



E&O Committee

T. Smith, Chair
Vacant, Vice Chair
R. Apodaca
S. Blois
M. Camacho
D. De Jesus
L. Dick
S. Faessel
R. Lefevre
J. Morris
J. Murray Jr.
G. Peterson
H. Repenning
H. Williams

Engineering and Operations Committee

Meeting with Board of Directors *

October 11, 2021

10:00 a.m.

Live streaming is available for all board and committee meetings on our mwdh2o.com website ([Click to Access Board Meetings Page](#))

Public Comment Via Teleconference Only: Members of the public may present their comments to the Board on matters within their jurisdiction as listed on the agenda via teleconference only. To participate call (404) 400-0335 and use Code: 9601962.

Monday, October 11, 2021 Meeting Schedule

09:00 am - F&I
10:00 am - E&O
12:00 pm - Break
12:30 pm - WP&S
02:00 pm - C&L
03:00 pm - OP&T

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

* The Metropolitan Water District's meeting of this Committee is noticed as a joint committee meeting with the Board of Directors for the purpose of compliance with the Brown Act. Members of the Board who are not assigned to this Committee may participate as members of the Board, whether or not a quorum of the Board is present. In order to preserve the function of the committee as advisory to the Board, members of the Board who are not assigned to this Committee will not vote on matters before this Committee.

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

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

2. CONSENT CALENDAR OTHER ITEMS - ACTION

- A. Approval of the Minutes of the Meeting of the Engineering and Operations Committee held September 13, 2021

[21-545](#)

Attachments: [10112021 EO 2A Minutes](#)

3. CONSENT CALENDAR ITEMS - ACTION

- 7-2** Award a \$3,815,000 contract to Creative Home dba Chi Construction to replace the wastewater system at the Lake Mathews facility; the proposed action is in furtherance of a project that was previously determined to be exempt or otherwise not subject to CEQA **21-480**

Attachments: [10122021 EO 7-2 B-L.pdf](#)
[10122021 EO 7-2 Presentation.pdf](#)

- 7-3** Authorize an agreement with Helix Environmental Planning, Inc., in an amount not to exceed \$2.8 million, to prepare environmental documentation for the Regional Recycled Water Program and an agreement with Stantec Consulting Services Inc., in an amount not to exceed \$6.5 million for engineering and technical studies to support the environmental planning phase of the Program; the General Manager has determined that the proposed action is not subject to CEQA **21-481**

Attachments: [10122021 EO 7-3 B-L.pdf](#)
[10122021 EO 7-3 Presentation.pdf](#)

- 7-4** Award a \$282,390 contract to AME Builders, Inc. for replacement of the roof on the Vehicle Maintenance and Warehouse Building at the Jensen Water Treatment Plant; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA **21-482**

Attachments: [10122021 EO 7-4 B-L.pdf](#)
[10122021 EO 7-4 Presentation.pdf](#)

- 7-5** Authorize the General Manager to enter into an agreement with the Arizona Department of Water Resources and the Central Arizona Water Conservation District to support the development of the Regional Recycled Water Program; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA **21-489**

Attachments: [10122021 EO 7-5 B-L.pdf](#)
[10122021 EO 7-5 Presentation.pdf](#)

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

4. OTHER BOARD ITEMS - ACTION

None

5. BOARD INFORMATION ITEMS

None

6. COMMITTEE ITEMS

- a. Project Labor Agreements Update [21-498](#)

Attachments: [10112021 EO 6a Presentation.pdf](#)

- b. Update on Drought Mitigation Actions [21-499](#)

Attachments: [10112021 EO 6b Presentation.pdf](#)

- c. Salinity Management Update [21-500](#)

Attachments: [10112021 EO 6c Presentation.pdf](#)

7. MANAGEMENT REPORTS

- a. Water System Operations Manager's report [21-501](#)

Attachments: [10112021 EO 7a Presentation.pdf](#)

- b. Engineering Services Manager's report [21-502](#)

Attachments: [10112021 EO 7b Presentation.pdf](#)

8. FOLLOW-UP ITEMS

None

9. FUTURE AGENDA ITEMS

10. ADJOURNMENT

NOTE: This committee reviews items and makes a recommendation for final action to the full Board of Directors. Final action will be taken by the Board of Directors. Agendas for the meeting of the Board of Directors may be obtained from the Board Executive Secretary. This committee will not take any final action that is binding on the Board, even when a quorum of the Board is present.

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 <http://www.mwdh2o.com>.

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.

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

MINUTES

ENGINEERING AND OPERATIONS COMMITTEE

September 13, 2021

Chair Smith called the teleconference meeting to order at 10:59 a.m.

Members present: Chair Smith, Directors Apodaca, Blois, Camacho, De Jesus, Dick, Faessel, Lefevre, Morris, Murray, Peterson, Repenning, and Williams

Members absent: None

Other Board members present: Directors Abdo, Atwater, Butkiewicz, Dennstedt, Erdman, Fellow, Goldberg, Gray, Hawkins, Hogan, Kurtz, Luna, McCoy, Pressman, Ramos, Record, and Tamaribuchi

Committee staff present: Bednarski, Hagekhalil, Lahouti, Parsons, Scully, Upadhyay, and Yamasaki

1. OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO ADDRESS THE COMMITTEE ON MATTERS WITHIN THE COMMITTEE'S JURISDICTION

None

CONSENT CALENDAR OTHER ITEMS – ACTION

2. CONSENT CALENDAR OTHER ITEMS – ACTION

- A. Approval of the Minutes of the Adjourned Meeting of the Engineering and Operations Committee held August 16, 2021.

3. CONSENT CALENDAR ITEMS – ACTION

- 7-1 Subject: Authorize an increase of \$185,000 to an agreement with Rincon Consultants, Inc for a new not-to-exceed amount of \$1 million for services related to the preparation of a Climate Action Plan and CEQA documentation; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA
- Motion: Authorize an increase of \$185,000 to an agreement with Rincon Consultants, Inc for a new not-to-exceed amount of \$1 million for services related to the preparation of a Climate Action Plan and CEQA documentation.

- 7-2 Subject: Award an \$11,604,521 contract to Ameresco, Inc. for construction of battery energy storage systems at the Joseph Jensen and Robert A. Skinner Water Treatment Plants; and authorize increase of \$550,000 to an agreement with Stantec Inc. for engineering services for a new not-to-exceed total of \$1,450,000; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA
- Motion: a. Award \$11,604,521 contract to Ameresco, Inc. to construct Battery Energy Storage System Facilities at the Jensen and Skinner plants; and
 b. Authorize increase of \$550,000 to agreement with Stantec Inc., for a new not-to-exceed total of \$1,450,000, to provide technical support.
- 7-3 Subject: Authorize an agreement with HDR Engineering, Inc., in an amount not to exceed \$635,000 for engineering design services to upgrade the 2.4 kV power line that serves the Black Metal Mountain communications site; the General Manager has determined that this proposed action is exempt or otherwise not subject to CEQA
- Motion: Authorize an agreement with HDR Engineering, Inc., in an amount not to exceed \$635,000 for engineering services to replace the 2.4kV power line to Black Metal Mountain communications site.

No presentations were given, Director Morris made a motion, seconded by Director Camacho, to approve the consent calendar consisting of items 2A, 7-1, 7-2, and 7-3.

The vote was:

Ayes: Directors Apodaca, Blois, Camacho, De Jesus, Dick, Faessel, Lefevre, Morris, Murray, Peterson, Repenning, Smith, and Williams

Noes: None

Abstentions: None

Absent: None

The motion for Items 2A, 7-1, 7-2, and 7-3 passed by a vote of 13 ayes, 0 noes, 0 abstentions, and 0 absent.

END OF CONSENT CALENDAR ITEMS

4. OTHER BOARD ITEMS – ACTION

None

5. BOARD INFORMATION ITEMS

None

6. COMMITTEE ITEMS

- a. Subject: Capital Investment Plan Quarterly report for the period ending June 2021 and Budget Development Process.
Presented by: James Hong, Principal Engineer

Mr. Hong reported on the following:

- Actions and accomplishments for the Capital Investment Plan (CIP) during fiscal years 2020/2021 and 2021/2022
- Updates on the status of capital projects and capital expenditures and information regarding service connections and relocations authorized by the General Manager
- Current capital budget development process for the next biennial budget

- b. Subject: Regional Recycled Water Program Update
Presented by: Bruce Chalmers, Program Manager and John Bednarski,
Engineering Services Group, Chief Engineer and Group Manager

Mr. Chalmers and Mr. Bednarski reported on the following:

- Agency coordination and funding
- Environmental planning activities
- Opportunities for program acceleration

The following Directors provided comments or asked questions:

1. Blois
2. Smith
3. Lefevre
4. DeJesus
5. Hogan
6. Record

Staff responded to the Directors' comments or questions.

- c. Subject: Salinity Management Update

Item deferred to Next Month

7. MANAGEMENT REPORTS

- a. Subject: Water System Operations Manager's report

Presented by: Brent Yamasaki, Water System Operations, Group Manager

Mr. Yamasaki reported on the following:

- Current operational conditions
- Quagga mussels found in Castaic Lake
- Resolving taste-and-odor event in August 2021
- Addressing Lake Skinner cyanobacterial bloom
- Annual shutdown schedule

- b. Subject: Engineering Services Manager's report

Presented by: John Bednarski, Engineering Services Group, Chief Engineer and Group Manager

Mr. Bednarski reported on the following:

- Construction and procurement contracts
- Garvey Reservoir site drainage contract
- Upper Feeder protection structure damage
- Metropolitan's ozonation system and ozone control system upgrades
- Staff presentations at recent and upcoming conferences

8. FOLLOW-UP ITEMS

None

9. FUTURE AGENDA ITEMS

Director Peterson inquired on when the Engineering and Operations Inspection Trip would take place. Chair Smith confirmed it is currently scheduled for October 21.

Staff also responded to the Directors' comments or questions

Next meeting will be held on October 11, 2021.

Meeting adjourned at 12:00 p.m.

Tim Smith
Chair



- Board of Directors
Engineering and Operations Committee

10/12/2021 Board Meeting

7-2

Subject

Award a \$3,815,000 contract to Creative Home dba Chi Construction to replace the wastewater system at the Lake Mathews facility; the proposed action is in furtherance of a project that was previously determined to be exempt or otherwise not subject to CEQA

Executive Summary

The septic tank and leach field-based wastewater system at Metropolitan's Lake Mathews facility has been in operation for 80 years and is no longer reliable. Despite receiving regular maintenance, the system is exhibiting signs of failure, including plumbing and septic tank backups, clogged leach fields, and slow-draining collection pipes. This action awards a contract to replace the wastewater collection system at Lake Mathews and connect to a nearby municipal sewer system.

Details

Background

An on-site wastewater system serves the maintenance buildings, administrative offices, and repair shops at Metropolitan's Lake Mathews facility. The system was installed during the reservoir's original construction in the 1930s and was expanded significantly in the 1960s. At that time, no municipal sewer system was available in the area.

The facility's wastewater system has three components: community septic tanks and leach fields; collector lines that convey wastewater from multiple facilities to the septic tanks; and sewer laterals that convey wastewater from individual buildings to the collector lines. At each septic tank, solid waste settles to the bottom of several chambers, where it undergoes biological treatment. The solids are periodically removed by pump trucks, while the liquid effluent from the tanks is dispersed through perforated pipes into subsurface soils at the leach fields. The wastewater system includes five community septic tanks and approximately 6,000 feet of collector lines and sewer laterals.

While the existing system has received regular maintenance, it is deteriorating and showing signs of potential failure. There have been repeated instances of slow-draining sinks and toilets, clogged pipes, septic tank backups, and clogged leach fields. In order to maintain reliability and reduce the risk of costly unplanned repairs, the existing wastewater system should be replaced. In recent years, residential development in the areas adjacent to Lake Mathews has begun to approach the reservoir complex. This development has brought with it the expansion of the area's municipal wastewater collection system, which is owned and operated by the Western Municipal Water District (Western). As part of this project, the existing collector lines and laterals within the Lake Mathews reservoir complex will be replaced, and the overall system will be connected to the nearby public wastewater collection system.

In April 2018, Metropolitan's Board authorized final design to replace the wastewater system at Lake Mathews. Design is complete, and staff recommends the award of a construction contract at this time.

In accordance with the April 2020 action on the biennial budget for fiscal years 2020/21 and 2021/22, the General Manager will authorize staff to proceed with the replacement of the Lake Mathews wastewater system, 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 Capital Investment Plan Appropriation for Fiscal Years 2020/21 and 2021/22 (Appropriation No. 15517). Funds required for work to be performed pursuant to the subject contract after fiscal year 2021/22 will be budgeted within the Capital Investment Plan Appropriation for Fiscal Years 2022/23 and 2023/24. 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 Distribution System Reliability Program.

Lake Mathews Site Wastewater System Replacement – Construction

The scope of construction includes removal of existing wastewater collector lines, septic tanks, leach fields, and accessways; installation of new collector lines, accessways, and cleanouts; connection of the new lines to existing facilities and to the Western sewer main; traffic control; and site restoration.

A total of \$5.425 million is required for this work. In addition to the amount of the contract described below, other funds to be allocated include \$446,000 for construction inspection; \$248,000 for submittal review, technical support during construction, responding to requests for information, and preparation of record drawings; \$150,000 for connection and impact fees; \$292,000 for contract administration and project management; and \$474,000 for remaining budget.

Attachment 1 provides the allocation of the required funds. The total estimated cost of Lake Mathews wastewater system replacement, including the amount allocated to date and funds allocated for the work described in this action, is approximately \$6.5 million.

Award of Construction Contract (Creative Home dba Chi Construction)

Specification No. 1944A for the Lake Mathews wastewater system replacement was advertised for bids on July 29, 2021. As shown in **Attachment 2**, three bids were received and opened on September 1, 2021. The low bid from Creative Home dba Chi Construction in the amount of \$3,815,000, complies with the requirements of the specifications. The other bids ranged from \$3,904,458.88 to \$4,153,720, while the engineer's estimate for this project was \$4,970,000. Staff investigated the difference between the low bid and the engineer's estimate and attributes the difference to the bidder's intent to the expanded use of power equipment to excavate non-rippable earth material, and this practice is anticipated to avoid delays and cost increases when compared to other rock excavation methods. For this contract, Metropolitan established a Small Business Enterprise (SBE) participation level of at least 25 percent of the bid amount. Creative Home dba Chi Construction is an SBE firm and thus achieves 100 percent participation. The subcontractors for this contract are listed in **Attachment 3**. This action awards a \$3,815,000 contract to Creative Home dba Chi Construction for Lake Mathews Site Wastewater System Replacement.

As described above, Metropolitan staff will perform construction management and inspection. Engineering Services' performance metric target range for inspection of projects with construction greater than \$3 million is 9 to 12 percent. For this project, the performance metric goal for inspection is 11.7 percent of the total construction cost. The total cost of construction for this project is \$3,815,000.

Alternatives Considered

During design, staff examined the feasibility of replacing the existing septic system in-kind, including wastewater pipes, septic tanks, and leach fields. However, this alternative requires additional maintenance and contracting activities to keep the system operating in a reliable manner. In addition, a septic system provides a potential source of contamination of water stored in Lake Mathews. Overall, a new wastewater system that connects directly to Western's main sewer line provides a long-term reliable, safe, and cost-effective approach when compared to the septic system.

Summary

This action awards \$3,815,000 to Creative Home dba Chi Construction for Lake Mathews Wastewater System Replacement. 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

February 2023 – Complete 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 51190, dated May 08, 2018, the Board authorized final design to replace the Lake Mathews Wastewater System.

By Minute Item 51963, dated April 13, 2020, the Board appropriated a total of \$500 million for projects identified in the Capital Investment Plan for Fiscal Years 2020/21 and 2021/22.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The project was determined by the Board to be categorically exempt under Classes 1, 2, and 4 (Sections 15301, 15302, and 15304 of the State CEQA Guidelines) on May 8, 2018. With the current action, there is no substantial change proposed since the original project was first approved in 2018. Hence, the previous environmental documentation in conjunction with the project fully complies with CEQA and the State CEQA Guidelines. Accordingly, no further CEQA documentation is necessary for the Board to act with regard to the proposed action.

CEQA determination for Option #2:

None required

Board Options

Option #1

Award \$3,815,000 contract to Creative Home dba Chi Construction for Lake Mathews Site Wastewater System Replacement.

Fiscal Impact: Expenditure of \$5.425 million in capital funds. Approximately \$0.5 million will be incurred in the current biennium and has been previously authorized.

Business Analysis: This project will provide reliable and efficient disposal of wastewater at the Lake Mathews facility in compliance with local codes and environmental regulations.

Option #2

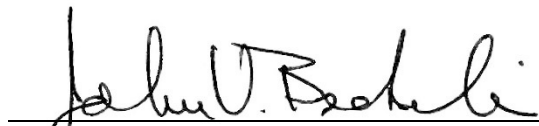
Do not proceed with the project at this time.

Fiscal Impact: None.

Business Analysis: This option would forgo an opportunity to reduce the risk of costly unplanned repairs.

Staff Recommendation

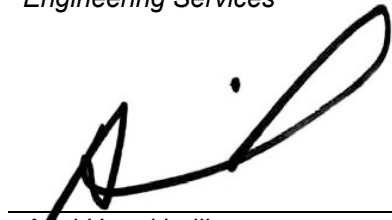
Option #1



John V. Bednarski
Manager/Chief Engineer
Engineering Services

9/22/2021

Date



Adel Hagekhalil
General Manager

9/29/2021

Date

Attachment 1 – Allocation of Funds

Attachment 2 – Abstract of Bids

Attachment 3 – List of Subcontractors

Attachment 4 – Location Map

Ref# es12674832

Allocation of Funds for the Lake Mathews Site Wastewater System Replacement

	Current Board Action (Oct. 2021)
Labor	
Studies & Investigations	\$ -
Final Design	-
Owner Costs (Program mgmt., envir. monitoring)	292,000
Submittals Review & Record Drwgs.	248,000
Construction Inspection & Support	446,000
Metropolitan Force Construction	-
Materials & Supplies	-
Incidental Expenses (Connection fees & permits)	150,000
Professional/Technical Services	-
Right-of-Way	-
Equipment Use	-
Contracts	-
Creative Home dba Chi Construction	3,815,000
Remaining Budget	474,000
Total	<u>\$ 5,425,000</u>

The total amount expended to date is approximately \$1.04 million. The total estimated cost to complete this project, including the amount appropriated to date and funds for the work described in this action, is \$6.5 million.

The Metropolitan Water District of Southern California
Abstract of Bids Received on September 1, 2021, at 2:00 P.M.
Specifications No. 1944A
Lake Mathews Site Wastewater System Replacement

The work consists of replacement of the existing sewer collection systems including sewer pipe, cleanouts, and septic tanks; and installation of new sewer mains, laterals, manholes, cleanouts, and connection to the local sewer system.

