The Metropolitan Water District of Southern California

Agenda

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

LTRPPBM Committee
M. Petersen, Chair
K. Seckel, Vice Chair
D. Alvarez
J. D. Armstrong
D. Erdman
S. Faessel
L. Fong-Sakai
M. Gold
J. McMillan
T. Quinn
N. Sutley

Subcommittee on Long-Term Regional Planning Processes and Business Modeling

Wednesday, August 28, 2024
Meeting Schedule
10:00 a.m. LTRPPBM

Meeting with Board of Directors *

August 28, 2024

10:00 a.m.

Agendas, live streaming, meeting schedules, and other board materials are available here: https://mwdh2o.legistar.com/Calendar.aspx. Written public comments received by 5:00 p.m. the business days before the meeting is scheduled will be posted under the Submitted Items and Responses tab available here: https://mwdh2o.legistar.com/Legislation.aspx.

If you have technical difficulties with the live streaming page, a listen-only phone line is available at 1-877-853-5257; enter meeting ID: 891 1613 4145.

Members of the public may present their comments to the Board on matters within their jurisdiction as listed on the agenda via in-person or teleconference. To participate via teleconference 1-833-548-0276 and enter meeting ID: 815 2066 4276 or to join by computer click here.

MWD Headquarters Building • 700 N. Alameda Street • Los Angeles, CA 90012
Teleconference Locations:
3008 W. 82nd Place • Inglewood, CA 90305
13 Pumphouse Road • Garden Valley, ID 83622
Lobby Conference Room • San Diego County Water Authority • 4677 Overland Avenue • San Diego, CA 92123
7 Upper Meadow Lane • Oak Bluffs, MA 02568
Bluffton Library • 120 Palmetto Way • Bluffton SC 29910
City Hall • 303 W. Commonwealth Avenue • Fullerton, CA 92832
30378 Canyon Trail Court • Menifee, CA 92584

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* 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.

US2-456

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 ITEMS -- ACTION ****

2. CONSENT CALENDAR OTHER ITEMS - ACTION

A. Approval of the Minutes of the Subcommittee on Long-Term Regional Planning Processes and Business Modeling Meeting for July 24, 2024 (Copies have been submitted to each Director, Any additions, corrections, or omissions) **21-3668**

Attachments: 08282024 LTRPPBM 2A (07242024) Minutes

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

3. SUBCOMMITTEE ITEMS - CAMP4W TASK FORCE

a. Member Agency Managers Task Force Members **21-3667**

Cesar Barrera, City of Santa Ana
Nina Jazmadarian, Foothill Municipal Water District
Shivaji Deshmukh, Inland Empire Utilities Agency
Dave Pedersen, Las Virgenes Municipal Water District
Anatole Falagan, Long Beach Water Department
Anselmo Collins, Los Angeles Department of Water and Power
Harvey De La Torre, Municipal Water District of Orange County
Dan Denham, San Diego County Water Authority
Kristine McCaffrey, Calleguas Municipal Water District
Tom Love, Upper San Gabriel Valley Municipal Water District
Craig Miller, Western Municipal Water District
Joe Mouawad, Eastern Municipal Water District
Stacie Takeguchi, Pasadena Water and Power

b. CAMP4W Task Force – Refined Evaluative Criteria Approach and Member Agency Feedback **21-3759**

Attachments: 08282024 LTRPPBM 3b Presentation

c. CAMP4W Task Force – Service Area Population Data **21-3801**

Attachments: 08282024 LTRPPBM 3c Report
08282024 LTRPPBM 3c Presentation

d. Member Agency Ad Hoc Working Group Update on Business Model Discussions **21-3802**

Attachments: 08282024 LTRPPBM 3d Report

4. FOLLOW-UP ITEMS

NONE

5. FUTURE AGENDA ITEMS

6. 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. Committee agendas may be obtained on Metropolitan's Web site https://mwdh2o.legistar.com/Calendar.aspx. 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 https://mwdh2o.legistar.com/Calendar.aspx.

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

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

MINUTES

SUBCOMMITTEE ON LONG-TERM REGIONAL PLANNING PROCESSES AND BUSINESS MODELING

July 24, 2024

Chair Petersen called the meeting to order at 9:34 a.m.

Members present: Directors Alvarez, Armstrong (AB2449 just cause), Erdman (teleconference posted location), Faessel, Fong-Sakai, McMillan, Petersen, Seckel, and Sutley (AB2449 just cause).

Members absent: Director Quinn.

Other Board Members present: Directors Ackerman (teleconference posted location), Bryant, Dennstedt, Goldberg, Gray (teleconference posted location), Lefevre (teleconference posted location), Miller (teleconference posted location), Morris, and Ortega.

Directors Armstrong and Sutley both appeared on camera and stated their circumstances, and that they were alone in their respective rooms.

Committee Staff present: Interim General Manager Upadhyay, Crosson, Dunbar, and Quilizapa.

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

None.

CONSENT CALENDAR ITEMS – ACTION

2. CONSENT CALENDAR OTHER ITEMS – ACTION

A. Approval of the Minutes of the Subcommittee on Long-Term Regional Planning Processes and Business Modeling for April 24, 2024, and June 26, 2024

Director Alvarez made a motion to approve item 2A, seconded by Director Seckel.

The vote was:

Ayes:	Directors Alvarez, Armstrong, Erdman, Faessel, Fong-Sakai, McMillan, Petersen, Seckel, and Sutley
Noes:	None
Abstentions:	Director Fong-Sakai abstained from the minutes of June 26, 2024, since she was not present at that meeting
Absent:	Director Quinn

The motion for Item 2A passed by a vote of 9 ayes, 0 noes, 0 abstentions, and 1 absent for the April 24, 2024 minutes, and a vote of 8 ayes, 0 noes, 1 abstention, and 1 absent for the minutes of June 26, 2024.

Directors Armstrong and Sutley stated they were alone.

END OF CONSENT CALENDAR ITEMS

3. SUBCOMMITTEE ITEMS - CAMP4W TASK FORCE

a. Subject: Member Agency Managers Task Force Members

Cesar Barrera, City of Santa Ana
Nina Jazmadarian, Foothill Municipal Water District
Shivaji Deshmukh, Inland Empire Utilities Agency
Dave Pedersen, Las Virgenes Municipal Water District
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Tom Love, Upper San Gabriel Valley Municipal Water District
Craig Miller, Western Municipal Water District
Joe Mouawad, Eastern Municipal Water District
Stacie Takeguchi, Pasadena Water and Power

Presented by: No presentation was given.

Task Force Members present: Member Agency Manager Members Barrera, Collins, De La Torre, Denham, Deshmukh, Falagan, Love, McCaffrey, Miller, Mouawad, Pedersen, and Takeguchi.

b. Subject: CAMP4W Task Force – Signposts, Model Inputs, and Annual Reports

Presented by: Demetri Polyzos, Water Resource Management Section Manager and Liz Crosson, Chief Sustainability, Resilience, and Innovation Officer

Mr. Polyzos and Ms. Crosson led the discussion regarding item 3b, CAMP4W Task Force – Signposts, Model Inputs, and Annual Reports.

The following Directors and Member Agency Managers asked questions and provided comments:

1. Member Agency Manager De La Torre
2. Member Agency Manager Collins
3. Member Agency Manager Falagan
4. Member Agency Manager Takeguchi
5. Member Agency Manager Denham
6. Director Fong-Sakai
7. Chair Petersen
8. Director Sutley
9. Vice Chair Seckel
10. Director Goldberg
11. Member Agency Manager Miller
12. Member Agency Manager Pedersen
13. Member Agency Manager Love
14. Member Agency Manager Deshmukh

Staff responded to Directors' and Member Agency Manager's comments and questions.

c. Subject: CAMP4W Task Force – Time-Bound Targets Refinement

Presented by: Martin Schlageter, Special Assistant to the General Manager

Mr. Schlageter led the discussion regarding item 3c, CAMP4W Task Force – Time-Bound Targets Refinement.

The following Directors and Member Agency Managers asked questions and provided comments:

1. Vice Chair Seckel
2. Member Agency Manager Falagan
3. Member Agency Manager Miller
4. Member Agency Manager Love
5. Board Chair Ortega
6. Chair Petersen
7. Director Goldberg

8. Member Agency Manager Mouawad
9. Director Sutley

Staff responded to Directors' and Member Agency Manager's comments and questions.

d. Subject: Provide Direction to Member Agency Managers regarding the scope of their input for the business model review

Presented by: Matt Petersen, Task Force Chair

Mr. Petersen led the discussion regarding item 3d, Provide Direction to Member Agency Managers regarding the scope of their input for the business model review.

The following Directors and Member Agency Managers asked questions and provided comments:

1. Vice Chair Seckel
2. Board Chair Ortega
3. Member Agency Manager Pedersen
4. Member Agency Manager Falagan
5. Director Erdman

Staff responded to Directors' and Member Agency Manager's comments and questions.

e. Subject: Status of Water Treatment Cost Recovery Discussions

Presented by: Adam Benson, Finance and Administration Group Manager

Mr. Benson presented on item 3e, Status of Water Treatment Cost Recovery Discussions.

4. FOLLOW-UP ITEMS

None

5. FUTURE AGENDA ITEMS

None

The next meeting will be held on August 28, 2024.

The meeting adjourned at 12:24 p.m.

