include*
25 *prequalification or short-listing.*

26 *(c) Subcontractors awarded construction subcontracts under*
27 *this subdivision shall be afforded all the protections of Chapter 4*
28 *(commencing with Section 4100) of Part 1.*

29 *10215.6. (a) Any department authorized by Section 10215.1*
30 *to utilize progressive design-build contracts pursuant to this article*
31 *shall prepare and submit to the Legislature a report by January*
32 *1, 2034, that describes each design-build project awarded under*
33 *this article that has begun construction by January 1, 2033.*

34 *(b) The report described in subdivision (a) shall include relevant*
35 *data including, but not limited to, all of the following information:*

36 *(1) The cost of the design-build project.*

37 *(2) The current status or stage of the design-build project.*

38 *(3) If complete, the completion date of the design-build project.*

39 *(4) If incomplete, the estimated completion date of the*
40 *design-build project.*

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1 (c) The report described in subdivision (a) shall also provide a
2 comprehensive assessment on the effectiveness of the progressive
3 design-build project delivery method relative to project cost and
4 time savings.

5 (d) The report submitted pursuant to subdivision (a) shall be
6 submitted in compliance with Section 9795 of the Government
7 Code.

8 10215.7. This article does not affect, expand, alter, or limit
9 any rights or remedies otherwise available at law.

10 10215.8. This article shall remain in effect only until December
11 31, 2033, and as of that date is repealed. The repeal of this article
12 shall not affect the contracts entered into by the department, or
13 the department's authority to complete the design-build projects
14 for which a design and preconstruction phase contract has been
15 entered under this article, before December 31, 2033.

16 SEC. 4. Article 6.5 (commencing with Section 217) is added
17 to Chapter 1 of Division 1 of the Streets and Highways Code, to
18 read:

19
20 Article 6.5. Job Order Contracting
21

22 217. As used in this article, the following definitions apply:

23 (a) "Adjustment factor" means the job order contractor's
24 competitively bid adjustment to the department's prices as
25 published in the unit price catalog.

26 (b) "Job order" means a firm, fixed-priced, lump-sum order
27 issued by the department to a job order contractor for a definite
28 project scope or work as compiled from the unit price catalog to
29 be performed pursuant to a job order contract.

30 (c) "Job order" means a contract, awarded pursuant to this
31 section, between the department and a licensed, bonded, and
32 general liability insured contractor in which the contractor agrees
33 to a fixed-period, fixed-unit price, and indefinite quantity contract
34 that provides for the use of job orders for public works or
35 maintenance projects.

36 (d) "Project" means the specific requirements and work to be
37 accomplished by the job order contractor in connection with an
38 individual job order.

39 (e) "Unit price catalog" means a book containing specific
40 construction tasks and the unit prices to install or demolish that

1 construction. The listed tasks shall be based on generally accepted
2 industry standards and information, where available, for various
3 items of work to be performed by the job order contractor. The
4 prices shall include the cost of materials, labor, and equipment
5 for performing the items of work. The prices shall not include
6 overhead and profit. All unit prices shall be developed using local
7 prevailing wages.

8 217.1. (a) It is the intent of the Legislature to enable the use
9 of job order contracting as an option for constructing
10 transportation and public works projects when it is anticipated
11 that the use of this method will reduce procurement costs or
12 expedite project completion in a manner that is not achievable
13 through the design-bid-build method. It is the intent of the
14 Legislature that this contracting method will improve the efficiency
15 and efficacy of contracted work and not supplant work completed
16 by the department's field maintenance employees.

17 (b) (1) The department may use the procurement method
18 outlined in this article for job order contracts.

19 (2) A job order contract of the department shall be competitively
20 bid and awarded to the lowest bidder providing a qualified
21 responsive bid.

22 (c) (1) The department may use job order contracting,
23 consistent with this article, when undertaking the following
24 projects:

25 (A) Highway maintenance or safety projects, including, but not
26 limited to, bridge deck sealing, bridge and asphalt pavement
27 overlays, concrete pavement slab work, repair and replacement
28 of active transportation and complete streets facilities, joint seals,
29 installation of new traffic safety devices, rumble strips, and traffic
30 control devices, and other safety, bridge repair, or highway repair
31 projects that are basic and repetitive.

32 (B) Traffic management and detection system installation,
33 replacement, and repair.

34 (C) Tree removal.

35 (D) Clearing and grubbing.

36 (E) Culvert installation and repairs.

37 (F) Improvements to, removal of, and installation of facilities,
38 systems, and traffic control devices needed to comply with the
39 federal Americans with Disabilities Act of 1990 (Public Law
40 101-336).

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1 (G) Facility repairs, including, but not limited to, building
2 maintenance.

3 (H) Installation of stormwater pollution control devices.

4 (I) Safety barriers.

5 (2) No job order contract may be awarded for adding vehicular
6 travel lanes.

7 (3) The department shall, when undertaking job order
8 contracting for the projects specified in paragraph (1), establish
9 a procedure to prequalify job order contractors for projects and
10 shall prepare a set of documents for each job order contract. The
11 documents shall include all of the following:

12 (A) A unit price catalog of construction tasks with preestablished
13 unit prices.

14 (B) Job order contract specifications.

15 (C) Any other information deemed necessary to adequately
16 describe the department's needs.

17 (4) Based on the documents prepared under paragraph (3), the
18 department shall develop a system for evaluating job order contract
19 bids for the award of job order contracts. The award of a job order
20 contract shall progress as follows:

21 (A) The department shall prepare a request for bids for job
22 order contracts based on the documents prepared under paragraph
23 (3) that invites prospective contractors to submit sealed bids in
24 the manner prescribed by the department.

25 (B) Each bidding contractor shall include in its bid one or more
26 adjustment factors to the established unit prices provided in the
27 request for bids based on the advertised technical specifications.

28 (C) Each bidding job order contractor shall identify any
29 subcontractors to be used for the job orders performed pursuant
30 to the awarded job order contract pursuant to Chapter 4
31 (commencing with Section 4100) of Part 1 of Division 2 of the
32 Public Contract Code.

33 (D) The award of job order contracts, if any, shall be made to
34 one or more job order contractors that the department determines
35 to be qualified and responsive based upon preestablished criteria
36 to be determined by the department.

37 (5) Any job order contractor that is selected for a project
38 pursuant to this article shall possess or obtain sufficient bonding
39 to cover the contract amount for construction services and risk
40 and liability insurance as the department may require.

1 (6) *Nothing in this article is intended to affect, expand, alter,*
2 *or limit any rights or remedies otherwise available at law.*

3 (d) *Notwithstanding paragraph (3) of subdivision (c) and*
4 *subparagraph (B) of paragraph (4) of subdivision (c), the*
5 *department may, in accordance with the requirements of Section*
6 *14838.7 of the Government Code, award a job order contract*
7 *pursuant to this article with an estimated value of greater than*
8 *five thousand dollars (\$5,000) but less than the cost limit, as*
9 *specified in subdivision (b) of Section 10105 of the Public Contract*
10 *Code, after obtaining written bid submittals from two or more*
11 *certified small businesses, including microbusinesses, or from two*
12 *or more disabled veteran business enterprises.*

13 (e) *Job order contracts may be executed for an initial contract*
14 *term of no more than 12 months with the option of extending or*
15 *renewing the job order contract for two 12-month periods. All*
16 *extensions or renewals shall be priced as provided in the request*
17 *for bids. An extension or renewal shall be mutually agreed to by*
18 *the department and the job order contractor.*

19 (f) *On or before July 1 of each year, until July 1, 2033, the*
20 *department shall publish on its internet website regarding the*
21 *status of all active job order contracts and those job order*
22 *contracts that expired in the previous year. The report shall*
23 *include, but is not limited to, all of the following information:*

24 (1) *A listing of all projects completed under each job order*
25 *contract.*

26 (2) *The name of each job order contractor awarded a contract.*

27 (3) *The estimated and actual project costs.*

28 (4) *The estimated procurement time savings.*

29 (5) *A description of any written protests concerning any aspect*
30 *of the solicitation, bid, proposal, or award of the job order*
31 *contract, including, but not limited to, the resolution of the protests.*

32 (6) *A summary of small business usage.*

33 (7) *A summary of Labor Code violations, including, but not*
34 *limited to, prevailing wage, apprenticeship, and health and safety*
35 *statutes to the extent information is readily available.*

36 (8) *The percentage of the project completed by subcontractors*
37 *certified by the Department of General Services as small business*
38 *and disabled veteran business enterprise.*

39 (9) *Recommendations regarding the most appropriate uses for*
40 *the job order contract process.*

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1 (g) *Job order contracts shall be monitored by the department's*
2 *labor compliance program for compliance with federal and state*
3 *labor laws.*

4 217.2. *This article shall remain in effect only until December*
5 *31, 2033, and as of that date is repealed.*

6 SEC. 5. *No reimbursement is required by this act pursuant to*
7 *Section 6 of Article XIII B of the California Constitution because*
8 *the only costs that may be incurred by a local agency or school*
9 *district will be incurred because this act creates a new crime or*
10 *infraction, eliminates a crime or infraction, or changes the penalty*
11 *for a crime or infraction, within the meaning of Section 17556 of*
12 *the Government Code, or changes the definition of a crime within*
13 *the meaning of Section 6 of Article XIII B of the California*
14 *Constitution.*

15 SEC. 6. *This act is an urgency statute necessary for the*
16 *immediate preservation of the public peace, health, or safety within*
17 *the meaning of Article IV of the California Constitution and shall*
18 *go into immediate effect. The facts constituting the necessity are:*

19 *To promote environmental protection and safeguard economic*
20 *development of California's diverse public resources and people,*
21 *and enhance the state's ability to maximize federal funding to*
22 *support those efforts, it is necessary for this act to take effect*
23 *immediately.*

24 ~~SECTION 1. It is the intent of the Legislature to enact statutory~~
25 ~~changes relating to the Budget Act of 2023.~~

O

AMENDED IN ASSEMBLY JUNE 26, 2023

SENATE BILL

No. 147

**Introduced by ~~Committee on Budget and Fiscal Review~~ Senator
Ashby**

January 18, 2023

An act relating to the Budget Act of 2023. An act to amend Sections 395, 3511, 4700, 5050, and 5515 of, and to add Section 2081.15 to, the Fish and Game Code, relating to fully protected species, and declaring the urgency thereof, to take effect immediately.