Engineer's estimate: \$4.97 million

Bidder and Location	Total	SBE \$	SBE %	Met SBE ¹
Creative Home dba Chi Construction Anaheim, CA	\$3,815,000.00	\$3,815,000	100%	Yes
Trinity Construction Blue Jay, CA	\$3,904,458.88	-	-	-
CEM Construction, Corp. Montebello, CA	\$4,153,720.00	-	-	-

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. 1944A****Lake Mathews Site Wastewater System Replacement**

Low bidder: Creative Home dba Chi Construction

Subcontractor and Location
Manhole Builders, Inc. Corona, CA
Brickley Environmental San Bernardino, CA





Lake Mathews Site Wastewater System Replacement

Engineering and Operations Committee

Item 7-2

October 11, 2021

Current Action

- Award \$3,815,000 contract to Creative Home dba Chi Construction to replace the wastewater system at Lake Mathews facility

Distribution System



Aerial view



Damaged Wastewater Line

Alternatives Considered

- In-kind replacement of existing septic tanks, wastewater pipes, & leach fields
 - Continued requirements for maintenance & contracting activities to keep system operating in a reliable manner
- Replace the existing system with lateral collection system - selected option
 - Connects directly to Western Municipal Water District
 - Minimizes system maintenance by in-house staff and contracts
 - Provides reliable, safe, & cost-effective system compared to septic system

Proposed Improvement



Contractor Scope

- Removal of existing wastewater collector lines, septic tanks, leach fields, & accessways
- Install approximately 7,000 ft of new wastewater line
- Install 35 new accessways
- Connect new lines to existing facilities & Western Municipal Water District sewer main
- Traffic control & site restoration



New Wastewater Line

Metropolitan Scope

- Construction inspection
- Submittal review
- Technical support
- Respond to requests for information
- Provide project management & contract administration

Bid Results

Specifications No. 1944A

Bids Received	September 1, 2021
No. of Bidders	3
Low Bidder	Creative Home dba Chi Construction
Low Bid	\$3,815,000
Range of Higher Bids	\$3,904,458 to \$4,153,720
Engineer's estimate	\$4,970,000
SBE Participation*	100%

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

Allocation of Budgeted Funds

Contract

Creative Home dba Chi Construction	\$3,815,000
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Metropolitan Labor

Construction Inspection	446,000
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Submittal review, technical support & record drwgs.	248,000
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Contract admin., envir. support, & proj. management	292,000
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Incidental Expenses (Connection & Permit Fees)	150,000
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Remaining Budget	474,000
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Total	\$5,425,000
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Project Schedule



Board Options

- Option #1
 - Award \$3,815,000 contract to Creative Home dba Chi Construction for Lake Mathews Site Wastewater System Replacement.
- Option #2
 - Do not proceed with the project at this time.

Staff Recommendation

- Option #1





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

10/12/2021 Board Meeting

7-3

Subject

Authorize an agreement with Helix Environmental Planning, Inc., in an amount not to exceed \$2.8 million, to prepare environmental documentation for the Regional Recycled Water Program and an agreement with Stantec Consulting Services Inc., in an amount not to exceed \$6.5 million for engineering and technical studies to support the environmental planning phase of the Program; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

The challenges and risks associated with recurring drought conditions, ongoing climate change, and underlying seismic risks to the region have underscored the need to develop additional local water supplies. In response to these challenges, Metropolitan initiated the environmental planning phase of the Regional Recycled Water Program (Program) in November 2020. The objective of the Program is to develop a new local resource that will increase future water supply reliability for the Southern California region. In order to complete the environmental planning phase as currently envisioned, staff recommends the award of two professional services agreements. This action authorizes a consulting agreement to provide specialized expertise for the preparation of environmental documentation for the full Program. This action also authorizes a second consulting agreement to provide specialized engineering and technical studies related to the Program's advanced water treatment (AWT) facilities in support of the environmental planning efforts.

Details

Background

In November 2015, Metropolitan's Board authorized an agreement with the Los Angeles County Sanitation District No. 2 (Sanitation District) to establish a partnership between Metropolitan and the Sanitation District in developing a new local resource that would help address the effects of the unprecedented drought conditions experienced in California. The Program's goal is to produce purified water for reuse applications such as groundwater recharge, industrial uses, and future direct potable use (DPR) through raw water augmentation at Metropolitan's water treatment plants. The Sanitation District provides wastewater and solid waste management for approximately 5.3 million people in Los Angeles County. The largest treatment plant in the system, the Joint Water Pollution Control Plant (Joint Plant), located in Carson, California, has a capacity of 400 million gallons of water per day (mgd) and an average daily flow of approximately 260 mg.

Treated secondary effluent from the Joint Plant is currently discharged through outfall tunnels to the Pacific Ocean in accordance with ocean discharge regulations. The Program would instead capture that water and treat it for beneficial reuse, adding a significant new water supply to Metropolitan's service area. The Program is currently envisioned to initially produce approximately 150 mgd of purified water for reuse under a two-phase approach. The ultimate capacity of the Program would be determined by the availability of source water from the Joint Plant, the anticipated demands by the member agencies for groundwater replenishment, industrial uses, and potential DPR applications, and the pending development and approval of DPR regulations by the state.

In November 2020, Metropolitan's Board authorized an amendment to the existing agreement with the Sanitation District to support further development and evaluation of the Program and preparation of environmental documentation, technical studies, and public outreach for the Program. Agreements were authorized in June 2021 and August 2021 for engineering and technical services related to the Program's conveyance and AWT demonstration facilities, respectively. Agreements for preparation of environmental documentation for the full Program and engineering and technical studies related to the Program's AWT facilities are needed at this time.

In accordance with the April 2020 action on the biennial budget for fiscal years 2020/21 and 2021/22 and the November 2020 action to initiate the environmental planning phase of the Program, the General Manager authorized staff to proceed with planning phase activities for the Program using Metropolitan's O&M funds budgeted for this purpose. The two agreements that are the subject of this board action, and the consulting agreement that was authorized by the Board in June 2021, will be utilized to complete the technical studies and environmental planning efforts for the Program. The total estimated cost to complete these engineering and technical studies, outreach, and environmental documentation is \$30 million. Funds for these planning activities for the Program are included in the O&M budget for fiscal years 2020/21 and 2021/22.

Similar to the current demonstration testing of membrane bioreactor for potable reuse, the effectiveness of the proposed treatment train for DPR must be demonstrated and approved by the regulators before its full-scale implementation. Modifications to the existing AWT Demonstration Facility at the Joint Plant to include additional DPR treatment options, such as ozonation and biological activated carbon, are planned to start in 2022 to accommodate testing of potential processes and facilitate collection of required information for regulatory acceptance.

In accordance with the April 2020 action on the biennial budget for fiscal years 2020/21 and 2021/22, the General Manager will authorize staff to proceed with the design of facility modifications to the existing AWT Demonstration Facility for DPR demonstration testing purpose, pending board award of the Engineering Services contract 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 2020/21 and 2021/22 (Appropriation No. 15517). This project is identified in the CIP Appendix for Fiscal Years 2020/21 and 2021/22 as a part of the Regional Recycled Water Program. Funds required for work to be performed pursuant to the subject contract after Fiscal Year 2021/22 will be budgeted within the Capital Investment Plan Appropriation for Fiscal Years 2022/23 and 2023/24.

Environmental Planning Support for the Regional Recycled Water Program

Environmental planning activities for the full-scale Program include technical studies and analyses for the preparation of a Program Environmental Impact Report (PEIR) in accordance with the California Environmental Quality Act (CEQA) and the State CEQA Guidelines. The PEIR will allow Metropolitan to consider broad policy alternatives and program-wide mitigation measures early in the Program's development and will provide greater flexibility to consider alternatives to avoid, minimize, and develop mitigation measures for identified impacts. Supplemental documents to address project-specific elements that are not addressed in the PEIR would be prepared in a later phase and are not included in this board action.

In addition to the PEIR, to take advantage of potential low-interest loans and grants from the State Revolving Funds (SRF) and other federal funding sources, a "CEQA-Plus" analysis will be prepared to comply with federal cross-cutting requirements for SRF and federal funds. Presently, it is not anticipated that additional National Environmental Policy Act (NEPA) compliance will be required to complete PEIR development and certification for the Program during this phase of work. If any impact on resources within federal jurisdiction is identified, the impacted federal agency will assess the environmental effects of the proposed action and any reasonable alternatives before deciding on whether and/or how to proceed with NEPA compliance. Metropolitan's consultant for environmental support services, identified below, would assist Metropolitan in providing NEPA support to the appropriate federal agency.

Engineering and Technical Studies for the AWT Facilities

Specialized engineering and technical studies are required to identify and evaluate potential Program alternatives and develop key design criteria under State CEQA Guidelines. Two agreements have been previously authorized for studies related to the conveyance and AWT demonstration facilities. The Sanitation District is currently

evaluating options to remove nitrogen from the Joint Plant's primary or secondary effluent, which would significantly reduce the downstream treatment requirements at an AWT facility and provide potential cost savings for the Program. Recommendations from these technical analyses will be considered during the Program's environmental planning phase, along with the results of demonstration testing.

Additional studies and investigations are needed to further develop the recommended AWT process; prepare a full-scale conceptual plan of the AWT facilities; explore potential DPR facility sites and treatment technologies for raw water augmentation at Metropolitan's water treatment plants; and evaluate power and energy sustainability to address regulatory, operational, and construction impacts. Information collected from the studies will also be utilized to support the preparation of environmental documentation, as described below.

Environmental Planning Support (Helix Environmental Planning, Inc.) – New Agreement

Helix Environmental Planning, Inc. (Helix) is recommended to prepare environmental documentation in compliance with CEQA, "CEQA-Plus," and potentially NEPA, as described above. Helix was selected through a competitive process via Request for Proposals No. 1285 based on the firm's specific experience in analyzing and addressing impacts and in preparing environmental documents of a similar scope for large-scale and complex projects within California on behalf of public agencies.

The specialized environmental planning services include: (1) development of a comprehensive project description in coordination with Metropolitan and the Sanitation District; (2) assessment of a reasonable range of potential alternatives in accordance with State CEQA Guidelines; (3) assessment of potential environmental impacts of the Program's construction and operation; (4) development of feasible mitigation measures to reduce or avoid significant environmental impacts; (5) management and distribution of all notices and documents in compliance with State CEQA Guidelines; (6) preparation of a "CEQA-Plus" analysis in accordance with federal cross-cutting requirements for SRF and federal funds; (7) technical support for public hearings, scoping meetings, and regulatory permit evaluation; and (8) preparation of a PEIR in compliance with State CEQA Guidelines.

This action authorizes a new agreement with Helix Environmental Planning, Inc., for a not-to-exceed amount of \$2.8 million, for environmental review and analysis and preparation of environmental documentation for the Program. For this agreement, Metropolitan has established a Small Business Enterprise participation level of 25 percent. Helix has agreed to meet this level of participation. The planned subconsultants for this work are listed in **Attachment 1**.

Engineering Services for AWT Facilities (Stantec Consulting Services Inc.) – New Agreement

Stantec Consulting Services Inc. (Stantec) is recommended to conduct the engineering and technical studies for the AWT facilities described above. Stantec was selected through a competitive process via Request for Proposals No. 1283 based on the firm's experience in design, construction, and operation of conventional wastewater treatment and advance treatment processes associated with water/wastewater treatment facilities, including permitting and DPR applications.

The planned engineering and technical studies include: (1) comprehensive site investigation and geotechnical analyses; (2) assessment of AWT and DPR technologies; (3) development of design criteria, treatment process and operating criteria, and conceptual plan for a full-scale AWT facility at the Joint Plant; (4) design of a demonstration scale DPR testing facility; (5) development of construction cost estimates and project schedule; and (6) preparation of technical reports documenting all findings and recommendations.

This action authorizes a new agreement with Stantec Consulting Services Inc., for a not-to-exceed amount of \$6.5 million, for engineering and technical studies related to the AWT facilities to support the environmental planning phase of the Program. For this agreement, Metropolitan has established a Small Business Enterprise participation level of 25 percent. Stantec has agreed to meet this level of participation. The planned subconsultants for this work are listed in **Attachment 2**.

Alternatives Considered

Staff considered several alternatives to complete the necessary engineering and technical studies and environmental documentation for the environmental planning phase of the Program. One alternative was to utilize Metropolitan's staff to perform all work components. The Program's upcoming activities will include the need for specialized engineering expertise such as technical knowledge and experience in implementing AWT

technologies and DPR applications. The in-house engineering staff does not routinely work in these areas. The recommended approach uses in-house staff for items normally encountered when working on Capital Investment Plan (CIP) projects, while consultants are utilized for specialized technical studies. This strategy will also be used for the development of the environmental documentation, which requires sophisticated environmental analyses used in the implementation of complex, large-scale projects, consideration of various environmental factors, and preparation of specialized documents.

After assessing the current staff workload and the required expertise, the use of specialized consultants is recommended to perform specific work identified in this board letter. Under this approach, Metropolitan staff will oversee the consultants' work and maintain key engineering and environmental planning competencies, while addressing specialized project needs. This approach will allow for timely completion of engineering and technical studies and environmental documentation for the Program without impacting the planned schedules of key CIP rehabilitation projects in the most cost- and time-efficient manner possible.

Summary

This action authorizes new agreements with: (1) Helix Environmental Planning, Inc., for a not-to-exceed amount of \$2.8 million to prepare the environmental documentation for the environmental planning phase of the Program; and (2) Stantec Consulting Services Inc., for a not-to-exceed amount of \$6.5 million for engineering and technical studies to support the environmental planning phase of the Program. See **Attachment 1** for the Listing of Subconsultants for the Agreement with Helix Environmental Planning, Inc., **Attachment 2** for the Listing of Subconsultants for the Agreement with Stantec Consulting Services Inc.; and **Attachment 3** for the Location Map.

Project Milestones

March 2024 – Board certification of environmental documentation

April 2024 – Completion of demonstration facility modifications for DPR testing

Policy

Metropolitan Water District Administrative Code Section 5108: Appropriations

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 Board Report No. 01122016 IRP 8-3 B-L, “2015 Integrated Water Resources Plan Update,” adopted January 2016

By Minute Item 42287, dated February 11, 1997, the Board adopted a set of policy principles on water recycling.

By Minute Item 50299, dated November 10, 2015, the Board authorized an agreement with County Sanitation District No. 2 of Los Angeles County for development of a potential regional recycled water supply program and a demonstration project.

By Minute Item 50410, dated March 8, 2016, the Board authorized agreements for design of the demonstration scale recycled water treatment plant and feasibility studies of recycled water delivery system.

By Minute Item 50884, dated July 11, 2017, the Board authorized construction of the advanced water treatment demonstration plant.

By Minute Item 51963, dated April 14, 2020, the Board appropriated a total of \$500 million for projects identified in the Capital Investment Plan for Fiscal Years 2020/21 and 2021/22.

By Minute Item 52174, dated November 10, 2020, the Board authorized preparation of environmental documentation and technical studies, and public outreach activities for the Regional Recycled Water Program.

By Minute Item 52404, dated June 8, 2021, the Board authorized an agreement with Black & Veatch Corporation, Inc. for engineering and technical studies to support environmental planning phase activities of the Regional Recycled Water Program.

By Minute Item 52476, dated August 17, 2021, the Board authorized an agreement with CDM Smith for engineering and technical studies at the Advanced Water Treatment Demonstration Facility.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is exempt from the provisions of CEQA and the State CEQA Guidelines because it consists of minor public or private alterations in the condition of land, water, and/or vegetation, which do not involve removal of healthy, mature, scenic trees (Section 15304 of the State CEQA Guidelines). Additionally, the proposed action is exempt from the provisions of CEQA and the State CEQA Guidelines because it consists of basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource. These 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 (Section 15306 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

- a. Authorize an agreement with Helix Environmental Planning, Inc., in an amount not to exceed \$2.8 million for preparation of environmental documentation for the Regional Recycled Water Program; and
- b. Authorize an agreement with Stantec Consulting Services Inc., in an amount not to exceed \$6.5 million for engineering and technical studies to support environmental planning phase activities of the Regional Recycled Water Program.

Fiscal Impact: \$7.5 million in O&M funds and \$1.8 million in capital funds. Approximately \$3 million will be incurred in O&M funds and \$0.5 million in capital funds in the current biennium and have been previously authorized.

Business Analysis: This option would advance the development of significant water reuse in Southern California and would augment regional supplies for Metropolitan's entire service area to deal with droughts, climate change, seismic risks, and uncertainties of imported water supplies.

Option #2

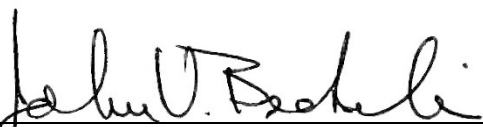
Do not proceed with the new agreements at this time.


Fiscal Impact: None

Business Analysis: This option would delay development of recycled water resources to meet the increasing need for the region's water supply to deal with drought, climate change, seismic risks, and other emergencies.

Staff Recommendation

Option #1



John V. Bednarski
Manager/Chief Engineer
Engineering Services
9/22/2021
Date

Adel Hagekhalil
General Manager
9/29/2021
Date**Attachment 1 – Subconsultants for Agreement with Helix Environmental Planning, Inc.****Attachment 2 – Subconsultants for Agreement with Stantec Consulting Services Inc.****Attachment 3 – Location Map**

Ref# es12677926

The Metropolitan Water District of Southern California
Subconsultants for Agreement with Helix Environmental Planning, Inc.

Subconsultant and Location
Paleo Solutions, Inc., Monrovia, CA
Ninyo & Moore Geotechnical and Environmental Sciences Consultants, San Diego, CA
Rick Engineering Company, San Diego, CA
Iteris, Inc., Los Angeles, CA

The Metropolitan Water District of Southern California
Subconsultants for Agreement with Stantec Consulting Services Inc.

Subconsultant and Location
Aldea Services, Inc., Los Angeles, CA
Carollo Engineers, Inc., Los Angeles, CA
Jacobs Engineering Group Inc., Los Angeles, CA
Kana Subsurface Engineering, Riverside, CA
One Water Solutions, Ann Arbor, MI
MWA Architects, Inc., San Francisco, CA
Paul Hansen Engineering, Rancho Palos Verdes, CA
Paul Redvers Brown, Inc., Encinitas, CA
THE CONVERSE PROFESSIONAL GROUP, dba Converse Consultants, Monrovia, CA
Trussell Technologies, Inc., Pasadena, CA
Veneklasen Associates, Inc., Santa Monica, CA

Location Map





Regional Recycled Water Program

Agreements for Preparation of Program's Env. Documentation and
Advanced Water Treatment Engineering Support

Engineering and Operations Committee

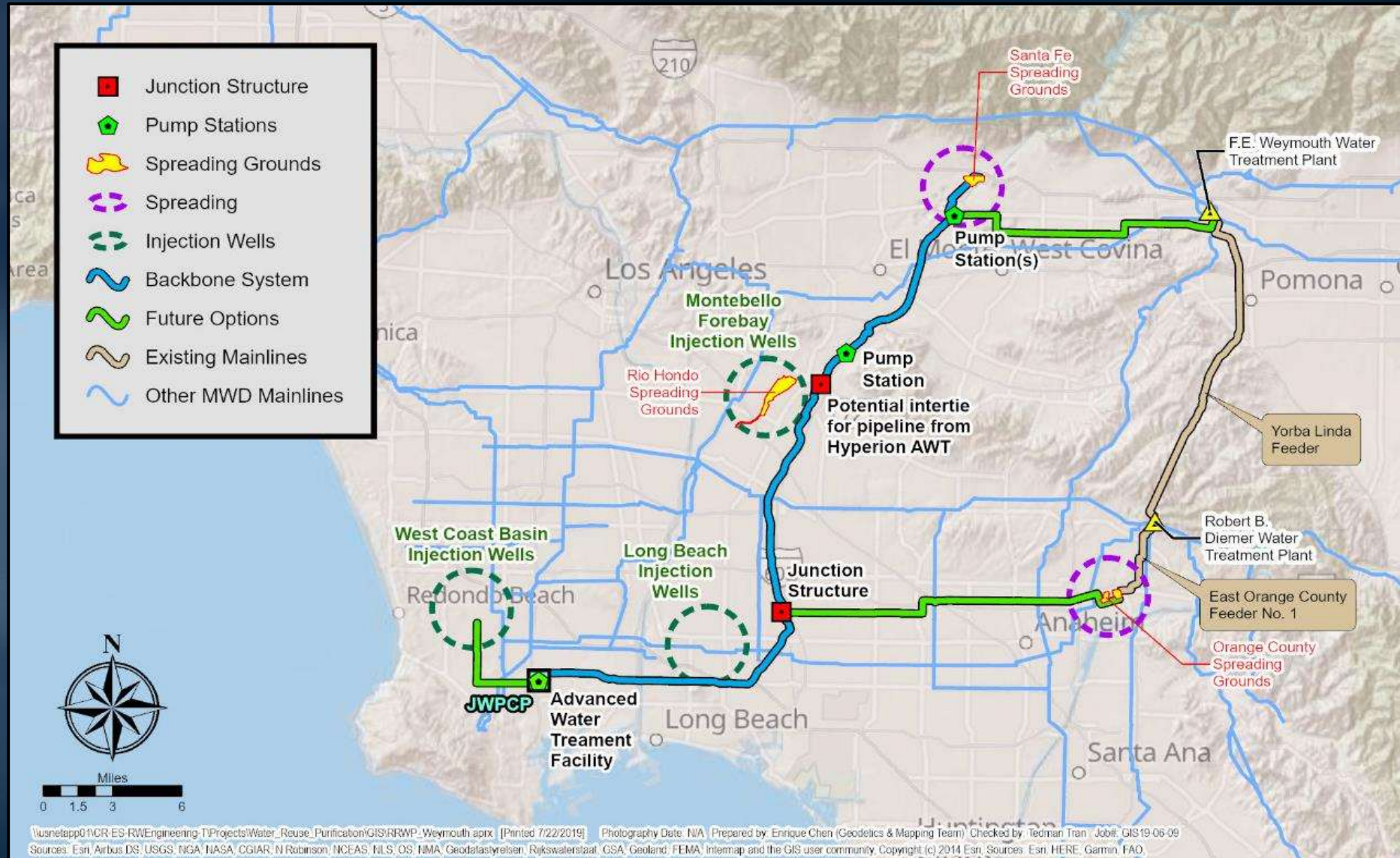
Item 7-3

October 11, 2021

Current Action

- Authorize an agreement with Helix Environmental Planning, Inc., in an amount not to exceed \$2.8 million, to prepare environmental documentation for the Regional Recycled Water Program
- Authorize an agreement with Stantec Consulting Services Inc., in an amount not to exceed \$6.5 million for engineering and technical studies to support the environmental planning phase of the Program