Matt Petersen

Chair

Subcommittee on Long-Term Regional Planning Processes and Business Modeling

CAMP4W Task Force – Refined Evaluative Criteria Approach and Member Agency Feedback

Item 3b

August 28, 2024

August 28 CAMP4W Task Force

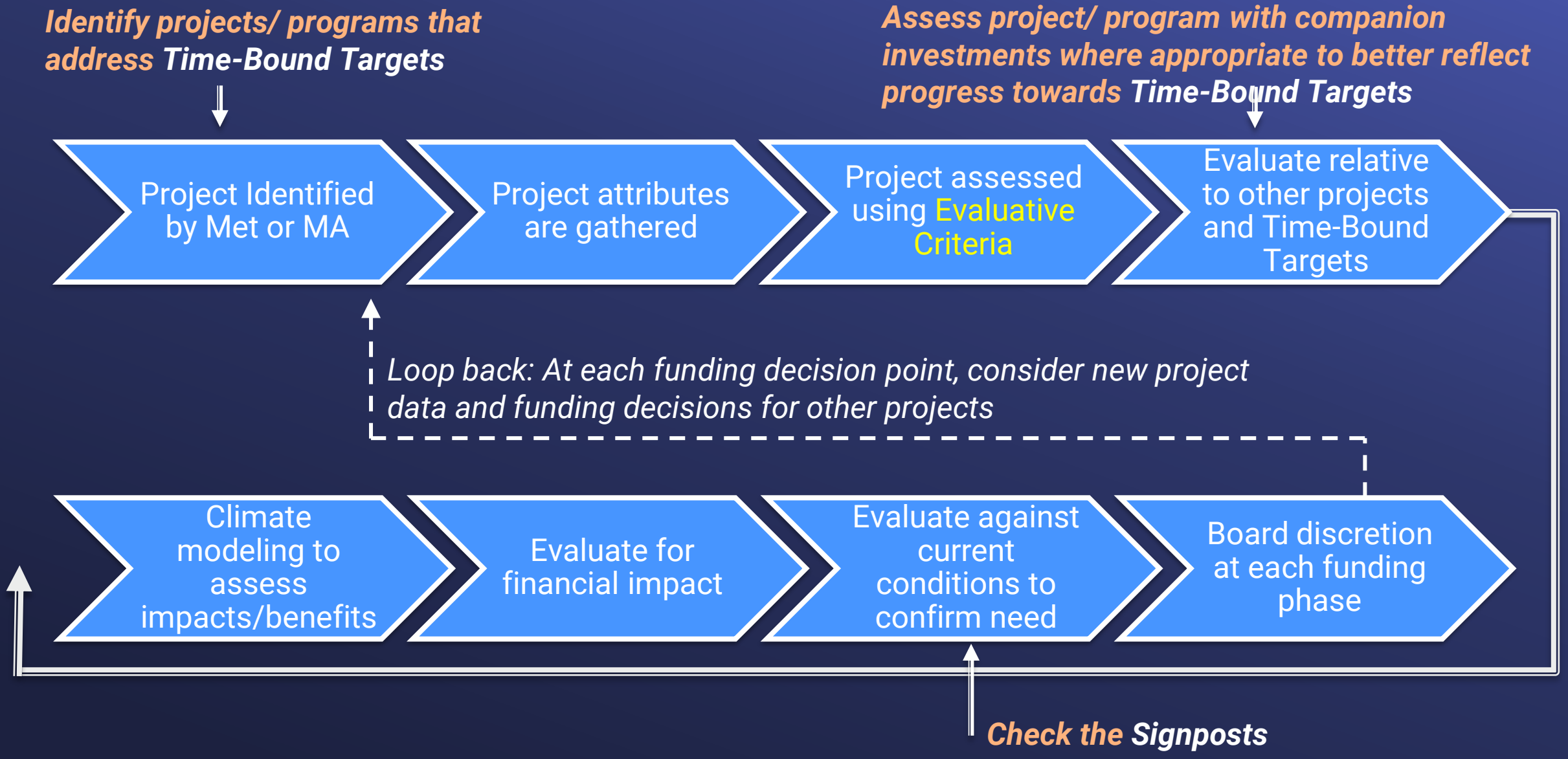
Evaluative Criteria and Member Agency Feedback

Presentation Outline

- ✓ Evaluative Criteria Evolution
  - Decision-Making Framework Background and Role of Evaluative Criteria
  - Establishment of Criteria Categories
- ✓ Initial Scoring Methodology
  - Member Agency Managers August 8 Meeting Feedback
  - Metropolitan Response to Feedback
- ✓ Revised Project Assessment Approach
  - Provide Comprehensive Assessment Instead of Project Scores
- ✓ Next Steps

Evaluative Criteria Evolution

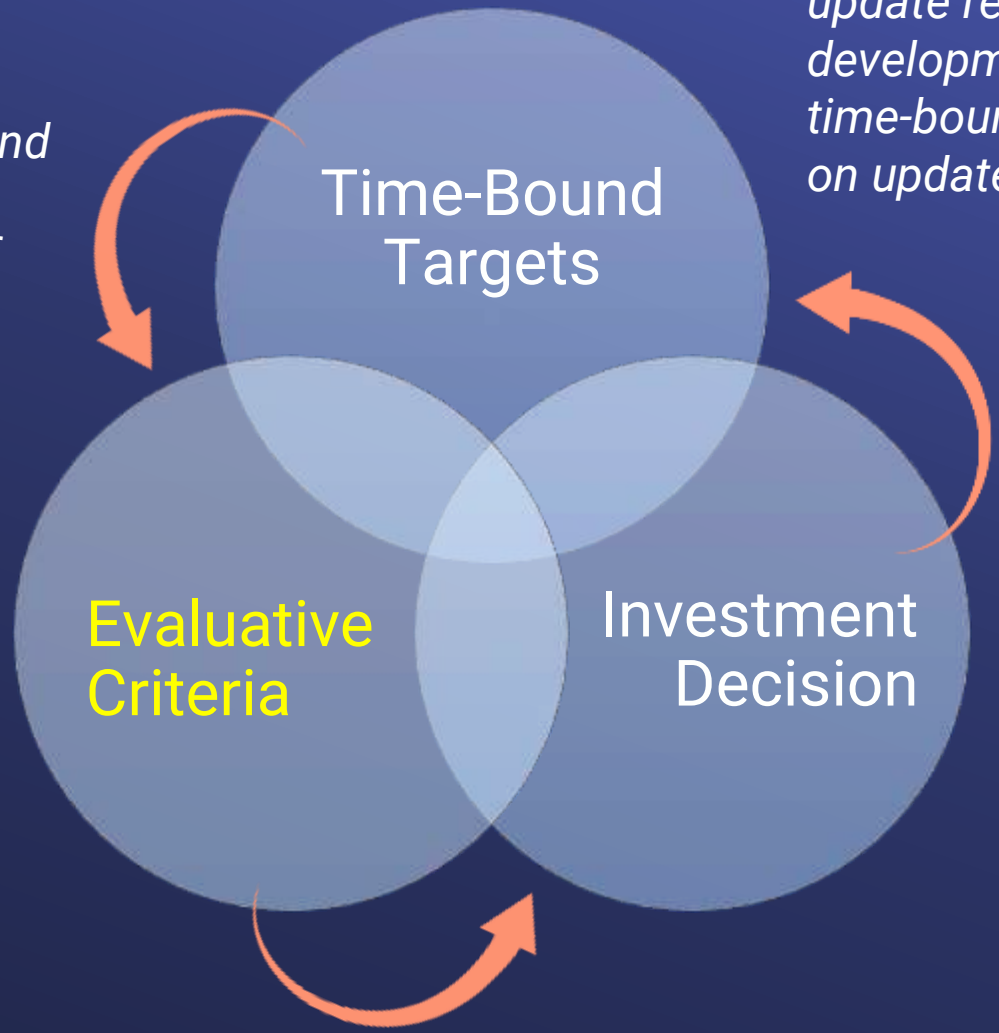
Use of Evaluative Criteria within the Climate Decision-Making Process



Evaluative Criteria Plays an Informative Role in Decision-Making Process

Time-Bound Targets guide project development and inform assessment of projects and programs

Adaptive Management: update resource development needs and time-bound targets based on updated projections