LEGISLATIVE COUNSEL'S DIGEST

SB 147, as amended, ~~Committee on Budget and Fiscal Review~~ Ashby. ~~Budget Act of 2023. Fully protected species: California Endangered Species Act: authorized take.~~

The California Endangered Species Act (CESA) requires the Fish and Game Commission to establish a list of endangered species and a list of threatened species and to add or remove species from either list if it finds, upon the receipt of sufficient scientific information, as specified, that the action is warranted. The act prohibits the taking of an endangered or threatened species, except in certain situations, including, if specified conditions are met, through the issuance of a permit commonly known as an incidental take permit.

Existing law also enumerates fully protected species and prohibits the take of fully protected species, except under limited circumstances.

This bill would, until December 31, 2033, authorize the Department of Fish and Wildlife to issue a permit under CESA that would authorize the take of a fully protected species resulting from impacts attributable to the implementation of specified projects if certain conditions are satisfied, including, among others, the conditions required for the

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issuance of an incidental take permit. The bill would require the department to develop a plan on or before July 1, 2024, to assess the population status of each fully protected species. The bill would require the department, on or before July 1, 2025, and annually thereafter, to prepare and submit a report to certain committees of the Legislature regarding the implementation of the authorization to issue these permits for the take of fully protected species.

The bill would also remove the American peregrine falcon, brown pelican, and thicktail chub as fully protected species.

This bill would declare that it is to take effect immediately as an urgency statute.

~~This bill would express the intent of the Legislature to enact statutory changes relating to the Budget Act of 2023.~~

Vote: ~~majority~~^{2/3}. Appropriation: no. Fiscal committee: ~~no~~ yes. State-mandated local program: no.

The people of the State of California do enact as follows:

1 SECTION 1. Section 395 of the Fish and Game Code is
2 amended to read:

3 395. (a) The commission may adopt regulations for the
4 possession or training, and the capture, importation, exportation,
5 or intrastate transfer, of any bird in the orders Falconiformes and
6 Strigiformes (birds-of-prey) used in the practice of falconry and
7 may authorize the issuance and provide for the revocation of
8 licenses and permits to persons for the practice of falconry.

9 (b) It is unlawful to capture, possess, or train any bird in the
10 orders Falconiformes and Strigiformes (birds-of-prey) in the
11 practice of falconry without procuring a falconry license.

12 ~~(e) (1) The capture, possession, and training of an American~~
13 ~~peregrine falcon in the practice of falconry pursuant to this chapter~~
14 ~~shall be exempt from the prohibitions in Section 3511.~~

15 ~~(2)~~

16 (c) Regulations shall not be adopted pursuant to subdivision (a)
17 for the possession, training, capture, importation, exportation, or
18 intrastate transfer of American peregrine falcons used in the
19 practice of falconry unless the Legislature provides an
20 appropriation in the annual Budget Act or another statute for that
21 purpose.

1 *SEC. 2. Section 2081.15 is added to the Fish and Game Code,*
2 *to read:*

3 *2081.15. (a) Notwithstanding Sections 3511, 4700, 5050, and*
4 *5515, and subject to the requirements set forth in subdivisions (c)*
5 *to (g), inclusive, the department may authorize under this chapter*
6 *by permit the take of species listed in subdivision (b) of Section*
7 *3511, subdivision (b) of Section 4700, subdivision (b) of Section*
8 *5050, and subdivision (b) of Section 5515 resulting from impacts*
9 *attributable to the implementation of the projects identified in*
10 *subdivision (b) if all of the following conditions are satisfied:*

11 *(1) The requirements of subdivisions (b) and (c) of Section 2081*
12 *are satisfied as to the species for which take is authorized.*

13 *(2) The department ensures that all further measures necessary*
14 *to satisfy the conservation standard of subdivision (d) of Section*
15 *2805 and take is avoided to the maximum extent possible as to the*
16 *species for which take is authorized are incorporated into each*
17 *project.*

18 *(3) The take authorization permit provides for the development*
19 *and implementation, in cooperation with the department, and*
20 *federal and state agencies, as applicable, of a monitoring program*
21 *and an adaptive management plan, approved by the department,*
22 *that satisfy the conservation standard of subdivision (d) of Section*
23 *2805 for monitoring the effectiveness of, and amending, as*
24 *necessary, the measures to minimize and fully mitigate the impacts*
25 *of the authorized take.*

26 *(4) The applicant pays a permit application fee consistent with*
27 *Section 2081.2.*

28 *(b) Projects or categories of projects eligible for a take*
29 *authorization permit pursuant to this section are limited to all of*
30 *the following:*

31 *(1) A maintenance, repair, or improvement project to the State*
32 *Water Project, including existing infrastructure, undertaken by*
33 *the Department of Water Resources.*

34 *(2) A maintenance, repair, or improvement project to critical*
35 *regional or local water agency infrastructure.*

36 *(3) A transportation project, including any associated habitat*
37 *connectivity and wildlife crossing project, undertaken by a state,*
38 *regional, or local agency, that does not increase highway or street*
39 *capacity for automobile or truck travel.*

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1 (4) A wind project and any appurtenant infrastructure
2 improvement, and any associated electric transmission project
3 carrying electric power from a facility that is located in the state
4 to a point of junction with any California-based balancing
5 authority.

6 (5) A solar photovoltaic project and any appurtenant
7 infrastructure improvement, and any associated electric
8 transmission project carrying electric power from a facility that
9 is located in the state to a point of junction with any
10 California-based balancing authority.

11 (c) A permit issued pursuant to subdivision (a) shall cover any
12 incidental take of a species for which take is authorized that may
13 occur in the course of implementing mitigation or conservation
14 actions required in the permit.

15 (d) The permit conditions are subject to amendment when
16 required by the monitoring program and adaptive management
17 plan adopted pursuant to paragraph (3) of subdivision (a).

18 (e) (1) This section does not apply to the design or construction
19 of through-delta water conveyances in the Sacramento-San Joaquin
20 Delta.

21 (2) This section does not apply to the design or construction of
22 ocean desalination projects.

23 (f) This section shall not be construed to exempt the projects or
24 categories of projects identified in paragraphs (1) to (5), inclusive,
25 of subdivision (b) from any other law.

26 (g) (1) The department shall not issue new take authorization
27 permits pursuant to this section on or after December 31, 2033.

28 (2) Take authorization permits issued pursuant to this section
29 before December 31, 2033, shall continue to remain in effect.

30 (h) The department shall develop a plan on or before July 1,
31 2024, to assess the population status of each fully protected species.
32 The plan shall include recommendations to the Legislature for
33 resources necessary to determine the scientific status of each fully
34 protected species.

35 (i) On or before July 1, 2025, and annually thereafter, the
36 department shall prepare and submit a report to the relevant policy
37 and budget committees of the Legislature regarding the
38 implementation of this section. The report shall include, at a
39 minimum, all of the following information:

1 *(1) For each individual permit issued to take a fully protected*
2 *species pursuant to this section, all of the following information:*

3 *(A) The type and location of the project for which the permit*
4 *was issued, including the county in which the project is located.*

5 *(B) The fully protected species at risk due to the project and*
6 *any take of the fully protected species due to the project in the*
7 *preceding calendar year.*

8 *(C) Actions taken to avoid, minimize, and fully mitigate the take*
9 *of, and to conserve, the fully protected species.*

10 *(D) A description of the monitoring program, including*
11 *observation frequency, and any adaptive management-driven*
12 *modifications to the monitoring program in the preceding calendar*
13 *year.*

14 *(2) The cost to the department of the implementation of this*
15 *section in the preceding calendar year broken down by task.*

16 *SEC. 3. Section 3511 of the Fish and Game Code is amended*
17 *to read:*

18 3511. (a) (1) Except as provided in this ~~section~~, *section or*
19 *Section 2081.7, 2081.15, or Section 2835, a fully protected bird*
20 *may not be taken or possessed at any time. No provision of this*
21 *code or any other law shall be construed to authorize the issuance*
22 *of a permit or license to take a fully protected bird, and no permit*
23 *or license previously issued shall have any force or effect for that*
24 *purpose. However, the department may authorize the taking of a*
25 *fully protected bird for necessary scientific research, including*
26 *efforts to recover fully protected, threatened, or endangered species,*
27 *and may authorize the live capture and relocation of a fully*
28 *protected bird pursuant to a permit for the protection of livestock.*
29 *Before authorizing the take of a fully protected bird, the department*
30 *shall make an effort to notify all affected and interested parties to*
31 *solicit information and comments on the proposed authorization.*
32 *The notification shall be published in the California Regulatory*
33 *Notice Register and be made available to each person who has*
34 *notified the department, in writing, of ~~his or her~~ that person's*
35 *interest in fully protected species and who has provided an ~~e-mail~~*
36 *email address, if available, or postal address to the department.*
37 *Affected and interested parties shall have 30 days after notification*
38 *is published in the California Regulatory Notice Register to provide*
39 *relevant information and comments on the proposed authorization.*

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(2) As used in this subdivision, “scientific research” does not include an action taken as part of specified mitigation for a project, as defined in Section 21065 of the Public Resources Code.