Regional Recycled Water Program



Joint Water Pollution Control Plant



RRWP Env. Planning Phase Activities

● Recent Accomplishments

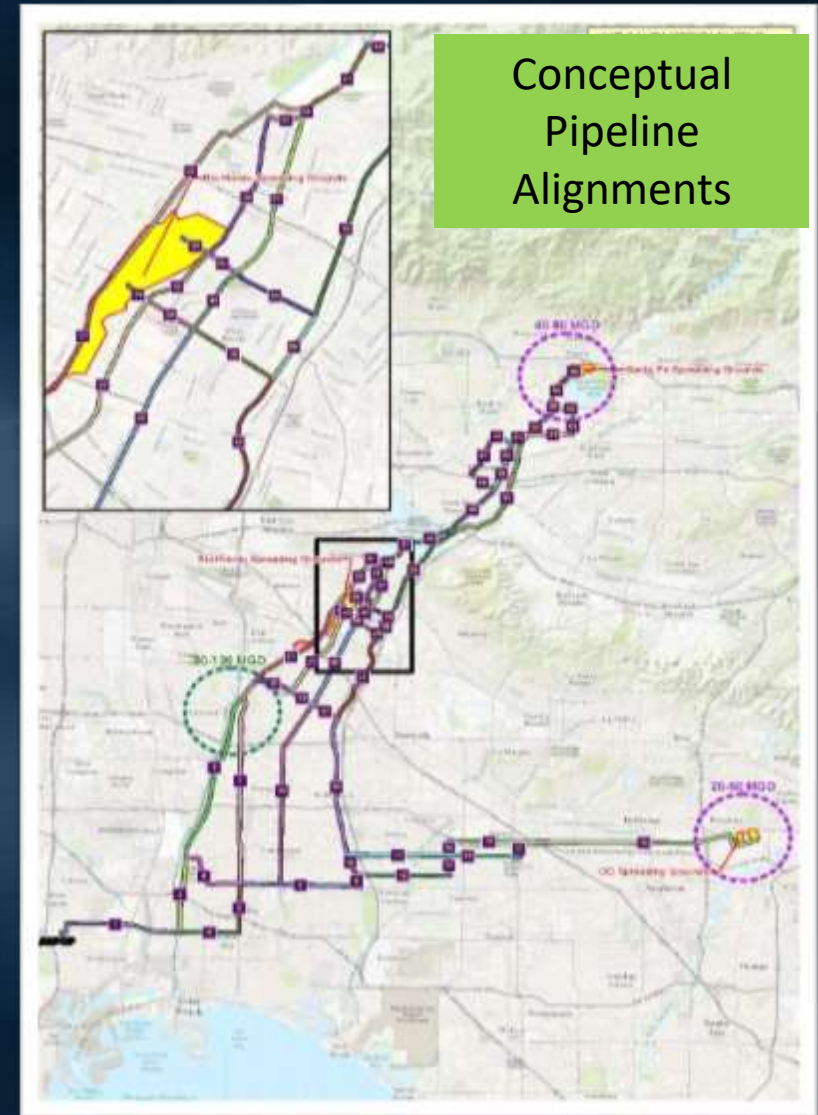
- Board authorized preparation of environmental documentation & technical studies for RRWP
- Amendments & agreements with LACSD and SNWA
- Public outreach consultants selected for on-call services
- Authorized agreement for conveyance engineering support
- Authorized agreement for demonstration testing & operation

● Current Action

- Authorize agreements for environmental documentation and Advanced Water Treatment (AWT) engineering support

Environmental Planning Support

- Preparation of env. documentation
 - Program EIR per CEQA guidelines
 - “CEQA-Plus” for Federal funding
- Coordination with LACSD and AWT & conveyance consultants
- Regulatory permit assessment
- Public outreach support



AWT Engineering Support

- Support environmental planning needs
- Finalize preferred AWT process
- Coordinate with LACSD on biological nitrogen removal process
- Develop full-scale conceptual facilities plan
- Assess DPR approaches and associated program components
- Evaluate power and energy sustainability
- Update program-level AWT costs



Conceptual Configuration
Full-Scale AWT Facility

Alternatives Considered

- All work by Metropolitan staff
- All work by consultant
- Hybrid approach (selected option)
 - Metropolitan staff – perform project management, technical oversight, coordination w/ regulatory agencies
 - Consultant – provide specialized technical expertise

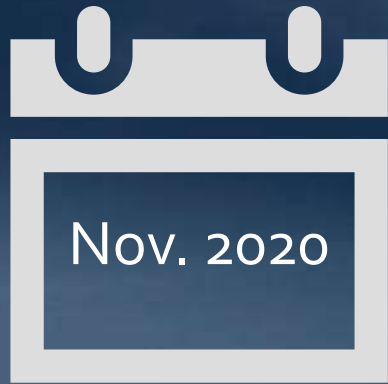
New Agreement – Helix Environmental Planning, Inc.

- Competitively selected under RFP No. 1285
- Scope of Work
 - Prepare Program EIR and “CEQA-Plus” documents
 - Assess potential alternatives and environmental impacts
 - Prepare Mitigation Monitoring and Reporting Plan to minimize environmental impacts
 - Distribute notices and documents per State CEQA Guidelines
 - Manage scoping meetings, support public outreach, and assess regulatory permit needs
- SBE/DVBE participation level – 25%
- NTE amount – \$2.8 million

New Agreement – Stantec Consulting Services Inc.

- Competitively selected under RFP No. 1283
- Scope of Work
 - Support environmental planning and CEQA documentation
 - Finalize preferred AWT process
 - Prepare full-scale AWT Conceptual Facilities Plan
 - Assess potential DPR facility sites and treatment technologies
 - Develop cost estimates and project schedule
 - Prepare DPR demonstration testing facility design, if needed
- SBE/DVBE participation level – 25%
- NTE amount – \$6.5 million

Program Schedule



Board Approval
of Next Steps

COMPLETED



Environmental
Planning

IN PROGRESS



Design and
Construction

FUTURE



Start-up and
Operations

FUTURE

Board Options

- Option #1

- a. Authorize an agreement with Helix Environmental Planning, Inc., in an amount not to exceed \$2.8 million for preparation of environmental documentation for the Regional Recycled Water Program; and
- b. Authorize an agreement with Stantec Consulting Services Inc., in an amount not to exceed \$6.5 million for engineering and technical studies to support environmental planning phase activities of the Regional Recycled Water Program.

- Option #2

- Do not proceed with the new agreements at this time.

Staff Recommendation

- Option #1





- Board of Directors
Engineering and Operations Committee

10/12/2021 Board Meeting

7-4

Subject

Award a \$282,390 contract to AME Builders, Inc. for replacement of the roof on the Vehicle Maintenance and Warehouse Building at the Jensen Water Treatment Plant; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

The Vehicle Maintenance and Warehouse Building at the Joseph Jensen Water Treatment Plant (Jensen plant) was constructed in 1999. The building roof has deteriorated over time and needs to be replaced. This action awards a construction contract to replace the roof on the Vehicle Maintenance and Warehouse Building at the Jensen plant.

Details

Background

The Jensen plant was placed into service in 1972 with an initial capacity of 400 million gallons per day (mgd) and was expanded to its current capacity of 750 mgd in the 1990s. Located in Granada Hills, the Jensen plant treats water from the West Branch of the State Water Project and delivers it to Metropolitan's Central Pool and to exclusive service areas on the west side of the distribution system.

The Vehicle Maintenance and Warehouse Building was placed into operation in 1999 and serves dual purposes. The warehouse portion stores stock supplies for operations and maintenance work and personal protective equipment for employees. The vehicle maintenance part of the building is utilized to service fleet vehicles. The building roof has reached the end of its service life and has leaked at several locations during the last several winter seasons. Leaks may cause damage to equipment and material stored in the warehouse. Staff has been required to implement temporary measures to protect the contents of both buildings when it rains.

In accordance with the April 2020 action on the biennial budget for Fiscal Years 2020/21 and 2021/22, the General Manager will authorize staff to proceed with replacement of the roof on the Vehicle Maintenance and Warehouse Building, pending board award of the contract described below. Based on the current CIP expenditure forecast, funds for the work to be performed, pursuant to this action during the current biennium, are available within the Capital Investment Plan Appropriation for Fiscal Years 2020/21 and 2021/22 (Appropriation No. 15519). 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.

Vehicle Maintenance and Warehouse Building Roof Replacement – Construction

The scope of the construction contract work consists of the replacement of approximately 14,000 square feet of roofing material on the building, which includes removing the existing asphalt roofing system and installing a new single-ply roofing system. Metropolitan forces will conduct temporary relocations of the heating, ventilation and air-conditioning conduits and piping on the roof, replace damaged insulation and ceiling tile, and repaint water-damaged walls inside the building.

A total of \$460,000 has been budgeted for this work. In addition to the amount of the contract described below, other funds to be allocated include \$40,000 for construction inspection; \$32,000 for Metropolitan force activities

as described above; \$25,000 for submittals review, technical support during construction, responding to requests for information, and preparation of record drawings; \$50,000 for contract administration and project management; and \$30,610 for the remaining budget.

Attachment 1 provides the allocation of the required funds. The total estimated cost of the Vehicle Maintenance and Warehouse Building Roof Replacement, including the amount allocated to date and funds allocated for the work described in this action, is approximately \$585,000. Approximately \$125,000 has been expended on this project to date.

Award of Construction Contract (AME Builders, Inc.)

Specification No. M-3050 to replace the Vehicle Maintenance and Warehouse Building roof at the Jensen plant was advertised for bids on July 27, 2021. As shown in **Attachment 2**, nine bids were received and opened on August 26, 2021. The low bid from AME Builders, Inc. in the amount of \$282,390 complies with the requirements of the specifications. The other bids ranged from \$294,700 to \$397,810, while the engineer's estimate for this project was \$375,000. For this contract, Metropolitan established a Small Business Enterprise (SBE) participation level of at least 25 percent of the bid amount. AME Builders, Inc. is an SBE firm and thus achieves 100 percent SBE participation.

This action awards a \$282,390 contract to AME Builders, Inc. for the roof replacement of the Vehicle Maintenance and Warehouse Building. As described above, Metropolitan staff will perform construction management and inspection. Engineering Services' performance metric target range for inspection of projects with construction less than \$3 million is 15 percent. For this project, the performance metric goal for inspection is 12.7 percent of the total construction cost, which includes the construction contract (\$282,390) and Metropolitan force construction (\$32,000).

Alternative Considered

Early in the design process, staff considered continuing to repair portions of the roof 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 20-year old roof is nearing the end of its service life. The selected alternative replaces the entire roof in order to maintain long-term operational reliability and provide the best value to Metropolitan.

Summary

This action awards a \$282,390 contract to AME Builders, Inc. for the replacement of the Vehicle Maintenance and Warehouse Building roof at the Jensen plant. See **Attachment 1** for the Allocation of Funds, **Attachment 2** for the Abstract of Bids, and **Attachment 3** for the Location Map.

Project Milestone

April 2022 – 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 51963, dated April 13, 2020, the Board appropriated a total of \$500 million for projects identified in the Capital Investment Plan for Fiscal Years 2020/21 and 2021/22.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

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. Accordingly, the proposed action qualifies under Class 1 and Class 2 Categorical Exemptions (Sections 15301 and 15302 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Award a \$282,390 contract to AME Builders, Inc. for replacement of the roof on the Vehicle Maintenance and Warehouse Building at the Jensen plant.

Fiscal Impact: Expenditure of \$460,000 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 reduce the risk of repairs on the building.

Option #2


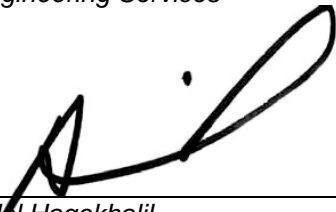
Do not proceed with the project at this time.

Fiscal Impact: Unknown

Business Analysis: Under this option, staff would continue to repair the existing roof as needed, which may lead to higher repair costs and interior damage within the building.

Staff Recommendation

Option #1

 _____ John V. Bednarski Chief Engineer Engineering Services	9/22/2021 Date
 _____ Adel Hagekhalil General Manager	9/29/2021 Date

Attachment 1 – Allocation of Funds

Attachment 2 – Abstract of Bids

Attachment 3 – Location Map

Ref# es12681028

Allocation of Funds for Vehicle Maintenance and Warehouse Building Roof Replacement at Jensen plant

	Current Board Action (Oct. 2021)
Labor	
Studies & Investigations	\$ -
Final Design	-
Owner Costs (Program mgmt., envir. monitoring)	50,000
Submittals Review & Record Drwgs.	25,000
Construction Inspection & Support	40,000
Metropolitan Force Construction	32,000
Materials & Supplies	-
Incidental Expenses	-
Professional/Technical Services	-
Right-of-Way	-
Equipment Use	-
Contracts	-
AME Builders, Inc.	282,390
Remaining Budget	30,610
Total	\$ 460,000

The total amount expended to date for the roof replacement of Vehicle Maintenance and Warehouse Building at Jensen plant is approximately \$125,000. The total estimated cost to complete the roof replacement of Vehicle Maintenance and Warehouse Building, including the amount appropriated to date, and funds allocated for the work described in this action, is \$585,000.

The Metropolitan Water District of Southern California

Abstract of Bids Received on August 26, 2021, at 2:00 P.M.

**Specifications No. 3050
Jensen Water Treatment Plant
Vehicle Maintenance and Warehouse Building Roof Replacement**

The work consists of the replacement of approximately 14,000 square feet of roofing material on the building, which includes removing the existing asphalt roofing system, and installing a new single-ply roofing system.

Engineer's estimate: \$~~374~~375,000

Bidder and Location	Total	SBE \$	SBE %	Met SBE¹
AME Builders, Inc. Pomona, CA	\$282,390.00	\$282,390.00	100%	Yes
Letner Roofing Company Orange, CA	\$294,700.00	-	-	-
Pacific Builders & Roofing Banning, CA	\$315,000.00	-	-	-
Eberhard Van Nuys, CA	\$318,966.00	-	-	-
Rite-Way Roof Corporation Fontana, CA	\$333,282.00	-	-	-
Best Contracting Services, Inc. Gardena, CA	\$354,486.00	-	-	-
Commercial Waterproofing Systems, Inc. Santa Ana, CA	\$371,765.41	-	-	-
Pacific Single Ply Roofing La Habra, CA	\$385,893.00	-	-	-
Bligh Roof Company Santa Fe Springs, CA	\$397,810.00	-	-	-

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





Award Construction Contract for Roof Replacement on the Vehicle Maintenance and Warehouse Building at the Jensen Plant

Engineering and Operations Committee

Item 7-4

October 11, 2021

Current Action

- Award a \$282,390 contract to AME Builders, Inc. to replace the roof on the Vehicle Maintenance and Warehouse Building at the Jensen plant

Distribution System



Location Map



Vehicle Maintenance & Warehouse Building

- Constructed in 1999
- Dual purpose building
 - Storage of stock supplies for operations
 - Fleet vehicle maintenance
- Roof condition
 - Asphalt roofing system at end of service life
 - Frequent leakage during winter seasons



Temporary Rainwater Collection System

Alternatives Considered

- Repair portions of the roof where leakage is observed
 - 20-year-old roof is nearing the end of its service life
 - Past repairs have not prevented new leaks during rain events
- Selected alternative
 - Replace the entire roof to maintain long-term operational reliability

Scope of Work

- Contractor
 - Remove & replace existing 14,000 sq ft roofing system
- Metropolitan
 - Temporarily relocate HVAC conduits & piping on the roof
 - Replace damaged insulation & ceiling tile
 - Repaint water-damaged walls inside the building
 - Construction inspection & submittal review
 - Project mgmt. & contract admin.

Bid Results

Specifications No. 3050

Bids Received	August 26, 2021
No. of Bidders	9
Low Bidder	AME Builders, Inc.
Low Bid	\$282,390
Range of Higher Bids	\$294,700 to \$397,810
Engineer's estimate	\$375,000
SBE Participation*	100%

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

Allocation of Budgeted Funds

Contract

AME Builders, Inc.	\$282,390
--------------------	-----------

Metropolitan Labor

Construction inspection	40,000
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Force construction	32,000
--------------------	--------

Submittals review & record drwgs.	25,000
-----------------------------------	--------

Program mgmt. & contract administration	50,000
---	--------

Remaining Budget	30,610
------------------	--------

Total:	\$460,000
--------	-----------

Project Schedule

Activity	2021	2022
Jensen Vehicle Maintenance & Warehouse Building Roof Replacement		



Board Action



Construction



Completion

Board Options

- Option #1
 - Award a \$282,390 contract to AME Builders, Inc. for replacement of the roof on the Vehicle Maintenance and Warehouse Building at the Jensen plant.
- Option #2
 - Do not proceed with the project at this time.

Staff Recommendation

- Option #1





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

10/12/2021 Board Meeting

7-5

Subject

Authorize the General Manager to enter into an agreement with the Arizona Department of Water Resources and the Central Arizona Water Conservation District to support the development of the Regional Recycled Water Program; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

Staff recommends executing an agreement with the Arizona Department of Water Resources (ADWR) and the Central Arizona Water Conservation District (CAWCD) to accept up to \$6 million in financial support for the development of the Regional Recycled Water Program. These agencies (ADWR and the CAWCD) are collectively called the “Arizona Parties” for this document.

Details

Background

In December 2020, Metropolitan entered into an agreement with the Southern Nevada Water Authority (SNWA) to fund up to \$6 million of the environmental phase work for the Regional Recycled Water Program. The Arizona Parties have expressed interest in developing a similar agreement.

The Arizona Parties, SNWA, and Metropolitan have a long history of working collaboratively to improve water supply reliability from the Colorado River. Over the last two decades, as Lake Mead levels declined and flows on the Lower Colorado River have been impacted, the Arizona Parties, SNWA, and Metropolitan have worked together to develop programs that benefitted all parties and the Colorado River as a whole. For example, Metropolitan, SNWA, and CAWCD funded a new regulating reservoir near the All-American Canal, funded conservation programs for the benefit of the Colorado River system, and developed conservation projects in Mexico. Additionally, ADWR and SNWA entered into an Intentionally Created Surplus (ICS) capacity sharing agreement with Metropolitan to more effectively use the available ICS storage capacity provided in the Lower Basin Drought Contingency Plan.

The Arizona Parties expressed interest in furthering their partnership with Metropolitan by developing an agreement similar to the SNWA funding agreement. In August of 2020, the Arizona Parties provided a non-binding letter of interest (LOI) to explore a potential partnership to jointly fund the Regional Recycled Water Program (Program) and receive water supply benefits from it. However, the LOI did not contain any firm commitments, nor did it specify any details. Accordingly, during the upcoming negotiations to develop new guidelines for the Colorado River, the agencies would like to facilitate interstate participation in the Program. To help advance this partnership, the Arizona Parties want to fund a portion of the Program’s environmental costs.