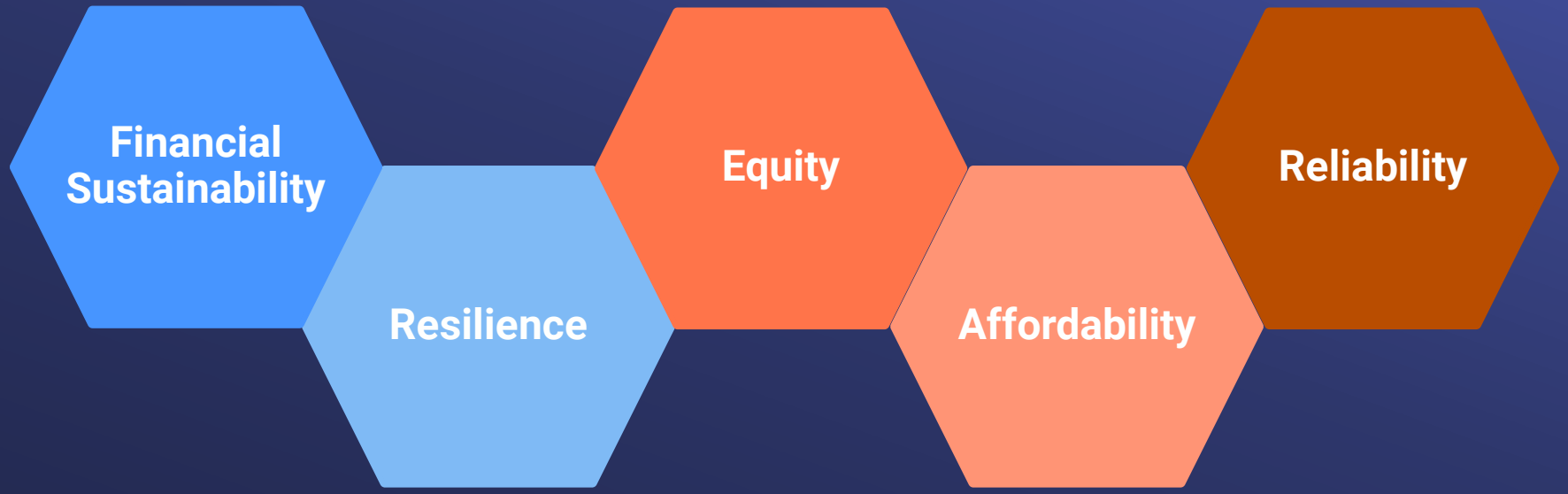


Assessments and Time-Bound Targets inform decision-making

CAMP4W
Climate Adaptation Master Plan for Water

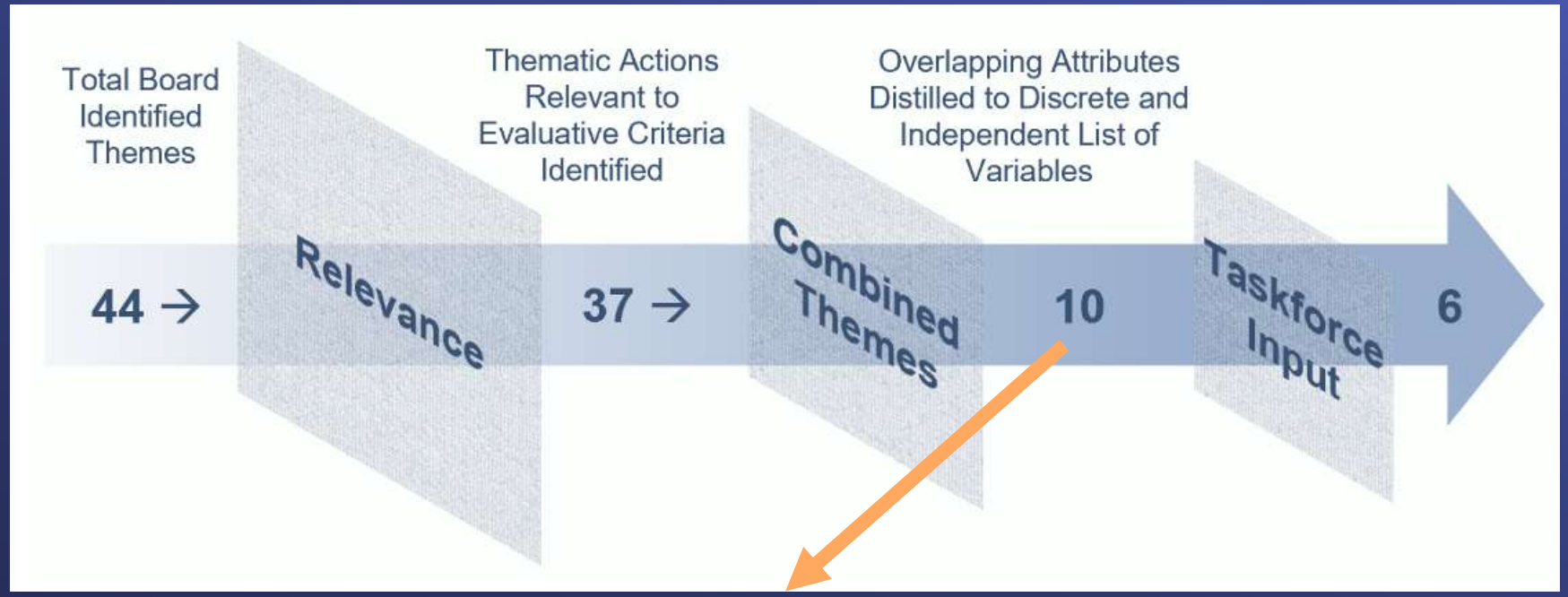
Integrating Board Priorities

Working Memo 2 summarizes the process by which the Board priorities were captured and translated into draft Evaluative Criteria



Initial Draft Evaluative Criteria

Process of incorporating Board Themes into Draft Evaluative Criteria



Initial Draft Evaluative Criteria

Equitable Supply Reliability	Risk Mitigation	Project Feasibility	Scaleability	Environmental Impact
Disadvantaged Community Benefit	Unit Cost/TAF	Locally-Sited Project	High Impact	Bond Feasibility

CAMP4W Climate Adaptation Master Plan for Water

Revisions based on Input

Initial Draft Evaluative Criteria were revised based on comments received from member agencies and Board Members

- Equitable Supply Reliability was revised to **Reliability**.
- The proposed Evaluative Criteria of **Resilience** incorporates Risk Mitigation and some benefits associated with a Locally-Sited Project.
- The financial metrics of Unit Cost/TAF and Bond Feasibility were combined into **Financial Sustainability and Affordability**.
- Increased **Adaptability and Flexibility** combines Project Feasibility and Scalability.
- Environmental Impact was revised to **Environmental Co-Benefits**.
- **Equity** encompasses Disadvantaged Community Benefit and other equity considerations.
- High Impact was omitted, to be addressed through the setting of Time-Bound Targets.

CAMP4W
Climate Adaptation Master Plan for Water

Initial Approach Focused on a Scoring Methodology

Evaluative Criteria Objectives

Defined in the CAMP4W Year One progress Report

"Evaluative Criteria and the scoring process will consist of quantifiable, meaningful, and measurable metrics. This approach supports a **data-driven evaluation process** for projects and programs."

Evaluative Criteria & Attributes from Year 1 Report

Attributes:
- Supply performance
- Equitable reliability

Attributes:
- Address known vulnerability
- Project's ability to perform under climate impacts

Attributes:
- Unit cost

Attributes:
- GHG emissions
- Ecosystem benefits
- Habitat/wildlife benefit

Attributes:
- Programs for underserved communities
- Scale of community engagement
- Public health benefits
- Workforce development

Attributes:
- Flexibility of existing assets
- Ease/Complexity
- Scalability

Draft Evaluative Criteria Scoring Metrics Presented to Member Agencies on August 8

Evaluative Criteria	Proposed Scoring Metrics to Produce a Total Project Score
Reliability	1a: Reduction in % of shortage in the entire service area at the target time 1b. Reduction in % of shortage in the SWPDA at the target time
Resilience	2a: Addressing recommendations and priorities in Hazard Mitigation Plan & Climate Vulnerability and Risk Assessment 2b. Level of compliance to Envision Standards
Affordability	Unit Cost (not part of proposed composite score)
Adaptability & Flexibility	4a: Improvement in ability to adjust to systemwide changes (water quality, source water, distribution interruption) 4b. Ease of operations (Staffing, maintenance, preparation) 4c. Ease of implementation (site conditions; ROW) 4d. Scalability (initial v total investment)
Environmental Co-Benefits	5a: Envision score on GHG emissions 5b: Envision score on resource consumption 5c: Envision score on conservation, ecology, and siting
Equity	6a: Ratio of DAC population in the project area 6b: Envision standards to gauge community engagement 6c: Quantification of community benefits

Summary of Member Agency Feedback on Draft Scoring Metrics

- Proposed scoring metrics are overly complicated and difficult to implement, and one single composite score could mask unique attributes of each project
- The proposed scoring metrics are too narrow and do not adequately represent the breadth of attributes discussed
- While Envision may be a useful certification system, it is unnecessarily complicated as proposed
- Concerned about how this would apply to projects still in development or complementary projects
- Reliability should remain paramount
- Example project scoring underscores issues expressed above

CAMP4W
Climate Adaptation Master Plan for Water

Integrating Feedback to Date

Revised Approach Focuses on Comprehensive Project Assessment

Providing a Comprehensive Assessment

Proposed Rubric Includes Quantitative and Qualitative Measures

Evaluative Criteria
Reliability
Resilience
Adaptability & Flexibility
Affordability
Environmental Co-Benefits
Equity

Each **Project** or **Program** would be considered through a robust narrative description of how project attributes achieve each objective

Descriptions could include:

- ✓ Quantitative metrics
- ✓ Qualitative information
- ✓ Gaps in information available

Reliability

Blending quantitative and qualitative information to produce a comprehensive assessment

Reliability Attributes	Source/Type Data
Does it advance equitable supply reliability?	1) IRPSIM 2) Historical drought sequence data 3) Qualitative description of reliability attributes and/or limitations
Does it help meet supply reliability objectives based upon Average and Dry Year conditions?	
How reliable is the source of the supply in projected climate conditions?	
What are the potential portfolio benefits (e.g., how does it perform alone, with another project, or only with the other project)?	

Resilience

Blending quantitative and qualitative information to produce a comprehensive assessment

Resilience Attributes	Source/Type Data
Does it address an identified climate vulnerability (e.g., extreme heat, wildfire, sea level rise, atmospheric rivers, runoff shifts)?	1) IRPSIM 2) Consider link to existing planning processes including system reliability, vulnerability, and flexibility assessments 3) Consider industry infrastructure standards for climate resilience and water quality implications 4) Consider Federal and State drinking water standards and total dissolved solids reductions 5) Qualitative description of resilience attributes and/or limitations
Will it continue to operate and perform under various climate change conditions, including potential compounding impacts?	
Does it improve resilience to other hazards, such as earthquakes?	
Does it address water quality considerations?	

Financial Sustainability and Affordability

Blending quantitative and qualitative information to produce a comprehensive assessment

Affordability Attributes	Source/Type Data
What is the average annual rate impact?	1) Project Costs (capital, O&M, life cycle, net present value) 2) LRFP Needs Assessment 3) Qualitative description of potential funding opportunities and/or additional project partners 4) Benefit / cost analysis
Is the project eligible for federal and/or state grants or other funding sources or partners? If so, what are the estimated target amount(s)? Is there a local match requirement? If so, how much?	
If applicable, what is the unit cost/af (gross and net)? For storage projects, what is the cost/capacity and cost/net yield?	
Does considering life cycle cost change the overall financial impact?	
Can the project be funded by tax-exempt bonds?	

Adaptability and Flexibility

Blending quantitative and qualitative information to produce a comprehensive assessment

Adaptability / Flexibility Attributes	Source/Type Data
Does it work with and/or improve the flexibility of existing assets?	1. Quantitative and qualitative description of potential added system operational flexibility (redundancy, water quality, etc.) and implementation complexity and risks (ROW, timing, partners, etc.) 2. Quantitative and qualitative description of scalability (cost, benefits, impacts) 3. Qualitative description of impact on day-to-day operations 4. Ability to adapt to uncertainties and sustain a specified performance across changing conditions (e.g., demand, legislation, energy costs)
Can the project be phased?	
How complex are the day-to-day operations?	
What is the implementation risk and/or complexity of implementation?	

Environmental Co-Benefits

Blending quantitative and qualitative information to produce a comprehensive assessment

*Feedback from 8/13 GM Environmental Listening Session in Green

Environmental Attributes	Source/Type Data
Is it consistent with the Climate Action Plan based on estimated greenhouse gas emissions or enhanced carbon sequestration?	1) GHG and pollutant load estimates 2) Qualitative description of ecosystem services and ecological functions provided 3) Consider using tool to measure / monetize co-benefits where appropriate 4) Acreage land impacted; Acre-feet of water provided
Does it provide additional ecosystem services **and promote ecological functions**, such as water quality, soil health, biodiversity, urban heat island reduction, **flooding reduction, watershed protection, restoration, carbon sequestration** etc.?	
Does it protect, improve, or expand wildlife and fish habitat **and/or affect flows in ways that improve ecological functions for native species?**	
Does it provide new public green space and/or reduce impervious surface?	

Equity

Blending quantitative and qualitative information to produce a comprehensive assessment

*Feedback from 8/13 GM Environmental Listening Session in Green

Equity Attributes	Source/Type Data
To what scale does it directly or indirectly benefit underserved communities while enhancing Metropolitan's services?	1) % of project in CalEnviro Screen community 2) Qualitative description of level of community, tribal and partner engagement 3) Qualitative description of direct community benefits associated with project/program 4) Consider using tool to measure / monetize co-benefits where appropriate 5) Scope of Community Benefits Program proposed
What level of community, tribal, partner engagement is included in the project or program?	
Is there broad community support or potential for support?	
Are specific community benefits such as workforce opportunities, localized resilience, public health, and quality of life measures incorporated?	

