WORKSHOP MEETING OF THE
BOARD OF DIRECTORS WITH MET DIRECTORS
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
18700 Ward Street, Fountain Valley, California
November 4, 2020, 8:30 a.m.

Due to the spread of COVID-19 and as authorized by the Governor's Executive Order, MWDOC will be holding all upcoming Board and Committee meetings by Zoom Webinar and will be available by either computer or telephone audio as follows:

Computer Audio: You can join the Zoom meeting by clicking on the following link:
https://zoom.us/j/8828665300

Telephone Audio: **(669) 900 9128 fees may apply**
(877) 853 5247 Toll-free
Webinar ID: **882 866 5300#**

AGENDA

ROLL CALL

PUBLIC PARTICIPATION/COMMENTS

At this time members of the public will be given an opportunity to address the Board concerning items within the subject matter jurisdiction of the Board. Members of the public may also address the Board about a particular Agenda item at the time it is considered by the Board and before action is taken.

The Board requests, but does not require, that members of the public who want to address the Board complete a voluntary "Request to be Heard" form available from the Board Secretary prior to the meeting.

ITEMS RECEIVED TOO LATE TO BE AGENDIZED

Determine need and take action to agendize item(s), which arose subsequent to the posting of the Agenda. (ROLL CALL VOTE: Adoption of this recommendation requires a two-thirds vote of the Board members present or, if less than two-thirds of the Board members are present a unanimous vote.)

ITEMS DISTRIBUTED TO THE BOARD LESS THAN 72 HOURS PRIOR TO MEETING

Pursuant to Government Code Section 54957.5, non-exempt public records that relate to open session agenda items and are distributed to a majority of the Board less than seventy-two (72) hours prior to the meeting will be available for public inspection in the lobby of the District's business office located at 18700 Ward Street, Fountain Valley, California 92708, during regular business hours. When practical, these public records will also be made available on the District's Internet Web site, accessible at http://www.mwdoc.com.

NEXT RESOLUTION NO. 2102

PRESENTATION/DISCUSSION ITEMS

1. INPUT OR QUESTIONS ON MET ISSUES FROM THE MEMBER AGENCIES/MET DIRECTOR REPORTS REGARDING MET COMMITTEE PARTICIPATION

Recommendation: Receive input and discuss the information.

2. UPDATE ON METROPOLITAN ACTIVITIES BY METROPOLITAN BOARD CHAIR, GLORIA GRAY

Recommendation: Review and discuss the information presented.

3. PRESENTATION BY MET STAFF REGARDING MET'S REGIONAL RECYCLED WATER PROGRAM WHITE PAPER

Recommendation: Review and discuss the information presented.

4. METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INTEGRATED RESOURCES PLAN (IRP) DISCUSSION SERIES PART 10

Recommendation: Review and discuss the information presented.

INFORMATION ITEMS

5. MET ITEMS CRITICAL TO ORANGE COUNTY (The following items are for informational purposes only – a write up on each item is included in the packet. Discussion is not necessary unless requested by a Director)

a. MET's Finance and Rate Issues
b. MET's General Manager Recruitment Process
c. MET's Water Supply Conditions
d. Colorado River Issues
e. Delta Conveyance Activities and State Water Project Issues (written and oral report)

Recommendation: Review and discuss the information presented.

6. METROPOLITAN (MET) BOARD AND COMMITTEE AGENDA DISCUSSION ITEMS

a. Summary regarding October MET Board Meeting
b. Review items of significance for MET Board and Committee Agendas

Recommendation: Review and discuss the information presented.

ADJOURNMENT

Note: Accommodations for the Disabled. Any person may make a request for a disability-related modification or accommodation needed for that person to be able to participate in the public meeting by telephoning Maribeth Goldsby, District Secretary, at (714) 963-3058, or writing to Municipal Water District of Orange County at P.O. Box 20895, Fountain Valley, CA 92728. Requests must specify the nature of the disability and the type of accommodation requested. A telephone number or other contact information should be included so that District staff may discuss appropriate arrangements. Persons requesting a disability-related accommodations should make the request with adequate time before the meeting for the District to provide the requested accommodations.

Item No. 2

DISCUSSION ITEM
November 4, 2020

TO: **Board of Directors**

FROM: **Robert Hunter, General Manager**

Staff Contact: Harvey De La Torre
Melissa Baum-Haley

SUBJECT: **UPDATE ON METROPOLITAN ACTIVITIES BY METROPOLITAN BOARD CHAIR, GLORIA GRAY**

STAFF RECOMMENDATION

Staff recommends the Board of Directors discuss and file this information.