Framework for Potential Exchanges in Support of the Program

Similar to the agreement with SNWA, staff sees an opportunity for potential exchanges with agencies that wish to partner in the Program. Board members have noted that while the Program provides significant regional benefits, it also comes at a higher unit cost (\$ per acre-foot) than Metropolitan’s previous investments. These exchange partnerships could significantly reduce Metropolitan’s net cost exposure while enhancing dry-year reliability and resilience to catastrophic events.

A set of general guidelines can be helpful for considering potential future Program exchanges. These general guidelines form the basis for any Program exchange proposals that would be brought for board discussion or consideration. While the guidelines can help bound the discussions on potential Program exchanges, substantive development of agreements and board discussions on specific exchanges are premature at this time. Significant analysis will be done through the environmental planning phase of the Program to help inform these discussions over the next couple of years.

Enhanced Reliability

Recent history, previous modeling analysis, and work currently underway through the Integrated Resources Plan (IRP) Update indicates that Metropolitan does not face water reliability issues in normal or wet year conditions. In fact, Metropolitan is likely to have surplus water available for storage in these year-types. As a result, any supply reliability issues appear to be confined to significant multiple dry-year sequences and catastrophic event scenarios. This circumstance has been shown through analysis done in the 2010 and 2015 IRP Updates and is likely to be emphasized again in the 2020/21 IRP Update. As such, Metropolitan will only consider Program exchanges that enhance dry-year reliability or resilience under catastrophic events after the Program is complete. Exchanges that negatively impact these factors will not be considered.

This guideline would likely focus on arrangements that allow Program water to be exchanged in normal or wet years while maintaining full access to imported supplies in dry conditions or catastrophic events, in addition to the water produced by the Program. This approach ensures net reliability improvements for the region.

Regional Provider

Metropolitan is developing the Program for the benefit of all member agencies. Funding provided by outside participants can reduce the net cost burden on Metropolitan's member agencies. As such, staff will focus on potential Program exchanges with agencies outside of Metropolitan's service area.

Metropolitan would consider Program exchange concepts with agencies on both the Colorado River or State Water Project (SWP) systems. Any potential Program exchanges on the SWP system would have a further requirement of preserving or enhancing the reliability of the SWP-constrained regions in Metropolitan's system. Program exchanges that reduce the availability of SWP supplies to these constrained areas in times of need would not be considered.

Full Cost Recovery

Any potential exchanges should achieve full cost recovery on a per acre-foot basis. Metropolitan does not intend to consider partnerships that seek exchanges at a subsidized rate.

Proposed Agreement with Arizona Parties

As discussed above, it is not time to consider a specific Program exchange agreement. However, the Arizona Parties are interested in assisting Metropolitan with completing the due diligence necessary to understand the Program parameters and costs. This information would inform decisions by the parties about a potential future Program exchange. The Arizona Parties propose to financially support the environmental planning phase activities for the Regional Recycled Water Program through a funding agreement. CAWCD's board of directors approved its participation on June 10, 2021.

A term sheet for the proposed Regional Recycled Water Program agreement with the Arizona Parties is provided in **Attachment 1**. The Arizona Parties would provide direct cost contribution in the lesser amount of either \$6 million or 24 percent of Metropolitan's costs. The combined funding from both SNWA and the Arizona Parties would be up to \$12 million or 48 percent of Metropolitan's costs for the environmental phase. Metropolitan would be responsible for 52 percent of the costs associated with the environmental phase. Under the proposed agreement with the Arizona Parties, Metropolitan would bill CAWCD for the Arizona Parties' contributions. Pursuant to a separate agreement between CAWCD and ADWR, CAWCD would contribute up to \$5 million while ADWR would provide up to \$1 million; however, in the event ADWR is unable to provide funding, CAWCD would provide up to \$6 million. The contribution from the Arizona Parties would reimburse Metropolitan to directly offset the environmental planning phase costs by the same amount.

In addition to the benefits described in the guidelines above, partnering with the Arizona Parties also presents an important opportunity for coordination on the Colorado River. The Arizona Parties and Metropolitan would have a mutual interest in seeking a framework on the Colorado River that recognizes this opportunity for supply augmentation. This feeds into discussions of the Operating Guidelines for the Lower Basin of the Colorado River, which are set to expire at the end of 2026. Cementing a partnership for coordination on the environmental planning phase activities of the Program at this time will also reinforce the commitment to work together in these important upcoming negotiations on the Colorado River. Importantly, this agreement would also help show collaboration among the three states in the Lower Basin of the Colorado River, which could help with future federal funding opportunities for the RRWP

The proposed agreement does not obligate Metropolitan or the Arizona Parties to an exchange in the future. Metropolitan will carefully consider all factors before surrendering any portion of its Colorado River supply. Climate change and deepening drought may mean Southern California will need all its available water resources in the future to meet our long-term demands. Staff recommends proceeding with this partnership without any obligations related to a long-term exchange. Under the proposed agreement, either the Arizona Parties or Metropolitan can decide not to proceed in the future. In this circumstance, Metropolitan would return the Arizona Parties' contribution with no interest charged. As information is developed through the environmental planning phase of the Program, staff would return to the Board with a full analysis of the benefits and risks of any Program exchange.

Additional Interest

In addition to the Arizona Parties and SNWA, some other agencies have indicated an interest in discussing similar arrangements. These discussions are preliminary and would be informed by feedback the Board may provide on this action item. Agencies that have expressed interest so far include Coachella Valley Water District (Colorado River and State Water Contractor), Desert Water Agency (State Water Contractor), and San Gabriel Valley Municipal Water District (State Water Contractor).

Summary

This action authorizes a funding agreement with the Arizona Parties that provides no risk to the parties. This agreement only deals with funding for the environmental planning phase of the Program and does not commit Metropolitan to complete the Program, nor does it commit any of the agencies to a future Program exchange. If Metropolitan, ADWR or CAWCD chooses not to proceed, Metropolitan will return the funds the Arizona Parties provided to Metropolitan without any interest. The CAWCD board has voted to authorize proceeding with the agreement.

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

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 the proposed action will not cause either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment and involves continuing administrative or maintenance activities (Section 15378(b)(2) of the State CEQA Guidelines). The proposed action also is not defined as a project under CEQA because it involves 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). Additionally, the proposed action is exempt from the provisions of CEQA and the State CEQA Guidelines because it consists of basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource. These 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 (Section 15306 of the

State CEQA Guidelines). Finally, where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the proposed activity is not subject to CEQA (Section 15061(b)(3) of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Authorize an agreement with the Arizona Parties to support the development of the Regional Recycled Water Program.

Fiscal Impact: Up to \$6 million will be reimbursed to Metropolitan by the Arizona Parties for expenditures on planning phase activities to develop the Regional Recycled Water Program.

Business Analysis: This option would provide substantial financial support to advance the development of significant water reuse in Southern California and would augment regional supplies for Metropolitan's entire service area to deal with droughts, climate change, and seismic risks.

Option #2

Do not authorize an agreement with the Arizona Parties to support the development of the Regional Recycled Water Program.

Fiscal Impact: Up to \$6 million of Metropolitan funding would be required without reimbursement from the Arizona Parties.

Business Analysis: Under this option, Metropolitan would receive no financial contribution from the Arizona Parties to advance the Regional Recycled Water Program.

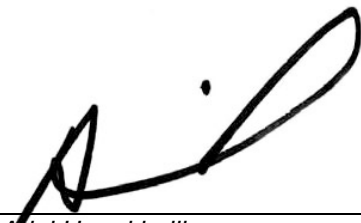
Staff Recommendation

Option #1



Brad Coffey
Water Resource Management Manager

10/6/2021
Date



Adel Hagekhalil
General Manager

10/6/2021
Date

Attachment 1: Term Sheet for Potential Regional Recycled Water Program Agreement with Arizona Parties

Ref# wrm12679337

**TERM SHEET FOR POTENTIAL REGIONAL RECYCLED WATER PROGRAM
AGREEMENT WITH ARIZONA PARTIES**

TERMS

1. The Central Arizona Water Conservation District and Arizona Department of Water Resources (collectively referred to as Arizona Parties) will provide to Metropolitan the lesser of either \$6 million or 24 percent of Metropolitan's costs for conducting analyses, investigations, evaluations, studies, and public outreach, as needed, to complete any environmental review and documentation required for design and construction of the Program (collectively "Environmental Planning Phase Services"). These Environmental Planning Phase Services include environmental evaluation, engineering and other technical support, and public outreach, and will conform to and comply with the requirements of the California Environmental Quality Act and any other applicable environmental requirements, permitting processes and laws.
2. Metropolitan shall provide an accounting and invoice Arizona Parties on a quarterly basis for 24 percent of the costs incurred by Metropolitan for Environmental Planning Phase Services, up to a maximum cumulative amount of \$6 million. Arizona Parties shall have the right to review and confirm that the invoice conforms to the terms of this Agreement, and if so approved, Arizona Parties shall pay the invoice within 30 days of receipt.
3. This Agreement does not: obligate Metropolitan to approve or develop the Program; obligate Metropolitan to make water available to Arizona Parties through exchange or other mechanism; obligate Arizona Parties to agree to such exchange; allocate any Program water to Arizona Parties; or set any precedent for the terms of any such allocation. Such terms may be provided for in a separate Development Agreement between the Parties.
4. If Metropolitan does not approve or develop the Program or if Metropolitan or Arizona Parties determines to not enter into a separate Development Agreement to allocate Program water to Arizona Parties, then Metropolitan will return the funds that Arizona Parties provided to Metropolitan under this Agreement, without any interest.
5. If the Parties enter into a separate Development Agreement which allocates Program water to Arizona Parties, the Development Agreement will credit Arizona Parties with the funds provided by Arizona Parties under this Agreement.
6. Metropolitan and Arizona Parties will also explore whether certain in-kind services could be provided by Arizona Parties in support of the Environmental Planning Phase Services.
7. This Agreement is effective as of the date the last Party executes the Agreement and will terminate on December 31, 2035, provided that the Parties may agree to extend the term of this Agreement.
8. This Agreement is not intended by the Parties to create any right in or benefit to Parties other than Arizona Parties and Metropolitan. This Agreement does not create any third-party beneficiary rights or causes of action.
9. The failure of either Party to enforce at any time, or for any period of time, the provisions hereof shall not be construed as a waiver of such provisions or of the rights of such Party to enforce each and every such provision.



Authorize RRWP Funding Agreement with Arizona Parties

Engineering and Operations Committee

Item 7-5

October 11, 2021

Arizona Parties Agreement Solidifies Support for the RRWP

- Letters of Intent with basin parties and key stakeholders first step in developing partnerships
- Funding partners share in cost of environmental phase
 - Sanitation Districts of Los Angeles County
 - SNWA
 - Proposed Arizona Parties Agreement

Who are the Arizona Parties?

- Central Arizona Water Conservation District
 - Also referred to as Central Arizona Project or CAP
- Arizona Department of Water Resources
- Both parties represent Arizona in Colorado River discussions

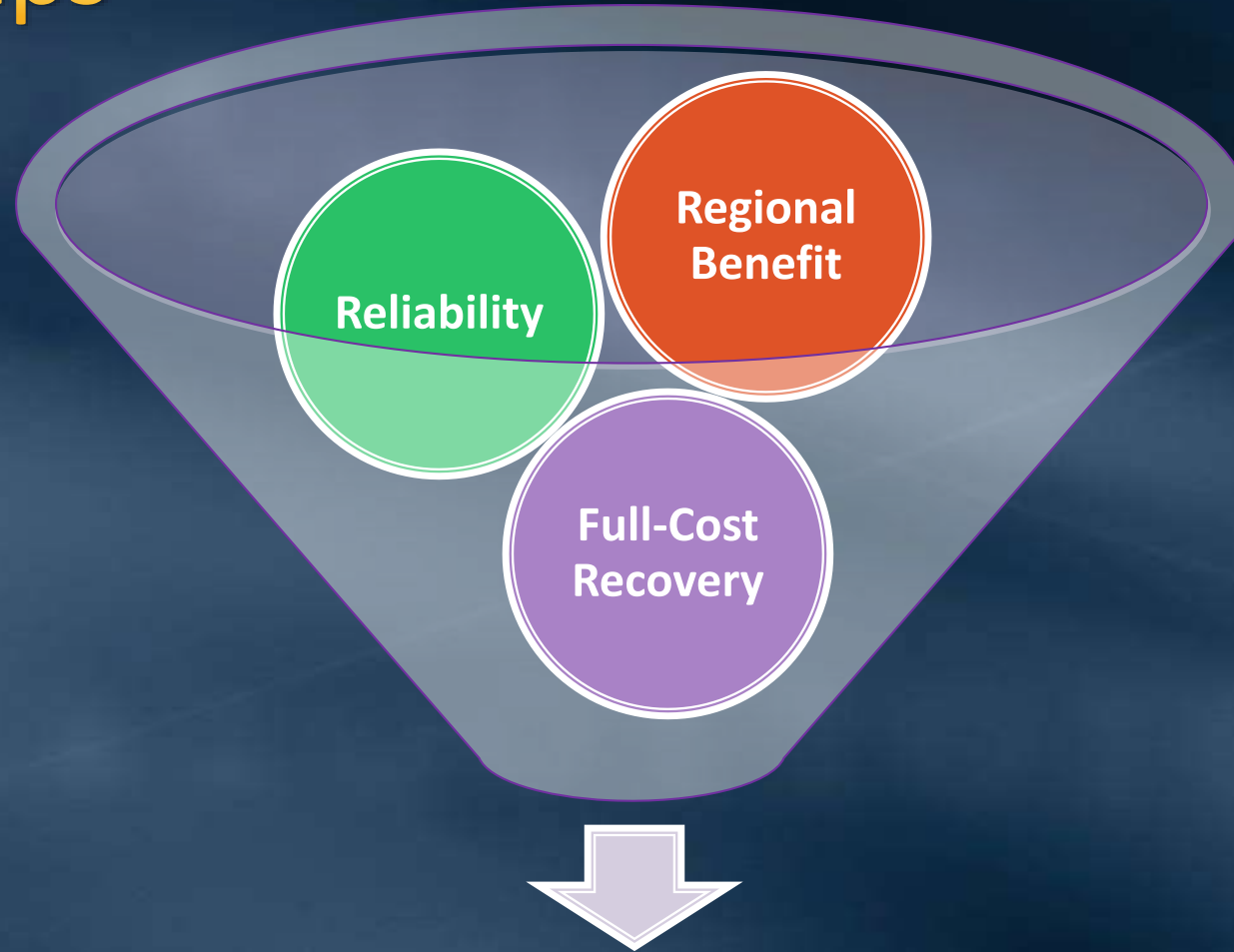
Metropolitan and Arizona Parties Enjoy Long History of Cooperation

- Metropolitan and Central Arizona Water Conservation District
 - Funded new regulating reservoir near the All-American Canal
 - Funded Conservation programs for the benefit of the Colorado River system, and
 - Developed conservation projects in Mexico
- Metropolitan and Arizona DWR
 - Intentionally Created Surplus (ICS) capacity sharing agreement to more effectively use the available ICS storage capacity provided in the Lower Basin Drought Contingency Plan.

Arizona Parties Expressed Interest in Participating in RRWP Planning

- Interested in exploring collaborative water resource projects with Colorado River partners
- Submitted Letter of Interest to explore potential partnership opportunities to support the RRWP in August 2020

Broad Framework Used to Explore Long-Term Partnerships



Partnership Considered

How a Potential Partnership Would Work



Other Agencies May Also Be Interested

- Some State Water contractors have contacted us
 - Interest likely to be for small amounts
 - Only preliminary discussions thus far

Metropolitan/Arizona Parties Agreement – Key Terms

- Arizona Parties to contribute 24 Percent (\$6 M cap) of Metropolitan environmental planning costs
 - Opportunity for in-kind services
- No obligation to participate in future phases
- Funds returned to Arizona Parties if either
 - Metropolitan does not develop RRWP or
 - Either party does not enter into separate participation agreement

Cooperation on Environmental Planning Provides Benefits to All Agencies

- Potentially reduces Metropolitan's expenditures for environmental planning activities
- Improves project understanding and shortens development path for potential long-term partnership
- Aligns agency interests entering Colorado River negotiations for the 2026 Colorado River shortage guidelines
- Help develop Lower Basin State support for Regional Recycled Water Program

Board Options – CAP/AZ DWR/Metropolitan Funding Agreement

- Option #1

- Authorize an agreement with the Arizona Parties to support the development of the Regional Recycled Water Program.

- Option #2

- Do not authorize an agreement with the Arizona Parties to support the development of the Regional Recycled Water Program.

Staff Recommendation

- Option #1





Project Labor Agreements

Engineering & Operations Committee

Item 6a

October 11, 2021

Agenda

- Highlights from the April E&O Presentation
- Follow up items
 - Director's Questions - April E&O Presentation
 - Contractor organization feedback
- Potential Approaches to PLA Implementation
- Next steps

Highlights from April E&O Presentation

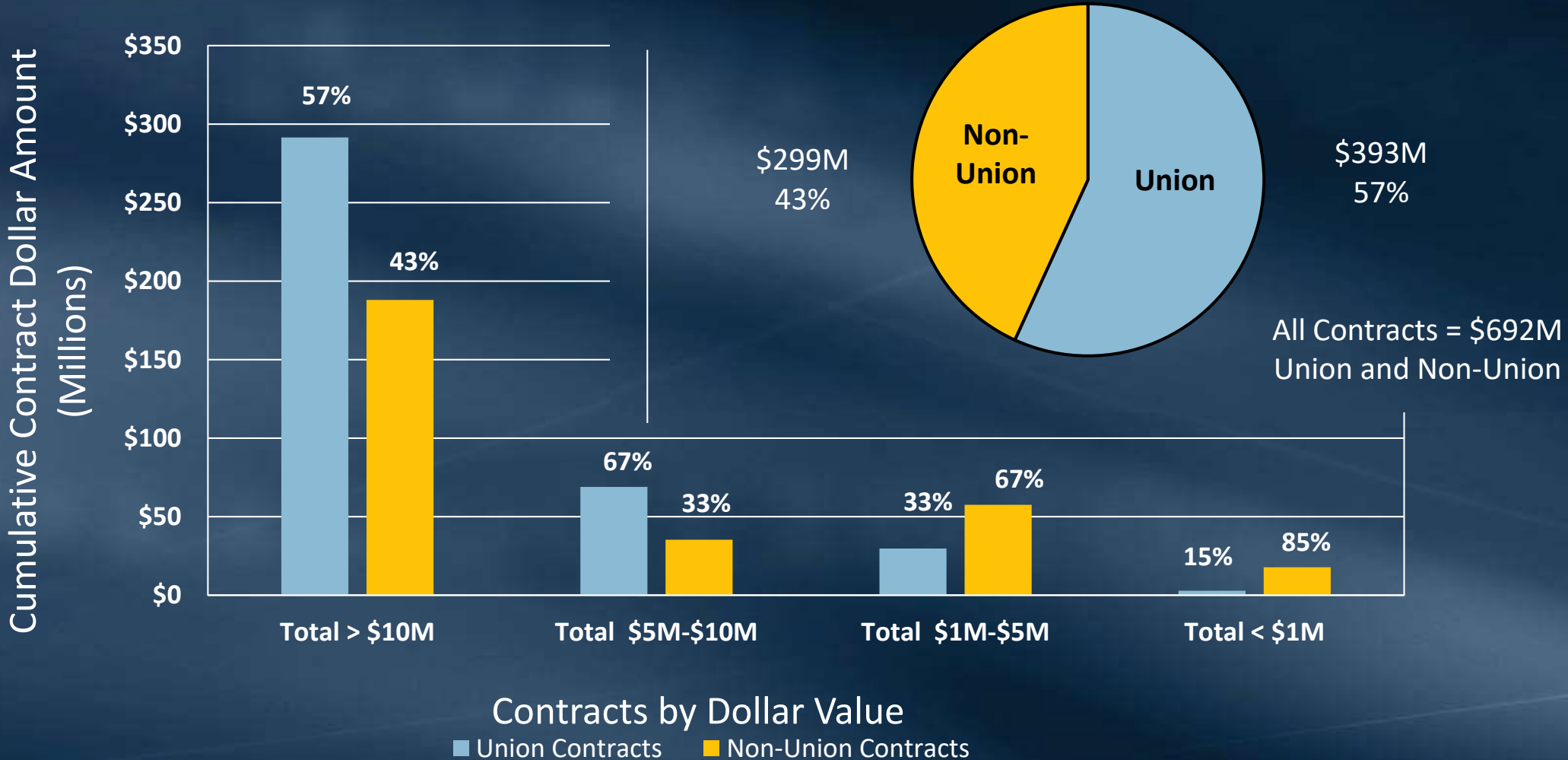
Background from April E&O Presentation

- Current contracting environment
- Overview of PLAs
- Potential benefits, costs, and challenges
- Metropolitan's past PLA experience
- Examples from other agencies
- SBE Program overview