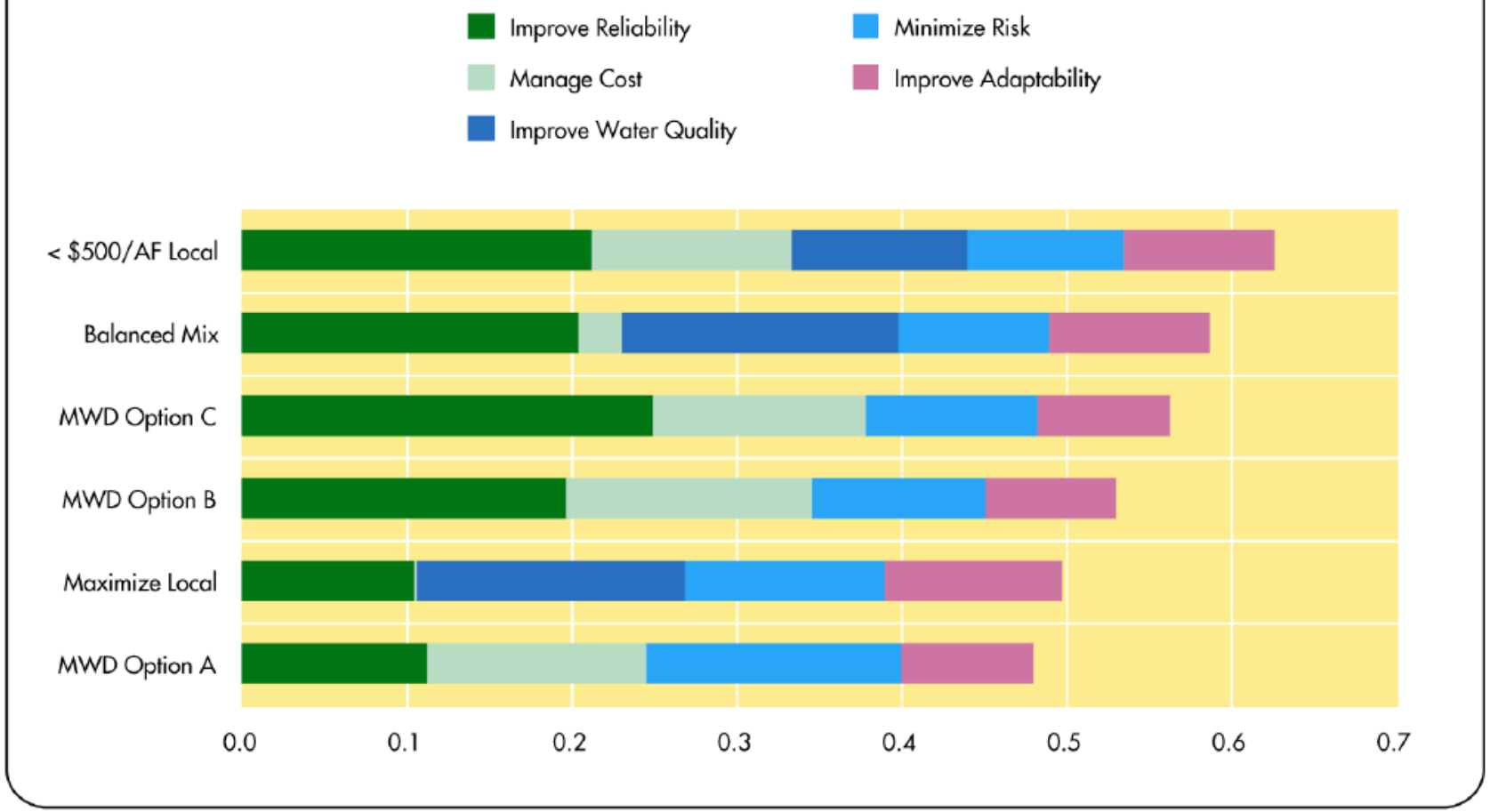
Examples of Past Metropolitan Processes

Example 1: Pipeline Alignment Selection Evaluative Criteria

Alignment Selection Evaluative Criteria								
	Criteria 1	Criteria 2	Criteria 3	Criteria 4	Criteria 5	Criteria 6	Criteria 7	Criteria 8
alignment 1							N/A	N/A
alignment 2							N/A	
alignment 3							N/A	
alignment 4								
alignment 5								
alignment 6								

Example 2: IAS Methodology

Figure ES-1 Portfolio Rankings Based on Riverside/San Diego Objective Weights



Providing a Comprehensive Assessment

Proposed Rubric Includes Quantitative and Qualitative Measures

Evaluative Criteria
Reliability
Resilience
Adaptability & Flexibility
Affordability
Environmental Co-Benefits
Equity

Each **Project** or **Program** would be considered through a robust narrative description of how project attributes achieve each objective

Descriptions could include:

- ✓ Quantitative metrics
- ✓ Qualitative information
- ✓ Gaps in information available

Next Steps for Evaluative Criteria Development and Finalizing the Climate Decision-Making Framework

Seek Direction on Overall Approach	Seek Additional Feedback from Member Agencies and other Partners	Discuss Proposed Approach	Finalize Climate Decision-Making Framework
CAMP4W Task Force August	*August - November*	*CAMP4W Task Force September*	*CAMP4W Task Force November*


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
1928

Sustainability, Resilience and Innovation Group

- **CAMP4W Task Force – Service Area Population Data**

Summary

This report provides a description of how population growth information is obtained as input for Metropolitan's planning purposes, including the development of scenarios for the 2020 Integrated Resource Plan Regional Needs Assessment. The Integrated Resource Plan Regional Needs Assessment serves as the analytical basis for the Climate Adaptation Master Plan for Water time-bound resource targets.

Purpose

Informational

Attachments

Attachment 1: Development of Demographic Growth Forecasts Metropolitan's 2020 IRP Planning

Detailed Report

Population as a Driver of Change for Water Reliability

The 2020 Integrated Water Resources Plan Regional Needs Assessment (IRP Needs Assessment) introduced a scenario planning approach. The purpose of scenario planning is to broaden the understanding of plausible but uncertain future conditions affecting water supplies and demands. To have scenarios that were meaningful and logically consistent in depicting future conditions, staff undertook a comprehensive identification of the fundamental drivers of change that affect supply stability and demands on Metropolitan. Building upon input received from the Board, member agencies, and the public, four scenarios were developed within a framework that examined and quantified these drivers of change. This exercise provided four sets of assumptions resulting in supply-demand gaps against which various investment options can be tested through the CAMP4W process.

Population growth is one of the primary drivers of water demand. All else equal, an increase in population will result in higher water use. Of course, population is not the only factor affecting water demand at the retail level. Water use efficiency and conservation behaviors also play an important role in overall water usage. The stability of water demand in Southern California even as the population increased by 24 percent between 1990 and 2023 is a testament to the success of water demand management efforts over the last 30 years.

Process for Developing Population Data Used for Planning

Historic Population Estimates

On an annual basis, Metropolitan tracks population changes using county-level estimates from the California Department of Finance (DOF), which are then converted to Metropolitan's service area. During the decennial Census years (e.g., 2000, 2010, 2020, etc.), population data are also obtained from the U.S. Census Bureau. **Figure 1** shows the historical population in Metropolitan's service area. Estimates for recent years are routinely revised with each annual data release.

DOF's year-to-year estimates are subject to revision, and uncertainties accumulate over time as new annual estimates move further from the last actual Census count. With each Census, DOF recalibrates population models to the new Census and revises estimates for the years going back to the previous Census. This recalibration can result in significant changes. As an example, for the whole state of California, after the 2010 Census count,

DOF's estimate for 2009 changed from 38.5 million to 37.1 million in the pre- and post-Census data. This resulted in a correction of near 1.5 million fewer people in the statewide official population estimates for 2009, with revisions for every year in between 2000 and 2010. For the Metropolitan service area, this resulted in a reduction of more than 700,000 persons that had previously been estimated in 2009, which had implications on planning assumptions for Metropolitan and its member agencies. This incident points to the inherent uncertainty and provisional nature of year-to-year population data.

Future Population Projections

Metropolitan uses growth forecasts developed by two government agencies – the Southern California Association of Governments (SCAG) and the San Diego Association of Governments (SANDAG) – as inputs to its retail demand model to estimate future urban water demands. SCAG and SANDAG are regional transportation planning agencies for Southern California. Among other responsibilities, SCAG and SANDAG prepare projections of demographic and employment growth. Both planning agencies update their regional growth forecasts approximately every four years. SCAG is the regional planning agency for six counties: Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. SANDAG is the regional planning agency for San Diego County. See Table 1.

Table 1. Counties Served by SCAG, SANDAG, and Metropolitan

County Served	SCAG	SANDAG	Metropolitan* Service Area	% of County Area in Metropolitan's Service Area	% of County Pop. Served by Metropolitan in 2020
Imperial	✓			0%	0%
Los Angeles	✓		✓	34%	91%
Orange	✓		✓	88%	~100%
Riverside	✓		✓	15%	74%
San Bernardino	✓		✓	1%	40%
Ventura	✓		✓	20%	75%
San Diego		✓	✓	34%	97%

*Metropolitan service area does not cover the entire county

For IRP analyses prior to the 2020 IRP Needs Assessment as well as for other planning purposes such as the Urban Water Management Plan (UWMP), Metropolitan has used SCAG's and SANDAG's demographic growth forecasts as the basis for modeling its retail demand projections. Both SCAG and SANDAG prepare demographic forecasts based on land use data for their respective regions through extensive processes that emphasize input from local planners and are done in coordination with local or regional land use authorities, incorporating essential information to reflect anticipated future populations and land uses. SCAG's and SANDAG's projections undergo extensive local review, incorporate zoning information from city and county general plans, and are supported by Environmental Impact Reports. Both SCAG and SANDAG have recently completed new regional growth forecasts in 2024. In order for these regional growth forecasts to be analyzed and used at the Metropolitan service area and member agency level, Metropolitan needs to have access to the forecasts at the U.S. Census Tract and Transportation Analysis Zone level. Metropolitan staff is working on obtaining and incorporating the new SCAG and SANDAG forecasts at the appropriate level of detail for use in Metropolitan's upcoming major planning cycle for the 2025 UWMP.