(3) A legally imported fully protected bird may be possessed under a permit issued by the department.

(b) The following are fully protected birds:

~~(1) American peregrine falcon (*Falco peregrinus anatum*).~~

~~(2) Brown pelican.~~

~~(3)~~

(1) California black rail (*Laterallus jamaicensis coturniculus*).

~~(4)~~

(2) California clapper rail (*Rallus longirostris obsoletus*).

~~(5)~~

(3) California condor (*Gymnogyps californianus*).

~~(6)~~

(4) California least tern (*Sterna albifrons browni*).

~~(7)~~

(5) Golden eagle.

~~(8)~~

(6) Greater sandhill crane (*Grus canadensis tabida*).

~~(9)~~

(7) Light-footed clapper rail (*Rallus longirostris levipes*).

~~(10)~~

(8) Southern bald eagle (*Haliaeetus leucocephalus leucocephalus*).

~~(11)~~

(9) Trumpeter swan (*Cygnus buccinator*).

~~(12)~~

(10) White-tailed kite (*Elanus leucurus*).

~~(13)~~

(11) Yuma clapper rail (*Rallus longirostris yumanensis*).

SEC. 4. Section 4700 of the Fish and Game Code is amended to read:

4700. (a) (1) Except as provided in this ~~section~~, *section or* Section 2081.7, 2081.15, or ~~Section~~ 2835, a fully protected mammal may not be taken or possessed at any time. No provision of this code or any other law shall be construed to authorize the issuance of a permit or license to take a fully protected mammal, and no permit or license previously issued shall have any force or effect for that purpose. However, the department may authorize

1 the taking of a fully protected mammal for necessary scientific
2 research, including efforts to recover fully protected, threatened,
3 or endangered species. Before authorizing the take of a fully
4 protected mammal, the department shall make an effort to notify
5 all affected and interested parties to solicit information and
6 comments on the proposed authorization. The notification shall
7 be published in the California Regulatory Notice Register and be
8 made available to each person who has notified the department,
9 in writing, of ~~his or her~~ *that person's* interest in fully protected
10 species and who has provided an ~~e-mail~~ *email* address, if available,
11 or postal address to the department. Affected and interested parties
12 shall have 30 days after notification is published in the California
13 Regulatory Notice Register to provide relevant information and
14 comments on the proposed authorization.

15 (2) As used in this subdivision, “scientific research” does not
16 include an action taken as part of specified mitigation for a project,
17 as defined in Section 21065 of the Public Resources Code.

18 (3) A legally imported fully protected mammal may be
19 possessed under a permit issued by the department.

20 (b) The following are fully protected mammals:

21 (1) Morro Bay kangaroo rat (*Dipodomys heermanni morroensis*).

22 (2) Bighorn sheep (*Ovis canadensis*), except Nelson bighorn
23 sheep (subspecies *Ovis canadensis nelsoni*) as provided by
24 subdivision (b) of Section 4902.

25 (3) Northern elephant seal (*Mirounga angustirostris*).

26 (4) Guadalupe fur seal (*Arctocephalus townsendi*).

27 (5) Ring-tailed cat (genus *Bassariscus*).

28 (6) Pacific right whale (*Eubalaena sieboldi*).

29 (7) Salt-marsh harvest mouse (*Reithrodontomys raviventris*).

30 (8) Southern sea otter (*Enhydra lutris nereis*).

31 (9) Wolverine (*Gulo luscus*).

32 *SEC. 5. Section 5050 of the Fish and Game Code is amended*
33 *to read:*

34 5050. (a) (1) Except as provided in this section, or Section
35 2081.5, 2081.7, 2081.9, 2081.12, *2081.15*, or 2835, a fully
36 protected reptile or amphibian may not be taken or possessed at
37 any time. No provision of this code or any other law shall be
38 construed to authorize the issuance of a permit or license to take
39 a fully protected reptile or amphibian, and no permit or license
40 previously issued shall have any force or effect for that purpose.

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1 However, the department may authorize the taking of a fully
2 protected reptile or amphibian for necessary scientific research,
3 including efforts to recover fully protected, threatened, or
4 endangered species. Before authorizing the take of a fully protected
5 reptile or amphibian, the department shall make an effort to notify
6 all affected and interested parties to solicit information and
7 comments on the proposed authorization. The notification shall
8 be published in the California Regulatory Notice Register and be
9 made available to each person who has notified the department,
10 in writing, of that person's interest in fully protected species and
11 who has provided an email address, if available, or postal address
12 to the department. Affected and interested parties shall have 30
13 days after notification is published in the California Regulatory
14 Notice Register to provide relevant information and comments on
15 the proposed authorization.

16 (2) As used in this subdivision, "scientific research" does not
17 include an action taken as part of specified mitigation for a project,
18 as defined in Section 21065 of the Public Resources Code.

19 (3) A legally imported fully protected reptile or amphibian may
20 be possessed under a permit issued by the department.

21 (b) The following are fully protected reptiles and amphibians:

22 (1) Blunt-nosed leopard lizard (*Gambelia sila*).

23 (2) San Francisco garter snake (*Thamnophis sirtalis tetrataenia*).

24 (3) Santa Cruz long-toed salamander (*Ambystoma*
25 *macrodactylum croceum*).

26 (4) Limestone salamander (*Hydromantes brunus*).

27 (5) Black toad (*Bufo boreas exsul*).

28 *SEC. 6. Section 5515 of the Fish and Game Code is amended*
29 *to read:*

30 5515. (a) (1) Except as provided in this section or Section
31 2081.4, 2081.6, 2081.7, 2081.10, 2081.11, 2081.15, 2089.7, or
32 2835, a fully protected fish shall not be taken or possessed at any
33 time. No provision of this code or any other law shall be construed
34 to authorize the issuance of a permit or license to take a fully
35 protected fish, and no permit or license previously issued shall
36 have force or effect for that purpose. However, the department
37 may authorize the taking of a fully protected fish for necessary
38 scientific research, including efforts to recover fully protected,
39 threatened, or endangered species. Before authorizing the take of
40 a fully protected fish, the department shall make an effort to notify

1 all affected and interested parties to solicit information and
2 comments on the proposed authorization. The notification shall
3 be published in the California Regulatory Notice Register and be
4 made available to each person who has notified the department,
5 in writing, of ~~his or her~~ *that person's* interest in fully protected
6 species and who has provided an email address, if available, or
7 postal address to the department. Affected and interested parties
8 shall have 30 days after notification is published in the California
9 Regulatory Notice Register to provide relevant information and
10 comments on the proposed authorization.

11 (2) As used in this subdivision, "scientific research" does not
12 include an action taken as part of specified mitigation for a project,
13 as defined in Section 21065 of the Public Resources Code.

14 (3) A legally imported fully protected fish may be possessed
15 under a permit issued by the department.

16 (b) The following are fully protected fish:

17 (1) Colorado River squawfish (*Ptychocheilus lucius*).

18 ~~(2) Thiektail chub (*Gila crassicauda*).~~

19 ~~(3)~~

20 (2) Mohave chub (*Gila mohavensis*).

21 ~~(4)~~

22 (3) Lost River sucker (*Deltistes luxatus* and *Catostomus luxatus*).

23 ~~(5)~~

24 (4) Modoc sucker (*Catostomus microps*).

25 ~~(6)~~

26 (5) Shortnose sucker (*Chasmistes brevirostris*).

27 ~~(7)~~

28 (6) Humpback sucker (*Xyrauchen texanus*).

29 ~~(8)~~

30 (7) Owens pupfish (*Cyprinodon radiosus*).

31 ~~(9)~~

32 (8) Unarmored threespine stickleback (*Gasterosteus aculeatus*
33 *williamsoni*).

34 ~~(10)~~

35 (9) Rough sculpin (*Cottus asperimus*).