Current Metropolitan Contracting Practices

- Traditional design-bid-build delivery method
- No PLAs currently in place
 - Prior use of PLAs on large programs
- Metropolitan's construction contracts performed by a mix of union and non-union contractors
- All contractors are required to comply with California Labor Code
 - Payment of prevailing wages
 - Must comply with California Labor Code Provisions for employment of apprentices

Distribution of Construction Contracts (2015-2021)



Metropolitan's Successful SBE Program

- In-place since 2001
- Board established SBE participation goal of 25 percent
- Disabled veteran-owned business enterprises established goal of 3 percent
- Regional businesses comprise 80-85 percent
- Subcontractor payments tracked monthly for compliance and accountability
- SBE program to remain unchanged under PLA
- Outreach and education are necessary to prime and subcontractors to maintain success of Metropolitan's SBE program for contracts under PLA

April E&O Comments/Questions

April Board Questions/Comments

- Does PLA increase the cost of construction?
 - Feedback indicates no increased construction cost
 - There is a cost to Metropolitan to administer the PLAs
- How are contractors involved in negotiating PLAs?
 - Contractor feedback solicited informally during negotiations
- Will contributions to union benefit funds be lost for non-union members?
 - Union benefit plans have different vesting periods for coverage
 - Non-union workers may receive some of the benefits depending on how long they work on PLA-covered projects or if they join the union in the future
- How might a PLA have affected previous MWD jobs?
 - Potentially improved labor compliance and reduced complaints through the Department of Industrial Relations
 - May have assisted in the implementation of more robust local workforce inclusion, diversity, and training partnerships

Commentary from AGC and UCON

- How are existing contractor/union agreements incorporated into the PLA?
 - Master agreements are typically incorporated into PLA by reference
- Will PLA limit hiring practices?
 - PLA typically has local inclusion and diversity requirements or goals
 - Non-union contractors may use a limited number of “core employees”
- What work is excluded from PLA?
 - Exclusions are part of the negotiation
 - Exclusions would typically include such items as offsite work and work by Metropolitan forces

Potential Approaches to PLA Implementation

Goals for MWD PLA Implementation

- Direct benefits to Metropolitan construction contracts
 - Avoid work stoppages and labor disputes
 - Consistent supply of skilled labor
 - Consistent work schedules among trades
 - Facilitate contractor/union dispute resolution
- Benefits to regional workforce
 - Utilization of union apprenticeship program
 - Provides for hiring of a diverse workforce
 - Emphasis on use of regional workers
- Other potential benefits
 - Pathway for Metropolitan to hire from pre-apprenticeship programs

Multiple Approaches to PLA Implementation

- Alternative 1. PLA covers all Metropolitan Public Works Contracts
- Alternative 2. Establish a dollar threshold for PLA contracts and/or have PLA cover all projects within a specific program
 - Contracts greater than a predetermined dollar value are covered by PLA
 - Contracts that are part of a larger program or project
 - Examples: Regional Recycled Water Program, PCCP Relining Program
- Alternative 3. PLA covers selected contracts within Metropolitan's CIP
 - Utilizes established evaluation criteria to determine applicability
 - List of applicable projects developed using the evaluation process
 - PLA incorporated into selected contracts

Alternative 1. PLA applied to all Metropolitan Contracts

● Pros:

- Simplified selection criteria
- Not necessary to evaluate contracts individually for suitability for PLA
- Uniformity and consistency across all contracts
- May be easier to negotiate because unions favor all contracts to be included in the PLA

● Cons:

- All construction contracts may not be suitable for PLA
- Increased challenges for SBE and non-union contractors
- May be viewed as a regulatory requirement

Alternative 2. PLA application based on dollar thresholds, and/or program-wide utilization

● Pros:

- Minimum contract dollar threshold would focus PLAs on larger contracts
- Entire program coverage simplifies contract administration of all work in the program
- Less impactful to non-union and SBE contractors than Alternative 1

● Cons:

- Some contracts above the threshold may not be suitable for PLA
- May be viewed as a regulatory requirement

Projected Number of Potential PLA Contracts: Anticipated Contract Awards - July 2022 to June 2024

Contract Value	Potential Number of Contracts*	Estimated Cumulative Costs*
Contracts greater than \$10M	12	\$390M
Contracts between \$5M and \$10M	7	\$43M
Total	19	\$433M

* Information based on current planning estimates for FY-2022/23 to FY-2023/24 two-year CIP budget

Alternative 3. PLA applied to selected contracts within Metropolitan's CIP via evaluation criteria

● Pros:

- Allows for case-by-case determination of contracts most suitable for PLA
 - Selection of contracts based on consistent evaluation criteria
- Further reduces potential risks to established SBE program
- Reduced risk to Metropolitan that PLA requirement is viewed as regulatory

● Cons:

- Evaluation of contracts for PLA suitability may be time consuming
- May be more challenging to negotiate because certain contracts may be excluded due to selection criteria

Potential Next Steps

- Early- to mid-2022
 - Board authorizes use of PLA's
 - Select consultant to negotiate PLA with unions
 - Select consultant to administer PLA in Metropolitan construction contracts
 - Establish in-house staff to manage overall PLA effort
 - Conduct enhanced PLA outreach with SBE firms
 - Begin implementation of PLAs into construction contracts





Update on Drought Mitigation Actions

Engineering and Operations Committee

Item 6b

October 11, 2021

Ongoing Extraordinary Drought Actions to Preserve SWP Supplies



Maximizing reliability with extraordinary operational drought actions

Bleak Outlook for State Water Project

Anticipating a zero percent *initial* 2022 SWP allocation

Lake Oroville



- Oroville storage may end the year at record low levels
- DWR projects a 20 percent SWP allocation in 2022 under normal conditions

Evaluating New Drought Actions for the Near- and Long-Term

Collaboration and idea generation across Metropolitan and Member Agencies

- Generated 132 creative ideas
- About 50 ideas selected for further study and potential development

Project Categories



*System
and Operations*



*Shift Timing
of Deliveries*



*Increase Local
Supplies*



*Increase
Conservation*



*Expand
Supply Programs*

Long-Term Opportunities to Further Reduce Demands for Limited SWP Supplies



- Projects require significant planning and capital investments
- Continue investigating long-term project opportunities

Long-Term Opportunities to Further Reduce Demands for Limited SWP Supplies



- Projects require significant planning and capital investments
- Continue investigating long-term project opportunities

Long-term Opportunities on SWP West Branch



Long-term Opportunities on SWP West Branch

East Valley Feeder and Greg Avenue Pump Station

- Designed for a maximum 50 cfs
- Increase in capacity requires:
 - Additional pumping capacity
 - A pipeline parallel to East Valley Feeder or lining the existing East Valley Feeder
 - Increase the capacity of the system from Eagle Rock to Greg Avenue (double barrel portions)



Long-term Opportunities on SWP West Branch

Venice and Sepulveda Pump Stations

- Deliver water from the Common Pool
- Reverse flow in Sepulveda Feeder
- Requires pumping
- One or both pump stations under consideration
- Requires expediting Sepulveda Feeder PCCP relining, currently scheduled to finish in 2027 or after



Project Yield

50-70 TAF/Year

Potential Online

2026 or after

Near-term Opportunities on SWP East Branch

Integration of Metropolitan, DWR, and SBVMWD systems

DWR's Devil Canyon
Second Afterbay
El. 1930'

**Highest point in
Metropolitan's
system**

Option	Description	Basic Feature	Existing Infrastructure	New Infrastructure	Other Agency Facilities	New or Revised Agreements	Local Supply Introduction
1	DVL to SBVMWD	Exchange	✓	✓		✓	
2a	SBVMWD Local Supply to SBVMWD System	Exchange	✓		✓	✓	✓
2b	SBVMWD Local Supply to Rialto	Exchange	✓		✓	✓	✓
3	DVL to Rialto via Existing Booster Pump Station	Pump DVL water to Rialto	✓	✓	✓	✓	
4	DVL to Rialto via New Pump Station at PC-1	Pump DVL water to Rialto	✓	✓			



Option 1 – SBVMWD Exchange

- Take SBVMWD SWP supply
- Exchange later with DVL Supply
- Use current pumping capacity
- Requires Wadsworth Bypass

Project Yield	5-6 TAF (carryover supplies)
Potential Online	2023



Near-term Opportunities on SWP East Branch

Option 2a – SBVMWD Exchange with Local Supply Introduction

- Take SBVMWD SWP supply
- Pump SBVMWD local supply through Inland Feeder to parts of their system to offset demands
- Exchange with DVL or SWP supply after drought period
- **Requires no new infrastructure**

Project Yield	5-6 TAF (carryover supplies)
Potential Online	2022



Near-term Opportunities on SWP East Branch

Option 2b – SBVMWD Exchange with Local Supply Introduction

- Pump SBVMWD local supply through Inland Feeder to Devil Canyon to Rialto
- Exchange with DVL or SWP supply after drought period
- Requires no new infrastructure

Project Yield	10-12 TAF/Year
Potential Online	2022

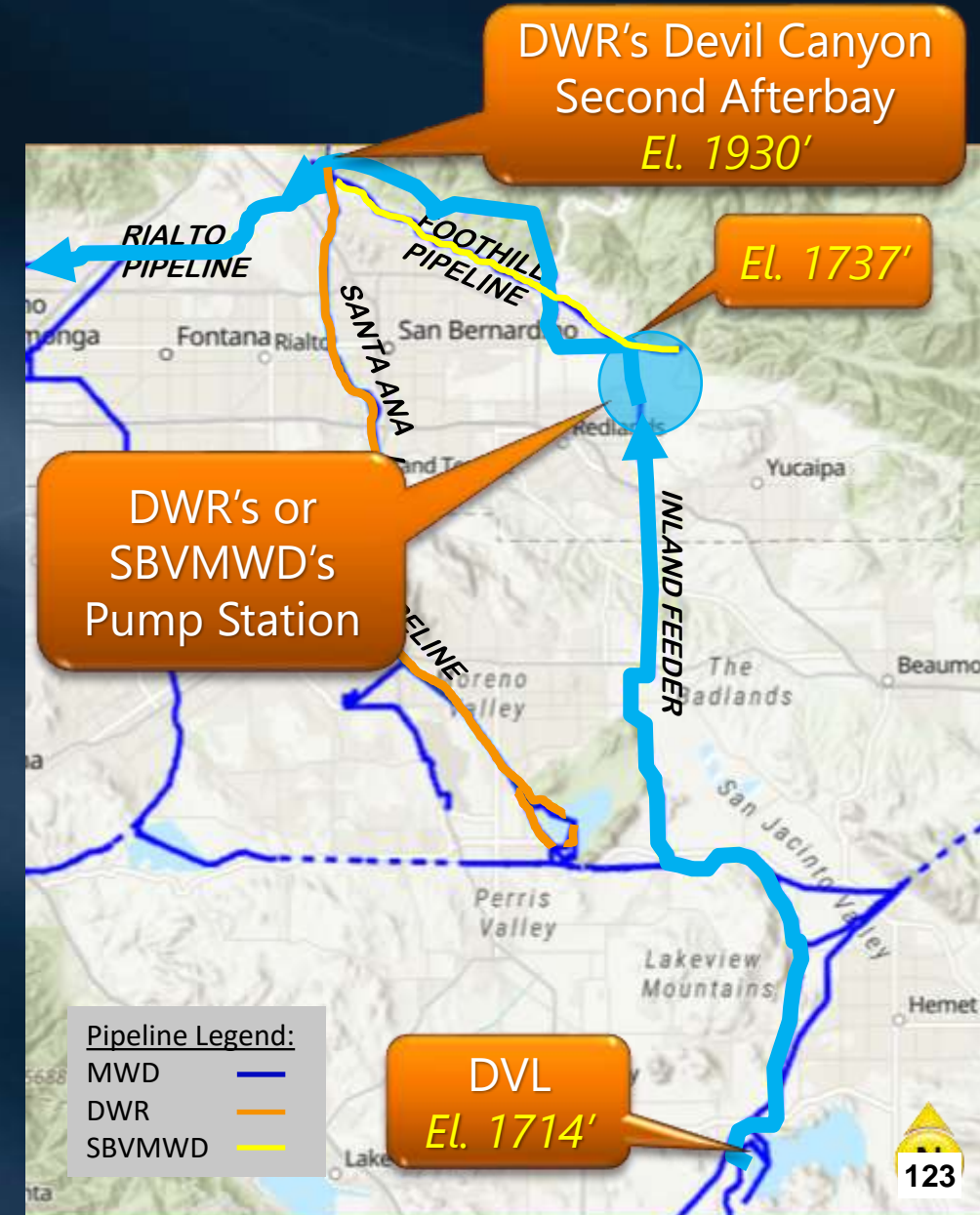


Near-term Opportunities on SWP East Branch

Option 3 – DVL to Rialto (Existing Booster Pump Station)

- Tie into DWR's or SBVMWD's existing pumps
- Pump water from DVL to Rialto
- Agreements with DWR and SBVMWD for facility uses
- Requires Wadsworth Bypass and the Inland Feeder / Rialto Pipeline Intertie

Project Yield	60-100 TAF/Year
Potential Online	2023 or after



Long-term Opportunity on SWP East Branch

Option 4 – DVL to Rialto (New Pump Station at PC-1)

- Design/Construct PC-1 Pump Station
- Pump water from DVL to Rialto (via PC-1)
- Use of Metropolitan facilities only
- Requires Wadsworth Bypass and the Inland Feeder / Rialto Pipeline Intertie

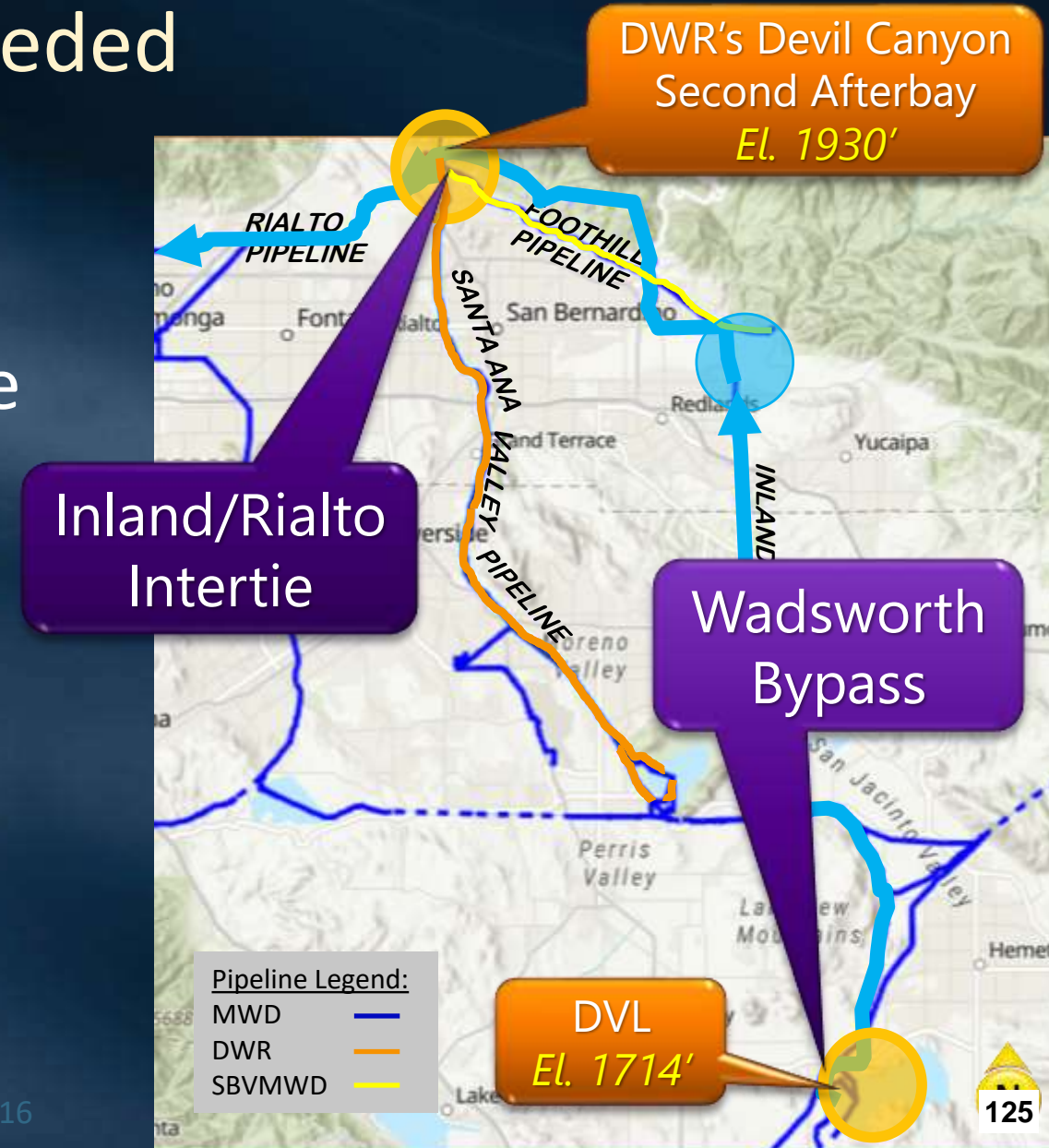
Project Yield	60-100 TAF/Year
Potential Online	2026 or after



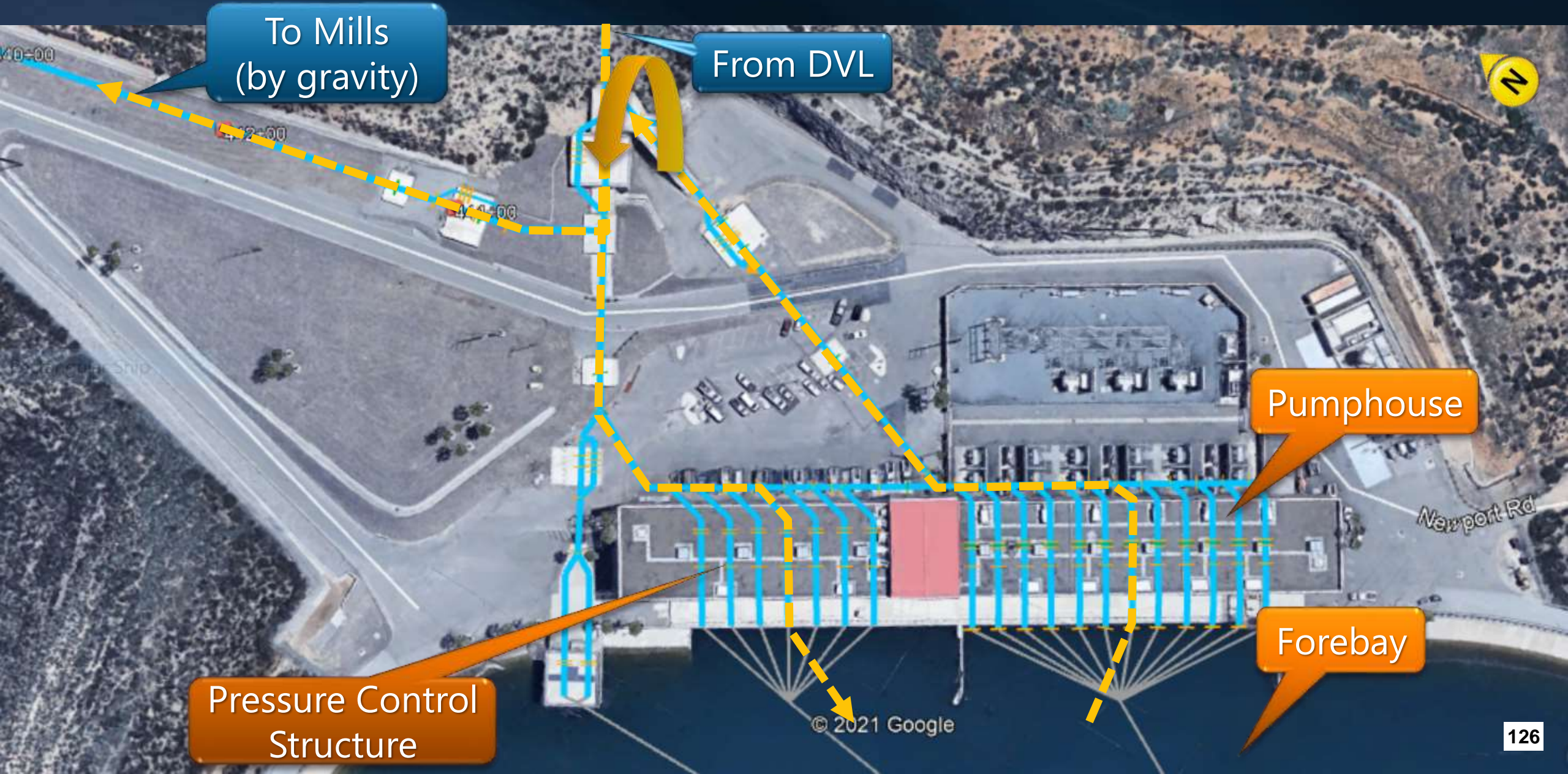
Near-term Opportunities on SWP East Branch