For developing the 2020 IRP Needs Assessment analysis, Metropolitan used an alternative methodology to obtain a range of high and low population projections to be consistent with high and low growth scenarios. During the

2020 IRP process, Metropolitan engaged the services of demographer Mr. Stephen Levy, Director and Senior Economist of the Center for Continuing Study of the California Economy (CCSCE), to produce two alternative demographic growth projections for the IRP planning scenarios. CCSCE provides independent assessments of economic and demographic trends in California to public agencies including SCAG and nonprofit institutions. CCSCE specializes in analyses of California growth trends including projections and implications for public policy.
In developing the alternative demographic projections, CCSCE considered three main drivers for growth in the Metropolitan's service area:

1. **Immigration** - With birth rates falling and death rates rising, immigration will be the key to how fast the economy grows. The U.S. Census Bureau projected that the U.S. population would grow from the 2019 population by between 36 million and 79 million by 2045, mostly from immigration.
2. **Competitiveness for Jobs** - Southern California's economy continues to be resilient, fluctuating in a narrow range between 6 percent and 7 percent of U.S. jobs over the past three decades. The composition of U.S. job growth is slightly favorable to Metropolitan's service area with a focus on trade, tourism, technology, and creativity.
3. **Housing Availability** - Housing supply, housing affordability, and investment in infrastructure are major drivers as to how the region will capture job growth.

Instead of the SCAG and SANDAG growth forecasts, CCSCE used U.S. Census Bureau projections for the U.S. population as a baseline to derive future Six-County and Metropolitan Service Area populations. Foreign immigration was assumed as a major determinant of future growth. The low growth projection assumed a continuation of the relatively low levels of immigration seen in recent years. The high projection assumed a significant increase in immigration prompting the aging of the U.S. population and eventual decline in the labor force that would create opportunities for additional immigrants to replace retiring workers and fill new jobs.
Table 2 shows the projected net population growth from 2019 to 2045 for Metropolitan's service area under the 2020 IRP scenarios. The growth in population is approximately 1,190,000 and 5,847,000 people for the low and high scenarios, respectively. In the low growth projection, CCSCE assumed that the overall growth trend would be positive between 2019 and 2045. Even with low growth assumptions, CCSCE did not anticipate a net decrease in population from 2019 over the long term.

Figure 1 shows how CCSCE's high and low growth projections compare with each other as well as with the historical population.

Table 2. Alternative Population Growth Projections

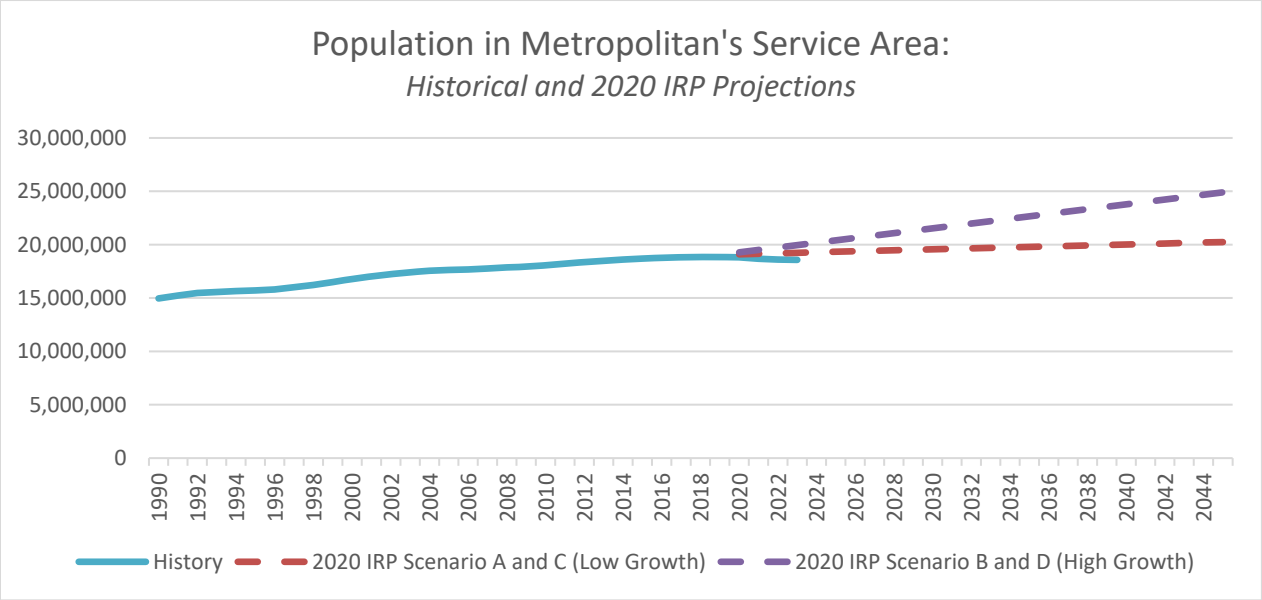
	2019	SCE A 2045L	SCE B 2045H	SCE C 2045L	SCE D 2045H
CCSCE's Six-County Area Population	22,202,000	23,813,000	28,619,000	23,813,000	28,619,000
CCSCE's In-Service Area Population	19,052,000	20,241,000	24,898,000	20,241,000	24,898,000
MWD's Member Agency Total Population	19,052,000	20,241,000	24,898,000	20,241,000	24,898,000
HH Population	18,722,000	19,922,000	24,505,000	19,922,000	24,505,000
SFR HH Population	12,269,000	12,906,000	15,710,000	12,858,000	15,583,000
MFR HH Population	6,453,000	7,015,000	8,795,000	7,064,000	8,922,000
GQ Population	330,000	320,000	393,000	320,000	393,000
Total Population	19,052,000	20,241,000	24,898,000	20,241,000	24,898,000

For an in-depth discussion on CCSCE's demographic projections that were used for the 2020 IRP Needs Assessment, please see **Attachment 1**.

Current Population in Metropolitan's Service Area

As shown in **Figure 1**, the service area's historical population peaked in 2018 at approximately 18.8 million persons. There are several reasons for the arrested growth over the last 5 years, notably the COVID-19 pandemic and shortage of housing available and affordable for new household formation. For nearly 20 years California has experienced negative net domestic migration, in which the number of people moving out of the state in a year exceeds the number moving in. Since 2016, net domestic outmigration has exceeded net international migration, leaving natural increase as the only source of population growth. Although the demographic shock of the pandemic has abated, growth from natural increase has been constrained by continuing declines in fertility and increased deaths from an aging population. However, the DOF has recently observed evidence of a reversal of the falling trend in statewide population, due to foreign legal immigration rebounding from the pandemic and returning to long-term trends, increased domestic in-migration and slowing domestic out-migration, and natural increase as the number of deaths fell from the pandemic peak.

Figure 1. Historical Population and 2020 IRP Needs Assessment Scenario Growth Projections



Population Data for Metropolitan's Service Area

Population projections are available on the CAMP4W dashboard, which features an interactive interface allowing you to filter data by agency and scenario. Additionally, all demographic data, including population data, can be accessed on the Metropolitan's website. Demographic Data Link.

CCSCE

Center for Continuing Study of the California Economy

Technical Memorandum:

Development of Demographic Growth Forecasts Metropolitan's 2020 IRP Planning Scenarios

Stephen Levy
May 2021

Prepared for:

Metropolitan Water District of Southern California

Center for Continuing Study of the California Economy
385 Homer Avenue ● Palo Alto, CA 94301 ● (650) 814-8553 ● www.ccsce.com

Table of Contents

List of Acronyms and Definitions

ABAG	Association of Bay Area Governments
BLS	Bureau of Labor Statistics
CCSCE	Center for Continuing Study of the California Economy
DOF	California Department of Finance
GDP	Gross Domestic Procut
HH	Household
MWD	Metropolitan Water District of Southern California
REMI	Regional Economic Models, Inc. (demographic and economic models)
RHNA	Regional Housing Needs Assessment
SANDAG	San Diego Association of Governments
SCAG	Southern California Association of Governments
2045H, 2045B, 2045L	Projections for 2045 – High, Base, Low, respectively
Six-County Area	Comprises of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura counties.
MWD Service Area	Comprises of the areas within the Six-County Area that Metropolitan Water District of Southern California serves.

Introduction

This report summarizes the development by the Center for Continuing Study of the California Economy (CCSCE) of alternative job, population, and household growth forecasts for the Metropolitan Water District of Southern California (MWD) service area to 2045.

MWD is developing scenarios for water demand and supply that include plausible high and low economic and demographic projections for the service area developed by CCSCE in consultation with MWD staff.

Forecast Framework

I will use the word forecast as it is used by both MWD and Southern California Association of Governments (SCAG), though technically what we are doing is developing projections—results that flow from a set of assumptions and are not by themselves predictive. Normally the word forecast is used to describe something usually thought of as a prediction as when an economist says GDP is forecast to rise by a certain percent next year.

Regional forecasts (e.g. for the SCAG or MWD service area) are anchored in a national forecast. This is true for CCSCE's work, but also for national models such as REMI.

It is useful to portray the national forecast as providing the "opportunity pie" that affects what share of growth and growth details that can be captured by regional areas such as the MWD service area.

Note also that long-term forecasts assume the economy is in equilibrium, not in recession or high inflation. One result is that for describing growth rates, the usual practice is to have an equilibrium year as the starting point. So I will use 2019, not 2020, when describing growth rates.

A national forecast begins with a forecast of total population. Normally the Census Bureau is the source for national population projections.

For our purposes the next step is to forecast total job levels. The translation from population to jobs includes assumptions about unemployment and labor force participation rates as the major linkages.

The next step as an input to regional job forecasts is to forecast the pattern of national job growth by industry.

In our work the national forecast is anchored in projections from national forecasting organizations such as Bureau of Labor Statistics (BLS) or REMI.

National Forecast—Assumptions and Key Drivers

In 2020, the Census Bureau published a set of alternative population projections driven solely by alternative assumptions about the level of immigration. This decision and prior expert panel work for SCAG establishes immigration as a major driver of the level of national growth.

Driver	Immigration
Impact on Alternative Forecasts	Major
Quantified	Yes

The Census Bureau alternative projections and their previously published baseline projections are shown below. The alternative projections reflect immigration levels roughly 50% above and below the 2011-15 average used in the baseline projection. The low projection would maintain the low levels of immigration in recent years. The alternative projections also include different birth levels reflecting the size and ethnic composition of the populations.

The higher projections are plausible given the aging of the U.S. population and eventual decline in the labor force that show the need for additional immigrants to replace retiring workers and fill job growth. The higher levels are in line with current administration goals and the support of the broad business community.