36 *SEC. 7. This act is an urgency statute necessary for the*
37 *immediate preservation of the public peace, health, or safety within*
38 *the meaning of Article IV of the California Constitution and shall*
39 *go into immediate effect. The facts constituting the necessity are:*

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1 *To promote environmental protection and safeguard economic*
2 *development of California's diverse public resources and people,*
3 *and enhance the state's ability to maximize federal funding to*
4 *support those efforts, it is necessary for this act to take effect*
5 *immediately.*

6 ~~SECTION 1. It is the intent of the Legislature to enact statutory~~
7 ~~changes relating to the Budget Act of 2023.~~

O

AMENDED IN ASSEMBLY JUNE 26, 2023

SENATE BILL**No. 150**

**Introduced by ~~Committee on Budget and Fiscal Review~~ Senators
*Durazo, Smallwood-Cuevas, Gonzalez, and Cortese, and Assembly
Member Luz Rivas***

January 18, 2023

An act relating to the Budget Act of 2023. An act to add Section 14017 to the Government Code, and to add Section 2500.5 to, and to add Chapter 6.9 (commencing with Section 6990) to Part 1 of Division 2 of, the Public Contract Code, relating to construction, and declaring the urgency thereof, to take effect immediately.

LEGISLATIVE COUNSEL'S DIGEST

SB 150, as amended, ~~Committee on Budget and Fiscal Review~~ *Durazo. Budget Act of 2023. Construction: workforce development: public contracts.*

(1) Existing law establishes the Department of Transportation in the Transportation Agency.

Existing law establishes the California Workforce Development Board as the body responsible for assisting the Governor in the development, oversight, and continuous improvement of California's workforce investment system and the alignment of the education and workforce investment systems to the needs of the 21st century economy and workforce. Under existing law, the California Workforce Development Board assists the Governor in the administration, promotion, and expansion of high road construction careers.

This bill would require the Department of Transportation to work in partnership with the California Workforce Development Board to support California's high road construction careers program. The bill

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would require the department to reserve a minimum aggregate total of \$50,000,000 of federal funds from the federal Infrastructure Investment and Jobs Act to be allocated over 4 years to support the program.

(2) Existing law authorizes a public entity to use, enter into, or require contractors to enter into, a project labor agreement, as defined, for a construction project only if the agreement includes specified taxpayer protection provisions. Existing law authorizes the members of the governing board of a local public entity to choose by majority vote whether to use, enter into, or require contractors to enter into a project labor agreement that includes taxpayer protection provisions for a specific project or projects.

This bill, on or after January 1, 2026, would authorize a state agency to use, enter into, or require contractors to enter into, a project labor agreement that applies to a project or set of projects with aggregate construction costs in excess of \$35,000,000 only if the agreement also includes provisions to address community benefits, as described.

(3) Existing law establishes specified procedures governing contracts between public entities and their contractors and subcontractors. Existing law also establishes the Labor and Workforce Development Agency, the Government Operations Agency, and the Transportation Agency within state government and sets forth their regulatory duties.

This bill would require the above-described state agencies to convene relevant stakeholders to provide input on recommendations to establish material terms to be included as a material part of a contract. The bill would require these agencies to meet with those stakeholders in the process of developing recommendations, and to consult with specified state entities, including the Civil Rights Department, as prescribed. The bill would require those recommendations to be provided to the Governor and the Legislature by March 30, 2024, and also presented to the California Workforce Development Board in a regularly scheduled public meeting.

(4) This bill would declare that it is to take effect immediately as an urgency statute.

~~This bill would express the intent of the Legislature to enact statutory changes relating to the Budget Act of 2023.~~

Vote: ~~majority~~^{2/3}. Appropriation: no. Fiscal committee: ~~no~~-yes. State-mandated local program: no.

The people of the State of California do enact as follows:

1 *SECTION 1. Section 14017 is added to the Government Code,*
2 *to read:*

3 *14017. The department shall work in partnership with the*
4 *California Workforce Development Board to support California's*
5 *high road construction careers program. The department shall*
6 *reserve a minimum aggregate total of fifty million dollars*
7 *(\$50,000,000) of federal funds from the federal Infrastructure*
8 *Investment and Jobs Act (Public Law 117-58) to be allocated over*
9 *four years in support of the program.*

10 *SEC. 2. Section 2500.5 is added to the Public Contract Code,*
11 *to read:*

12 *2500.5. (a) A state agency may use, enter into, or require*
13 *contractors to enter into, a project labor agreement pursuant to*
14 *this chapter that applies to a project or set of projects with*
15 *aggregate construction costs in excess of thirty-five million dollars*
16 *(\$35,000,000) only if the agreement also includes provisions to*
17 *address community benefits. Community benefits may include*
18 *partnerships with high road construction careers programs, as*
19 *defined in Section 14005 of the Unemployment Insurance Code,*
20 *local hire goals, coordination with programs that assist veterans*
21 *in transitioning to civilian employment, job fairs for construction*
22 *apprenticeship or preapprenticeship programs, or other methods*
23 *agreed upon by the parties to promote employment and training*
24 *opportunities for veterans and individuals who reside in*
25 *economically disadvantaged areas.*

26 *(b) This section shall apply to project labor agreements entered*
27 *into on or after January 1, 2026.*

28 *SEC. 3. Chapter 6.9 (commencing with Section 6990) is added*
29 *to Part 1 of Division 2 of the Public Contract Code, to read:*

30
31 *CHAPTER 6.9. EMBEDDING WORKFORCE STANDARDS IN*
32 *PROCUREMENT AND CONTRACTING*

33
34 *6990. It is the intent of the Legislature, in enacting this chapter,*
35 *to develop procurement models in alignment with initiatives to*
36 *enhance the state's training and access pipeline for quality jobs*
37 *and the application of community benefits on infrastructure and*
38 *manufacturing investments funded by the federal Infrastructure*

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1 *and Investment Jobs Act, the Inflation Reduction Act, and the*
2 *CHIPS and Science Act.*

3 *6990.1. (a) The Labor and Workforce Development Agency,*
4 *the Government Operations Agency, and the Transportation*
5 *Agency shall do all of the following:*

6 *(1) Convene relevant stakeholders to provide input on*
7 *recommendations to establish terms to be included as a material*
8 *part of a contract, including measurable results to ensure that*
9 *investments maximize benefits to marginalized and disadvantaged*
10 *communities.*

11 *(2) Meet with those stakeholders no less than three times during*
12 *the process of developing recommendations described in paragraph*
13 *(1).*

14 *(3) Consult with the Civil Rights Department, other relevant*
15 *state agencies, and a research or academic institution for the*
16 *University of California for purposes of developing*
17 *recommendations described in paragraph (1).*

18 *(b) The recommendations described in paragraph (1) of*
19 *subdivision (a) shall be provided to the Governor and the*
20 *Legislature by March 30, 2024. The recommendations shall also*
21 *be presented to the California Workforce Development Board in*
22 *a regularly scheduled public meeting.*

23 *(c) For purposes of this section, relevant stakeholders shall*
24 *include representatives from local public agencies, labor*
25 *organizations that represent workers in manufacturing, business*
26 *organizations, nonprofit organizations that represent women in*
27 *the construction industry, organizations representing the formerly*
28 *incarcerated, and organizations that represent populations*
29 *historically marginalized in the California economy.*

30 *SEC. 4. This act is an urgency statute necessary for the*
31 *immediate preservation of the public peace, health, or safety within*
32 *the meaning of Article IV of the California Constitution and shall*
33 *go into immediate effect. The facts constituting the necessity are:*

34 *To promote environmental protection and safeguard economic*
35 *development of California's diverse public resources and people,*
36 *and enhance the state's ability to maximize federal funding to*
37 *support those efforts, it is necessary for this act to take effect*
38 *immediately.*

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1 ~~SECTION 1. It is the intent of the Legislature to enact statutory~~
2 ~~changes relating to the Budget Act of 2023.~~

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AMENDED IN ASSEMBLY JUNE 28, 2023

AMENDED IN ASSEMBLY JUNE 26, 2023

SENATE BILL**No. 149**

Introduced by Senators Caballero and Becker*and Assembly Member
Robert Rivas*

January 18, 2023

An act to amend Sections 21167.6, 21181, 21183, 21189.1, and 21189.3 of, and to add Chapter 7 (commencing with Section 21189.80) to Division 13 of, the Public Resources Code, relating to environmental quality, making an appropriation therefor, and declaring the urgency thereof, to take effect immediately.

LEGISLATIVE COUNSEL'S DIGEST

SB 149, as amended, Caballero. California Environmental Quality Act: administrative and judicial procedures: record of proceedings: judicial streamlining.

The California Environmental Quality Act (CEQA) requires a lead agency, as defined, to prepare, or cause to be prepared, and certify the completion of an environmental impact report (EIR) on a project that it proposes to carry out or approve that may have a significant effect on the environment or to adopt a negative declaration if it finds that the project will not have that effect. CEQA also requires a lead agency to prepare a mitigated negative declaration for a project that may have a significant effect on the environment if revisions in the project would avoid or mitigate that effect and there is no substantial evidence that the project, as revised, would have a significant effect on the environment.

CEQA provides ~~that~~ *that*, in certain specified actions or proceedings, the plaintiff or petitioner may elect to prepare the record of proceedings,

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subject to certification of its accuracy by the public agency. CEQA requires that a copy of the certified record of proceedings be lodged with the court.