Two Key Facility Improvements Needed

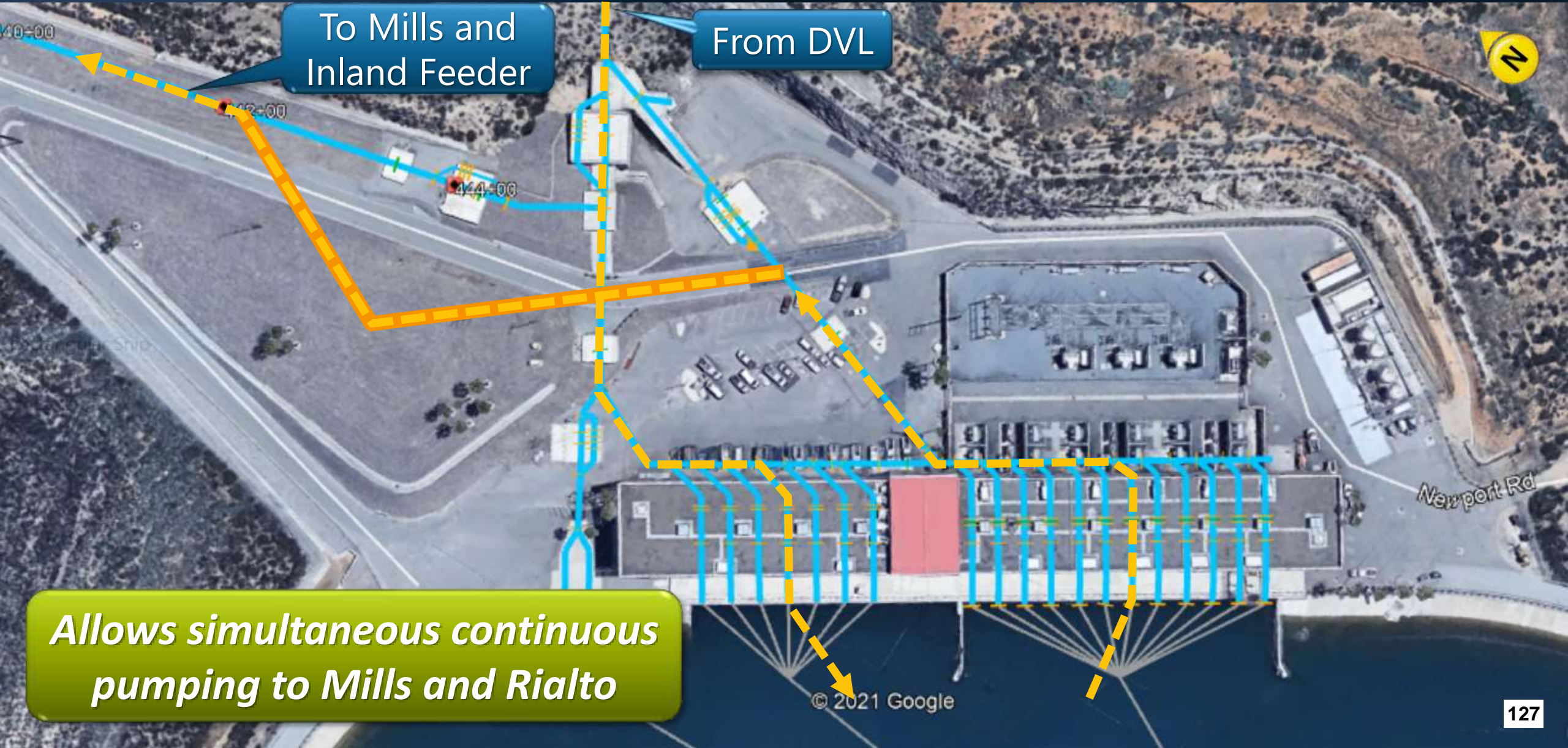
- Wadsworth Bypass Pipeline
- Inland Feeder/Rialto Pipeline Intertie



Current DVL Operation



Wadsworth Bypass Pipeline



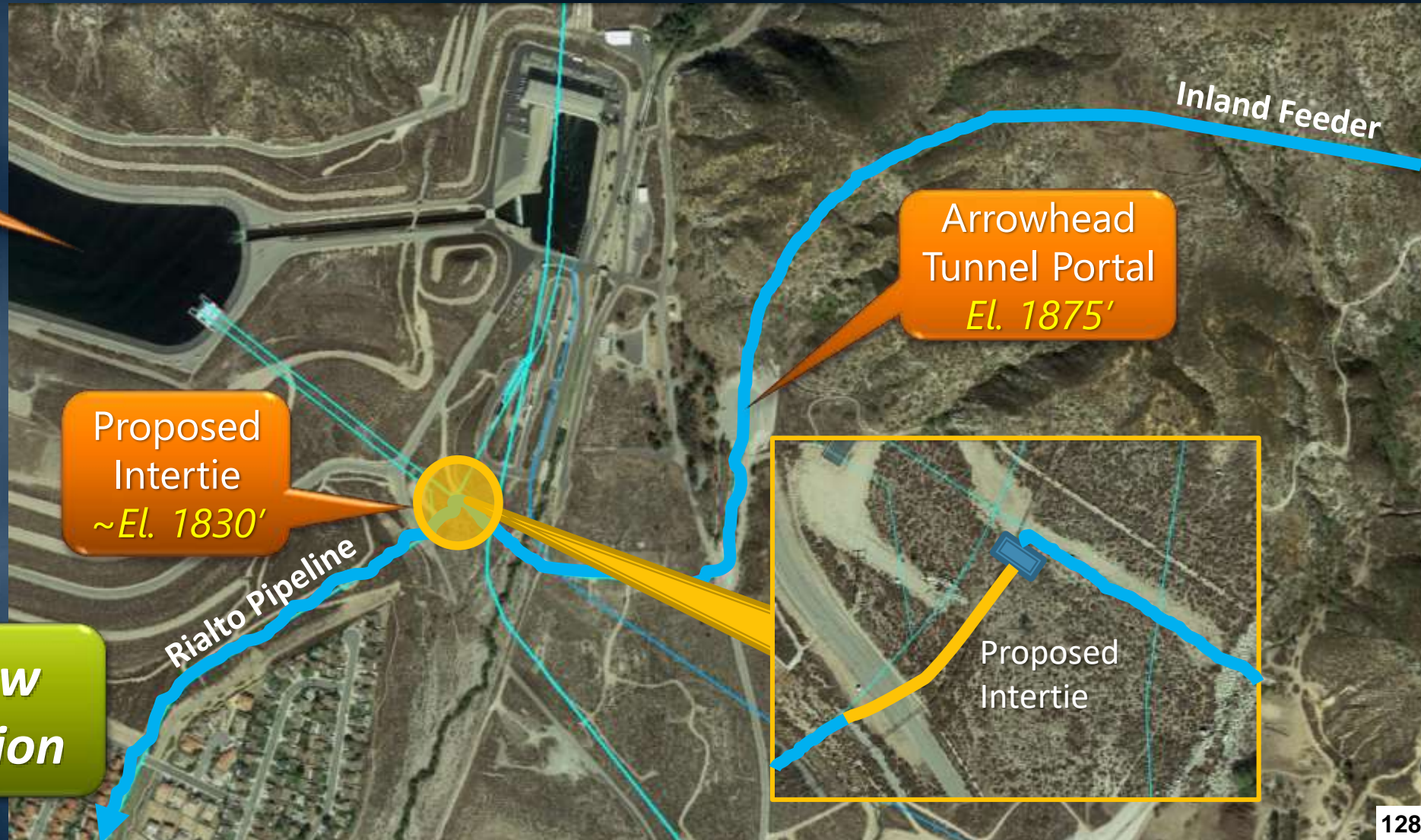
Inland Feeder / Rialto Pipeline Intertie

DWR's Devil Canyon
Second Aferbay
El. 1930'

Proposed
Intertie
~El. 1830'

Arrowhead
Tunnel Portal
El. 1875'

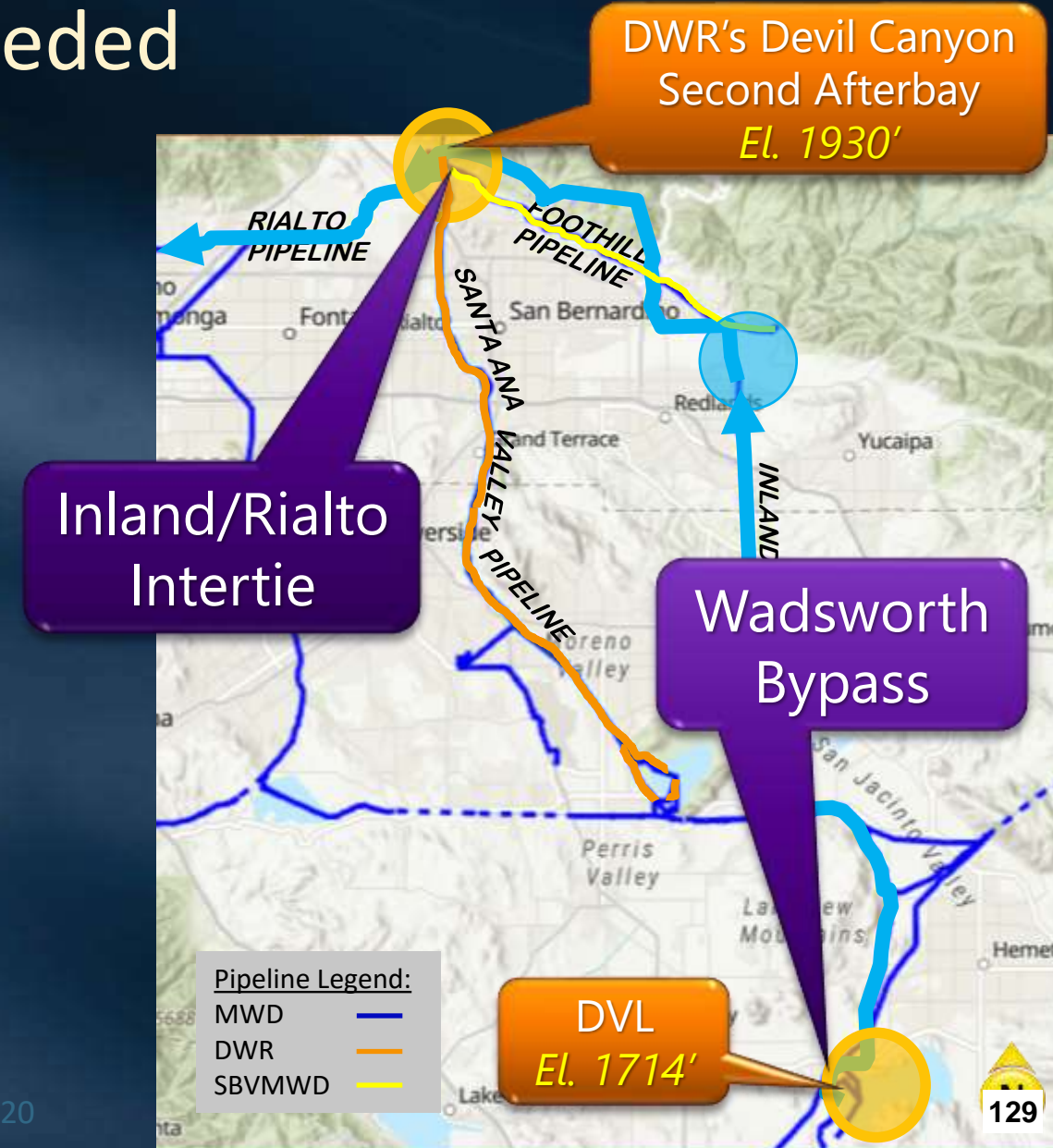
***Allows higher flow
and easier operation***



Near-term Opportunities on SWP East Branch

Two Key Facility Improvements Needed

Option	Description	Potential Online Date	Needs Wadsworth Bypass	Needs Inland/Rialto Intertie	Potential Yield
1	DVL to SBVMWD	2023	✓		5-6 TAF (carryover)
2a	SBVMWD Local Supply to SBVMWD System	2022			5-6 TAF (carryover)
2b	SBVMWD Local Supply to Rialto	2022			10-12 TAF/yr
3	DVL to Rialto via Existing Booster Pump Station	2023 or after	✓	✓	60-100 TAF/yr
4	DVL to Rialto via New Pumps at PC-1	2026 or after	✓	✓	60-100 TAF/yr



Next Steps

- Continued coordination and action planning with member agencies, DWR, and other partnering agencies
- Implement short-term drought mitigation actions
- Staff to review details at the E&O Virtual Field Inspection Trip on October 21
- Schedule Board Action on Wadsworth Bypass and Inland Feeder/Rialto Pipeline Intertie
- Develop long-term plan for increased system resilience and flexibility





Report on Salinity Management

Engineering and Operations Committee

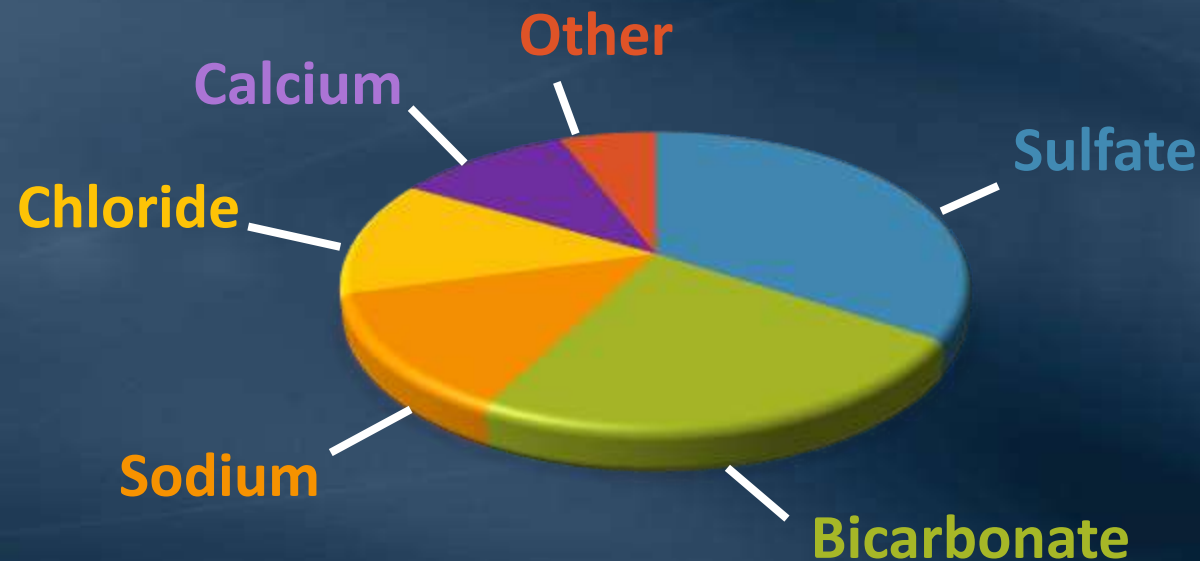
Item 6c

October 11, 2021

What is salinity?

- Measurement of salts (minerals) dissolved in water
- Commonly expressed as Total Dissolved Solids or “TDS”
- Naturally occurring, agricultural runoff, urban uses, seawater intrusion

Typical mineral comparison in Colorado River water



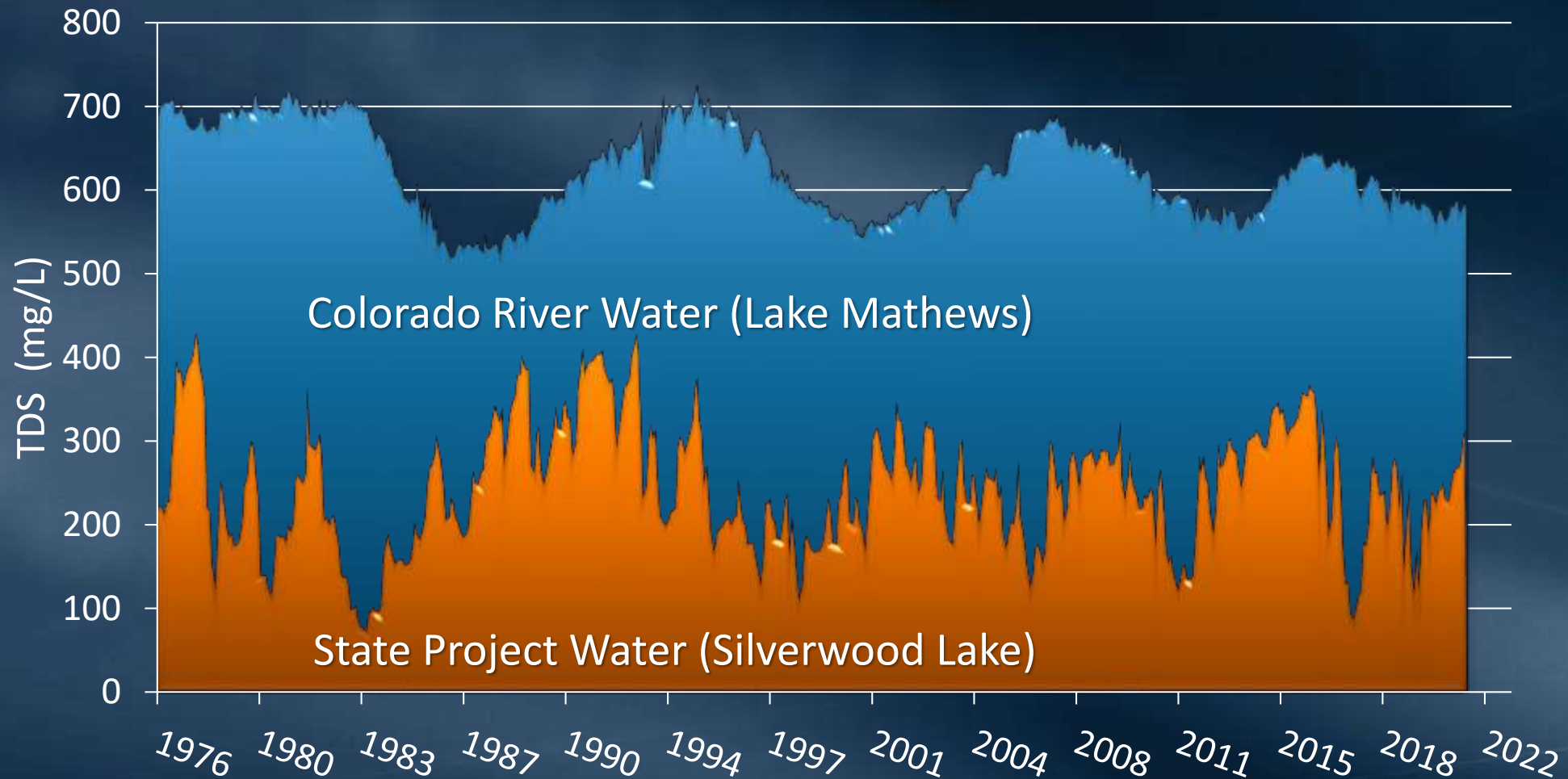
Why does salinity matter?