In the charts and tables in this memo as well as in the accompanying Excel file, a baseline forecast developed by CCSCE is shown as well as a high and low projection (2045H and 2045L respectively). Though the baseline (2045B) growth numbers are not used by MWD in their scenarios, they are included to show the differences with the high and low scenarios.

	2019	**2045L**	**2045B**	**2045H**
U.S. Population (Millions)	328.2	364.0	381.4	407.4
		19-45L	**19-45B**	**19-45H**
Percent Change		10.9%	16.2%	24.1%
		19-45L	**19-45B**	**19-45H**
Change (Millions)		35.8	53.2	79.2
Average immigration per year (Millions)		0.65	1.08	1.76

The alternatives create a wide range of population growth, which will anchor our service area forecasts. Between 2019 and 2045 U.S. population growth is 35.8 million (+10.9%) in the low alternative and 79.3 million (+24.1%) in the high alternative.

There can be further impacts at the service area level as:

1) the MWD service area has a high concentration of immigrants in the population and workforce and,
2) high immigration implies a welcoming and tolerant attitude toward immigrants and foreigners that is important for the service area economy.

Going from U.S. population to U.S. jobs involves assumptions about labor force participation rates and unemployment rates. The 2045 forecast is an equilibrium forecast so the national unemployment rate is assumed to be near 5%. Small variations will not have an impact on the final results. Overall labor force participation rates are assumed to decline as the population ages even as older workers work more.

Driver	• Translating population into total jobs • Unemployment rates • Labor force participation rates • Double jobbing rates
Impact on Alternative Forecasts	Minor
Quantified	No, same translation factors used in all forecast alternatives

CCSCE used the translation ratio shown below from population to jobs that was developed for Association fo Bay Area Governments (ABAG) in late 2019. The translation factors are not major drivers of change.

One result is that population is forecast to grow faster than jobs. This is a direct result of the aging of the population that slows labor force and job growth. But the general pattern of national job growth is similar to the population pattern. In the low alternative jobs grow by 13.6 million (+8.3%) between 2019 and 2045 while in the high alternative job growth is forecast to be 34.6 million (+21.2%).

These results shown below feed into the service area forecast and are the first piece of distinguishing the alternative forecasts.

	2019	2045L	2045B	2045H
Ratio of Population/Jobs	2.02	2.06	2.06	2.06
Jobs (Millions)	162.8	176.4	184.8	197.4
Percent Change		8.3%	13.5%	21.2%
Change		13.6	22.0	34.6

The next and final step in the national forecast is a forecast of job growth by industry. This is an important driver of the service area forecast though CCSCE did not have the scope or find credible evidence to develop alternatives.

Driver	Pattern of Industry Growth
Impact on Alternative Forecasts	Moderate
Quantified	No, but share narrative incorporates qualitative assumptions

The pattern of industry growth is similar in both the BLS projections used by CCSCE and the REMI model forecasts CCSCE worked with for ABAG.

Both show a pattern of industry growth that is favorable for the MWD service area economy. This is integral to the SCAG and San Diego Association of Governments (SANDAG) recent forecasts.

The service area job forecast is anchored in forecasts of the share of “basic” industries—those that can locate anywhere and are tied to national and international markets meaning most goods and services do not serve the local population.

The fastest growing basic industries nationally in terms of job growth are in Information and Professional Services sectors. Included here are entertainment production whether movies, TV, commercials or new forms, a variety of design services and a wide range of high-tech manufacturing and services. In addition, foreign trade and tourism are relatively fast-growing basic industry sectors.

Six-County Area and Service Area Job Forecast

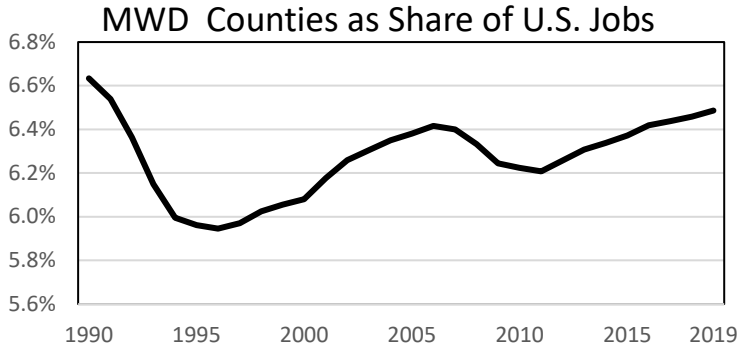
Six-County Area Job Forecast

Driver	Six-County Area share of national industry job share
Impact on Alternative Forecasts	Major
Quantified	Yes, with narrative associated

In the 2015-2019 period the Six-County Area recorded a steady increase in the share of U.S. jobs ending with the highest level since before the aerospace/defense induced decline in the early 1990s. Between 2000 and 2019 the Six-County Area share of U.S. jobs stayed in a relatively narrow range of between 6.1% and 6.5%.

The Six-County Area job share depends on
1) the composition of U.S. jobs, and
2) the share captured by the Six-County Area.

These are drivers of the share forecast.



To develop the low job forecast, CCSCE assumed that the Six-County Area share of U.S. jobs would return to the low point of the 2000-2019 history—6.1%. That assumption plus the low U.S. job forecast results in just 1.9% (0.2 million) job growth between 2019 and 2045.

What drivers could justify the low forecast? This is equivalent to asking:
1) What could change the composition of U.S. growth, and
2) What would reduce the region's competitive position.

Answers to the first question are:
1) Lower immigration would also imply restrictions that convey a less welcoming policy toward foreigners and could reduce activities such as tourism and foreign trade that are strengths of the regional economy.

A slow growth/low immigration U.S. economy as in the low U.S. forecast could also diminish entrepreneurial and skilled labor talent as much has come recently from immigrants. That would reduce job growth in tech sectors where the regional economy has a competitive advantage.

Answers to the second question are the main drivers of competitive position:

1) Success in reducing housing costs and expanding supply, and
2) Increasing mobility for people and goods.

These are both SCAG and SANDAG's goals, but success can be greater or less affecting the ability for people to live in the region affordably and reduce congestion for people and goods. Low housing production particularly for units that are broadly affordable could lower labor force and job growth in the service area.

The drivers of the high forecast are the same as in the low forecast, **but with different impacts.**

The high forecast depends on major success in meeting housing and mobility goals. High housing costs and long commutes are the major cause of recent out-migration.

High levels of immigration will increase the region's competitive position for two reasons:

1) They imply a welcoming attitude toward foreigners that will boost tourism and foreign students, and
2) Immigrants are a major source of skilled workers and entrepreneurs in the MWD service area.

The regional job forecast is shown below. Note that the low forecast has very little job growth. Also note that the job growth forecasts are lower in growth rates by a bit compared to forecast population growth—a result of the continued aging of the region's population and, as a result, declining total labor force participation rates meaning more people are needed to fill a given level of job growth. There is, however, a wide range of forecast growth between the high and low forecasts.

In the Six-County Area and service area tables, the unrounded forecasts are shown so that they match the numbers in the MWD staff worksheets.

	2019	2045L	2045B	2045H
Six County Share of U.S.	6.49%	6.10%	6.36%	6.55%
Six-County Area Jobs (Millions)	10.6	10.8	11.8	12.9
Percent Change		1.9%	11.3%	22.4%
Change (Millions)		0.2	1.2	2.4

Service Area Job Forecast

The service area job forecast was developed by assuming that the 2019 service area share of Six-County Area jobs would remain in 2045. There was very little change historically and small differences would not have a large impact on the forecast. There are actually two competing forces pointing in opposite directions. On the one hand SCAG and SANDAG are planning for more growth to be within the MWD service area in coastal areas. On the other hand, historically growth in the Six-County Area outside of the service area has been a bit faster.

	2019	2045L	2045B	2045H
Service Area Share of Six-County Area Jobs in 2019	87.3%	87.3%	87.3%	87.3%
Service Area Jobs (Millions)	9.2	9.4	10.3	11.3

Six-County Area and Service Area Population Forecast

Six-County Area Population Forecast

Driver	Ratio of population to jobs driven by unemployment and labor force participation rates and double jobbing
Impact on Alternative Forecasts	Minor
Quantified	Yes

In the SCAG and ABAG work and here, the forecast used the ratio of population to jobs in the region in relation to the forecast U.S. ratio. For this forecast, the Six-County Area average ratio for 2010-19 was used. The Six-County Area ratio of population/jobs rises slightly to 2045 similar to the U.S. trend and is not a major factor in our forecast

	2019	2045L	2045B	2045H
Ratio of Population/Jobs Six-County Area/U.S.	1.04	1.07	1.07	1.07
Ratio of Population/Jobs Six-County Area	2.10	2.21	2.21	2.21
Six-County Area Jobs (Millions)	22.2	23.8	26.0	28.6

Service Area Population Forecast

The 2019 service area share of the Six-County Area population was used for the baseline forecast. For the low forecast 85% was used for the service area share of the Six-County Area and 87% for the high forecast. The explanation is tied to the service area HH forecast and shown in that section. The resulting service area population forecast is calculated by multiplication as shown below.

The forecast growth ranges from 1.2 million (+6.2%) for the low and 5.8 million (+30.7%) for the high forecast alternative.

	2019	2045L	2045B	2045H
Service Area Share of Six-County Area Population	85.8%	85.0%	85.8%	87.0%
Service Area Population (Millions)	19.05	20.24	22.32	24.9
		2019-45L	**2019-45B**	**2019-45H**
Percent Change		6.2%	17.2%	30.7%
Change (Millions)		1.2	3.3	5.8

Six-County Area and Service Area Housing Forecast

Driver	• Household formation (headship) rates, • Regional housing needs assessment (RHNA) requirements for reducing the number of overcrowded and cost burdened households, maintaining a normal vacancy rate and • Success in meeting RHNA, and SCAG/SANDAG housing goals
Impact on Alternative Forecasts	Minor
Quantified	Yes

The housing growth forecasts are split into two parts:

1) Relating to growth associated with population growth, and
2) Associated with their RHNA “catch up” requirements, including reducing the number of overcrowded and cost burdened residents.

For the household growth related to population growth the persons/household forecast of DOF for 2030 for the service area was used as shown below. It falls a bit from current levels primarily because there are fewer children per household.

The service area shares of Six-County Area growth explained in the next section were used, the same as in the service area population forecasts.

These assumptions produce a range of household growth from just under 0.6 million (+9.1%) in the low forecast to just over 2.1 million (+34.1%) in the high forecast alternative.