This bill would authorize the public agency to deny the request of the plaintiff or petitioner to prepare the record of proceedings, as provided, in which case the bill would require the public agency or the real party in interest to bear the costs of preparation and certification of the record of proceedings and would prohibit the recovery of those costs from the plaintiff or petitioner. The bill would require the court to schedule a case management conference within 30 days of the filing of an action to review the scope, timing, and cost of the record of proceedings. The bill would require that an electronic copy of the certified record of proceedings be lodged with the court.

The Jobs and Economic Improvement Through Environmental Leadership Act of 2021 (Leadership Act) authorizes the Governor, before January 1, 2024, to certify projects that meet specified requirements for streamlining benefits related to CEQA, including the requirement that judicial actions challenging the action of a lead agency for projects certified by the Governor be resolved, to the extent feasible, within 270 days after the filing of the record of proceedings with the court, and a requirement that the applicant agrees to pay the costs of preparing the record of proceedings for the project concurrent with review and consideration of the project, as specified. The Leadership Act provides that if a lead agency fails to approve a project certified by the Governor before January 1, 2025, the certification is no longer valid. The Leadership Act provides that it is repealed on January 1, 2026.

This bill would extend the Governor's authority to certify a project to before January 1, 2032. The bill would expressly provide that the cost of preparing the record of proceedings for the project is not recoverable from the plaintiff or petitioner before, during, or after any litigation. The bill would provide that if a lead agency fails to approve a project certified by the Governor before January 1, 2033, the certification is no longer valid. The bill would repeal the Leadership Act on January 1, 2034. Because the bill would extend the duties of the lead agency under the Leadership Act, this bill would impose a state-mandated local program.

This bill would establish procedures for the preparation of the record of proceedings for projects that are certified by the Governor as an infrastructure project, as defined. The bill would require an action or proceeding challenging the certification of an EIR for those projects or

the granting of any project approvals, including any potential appeals to the court of appeal or the Supreme Court, to be resolved, to the extent feasible, within 270 days of the filing of the record of proceedings with the court. The bill would authorize a project applicant to apply to the Governor for the certification of a project as an infrastructure project. The bill would require the lead agency, within 10 days of the certification of a project, to provide a public notice of the certification, as provided. Because the bill would impose additional duties on a lead agency in conducting the environmental review of a certified project, this bill would impose a state-mandated local program. If a lead agency fails to approve a project certified as an infrastructure project before January 1, 2033, the bill would specify that the certification is no longer valid. The bill would repeal the above provisions on January 1, 2034.

This bill would appropriate \$1,000,000 from the General Fund to the Judicial Council for judicial officer training for implementation of the above provisions.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

This bill would declare that it is to take effect immediately as an urgency statute.

Vote: $\frac{2}{3}$. Appropriation: yes. Fiscal committee: yes.
State-mandated local program: yes.

The people of the State of California do enact as follows:

- 1 SECTION 1. Section 21167.6 of the Public Resources Code
- 2 is amended to read:
- 3 21167.6. Notwithstanding any other law, in all actions or
- 4 proceedings brought pursuant to Section 21167, except as provided
- 5 in Section 21167.6.2 or those involving the Public Utilities
- 6 Commission, all of the following shall apply:
- 7 (a) At the time that the action or proceeding is filed, the plaintiff
- 8 or petitioner shall file a request that the respondent public agency
- 9 prepare the record of proceedings relating to the subject of the
- 10 action or proceeding. The request, together with the complaint or
- 11 petition, shall be served personally upon the public agency not

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1 later than 10 business days from the date that the action or
2 proceeding was filed.

3 (b) (1) (A) The public agency shall prepare and certify the
4 record of proceedings not later than 60 days from the date that the
5 request specified in subdivision (a) was served upon the public
6 agency. Upon certification, the public agency shall lodge an
7 electronic copy of the record of proceedings with the court and
8 shall serve on the parties notice that the record of proceedings has
9 been certified and lodged with the court. The parties shall pay any
10 reasonable costs or fees imposed for the preparation of the record
11 of proceedings in conformance with any law or rule of court.

12 (B) The court shall schedule a case management conference
13 within 30 days of the filing of the complaint or petition pursuant
14 to this division to review the scope, timing, and cost of the record
15 of proceedings. The parties may stipulate to a partial record of
16 proceedings that does not contain all the documents listed in
17 subdivision (e) if approved by the court.

18 (2) The plaintiff or petitioner may elect to prepare the record
19 of proceedings by providing a notice of the election to the public
20 agency, or the parties may agree to an alternative method of
21 preparation of the record of proceedings, subject to certification
22 of its accuracy by the public agency, within the 60-day time limit
23 specified in this subdivision.

24 (3) Notwithstanding paragraph (2), the public agency, within
25 five business days of the receipt of the notice specified in paragraph
26 (2), may deny the request of the plaintiff or petitioner to prepare
27 the record of proceedings, in which case the public agency or the
28 real party in interest shall bear the costs of preparation and
29 certification of the record of proceedings, and those costs shall not
30 be recoverable from the plaintiff or petitioner.

31 (c) The time limit established by subdivision (b) may be
32 extended only upon the stipulation of all parties who have been
33 properly served in the action or proceeding or upon order of the
34 court. Extensions shall be liberally granted by the court when the
35 size of the record of proceedings renders infeasible compliance
36 with that time limit. There is no limit on the number of extensions
37 that may be granted by the court, but no single extension shall
38 exceed 60 days unless the court determines that a longer extension
39 is in the public interest.

1 (d) If the public agency fails to prepare and certify the record
2 of proceedings within the time limit established in paragraph (1)
3 of subdivision (b), or any continuances of that time limit, the
4 plaintiff or petitioner may move for sanctions, and the court may,
5 upon that motion, grant appropriate sanctions.

6 (e) The record of proceedings shall include, but is not limited
7 to, all of the following items:

8 (1) All project application materials.

9 (2) All staff reports and related documents prepared by the
10 respondent public agency with respect to its compliance with the
11 substantive and procedural requirements of this division and with
12 respect to the action on the project.

13 (3) All staff reports and related documents prepared by the
14 respondent public agency and written testimony or documents
15 submitted by any person relevant to any findings or statement of
16 overriding considerations adopted by the respondent agency
17 pursuant to this division.

18 (4) Any transcript or minutes of the proceedings at which the
19 decisionmaking body of the respondent public agency heard
20 testimony on, or considered any environmental document on, the
21 project, and any transcript or minutes of proceedings before any
22 advisory body to the respondent public agency that were presented
23 to the decisionmaking body before action on the environmental
24 documents or on the project.

25 (5) All notices issued by the respondent public agency to comply
26 with this division or with any other law governing the processing
27 and approval of the project.

28 (6) All written comments received in response to, or in
29 connection with, environmental documents prepared for the project,
30 including responses to the notice of preparation.

31 (7) All written evidence or correspondence submitted to, or
32 transferred from, the respondent public agency with respect to
33 compliance with this division or with respect to the project.

34 (8) Any proposed decisions or findings submitted to the
35 decisionmaking body of the respondent public agency by its staff,
36 or the project proponent, project opponents, or other persons.

37 (9) The documentation of the final public agency decision,
38 including the final environmental impact report, mitigated negative
39 declaration, or negative declaration, and all documents, in addition
40 to those referenced in paragraph (3), cited or relied on in the

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1 findings or in a statement of overriding considerations adopted
2 pursuant to this division.

3 (10) Any other written materials relevant to the respondent
4 public agency's compliance with this division or to its decision on
5 the merits of the project, including the initial study, any drafts of
6 any environmental document, or portions thereof, that have been
7 released for public review, and copies of studies or other documents
8 relied upon in any environmental document prepared for the project
9 and either made available to the public during the public review
10 period or included in the respondent public agency's files on the
11 project, and all internal agency communications, including staff
12 notes and memoranda related to the project or to compliance with
13 this division, but not including communications that are of a
14 logistical nature, such as meeting invitations and scheduling
15 communications, except that any material that is subject to
16 privileges contained in the Evidence Code, or exemptions contained
17 in the California Public Records Act (Division 10 (commencing
18 with Section 7920.000) of Title 1 of the Government Code) shall
19 not be included in the record of proceedings under this paragraph,
20 consistent with existing law.

21 (11) The full written record before any inferior administrative
22 decisionmaking body whose decision was appealed to a superior
23 administrative decisionmaking body before the filing of litigation.

24 (f) In preparing the record of proceedings, the party preparing
25 the record of proceedings shall strive to do so at reasonable cost
26 in light of the scope of the record of proceedings.

27 (g) The clerk of the superior court shall prepare and certify the
28 clerk's transcript on appeal not later than 60 days from the date
29 that the notice designating the papers or records to be included in
30 the clerk's transcript was filed with the superior court, if the party
31 or parties pay any costs or fees for the preparation of the clerk's
32 transcript imposed in conformance with any law or rules of court.
33 Nothing in this subdivision precludes an election to proceed by
34 appendix, as provided in Rule 8.124 of the California Rules of
35 Court.

36 (h) Extensions of the period for the filing of any brief on appeal
37 may be allowed only by stipulation of the parties or by order of
38 the court for good cause shown. Extensions for the filing of a brief
39 on appeal shall be limited to one 30-day extension for the
40 preparation of an opening brief and one 30-day extension for the

1 preparation of a responding brief, except that the court may grant
2 a longer extension or additional extensions if it determines that
3 there is a substantial likelihood of settlement that would avoid the
4 necessity of completing the appeal.