REPORT

Director Gloria D. Gray has served as the Chairwoman of the Metropolitan Board since her election in October, 2018. She is the first African American Chairperson in the 90-year history of Metropolitan, and has been credited with bringing a new and diverse perspective to the Southern California water landscape. At the October 13 Metropolitan Board meeting, Chair Gray was unanimously reelected as Chairwoman. She will begin her second two-year term on Jan. 1, 2021.

This is an important time in Metropolitan's history that calls for Board unity. We have invited Metropolitan Board Chair Gray to provide an update on current Metropolitan activities. In the months ahead Chair Gray will head Metropolitan's 38-member board as it selects a replacement for longtime general manager Jeffrey Kightlinger, who announced his retirement earlier this year. The Metropolitan Board also faces critical decisions on the agency's rate structure, long-term water strategy, investment priorities, including whether to advance a major regional recycled water program and to continue supporting a conveyance tunnel in the Sacramento-San Joaquin Delta to improve supply reliability.

Budgeted (Y/N): N/A	Budgeted amount: None	Core _X_	Choice __
Action item amount: N/A	Line item:		
Fiscal Impact (explain if unbudgeted):			

Item No. 3

DISCUSSION ITEM
November 4, 2020

TO: **Board of Directors**

FROM: **Robert Hunter,**
General Manager

Staff Contact: Harvey De La Torre
Melissa Baum-Haley

SUBJECT: **PRESENTATION BY METROPOLITAN STAFF REGARDING REGIONAL RECYCLING WATER PROGRAM**

STAFF RECOMMENDATION

Staff recommends the Board of Directors review and discuss the information presented.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

REPORT

The Regional Recycled Water Program (RRWP), a partnership with the Sanitation Districts of Los Angeles County, will purify wastewater to produce high quality purified water. The first White Paper, presented in July 2019, addressed three alternative approaches to RRWP implementation, as well as Metropolitan's potential role in the development of Direct Potable Reuse (DPR) regulations. On October 12, Metropolitan held a workshop at the Engineering and Operations Committee to focus on a second white paper regarding planning, financial considerations and agreements for the RRWP. It is intended that the additional information provided in this second white paper will assist the Metropolitan Board in decision making related to the RRWP, specifically whether to move forward with environmental review and associated work on the Program.

Attached is the second white paper, which broadly provides an update regarding the RRWP's role in Metropolitan's regional resource planning, and also provides information

Budgeted (Y/N): N/A	Budgeted amount: None	Core _X_	Choice __
Action item amount: N/A	Line item:		
Fiscal Impact (explain if unbudgeted):			

regarding certain financial, institutional, and other considerations related to the Program. In the development of this paper, Metropolitan staff conducted a preliminary review of the potential cost-recovery approaches for the Program.

The RRWP is currently estimated to have a construction cost ranging from $2.6 to $3.4 billion (2018 dollars), depending on the project phasing approach approved by the Board. The estimates do not include any additional facilities needed for the implementation of DPR through raw water augmentation, should that option be implemented in the future.

Backbone System and Full Program Costs (Without DPR)[1]

Cost Description	Backbone System (2018 Dollars)	Full Program [2,3] (2018 Dollars)
Production Capacity (mgd)	100	150
Capital Program Cost [4]	$2.6 billion	$3.4 billion
Annual O&M Cost ($/year)	$69 million	$129 million
Program Unit Cost of Yield		
Capital Unit Cost	$1,181/AF	$1,054/AF
O&M Unit Cost	$631/AF	$772/AF
Total Program Unit Cost	$1,813/AF	$1,826/AF

Notes:

1. Costs are from the Conceptual Planning Studies Report (2018 dollars). Costs will be updated during the PEIR phase, if approved by the Board.
2. Adds Orange County and West Coast Basin deliveries to the initial Backbone System
3. Does not include cost for DPR to Weymouth or Diemer WTPs
4. Costs include a 25 percent contingency for engineering services and a 35 percent overall program contingency.

The cost-recovery approaches discussed do not contain a full cost-of-service analysis. The discussion includes a review by staff of the following approaches:

1. Direct Recipient Pays 100% of Metropolitan's RRWP Costs
   Recover 100% of Metropolitan's RRWP costs only from those member agencies that directly receive purified water from the Program (direct recipients).

2. RRWP Costs are Integrated into Metropolitan's Water Service Rates and Charges
   Recover 100% of Metropolitan's RRWP costs by integrating those costs into Metropolitan's regional wholesale water service costs and recover the integrated costs through an integrated rate structure based on the cost-of-service process.