	2019	2019-45L	2019-45B	2019-45H
Households from population growth Six-County Area Person per Household	3.06	2.99	2.99	2.99
Six-County Area Households (Millions)	7.2	8.0	8.7	9.6
Service Area Share of Six-County Area Households	86%	85%	86%	87%
Service Area Households (Millions)	6.2	6.8	7.5	8.3
Percent Change		9.10%	20.50%	34.10%
Change (Millions)		0.6	1.3	2.1

The next step was to identify the RHNA related catch-up housing required in the SCAG and SANDAG regions. A portion of the 6th cycle RHNA allocations for the SCAG and SANDAG regions relate to future population growth and these are included above.

Another portion related to minimizing the number of overcrowded and cost burdened household (those paying more than 30% of income for housing) and bringing the vacancy rate back up to normal levels. The result (after backing out Imperial County which is not in MWD's service area was 800,000 units for the Six-County Area as shown below. These units are a one-time catch up to mitigate existing needs for current residents.

CCSCE and MWD staff worked together to develop alternative assumptions about the success that would be achieved in producing these housing units. We assumed different success rates of 50% (low alternative), 75% (baseline) and 100% (high) to 2045 to illustrate the impact of a range.

There is a feedback from the choice of success rates in meeting the catch up RHNA allocations to the service area share of household and population growth in the low and high alternatives. The catch-up units are primarily for low- and

moderate-income residents and will be built primarily within the MWD service area portions of the Six-County Area. As a result, CCSCE and MWD assumed that the service area would get a slightly higher (87%) share of Six-County Area households and population growth in the high alternative where 100% of the catch-up units are assumed and a slightly lower (85%) share of Six-County Area households and population in the low alternative where only 50% of the catch-up units are assumed to be built.

MWD will also show results for a second high alternative they developed that assumes 75% success in developing the catch-up units.

The result of these assumptions is a range of total HH growth from 0.9 million (+14.5%) in the low forecast alternative to 2.8 million (+45.3%) in the high forecast.

Six-County Area	2019	2019-45L	2019-45B	2019-45H
Total Need (Millions)		0.80	0.80	0.80
Success Rate		50%	75%	100%
Added Household (Millions)		0.40	0.60	0.80
Service Area Share		85%	86%	87%
Service Area Household from unbundling (Millions)	6.22	0.30	0.50	0.70
Total Service Area Household Growth (Millions)		0.90	1.80	2.80
Total Service Area Households	6.22	7.12	8.00	9.03
Percent Change		15%	29%	45%

Summary of Results with Rounded Numbers

U.S. Population	2019	2045L	2045B	2045H
U.S. Population (Millions)	328.2	364.0	381.4	407.4
		2019-45L	2019-45B	2019-45H
Percent Change		10.9%	16.2%	24.1%
Change (Millions)		35.8	53.2	79.2
U.S. Jobs	**2019**	**2045L**	**2045B**	**2045H**
Jobs (Millions)	162.8	176.4	184.8	197.4
		2019-45L	2019-45B	2019-45H
Percent Change		8.3%	13.5%	21.2%
Change		13.6	22.0	34.6
Service Area Population	**2019**	**2045L**	**2045B**	**2045H**
Service Area Population (Millions)	19.1	20.2	22.3	24.9
		2019-45L	2019-45B	2019-45H
Percent Change		6.2%	17.2%	30.7%
Change (Millions)		1.2	3.3	5.8
Service Area Jobs	**2019**	**2045L**	**2045B**	**2045H**
Service Area Jobs (Millions)	9.2	9.4	10.3	11.3
		2019-45L	2019-45B	2019-45H
Percent Change		1.9%	11.3%	22.4%
Change (Millions)		0.2	1.0	2.1
Service Area Household	**2019**	**2045L**	**2045B**	**2045H**
Service Area Household (Millions)	6.2	7.1	8.0	9.0
		2019-45L	2019-45B	2019-45H
Percent Change		14.5%	28.8%	45.3%
Total HH Growth (Millions)		0.9	1.8	2.8

Subcommittee on Long-Term Regional Planning Processes and Business Modeling

CAMP4W Task Force – Service Area Population Data

Item 3c

August 28, 2024

Population as a Driver of Change for Water Reliability

- Population growth is a primary driver of water demand
- Past IRPs had used a single demographic scenario based on official regional growth forecasts
  - Past projections have proved to be inaccurate when used as predictions
  - Metropolitan moved towards capturing uncertainty under a range of plausible outcomes
  - For planning, understanding the consequences under a range of outcomes is more useful than relying on a single prediction
- The 2020 IRP Needs Assessment used a dual set of customized demographic growth projections for use in scenario planning
  1. High Growth projection
  2. Low Growth projection

Population Data Sources

Historical

CA Department of Finance

- Annual population estimates
- Subject to revision

Census

- Decennial years (e.g. 2000, 2010, 2020)

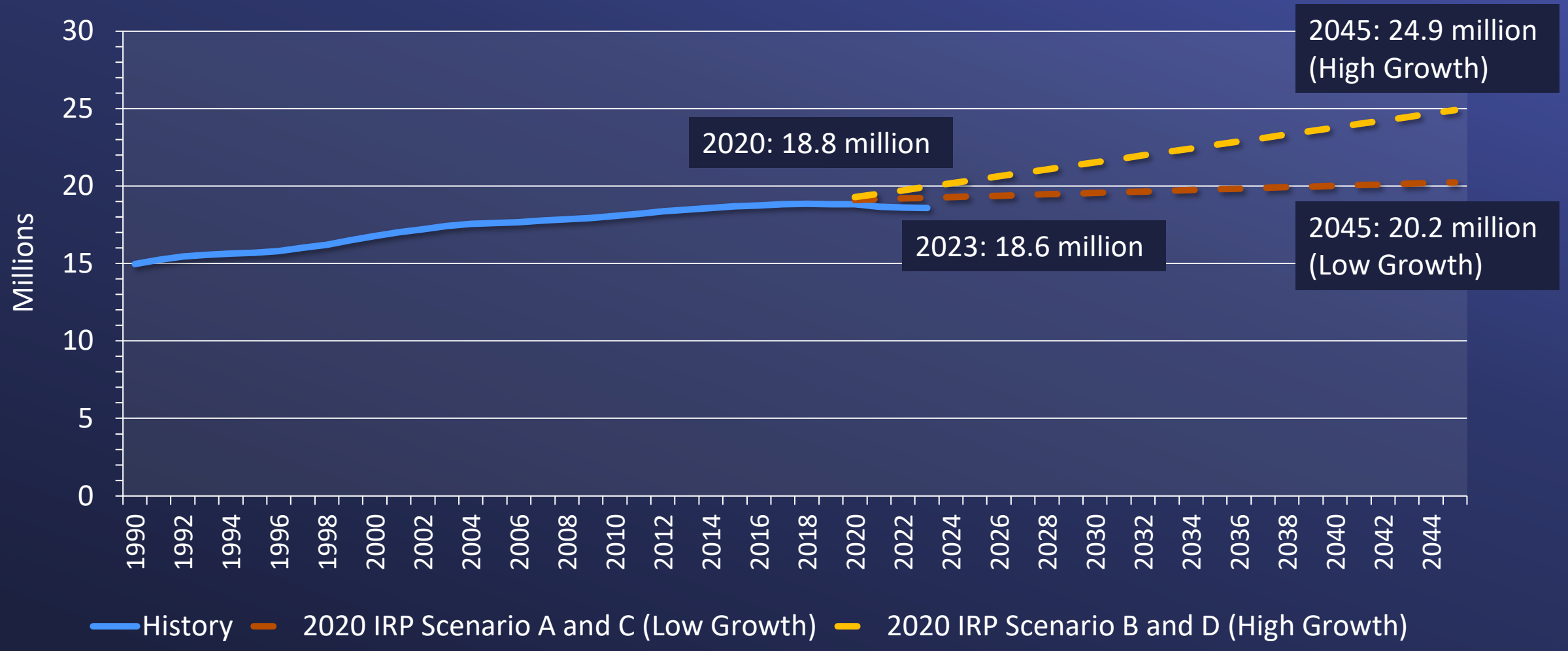
Projections

- **Southern California Association of Governments (SCAG)**
  - Every 4 years
  - RTP 24 adopted April 2024
- **San Diego Association of Governments (SANDAG)**
  - Every 4 years
  - Draft 2025 Regional Plan to be adopted in 2025
- **Center for Continuing Study of the California Economy (CCSCE)**
  - Scenarios for 2020 IRP Needs Assessment
  - Demographic projection in May 2021

2020 IRP Scenario Demographic Growth Projections

- CCSCE considered 3 main drivers for population growth in Metropolitan's service area:
  - Immigration
  - Competitiveness for jobs
  - Housing availability
- CCSCE developed 2 demographic growth projections for the IRP scenarios:
  - Low growth projection
    - Assumed that a continuation of the relatively low levels of immigration seen in recent years (applied to 2020 IRP Scenarios A and C)
  - High growth projection
    - Assumed a significant increase in immigration, prompted by aging of the U.S. population (applied to 2020 IRP Scenarios B and D)

Population in Metropolitan's Service Area:
Historical and 2020 IRP Projections



Understanding Population Estimates and Projections in the Context of Long-Term Planning

- Historical population estimates are provisional and subject to revision
  - Uncertainties accumulate over time as new annual estimates move further from the last Census count
  - With each Census, DOF recalibrates population models to the new Census and revises estimates for the years going back to the previous Census
  - Recalibration can result in significant changes
- Newer projections from SCAG and SANDAG do not invalidate the 2020 IRP's scenarios for high and low population growth
  - Under scenario planning, exact projections are less important than an examination of assumptions for the drivers of population growth
  - Staff will explore SCAG and SANDAG's latest assumptions for insights into refinements for the scenarios

Discussion


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Board Report

Sustainability, Resilience, and Innovation Group

- **Member Agency Ad Hoc Working Group Update on Business Model**

Summary

This report presents correspondence received from Member Agency Managers outlining a proposed process for an Ad Hoc Working Group to review and recommend refinement of Metropolitan Water District's business model

Purpose

Informational

Attachments

Attachment 1 – Letter re: Business Model Review and Refinement Ad Hoc Working Group Process

Detailed Report

On July 22, 2024, as part of the CAMP4W process, the Board Chair, Board Vice Chair for Finance and Planning, and the Chair of the Subcommittee on Long-Term Regional Planning Process and Business Model (the CAMP4W Task Force Chair) provided guidance to the general managers of Metropolitan's member agencies regarding the process for the business model review. Guidance was shared with the materials for CAMP4W Task Force discussion at the July 24, 2024 Subcommittee meeting.