5 (i) At the completion of the filing of briefs on appeal, the
6 appellant shall notify the court of the completion of the filing of
7 briefs, whereupon the clerk of the reviewing court shall set the
8 appeal for hearing on the first available calendar date.

9 SEC. 2. Section 21181 of the Public Resources Code is
10 amended to read:

11 21181. This chapter does not apply to a project if the Governor
12 does not certify the project as an environmental leadership
13 development project eligible for streamlining under this chapter
14 before January 1, 2032.

15 SEC. 3. Section 21183 of the Public Resources Code is
16 amended to read:

17 21183. The Governor may certify a leadership project for
18 streamlining before a lead agency certifies a final environmental
19 impact report for a project under this chapter if all the following
20 conditions are met:

21 (a) (1) Except as provided in paragraph (2), the project will
22 result in a minimum investment of one hundred million dollars
23 (\$100,000,000) in California upon completion of construction.

24 (2) Paragraph (1) does not apply to a leadership project described
25 in paragraph (4) of subdivision (b) of Section 21180.

26 (b) The project creates high-wage, highly skilled jobs that pay
27 prevailing wages and living wages, provides construction jobs and
28 permanent jobs for Californians, helps reduce unemployment, and
29 promotes apprenticeship training. For purposes of this subdivision,
30 a project is deemed to create jobs that pay prevailing wages, create
31 highly skilled jobs, and promote apprenticeship training if the
32 applicant demonstrates to the satisfaction of the Governor that the
33 project will comply with Section 21183.5.

34 (c) (1) For a project described in paragraph (1), (2), or (3) of
35 subdivision (b) of Section 21180, the project does not result in any
36 net additional emission of greenhouse gases, including greenhouse
37 gas emissions from employee transportation. For purposes of this
38 paragraph, a project is deemed to meet the requirements of this
39 paragraph if the applicant demonstrates to the satisfaction of the
40 Governor that the project will comply with Section 21183.6.

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(2) For a project described in paragraph (4) of subdivision (b) of Section 21180, the project does not result in any net additional emission of greenhouse gases, including greenhouse gas emissions from employee transportation.

(d) The applicant demonstrates compliance with the requirements of Chapter 12.8 (commencing with Section 42649) and Chapter 12.9 (commencing with Section 42649.8) of Part 3 of Division 30, as applicable.

(e) The applicant has entered into a binding and enforceable agreement that all mitigation measures required under this division to certify the project under this chapter shall be conditions of approval of the project, and those conditions will be fully enforceable by the lead agency or another agency designated by the lead agency. In the case of environmental mitigation measures, the applicant agrees, as an ongoing obligation, that those measures will be monitored and enforced by the lead agency for the life of the obligation.

(f) The applicant agrees to pay the costs of the trial court and the court of appeal in hearing and deciding any case challenging a lead agency's action on a certified project under this division, including payment of the costs for the appointment of a special master if deemed appropriate by the court, in a form and manner specified by the Judicial Council, as provided in the California Rules of Court adopted by the Judicial Council under Section 21185.

(g) The applicant agrees to pay the costs of preparing the record of proceedings for the project concurrent with review and consideration of the project under this division, in a form and manner specified by the lead agency for the project. The cost of preparing the record of proceedings for the project shall not be recoverable from the plaintiff or petitioner before, during, or after any litigation.

(h) For a project for which environmental review has commenced, the applicant demonstrates that the record of proceedings is being prepared in accordance with Section 21186.

SEC. 4. Section 21189.1 of the Public Resources Code is amended to read:

21189.1. If, before January 1, 2033, a lead agency fails to approve a project certified by the Governor under this chapter, then the certification expires and is no longer valid.

1 SEC. 5. Section 21189.3 of the Public Resources Code is
2 amended to read:

3 21189.3. This chapter shall remain in effect until January 1,
4 2034, and as of that date is repealed unless a later enacted statute
5 extends or repeals that date.

6 SEC. 6. Chapter 7 (commencing with Section 21189.80) is
7 added to Division 13 of the Public Resources Code, to read:

8
9 CHAPTER 7. INFRASTRUCTURE PROJECTS

10
11 21189.80. The Legislature finds and declares all of the
12 following:

13 (a) This division requires that the environmental impacts of
14 development projects be identified and mitigated.

15 (b) This division also guarantees the public an opportunity to
16 review and comment on the environmental impacts of a project
17 and to participate meaningfully in the development of mitigation
18 measures for potentially significant environmental impacts.

19 (c) Historic federal and state investments in infrastructure will
20 lead to the development of numerous transportation-related,
21 water-related, technology, and energy facilities across the state
22 that would further California's commitments to reducing emissions
23 of greenhouse gases and protecting its people from the worst
24 extremes of climate change while also leveraging federal resources
25 to increase access to quality jobs in our communities.

26 (d) These projects will further generate full-time jobs during
27 construction and additional jobs once the projects are constructed
28 and operating.

29 (e) The transportation-related projects would help state, regional,
30 and local agencies more quickly meet the goals of advancing safety,
31 rehabilitating the aging transportation infrastructure, and addressing
32 the impacts of climate change.

33 (f) The transportation-related projects will accelerate critical
34 state, regional, and local "fix it first" projects supported by a
35 historic federal and state partnership through Chapter 5 of the
36 Statutes of 2017, and the federal Infrastructure Investment and
37 Jobs Act (Public Law 117-58).

38 (g) The purpose of this chapter is to provide unique streamlining
39 benefits under this division for critical state, regional, and local
40 investments in climate resiliency, safety, and infrastructure

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1 maintenance while maintaining the environmental and public
2 engagement benefits of this division for projects that provide the
3 public benefits, including environmental and climate-related
4 benefits, described above and to both achieve those benefits and
5 put people to work as soon as possible.

6 21189.81. For purposes of this chapter, the following
7 definitions apply:

8 (a) “Applicant” means a public or private entity or its affiliates,
9 or a person or entity that undertakes a public works project, that
10 proposes a project and its successors, heirs, and assignees.

11 (b) “Disadvantaged community” means an area identified by
12 the California Environmental Protection Agency pursuant to
13 Section 39711 of the Health and Safety Code or an area identified
14 as a disadvantaged unincorporated community pursuant to Section
15 65302.10 of the Government Code.

16 (c) “Electrical transmission facility project” means a project for
17 the construction and operation of an electrical transmission facility
18 the meets either of the following:

19 (1) An electrical transmission facility project identified by the
20 Independent System Operator in its annual transmission planning
21 process that meets either of the following criteria:

22 (A) The project will facilitate delivery of electricity from
23 renewable energy resources or zero-carbon resources.

24 (B) The project will facilitate delivery of electricity from energy
25 storage projects.

26 (2) An electrical transmission facility project identified by a
27 local publicly owned electric utility that would satisfy a
28 transmission expansion need approved by the governing body of
29 the local publicly owned electric utility and that meets either of
30 the following criteria:

31 (A) The project will facilitate delivery of electricity from
32 renewable energy resources or zero-carbon resources.

33 (B) The project will facilitate delivery of electricity from energy
34 storage projects.

35 (d) (1) “Energy infrastructure project” means any of the
36 following:

37 (A) An eligible renewable energy resource, as defined in Section
38 399.12 of the Public Utilities Code, excluding resources that utilize
39 biomass fuels.

1 (B) New energy storage systems of 20 megawatts or more, that
2 are capable of discharging for at least two hours, provided that a
3 pumped hydro facility may qualify only if it is less than or equal
4 to 500 megawatts and has been directly appropriated funding by
5 the state before January 1, 2023.

6 (C) A project for which the applicant has certified that a capital
7 investment of at least two hundred fifty million dollars
8 (\$250,000,000) made over a period of five years and the project
9 is for either of the following:

10 (i) The manufacture, production, or assembly of an energy
11 storage system or component manufacturing, wind system or
12 component manufacturing, and solar photovoltaic energy system
13 or component manufacturing.

14 (ii) The manufacture, production, or assembly of specialized
15 products, components, or systems that are integral to renewable
16 energy or energy storage technologies.

17 (D) An electric transmission facility project, provided that
18 nothing in this chapter affects the jurisdiction of the California
19 Coastal Commission pursuant to Division 20 (commencing with
20 Section 30000) to regulate such projects if located in the coastal
21 zone.

22 (E) An energy infrastructure project does not include projects
23 utilizing hydrogen as a fuel.

24 (2) Any project to develop a facility within the meaning of
25 subdivision (b) of Section 25545 shall meet the requirements of
26 Sections 25545.3.3 and 25545.3.5, except that those requirements
27 shall also apply to solar photovoltaic and terrestrial wind electrical
28 generating power plants with a generating capacity of between 20
29 and 50 megawatts and energy storage projects capable of storing
30 between 80 and 200 megawatt hours of electrical energy.

31 (e) “Infrastructure project” means a project that is certified
32 pursuant to Sections 21189.82 and 21189.83 as any of the
33 following:

34 (1) An energy infrastructure project.

35 (2) A semiconductor or microelectronic project.

36 (3) A transportation-related project.