- Limits use of groundwater basins for storage
- Lowers usefulness and increases cost of recycled water
- Scaling of household appliances and plumbing fixtures; impacts industrial processes
- Reduces agricultural crop yields
- Imparts unpleasant taste in drinking water



Salinity in Metropolitan Supplies

Historical Trends

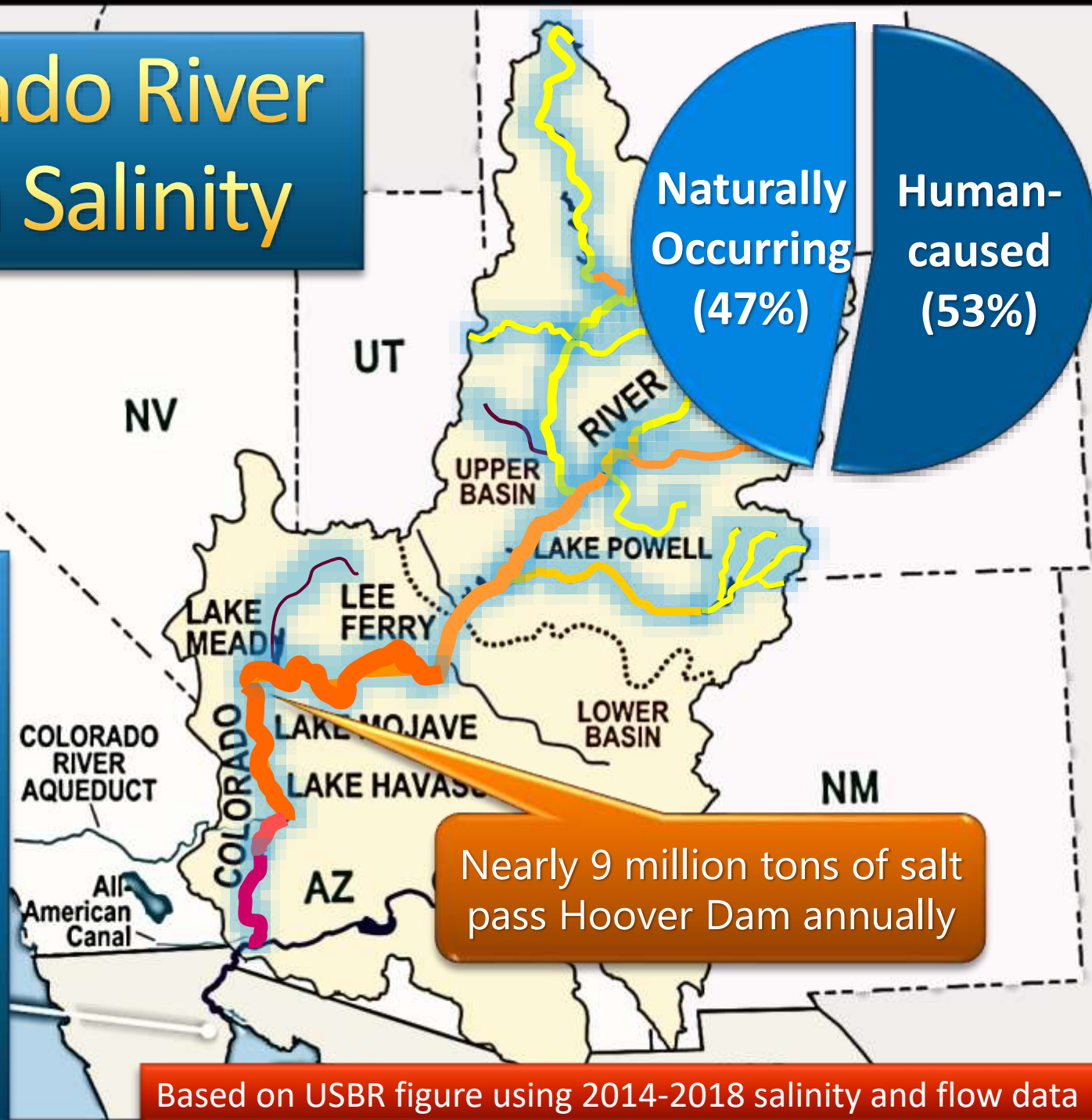


Colorado River Basin Salinity

Naturally
Occurring
(47%)

Human-
caused
(53%)

Est. Range of Salinity
Concentrations (mg/L)



Nearly 9 million tons of salt
pass Hoover Dam annually

Based on USBR figure using 2014-2018 salinity and flow data

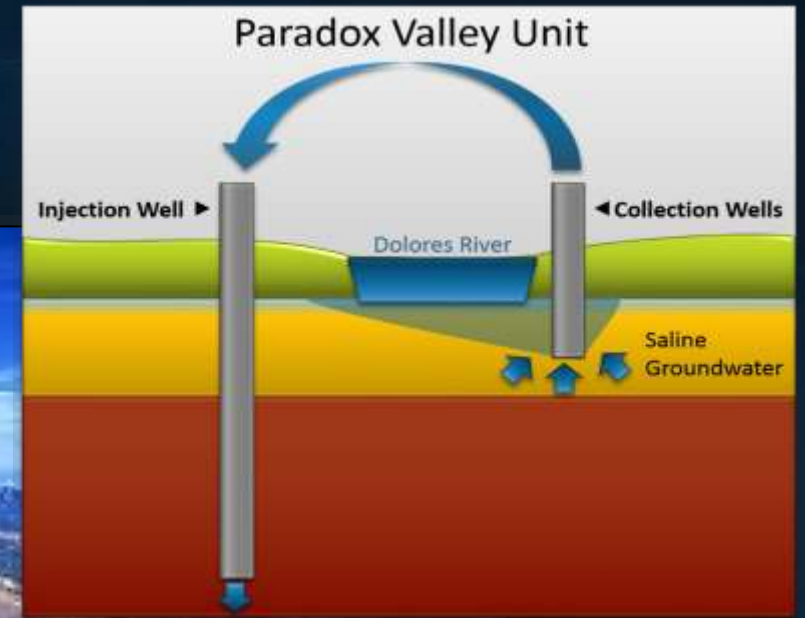
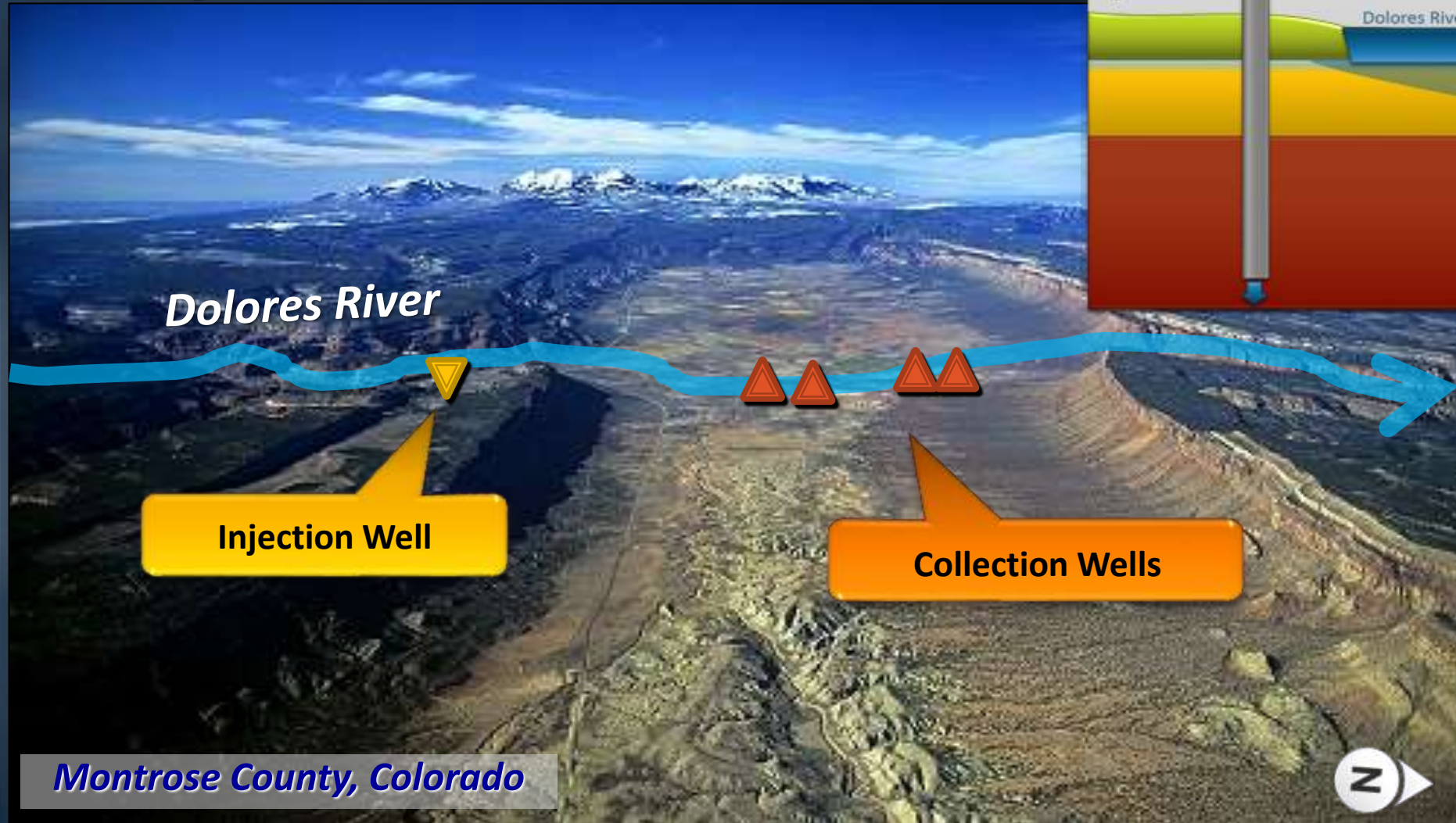
Colorado River Basin Salinity Control Program

- Salinity Control Forum (1973); federal government and Basin states
- Salinity control measures
 - Improved irrigation practices
 - Rangeland management
 - Deep-well brine injection
- 1.2 million tons/year removed → 100 mg/L reduction
- ~\$40 million spent annually; 70% federally funded
- Current challenges: Paradox Valley; Funding



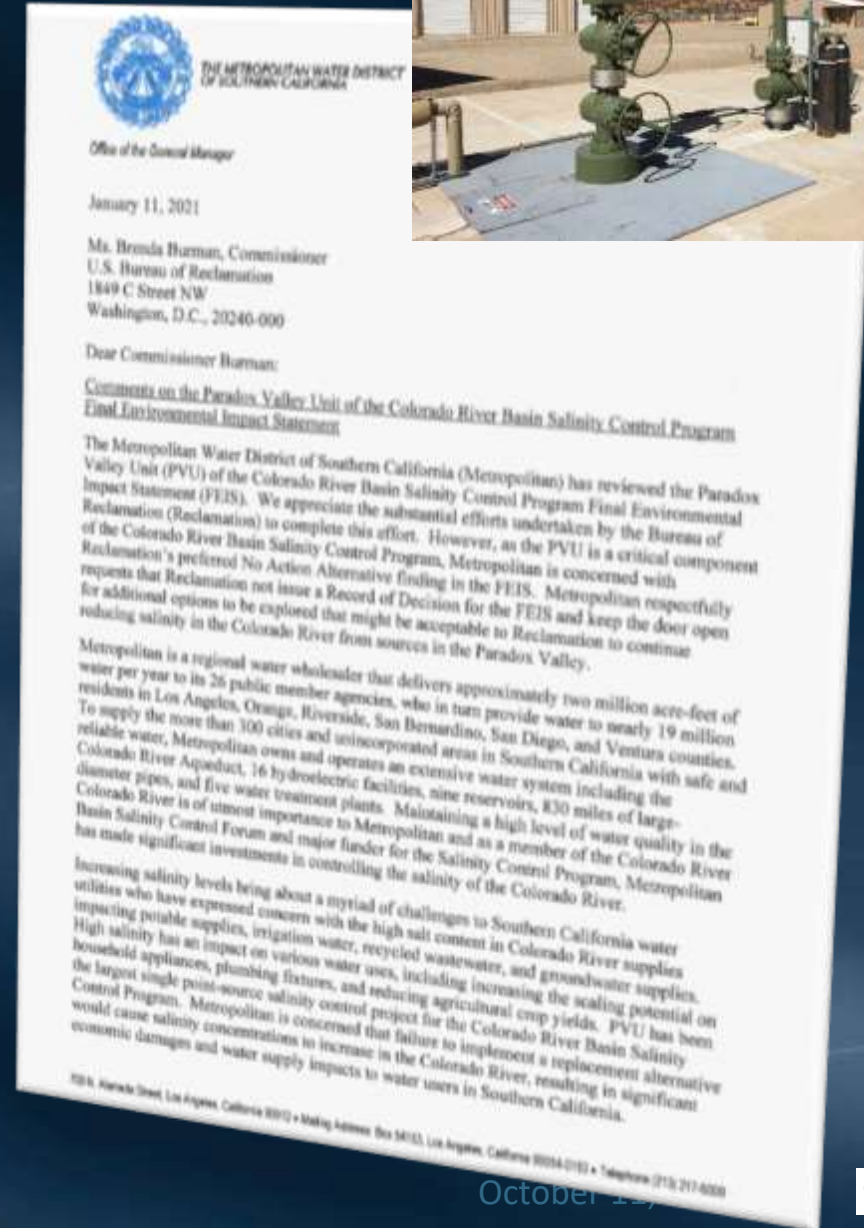
Paradox Valley Salinity Control

Deep Well Injections



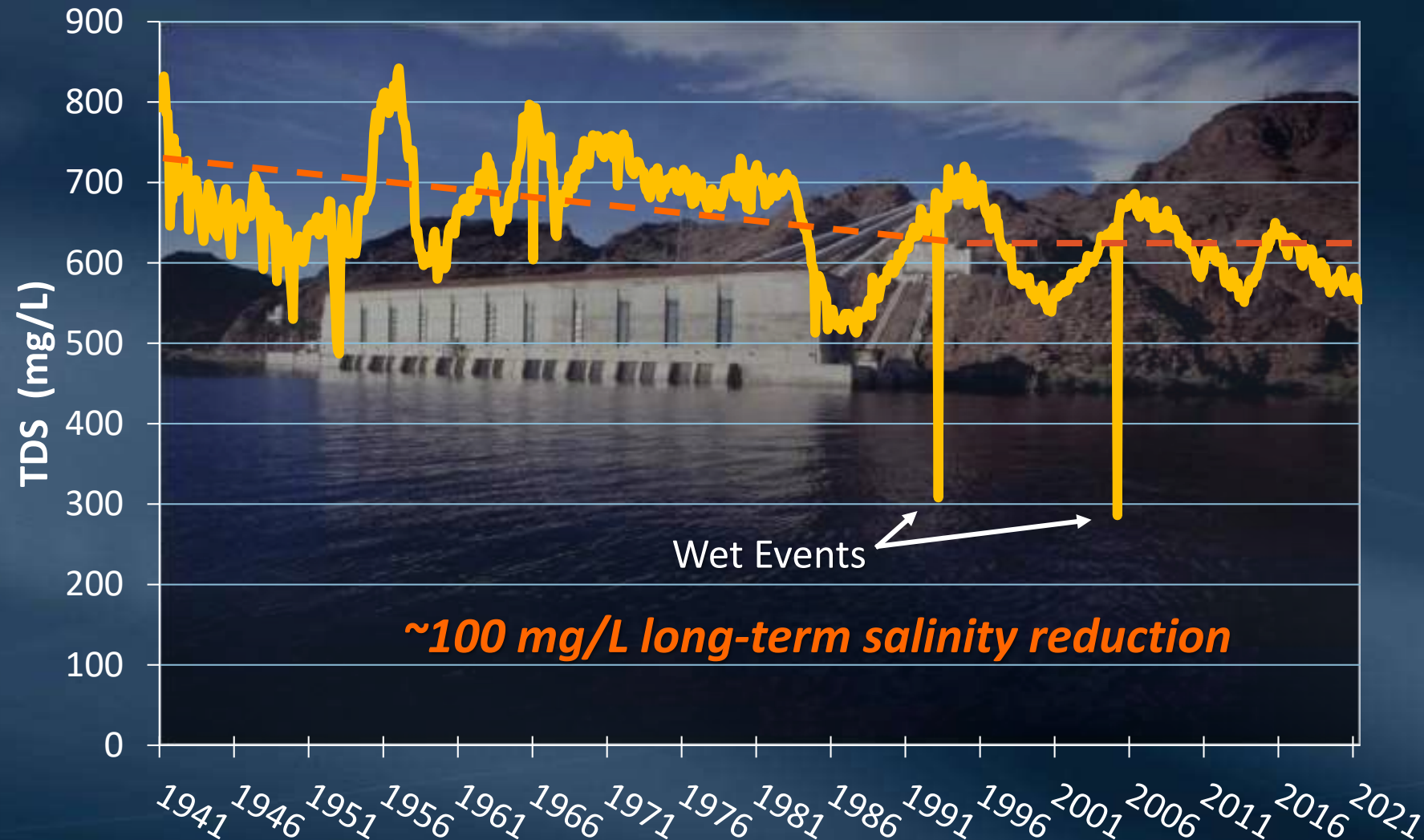
Paradox Valley Salinity Control Status

- Well hasn't operated since 4.1 magnitude earthquake in March 2019
- Reclamation analyzing injection and seismic data to optimize operations
- Final EIS analyzed replacement options – new injection well, evaporation ponds, zero liquid discharge, and **no action**
- Lake Powell and Lake Mead provide significant buffers



Colorado River Historical Salinity

Whitsett Intake



State Water Project

Primary Salinity Sources



Statewide Salinity Management Efforts

- Delta-State Water Project
 - Delta Cross Channel Gate
 - Emergency Drought Salinity Barrier
 - Salinity forecasts
- Central Valley Salinity Alternatives for Long-term Sustainability (CV-SALTS) Initiative
- Salt and Nutrient Management Plans

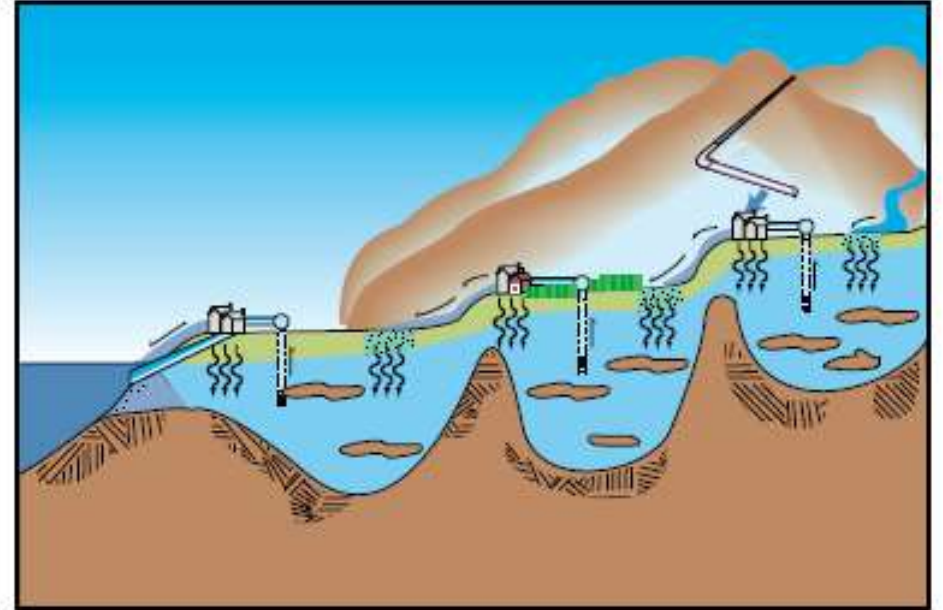


2021 Emergency Rock Barrier
Sacramento-San Joaquin Delta

Salinity Management Study

- Study estimated \$95 million/yr economic benefit with 100 mg/L salinity reduction (1999 dollars)
- Metropolitan Board adopted 500 mg/L TDS objective, annual average
 - System Blending
 - Dependent on availability of sufficient SWP water
- Protect imported source water
- Support groundwater and recycled water resources