On August 23, 2024, member agency managers from all 26 member agencies submitted a joint letter in response. Attachment 1 is a copy of the letter received.

Date of Report: August 28, 2024

BUSINESS MODEL REVIEW AND REFINEMENT AD HOC WORKING GROUP PROCESS

August 19, 2024

Mr. Adán Ortega Jr., Board Chair
Ms. Gail Goldberg, Board Vice Chair for Finance and Planning
Mr. Matt Petersen, CAMP4W Task Force Chair
Mr. Deven Upadhyay, Interim General Manager
Metropolitan Water District of Southern California
700 North Alameda Street
Los Angeles, CA 90012-2944

Subject: BUSINESS MODEL REVIEW AND REFINEMENT AD HOC WORKING GROUP PROCESS

Dear Board Leadership and Interim General Manager Upadhyay,

Thank you for your July 22nd guidance letter regarding the development of a Business Model review and refinement Ad Hoc Working Group as we consider the impacts of climate change on Metropolitan's water supply and operations "***to provide its service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.***"

We further appreciate the Board Leadership's foresight and recognition that as Metropolitan's Member Agency Managers, we have expertise through our direct experience running our respective agencies' day-to-day operations and finances, which offers valued input into the Business Model review and refinement process.

Following the July 24th Subcommittee on Long-Term Regional Planning Processes and Business Modeling CAMP4W Task Force Meeting, we collectively reviewed and discussed your guidance letter and the Ad Hoc Working Group process. As the 26 Metropolitan Member Agency Managers, we propose the following framework for collaboration that includes at least two facilitated "retreats" to discuss and vet major elements of the process (see attached).

We look forward to embarking on a collaborative effort for review and refinement of the Business Model via the Ad Hoc Working Group and pledge our continued dedication to the success of Metropolitan's initiatives.

Sincerely,

Craig J. Parker, P.E., BCEE
Assistant General Manager, Water Services
Anaheim Public Utilities
City of Anaheim

Richard Howard Wilson, P.E.
Assistant General Manager – Water Systems
Burbank Water & Power

Kristine McCaffrey
General Manager
Calleguas Municipal Water District

Elaine Jeng, P.E.
Interim General Manager
Central Basin Municipal Water District

Nina Jazmadarian
General Manager
Foothill Municipal Water District

Chisom Obegolu, P.E.
Assistant General Manager – Water Services
Glendale Water & Power

David W. Pedersen, P.E.
General Manager
Las Virgenes Municipal Water District

Anselmo G. Collins, P.E., MBA
Senior Assistant General Manager – Water System
Los Angeles Department of Water and Power

Stacie N. Takeguchi
Chief Assistant General Manager
Pasadena Water & Power

Wendell E. Johnson, P.E.
Director of Public Works
City of San Fernando

Shana Epstein
Director of Public Works
City of Beverly Hills

Jessica Taylor
Director of Operations
California American Water/City of San Marino

Jose Garfias
Interim Water Department General Manager
City of Compton Water Department

Joe Mouawad, P.E.
General Manager
Eastern Municipal Water District

Stephen Bise, P.E., T.E.
Director of Public Works
City of Fullerton

Shivaji Deshmukh, P.E.
General Manager
Inland Empire Utilities Agency

Chris Garner
General Manager
Long Beach Utilities
City of Long Beach

Harvey De La Torre
General Manager
Municipal Water District of Orange County

Dan Denham
General Manager
San Diego County Water Authority

Cesar E. Barrera, P.E.
Deputy Public Works Director
Water Resources Manager
City of Santa Ana

Sunny Wang, P.E.
Water Resources Manager
City of Santa Monica

Andy Darlak
Water Operations Manager
City of Torrance

E.J. Caldwell
General Manager
West Basin Municipal Water District

Matthew H. Litchfield, P.E.
General Manager
Three Valleys Municipal Water District

Tom Love
General Manager
Upper San Gabriel Valley Municipal Water District

Craig Miller
General Manager
Western Municipal Water District

DRAFT FRAMEWORK FOR MWD AND MEMBER AGENCY
COLLABORATION ON BUSINESS MODEL REVIEW AND REFINEMENT

August 19, 2024

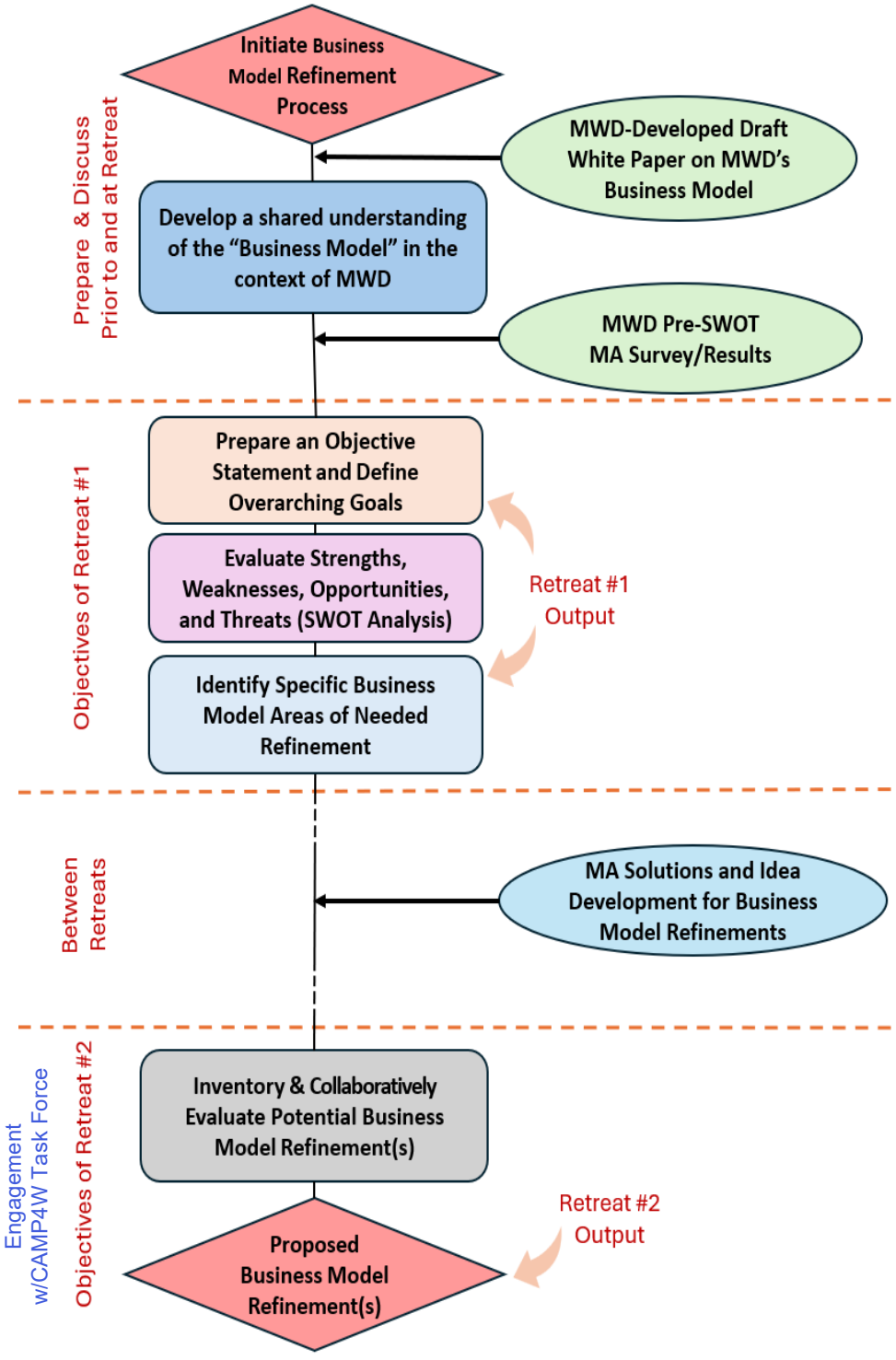
In response to the July 22nd guidance from Board Leadership, the Metropolitan Water District of Southern California (MWD) and its Member Agencies (MAs) propose to embark on a collaborative effort to review and refine the Business Model via an Ad Hoc Working Group.

The attached flow chart describes the proposed process. Following are the initial logistics for the effort:

- MWD and MA Managers jointly "own" the process, work products, and recommendations of the Ad Hoc Working Group.
- The Ad Hoc Working Group includes all 26 MA Managers and MWD's General Manager.
- MWD's General Manager will invite key MWD staff (subject matter experts) to actively participate, as needed.
- The Ad Hoc Working Group will organize at least two facilitated "retreats" to discuss and vet major elements of the process.
- To coordinate the Ad Hoc Group meetings/retreats, a MA Liaison group of MA Managers (four to six) serving on a volunteer basis will assist with the administrative elements of the process. MWD will hire a professional facilitator to support the Ad Hoc Working Group's retreats. The MA Managers' input will be considered in the selection of the facilitator.
- In preparation for the retreats, the facilitator should have the opportunity to receive input from the MWD General Manager and MA Managers.
- Board Leadership will be provided with an opportunity to address the Ad Hoc Working Group at the onset of the retreats.
- Progress updates will be given by the Ad Hoc Working Group at the Subcommittee on Long-Term Regional Planning Processes and Business Modeling meeting and/or appropriate committee at key milestones.
- The Ad Hoc Working Group's goal is to provide and present a deliverable report to the CAMP4W Task Force by March 31, 2025, with collaborative-based recommendations that can be subsequently considered by the Board.

Proposed Process for MWD Business Model Discussion

August 19, 2024



Prepare a definition of the term "business model" in the context of MWD's role as the regional water supplier for Southern California. Consider: (1) the Mission Statement; (2) what products and services are provided; (3) how they are packaged and delivered; and (4) how value is provided to customers and payment/reimbursement to MWD.

Review and comment on an MWD-developed white paper describing MWD's current Business Model.

Report progress to CAMP4W Task Force.

Prepare an objective statement to frame the challenge(s) and define the overarching goals for a potential business model refinement.

Perform a SWOT analysis to evaluate MWD's current business model and support the analysis with relevant data to substantiate the identified strengths, weaknesses, opportunities, and threats.

Report progress to CAMP4W Task Force.

Utilize additional Ad Hoc Working Group meetings, as needed; Data-Informed in cooperation with MWD staff.

Report progress to CAMP4W Task Force.

Prepare an inventory and data-driven evaluation of potential business model refinement(s), ensuring that the solutions address the problem statement and overarching goals.

Prepare collaborative-based recommendations for proposed Business Model Refinement(s).