37 (4) A water-related project.

38 (f) “Semiconductor or microelectronic project” means a project
39 that meets the requirements related to investment in new or
40 expanded facilities and is awarded funds under the federal Creating

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1 Helpful Incentives to Produce Semiconductors Act of 2022 (Public
2 Law 117-167), commonly known as the CHIPS Act of 2022, and
3 the requirements of Section 21183.5.

4 (g) (1) “Transportation-related project” means a transportation
5 infrastructure project that advances one or more of, and does not
6 conflict with, the following goals related to the Climate Action
7 Plan for Transportation Infrastructure adopted by the
8 Transportation Agency:

9 (A) Build toward an integrated, statewide rail and transit
10 network.

11 (B) Invest in networks of safe and accessible bicycle and
12 pedestrian infrastructure.

13 (C) Include investments in light-, medium-, and heavy-duty
14 zero-emission vehicle infrastructure.

15 (D) Develop a zero-emission freight transportation system.

16 (E) Reduce public health and economic harms and maximize
17 community benefits.

18 (F) Make safety improvements to reduce fatalities and severe
19 injuries of all users towards zero.

20 (G) Assess and integrate assessments of physical climate risk.

21 (H) Promote projects that do not significantly increase passenger
22 vehicle travel.

23 (I) Promote compact infill development while protecting
24 residents and businesses from displacement.

25 (J) Protect natural and working lands.

26 (2) Transportation-related projects are public works for the
27 purposes of Section 1720 of the Labor Code and shall comply with
28 the applicable provisions of Chapter 1 (commencing with Section
29 1720) of Part 7 of Division 2 of the Labor Code.

30 (h) (1) “Water-related project” means any of the following:

31 (A) A project that is approved to implement a groundwater
32 sustainability plan that the Department of Water Resources has
33 determined is in compliance with Sections 10727.2 and 10727.4
34 of the Water Code or to implement an interim groundwater
35 sustainability plan adopted pursuant to Section 10735.6 of the
36 Water Code.

37 (B) (i) A water storage project funded by the California Water
38 Commission pursuant to Chapter 8 (commencing with Section
39 79750) of Division 26.7 of the Water Code.

(ii) In addition to clause (i), the applicant shall demonstrate that the project will minimize the intake or diversion of water except during times of surplus water and prioritizes the discharge of water for ecological benefits or to mitigate an emergency, including, but not limited to, dam repair, levee repair, wetland restoration, marshland restoration, or habitat preservation, or other public benefits described in Section 79753 of the Water Code.

(C) Projects for the development of recycled water, as defined in Section 13050 of the Water Code.

(D) Contaminant and salt removal projects, including groundwater desalination and associated treatment, storage, conveyance, and distribution facilities. This shall not include seawater desalination.

(E) Projects exclusively for canal or other conveyance maintenance and repair.

(2) Water-related projects are public works for the purposes of Section 1720 of the Labor Code and shall comply with the applicable provisions of Chapter 1 (commencing with Section 1720) of Part 7 of Division 2 of the Labor Code.

(3) “Water-related project” does not include the design or construction of through-Delta conveyance facilities of the Sacramento-San Joaquin Delta.

21189.82. (a) (1) (A) The Governor may certify a project as an energy infrastructure project for purposes of this chapter if the project meets the requirements of subdivision (d) of Section 21189.81.

(B) In addition to subparagraph (A), if the applicant is not the lead agency, the Governor shall ensure all of the following:

(i) The applicant agrees to pay the costs of the trial court and the court of appeal in hearing and deciding any case challenging a lead agency’s action on a certified project under this division, including payment of the costs for the appointment of a special master if deemed appropriate by the court, in a form and manner as provided in the rule of court adopted by the Judicial Council under Section 21189.85.

(ii) The applicant agrees to pay the costs of preparing the record of proceedings for the project concurrent with the review and consideration of the project under this division, in a form and manner specified by the lead agency for the project.

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1 (iii) For a project for which environmental review has
2 commenced, the applicant demonstrates that the record of
3 proceedings is being prepared in accordance with Section 21189.86.

4 (2) (A) The Governor may certify a project as a semiconductor
5 or microelectronic project for purposes of this chapter if the project
6 meets the requirements of subdivision (f) of Section 21189.81.

7 (B) In addition to subparagraph (A), if the applicant is not the
8 lead agency, the Governor shall ensure all of the following:

9 (i) The applicant agrees to pay the costs of the trial court and
10 the court of appeal in hearing and deciding any case challenging
11 a lead agency's action on a certified project under this division,
12 including payment of the costs for the appointment of a special
13 master if deemed appropriate by the court, in a form and manner
14 as provided in the rule of court adopted by the Judicial Council
15 under Section 21189.85.

16 (ii) The applicant agrees to pay the costs of preparing the record
17 of proceedings for the project concurrent with the review and
18 consideration of the project under this division, in a form and
19 manner specified by the lead agency for the project.

20 (iii) For a project for which environmental review has
21 commenced, the applicant demonstrates that the record of
22 proceedings is being prepared in accordance with Section 21189.86.

23 (3) The Governor may certify up to 20 transportation-related
24 projects for purposes of this chapter, including up to 10 state
25 projects proposed by the Department of Transportation and up to
26 10 local or regional projects, that meet the requirements of
27 subdivision (g) of Section 21189.81.

28 (4) (A) The Governor may certify a project as a water-related
29 project for purposes of this chapter if the project meets the
30 requirements of subdivision (h) of Section 21189.81.

31 (B) In addition to subparagraph (A), the Governor shall ensure
32 all of the following:

33 (i) The applicant agrees to pay the costs of the trial court and
34 the court of appeal in hearing and deciding any case challenging
35 a lead agency's action on a certified project under this division,
36 including payment of the costs for the appointment of a special
37 master if deemed appropriate by the court, in a form and manner
38 as provided in the rule of court adopted by the Judicial Council
39 under Section 21189.85.

1 (ii) The applicant agrees to pay the costs of preparing the record
2 of proceedings for the project concurrent with the review and
3 consideration of the project under this division, in a form and
4 manner specified by the lead agency for the project.

5 (iii) For a project for which environmental review has
6 commenced, the applicant demonstrates that the record of
7 proceedings is being prepared in accordance with Section 21189.86.

8 (C) In addition to subparagraphs (A) and (B), the Governor may
9 certify a project as a water-related project for purposes of this
10 chapter only if the Governor finds that greenhouse gas emissions
11 resulting from the project will be mitigated to the extent feasible.

12 (b) The Office of Planning and Research may consult with other
13 state agencies on and may issue guidelines regarding applications
14 for and the certification of projects under this chapter. Any
15 guidelines issued under this subdivision are not subject to the
16 rulemaking provisions of the Administrative Procedure Act
17 (Chapter 3.5 (commencing with Section 11340) of Part 1 of
18 Division 3 of Title 2 of the Government Code).

19 (c) An applicant for certification of an infrastructure project
20 under this chapter shall do all of the following:

21 (1) Avoid or minimize significant environmental impacts in any
22 disadvantaged community.

23 (2) If measures are required pursuant to this division to mitigate
24 significant environmental impacts in a disadvantaged community,
25 mitigate those impacts consistent with this division, including
26 Section 21002. Mitigation measures required under this subdivision
27 shall be undertaken in, and directly benefit, the affected
28 community.

29 (3) Enter into a binding and enforceable agreement to comply
30 with this subdivision in its application to the Governor and to the
31 lead agency prior to the agency's certification of the environmental
32 impact report for the project.

33 (d) The Office of Planning and Research shall make evidence
34 and materials submitted for the certification of a project available
35 to the public on its internet website at least 15 days before the
36 certification of the project.

37 (e) The Governor's decision to certify a project shall not be
38 subject to judicial review.

39 21189.83. (a) In addition to the requirements of Section
40 21189.82, with respect to any energy infrastructure project or

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1 semiconductor or microelectronic project proposed by a private
2 entity, the Governor may certify the project pursuant to this chapter
3 only if the project does not result in any net additional emission
4 of greenhouse gases, including greenhouse gas emissions from
5 employee transportation. For purposes of this section, a project is
6 deemed to meet the requirements of this section if the applicant
7 demonstrates to the satisfaction of the Governor that the applicant
8 has a binding commitment that it will mitigate impacts resulting
9 from the emission of greenhouse gases, if any, in accordance with
10 Section 21183.6.

11 (b) In addition to the requirements of Section 21189.82, with
12 respect to any transportation-related project, the Governor may
13 certify the project pursuant to this chapter only if the project does
14 not result in any net additional emission of greenhouse gases,
15 excluding greenhouse gas emissions from employee transportation.
16 For purposes of this section, a project is deemed to meet the
17 requirements of this section if the applicant demonstrates to the
18 satisfaction of the Governor that the applicant has a binding
19 commitment that it will mitigate impacts resulting from the
20 emission of greenhouse gases, if any, preferably through direct
21 emissions reductions where feasible, but where not feasible, then
22 through the use of offsets that are real, permanent, verifiable, and
23 enforceable, and that provide a specific, quantifiable, and direct
24 environmental and public health benefit to the same air pollution
25 control district or air quality management district in which the
26 project is located, but if all of the project impacts cannot be feasibly
27 and fully mitigated in the same air pollution control district or air
28 quality management district, then remaining unmitigated impacts
29 shall be mitigated through the use of offsets that provide a specific,
30 quantifiable, and direct environmental and public health benefit
31 to the region in which the project is located.