3. Hybrid Cost Recovery
   Implement a hybrid cost-recovery approach in which a portion of the costs are recovered from member agencies directly receiving purified water and the rest is recovered through Metropolitan's costs integrated rate structure.

The current evaluations and financial program planning assume that the RRWP is integrated into Metropolitan's operations and service, based on currently available information.

Summary of Significant Factors for Cost-Recovery Approaches

Factor	Direct Recipients Pay 100%	Integrated Approach	Hybrid Approach
Cost Impact to meet same replenishment demands	Significant increase in cost to direct recipients	No significant increase in cost because cost recovery is through current rate structure	The cost impact is unclear and depends on the hybrid selected
Cost recovery accounts for regional benefits	No	Yes	Depends upon how hybrid approach is implemented
Firm commitments from direct recipients would be mandatory	Yes	Yes	Yes
Reasonable	No	Yes	Unlikely

The paper also includes the potential for future purchase commitments required for water deliveries and the agreements/arrangements needed to ensure successful water deliveries to the groundwater basins located along the path of the backbone conveyance system. Lastly, this paper highlights the potential for Metropolitan to collaborate with other agencies, and how potential partnerships, grant funding, and low-interest loan programs can offset Metropolitan's investments in the Program.

MWDOC staff has invited Deven Upadhyay, Assistant General Manager/Chief Operating Officer for Metropolitan, to provide an overview presentation of the second RRWP white paper and the institutional and financial considerations for the RRWP.

More information on the RRWP can be found at:
http://www.mwdh2o.com/DocSvcsPubs/rrwp/index.html#home

Attachment: Regional Recycled Water Program White Paper – Intuitional and Financial Considerations

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Regional Recycled Water Program

White Paper No. 2

Planning, Financial Considerations, and Agreements

October 12, 2020

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SUMMARY

White Paper #1 was presented in July 2019 at the Metropolitan Board Workshop No. 1 for the Regional Recycled Water Program (RRWP or Program). The first White Paper addressed three alternative approaches to RRWP implementation, as well as Metropolitan's potential role in the development of direct potable reuse (DPR). This White Paper #2 (paper) provides an update regarding the RRWP's role in Metropolitan's regional resource planning, and also provides information regarding certain financial and other considerations related to the Program. It is intended that the additional information provided in this paper will assist the Board in decision making related to the RRWP—whether to move forward with environmental review and associated work on the Program.

The role of the RRWP in Metropolitan's resource planning was addressed in the Feasibility Study, Report No. 1530, in November 2016. The Feasibility Study showed the local resource targets set in Metropolitan's 2015 Integrated Water Resources Plan (IRP) Update have not been met and the RRWP could serve to help meet those targets. The Feasibility Study also presented other potential benefits of the Program, such as a reduction of shortage possibilities and increased system flexibility that could be derived from the Program. While the IRP will be updated many times before construction of the RRWP could be completed, these updates are not likely to change most of the core benefits this program could provide. This paper highlights the nature of those regional benefits.

In the preparation of this paper, staff conducted a preliminary review of the potential cost-recovery approaches for the Program based on the benefits identified to date. The results of this assessment are provided in this paper and may be used by staff to conduct a cost-of-service study at the appropriate time. At this time, the preliminary review and information is being provided to the Board to obtain policy direction as to preferred cost-recovery methods. If the Board is not interested, as a matter of policy, in pursuing a program under a particular type of general approach, then it may consider and discuss that now.

This paper also includes a section describing the purchase commitments required for water deliveries and the agreements and arrangements needed to ensure successful water deliveries to the groundwater basins located on the path of the conveyance system from the RRWP. Lastly, this paper provides a high-level review of how Metropolitan can collaborate with other agencies and how the total project costs can be reduced through potential partnerships, grant funding, and low-interest loan programs. These issues would be further developed as Metropolitan pursues the environmental and engineering planning for the program.

1.0 INTRODUCTION

The conclusion of the Conceptual Planning Studies Report (Report 1618, February 21, 2019) included recommendations that Metropolitan should:

- Continue evaluation of the Program's regional water supply benefits in the context of Metropolitan's Integrated Water Resources Plan (IRP);

- Present information to the Metropolitan Board to obtain policy direction as to preferred cost-recovery methods, and
- Undertake discussions to confirm the willingness of potential recipients of the purified water to commit to delivery quantities/schedule, operational requirements, and overall financial needs of the Program.