SALINITY MANAGEMENT STUDY Final Report



MWD
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA



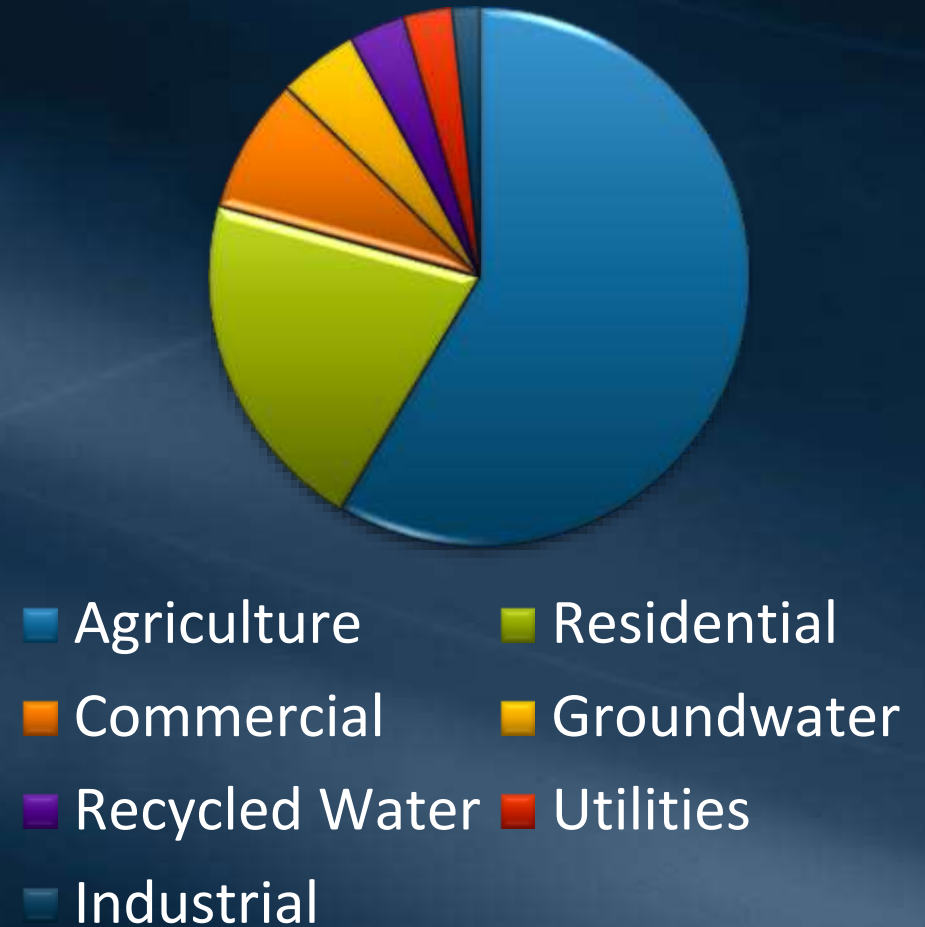
UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

June 1999

Salinity Economic Impact Model

- Developed by USBR and Metropolitan; updated in 2020
- Quantifies economic impacts of salinity
 - Reduced appliance/ plumbing fixtures useful life
 - Reduced crop yields
 - Groundwater & Recycling impacts
- \$500 million/yr damages to lower Colorado River Basin (2035 projection)

Impact Sectors

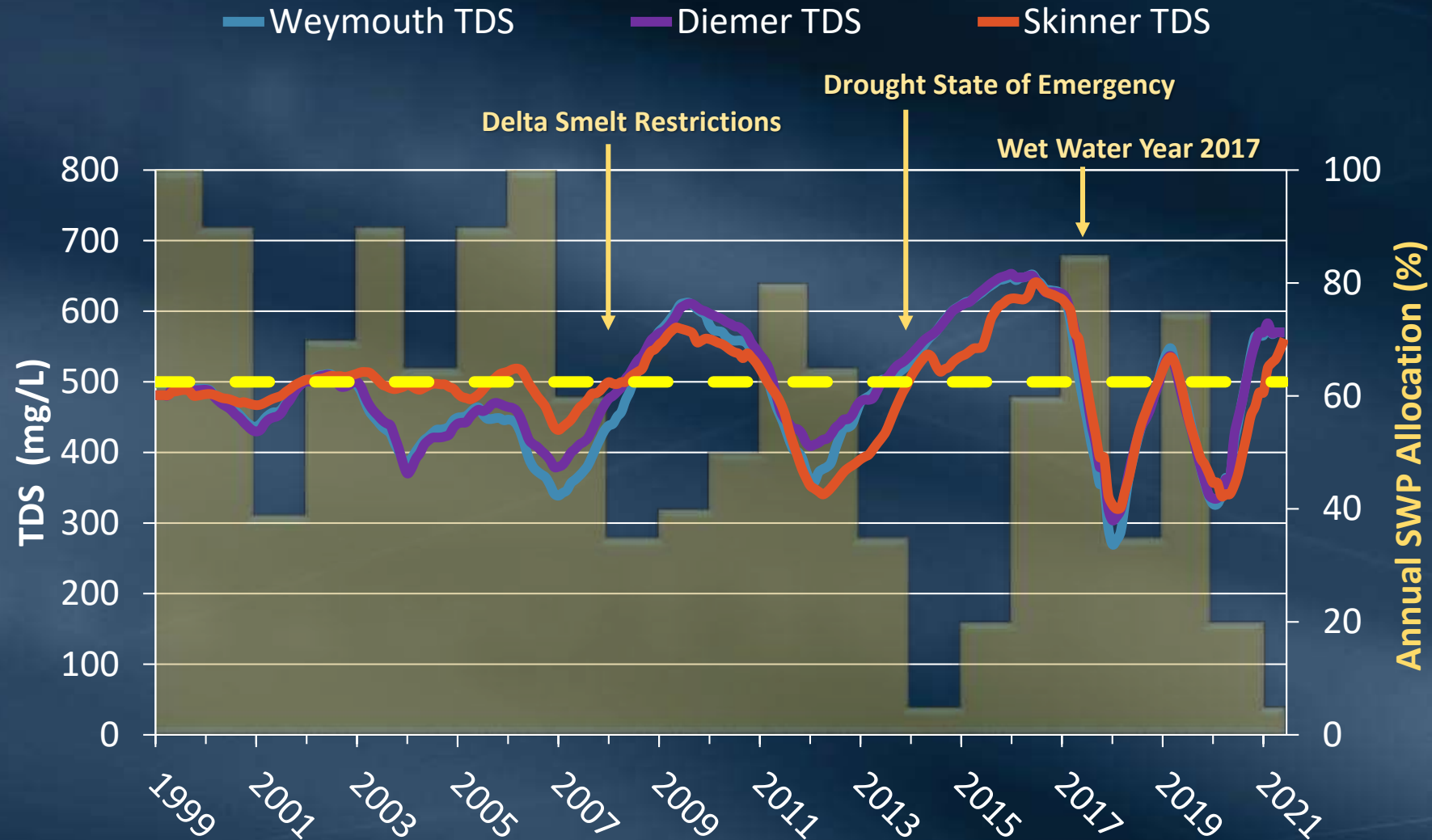


Efforts to Meet Salinity Goal

- Transfer and Exchange Programs
- Local Storage
 - Inland Feeder/ Diamond Valley Lake
- Operating Principles
 - Meet water quality requirements and salinity objectives



TDS Trends at Blend Plants



Moving Forward

- Work with Reclamation to find a long-term replacement for the Paradox Well and develop a sustainable funding plan for the Salinity Control Program
- Invest in reliable Delta water supplies
- Manage system to meet salinity management policy objectives
- Collaborate with stakeholders on regional approaches
 - Southern California Salinity Coalition
 - Future Supply Actions Funding Program
 - Participate in other state and national programs





Water System Operations Manager's Report

Engineering and Operations Committee
Item 7a

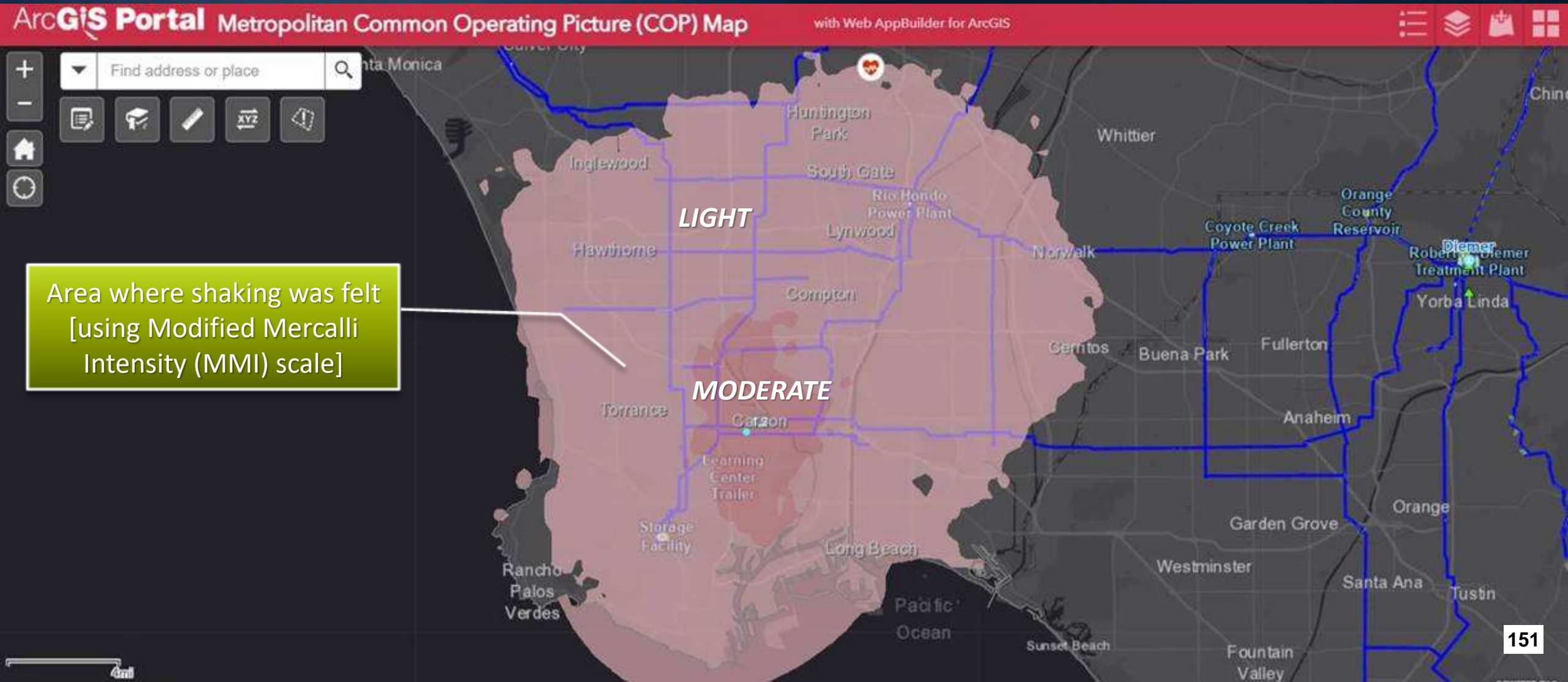
October 11, 2021

Current Operational Conditions

- 2021 SWP Allocation is 5%
- SWP blend targets are 0% at Weymouth, Diemer, and Skinner plants
- CRA is at 7-pump flow
- DVL to Mills drought operation continues to perform well
- Managing storage based on WSDM principles
- September 2021 deliveries of 149 TAF were 13 TAF higher than September 2020

Carson Earthquake — 4.4 Magnitude (Sept. 17, 2021)

No impacts to Metropolitan's system or facilities



Emergency Management Improvements

Real World Example for Emergency Preparedness and Response

- EOC Duty Officer maintains 24/7 situational awareness and serves as central point of communication for emergencies
- Duty Officer response to Carson earthquake
 - Provided rapid notifications to management and key personnel
 - Analyzed separate reports from Security Watch Center, Operations Control Center, and field staff
 - Maintained status log in WebEOC
 - Updated Common Operating Picture Map

Emergency Management Improvements

Real World Example for Emergency Preparedness and Response

- ShakeCast reports reviewed (*early assessment*)
- Western C&D patrollers dispatched (*detailed assessment*)
- Notifications from LA County EOC (*collaboration with emergency management partners*)
- Aftershocks tracked (*ongoing assessment*)
- Contact procedures confirmed with LACSD for Advanced Purification Center in Carson (*valuable lessons-learned*)





Engineering Services Manager's Report

Engineering and Operations Committee

Item 7b

October 11, 2021

Construction and Procurement Contracts

August 2021

Construction & Procurement Contracts Through August 2021	
Number of Contracts at end of August 2021	34
Total Bid Amount of Contracts in Progress at end of August 2021	\$287M
Contracts Awarded in August 2021	1
Contracts With Notice To Proceed Issued in August 2021	0
Contracts Completed in August 2021	1
Contract Gross Earnings in August 2021	\$5.7M

Correction Reporting - Recent Board Items

- Two Board Letters referenced RFP 1252 rather than RFQ 1215 for consultant selection:
 - Gene Communication System Upgrade
 - Design: Item 7-3 approved on July 13, 2021
 - Black Metal Mountain 2.4 kV Power Upgrade
 - Preliminary Design: Item 7-3 approved on September 14, 2021

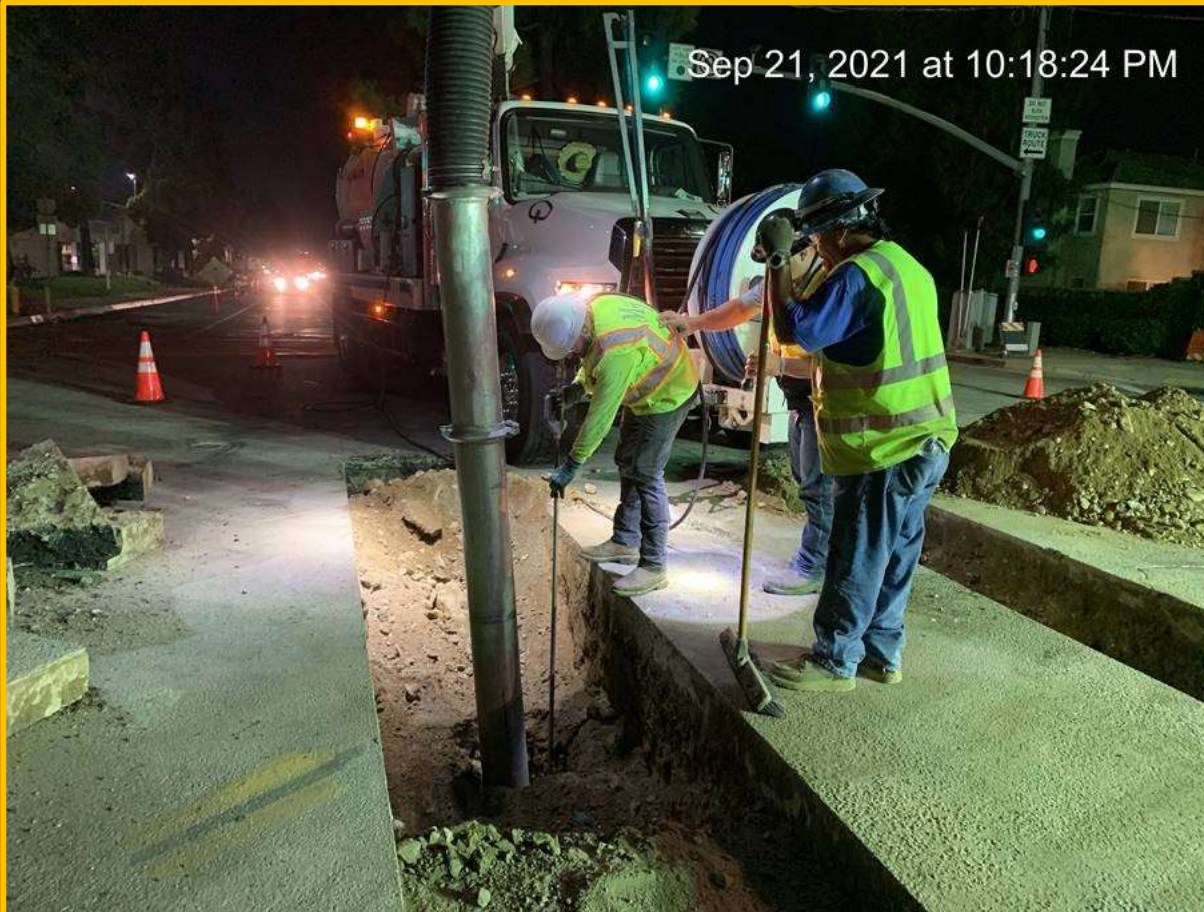
A-02 Service Connection Pipe Support Damage



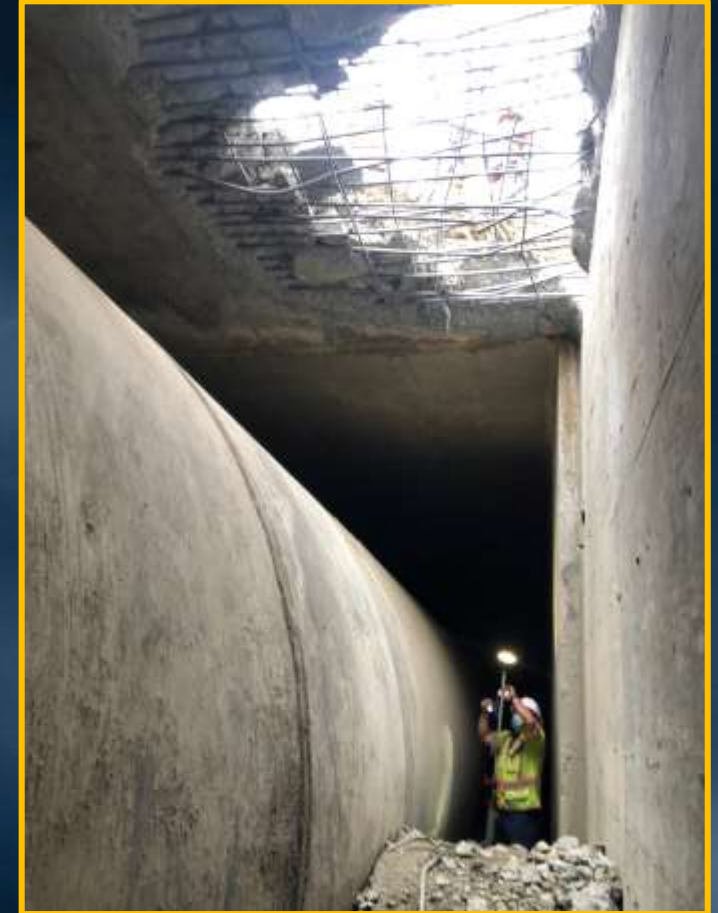
Cracked Pipe Support Pedestal



Upper Feeder Protection Structure Repairs at I-10 and Monte Vista



Excavating near Upper Feeder at I-10 and Monte Vista



Recent Structure Damage

PCCP Valve Delivery to Lake Mathews



Delivery of Valve Body (inside protective crate)



Visual Inspection of Valve Components

Temporary Storage for PCCP Valves at Lake Mathews



ESG/WSO Partnering Session

September 28, 2021



Climate Registry Gold Status

- Metropolitan was awarded **Climate Registered™** and **Water-Energy Leader™ Gold status** for its accomplishments and exceptional climate leadership in 2019
- Metropolitan recognized for:
 - 11 years of verified inventories with The Climate Registry
 - Taking proactive steps to reduce emissions
 - Founding membership for the Water-Energy Nexus Registry established in 2018