32 ~~(c) In addition to the requirements of Section 21189.82, with~~
33 ~~respect to any project that is located in whole or in part in a~~
34 ~~disadvantaged community, the Governor may certify the project~~
35 ~~pursuant to this chapter only if the project minimizes negative~~
36 ~~environmental or public health impacts on the disadvantaged~~
37 ~~community and benefits the disadvantaged community. A project~~
38 ~~is deemed to meet the requirements of this section if the applicant~~
39 ~~demonstrates to the satisfaction of the Governor that the applicant~~

1 ~~has a binding commitment that it will minimize the environmental~~
2 ~~burdens in any disadvantaged community.~~

3 ~~(d)~~

4 (c) The applicant shall be responsible for the costs of preparing
5 an analysis of the emission of greenhouse gases ~~or the impacts on~~
6 ~~a disadvantaged community~~ resulting from the project.

7 21189.84. (a) This chapter applies to a project that is certified
8 by the Governor as an infrastructure project.

9 (b) An applicant may apply to the Governor for certification
10 and shall provide evidence and materials deemed necessary by the
11 Governor in making a decision on the application for certification.

12 (c) The Governor shall submit the Governor's proposed
13 certification, and any supporting information, to the Joint
14 Legislative Budget Committee for review and concurrence or
15 nonconcurrence. Within 30 days of receiving the determination,
16 the Joint Legislative Budget Committee shall concur or nonconcur
17 in writing on the certification. If the Joint Legislative Budget
18 Committee fails to concur or nonconcur on a certification within
19 30 days of the submittal, the project is deemed to be certified.

20 (d) The Office of Planning and Research may charge a fee to
21 an applicant seeking certification under this chapter for the costs
22 incurred by the Governor's office in implementing this chapter.

23 21189.85. (a) An action or proceeding brought to attack,
24 review, set aside, void, or annul the certification of an
25 environmental impact report for an infrastructure project subject
26 to this chapter or the granting of any project approvals, including
27 any potential appeals to the court of appeal or the Supreme Court,
28 shall be resolved, to the extent feasible, within 270 days of the
29 filing of the certified record of proceedings with the court.

30 (b) On or before December 31, 2023, the Judicial Council shall
31 adopt a rule of court to implement this section.

32 21189.86. Notwithstanding any other law, the preparation and
33 certification of the record of proceedings for an infrastructure
34 project shall be performed in the following manner:

35 (a) The lead agency for the project shall prepare the record of
36 proceedings under this division concurrently with the
37 administrative process.

38 (b) All documents and other materials placed in the record of
39 proceedings shall be posted on, and be downloadable from, an

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1 internet website maintained by the lead agency commencing with
2 the date of the release of the draft environmental impact report.

3 (c) The lead agency shall make available to the public in a
4 readily accessible electronic format the draft environmental impact
5 report and all other documents submitted to, or relied on by, the
6 lead agency in preparing the draft environmental impact report.

7 (d) Any document prepared by the lead agency or submitted by
8 the applicant after the date of the release of the draft environmental
9 impact report that is a part of the record of proceedings shall be
10 made available to the public in a readily accessible electronic
11 format within five days after the document is released or received
12 by the lead agency.

13 (e) The lead agency shall encourage written comments on the
14 project to be submitted in a readily accessible electronic format,
15 and shall make any comment available to the public in a readily
16 accessible electronic format within five days of its receipt.

17 (f) Within seven days after the receipt of any comment that is
18 not in an electronic format, the lead agency shall convert that
19 comment into a readily accessible electronic format and make it
20 available to the public in that format.

21 (g) Notwithstanding subdivisions (b) to (f), inclusive, documents
22 submitted to or relied on by the lead agency that were not prepared
23 specifically for the project and are copyright protected are not
24 required to be made readily accessible in an electronic format. For
25 those copyright-protected documents, the lead agency shall make
26 an index of these documents available in an electronic format no
27 later than the date of the release of the draft environmental impact
28 report, or within five days if the document is received or relied on
29 by the lead agency after the release of the draft environmental
30 impact report. The index shall specify the libraries or lead agency
31 offices in which hardcopies of the copyrighted materials are
32 available for public review.

33 (h) The lead agency shall certify the final record of proceedings
34 within five days of its approval of the project.

35 (i) Any dispute arising from the record of proceedings shall be
36 resolved by the superior court. Unless the superior court directs
37 otherwise, a party disputing the content of the record of
38 proceedings shall file a motion to augment the record of
39 proceedings at the time it files its initial brief.

1 (j) The contents of the record of proceedings shall be as set forth
2 in subdivision (e) of Section 21167.6.

3 (k) The applicant shall pay the costs of preparing the record of
4 proceedings for the project concurrent with review and
5 consideration of the project under this division, in a form and
6 manner specified by the lead agency for the project. The cost of
7 preparing the record of proceedings for the project shall not be
8 recoverable from the plaintiff or petitioner before, during, or after
9 any litigation.

10 21189.87. (a) Within 10 days of the certification of a project
11 pursuant to Section 21189.82, the lead agency shall, at the
12 applicant's expense, if applicable, issue a public notice in no less
13 than 12-point type stating the following:

14 "THE APPLICANT HAS ELECTED TO PROCEED UNDER
15 CHAPTER 7 (COMMENCING WITH SECTION 21189.80) OF
16 DIVISION 13 OF THE PUBLIC RESOURCES CODE, WHICH
17 PROVIDES, AMONG OTHER THINGS, THAT ANY JUDICIAL
18 ACTION CHALLENGING THE CERTIFICATION OF THE
19 ENVIRONMENTAL IMPACT REPORT (EIR) OR THE
20 APPROVAL OF THE PROJECT DESCRIBED IN THE EIR IS
21 SUBJECT TO THE PROCEDURES SET FORTH IN SECTIONS
22 21189.85 AND 21189.86 OF THE PUBLIC RESOURCES CODE.
23 A COPY OF CHAPTER 7 (COMMENCING WITH SECTION
24 21189.80) OF DIVISION 13 OF THE PUBLIC RESOURCES
25 CODE IS INCLUDED BELOW."

26 (b) The public notice shall be distributed by the lead agency as
27 required for public notices issued under paragraph (3) of
28 subdivision (b) of Section 21092.

29 21189.88. Except as otherwise provided expressly in this
30 chapter, this chapter does not affect the duty of any party to comply
31 with this division.

32 21189.89. The provisions of this chapter are severable. If any
33 provision of this chapter or its application is held invalid, that
34 invalidity shall not affect other provisions or applications that can
35 be given effect without the invalid provision or application.

36 21189.90. If before January 1, 2033, a lead agency fails to
37 approve an infrastructure project, then the certification is no longer
38 valid.

39 21189.91. This chapter shall remain in effect only until January
40 1, 2034, and as of that date is repealed.

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1 SEC. 7. The sum of one million dollars (\$1,000,000) is hereby
2 appropriated from the General Fund to the Judicial Council for
3 judicial officer training for implementation of this act. These funds
4 are available for expenditure through June 30, 2025.

5 SEC. 8. No reimbursement is required by this act pursuant to
6 Section 6 of Article XIII B of the California Constitution because
7 a local agency or school district has the authority to levy service
8 charges, fees, or assessments sufficient to pay for the program or
9 level of service mandated by this act, within the meaning of Section
10 17556 of the Government Code.

11 SEC. 9. This act is an urgency statute necessary for the
12 immediate preservation of the public peace, health, or safety within
13 the meaning of Article IV of the California Constitution and shall
14 go into immediate effect. The facts constituting the necessity are:

15 To promote environmental protection and safeguard economic
16 development of California's diverse public resources and people,
17 and enhance the state's ability to maximize federal funding to
18 support those efforts, it is necessary for this act to take effect
19 immediately.

O



Legislation, Regulatory Affairs, and
Communications Committee

Governor's Infrastructure Streamlining Package

Item 9-2
July 10, 2023

Budget Overview

- May 19, Governor Newsom signed an Executive Order to accelerate clean infrastructure projects
- June 5 – 8, Assembly Informational Hearings
- June 26, Amended language for the infrastructure package in print

Budget Overview Cont'd

- June 29, Metropolitan issued a floor alert to the Assembly indicating support of the amended package with the intent to continue work on further refinements
- July 5, Voted on and passed with a 2/3 majority vote

Governor's Infrastructure Package

The infrastructure trailer bills are intended to:

- Streamline permitting and speed construction to reduce timing and costs
- Expedite judicial and administrative review without reducing environmental and transparency protections
- Maximize federal dollars for climate projects that address pollution and benefit low-income and disadvantaged communities

Governor's Infrastructure Package

Infrastructure Bills of Interest to Metropolitan

- SB 124 – Green Financing Programs for Federal IRA Funding
- SB 146 – Progressive Design-Build Authority
- SB 147 – Incidental Take of Fully Protected Species
- SB 149 – CEQA Administrative and Judicial Streamlining
- SB 150 – Equity and Workforce Development