In response to these recommendations, this paper addresses the RRWP's role in supporting Metropolitan's water supply planning and reviews potential approaches to cost recovery. This paper also provides information addressing the following key questions:

- How does the RRWP fit into Metropolitan's regional resource planning given changes since the 2015 IRP Update?
- How could the Program's costs be recovered by Metropolitan?
- What kind of institutional arrangements and agreements would be required from Program participants?

This paper will be discussed at an E&O Committee workshop on October 12, 2020.

1.1 Program Overview

The RRWP will produce and is currently planned to deliver up to 150 million gallons per day (mgd), or approximately 168,000 acre feet (AF) per year (AFY), of purified water from a new advanced water treatment (AWT) facility located at the Los Angeles County Sanitation Districts (Sanitation Districts) Joint Water Pollution Control Plant (JWPCP). The Program also includes a new conveyance system that would deliver water to groundwater basins within Metropolitan's service area for indirect potable reuse (IPR) and potentially to two Metropolitan treatment plants for direct potable reuse (DPR). It is anticipated that the Program will be constructed in a phased approach to ensure that production of purified water closely matches the anticipated demands by member agencies.

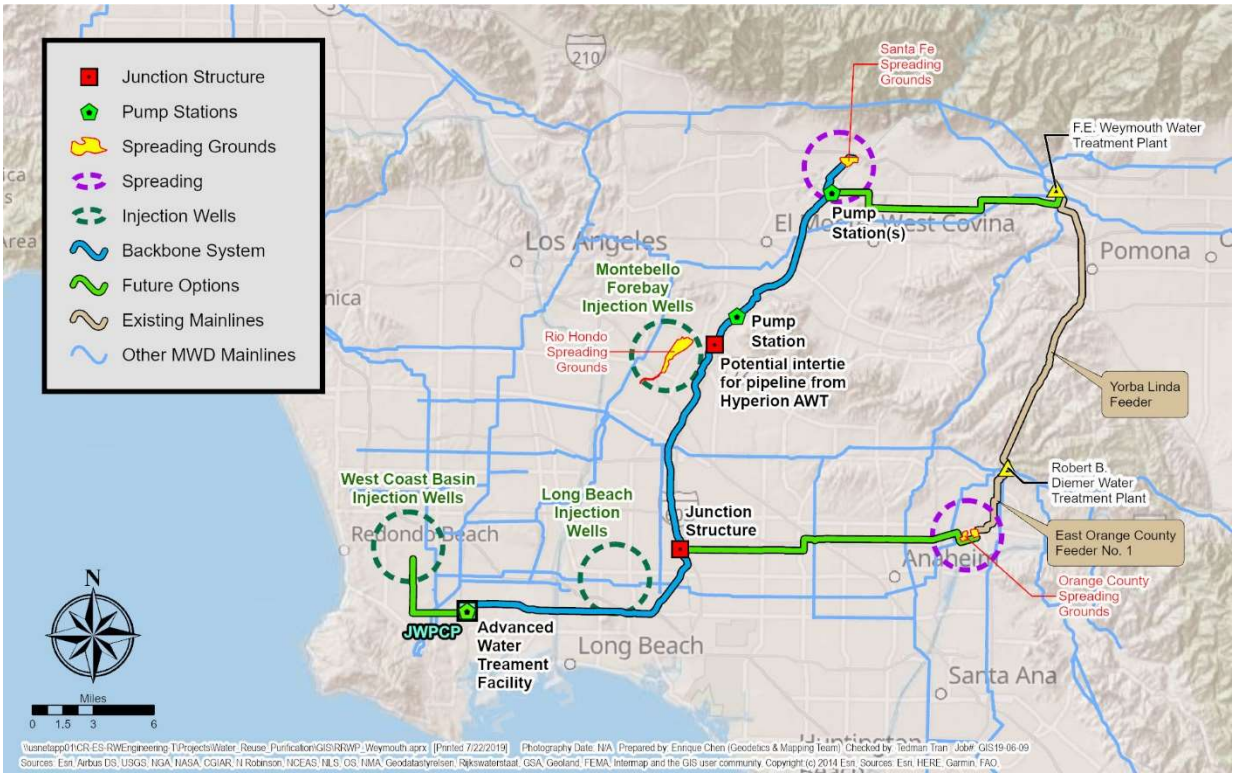
Four groundwater basins in Southern California are being considered as potential recipients of this purified water: Central Basin, Main San Gabriel Basin, Orange County Basin, and the West Coast Basin. The RRWP will also have the flexibility to accommodate industrial users in the Harbor areas whose needs are consistent with the quality of water produced by the AWT facility. Finally, the Program will have the flexibility to be expanded in the future to implement potential DPR through raw water augmentation (RWA) at the Weymouth or Diemer water treatment plants (WTPs). While numerous potential approaches to implementation can be developed, for the purposes of this paper, the assumption is that the RRWP would be implemented in two phases. The first phase would be a 100 mgd AWT and conveyance pipeline to the Santa Fe Spreading Grounds (Backbone System) while in Phase 2, the Backbone System would be expanded to the "Full System" to include facilities to meet the remaining IPR demands and the extension to the WTPs for RWA. Additional sub-phases of this program may be considered as the environmental and planning work are conducted. Figure 1 shows the full Program as described in the Conceptual Planning Studies Report.

The RRWP is being developed to achieve the following objectives:

- Provide a new local source of reliable, high quality, and climate-change resilient water to meet demands on Metropolitan

- Diversify Metropolitan's water sources for the region
- Add to the regional recycled water supply in the region
- Provide an additional local resource within the region with a reduced risk of disruption from significant seismic events on the San Andreas or other major faults
- Increase Metropolitan's regional water reserves
- Enhance Metropolitan's operational reliability and flexibility
- Contribute to the water quality of groundwater basins, an important source for Metropolitan's member agencies during emergencies and shortages of imported water
- Create a cost-effective, stand-alone project
- Achieve regulatory approvals to ensure protection of public health
- Offer flexibility to accommodate future DPR

Figure 1: Full Regional Recycled Water Program Elements



1.2 Program Implementation and Delivery White Paper (White Paper #1)

Following completion of the Conceptual Planning Studies Report and White Paper #1, a Board workshop was held in July 2019 to provide an opportunity for discussion of the Program implementation, policy considerations, and issues requiring further exploration before starting the environmental review and

possibly preliminary engineering. Three potential approaches to implementing the Program were outlined in the first white paper and discussed at the workshop. An overview of the Program and recommended approach to the environmental review process was provided. Additional activities that could be undertaken during the environmental review were also described. White Paper #1 highlighted possible alternative approaches to RRWP implementation and explained how Metropolitan could potentially play a role in the development of DPR through raw water augmentation. The topic of program implementation was outlined with three potential approaches for initiating the RRWP:

- *Approach 1 – Traditional***.** The traditional option completes the Program Environmental Impact Report (PEIR) before starting the design of any facilities.

- *Approach 2 – Accelerated Construction*. This approach leads to the accelerated start of construction for a portion of the backbone pipeline. In this option, the design of a portion of the conveyance piping (3.5 miles), near the JWPCP in Carson, would begin in parallel with work on the PEIR. Final design and construction would start following Board certification of the PEIR.

- *Approach 3 – Accelerated Water Delivery***.** This approach leads to the accelerated start of water deliveries to selected uses near the JWPCP. In this option, design of a portion of the AWT (approximately 20 mgd) and conveyance facilities needed to support early deliveries of purified water to industrial users in the Harbor Areas and for replenishment water in the West Coast Basin would begin in parallel with the work on the PEIR. Preliminary design for the facilities would be completed during PEIR preparation, and the final design and construction would commence after the Board certified the PEIR.

The first white paper also outlined an approach to provide the flexibility to meet demands for direct potable use through future RWA, in addition to meeting demands for regional groundwater replenishment. Finally, the paper outlined how Metropolitan could take steps to work with the California Division of Drinking Water (DDW) to provide input on future development of regulations that would permit DPR to move forward. Staff now recommends proceeding with Approach 1- Traditional Delivery, beginning with Board approval to begin the PEIR work in November 2020.

1.3 Planning, Financial Considerations and Agreements (White Paper #2)

This paper addresses the RRWP's role in supporting Metropolitan's regional water resource planning, describes the Program's anticipated costs and benefits identified to date, preliminarily review potential cost-recovery approaches to obtain policy direction from the Board, details the commitments needed for water deliveries, and introduces opportunities to work with Program partners.

2.0 RRWP ROLE IN METROPOLITAN'S REGIONAL PLANNING

Metropolitan's long-term resource strategy is developed through its IRP. The IRP has, among other information, a series of targets on supply development and assumptions about demands and population growth. In practice, it serves to define Metropolitan's agenda for ensuring water reliability in the region. Through its IRP process, Metropolitan plans for regional water supply reliability for all its 26 voluntary member agencies. Demands on Metropolitan are projected, in part, based on the availability of local supplies in Metropolitan's service area. Metropolitan establishes reliability targets based on identified trends in imported and local water supply, and water conservation that, if successful, would reduce water

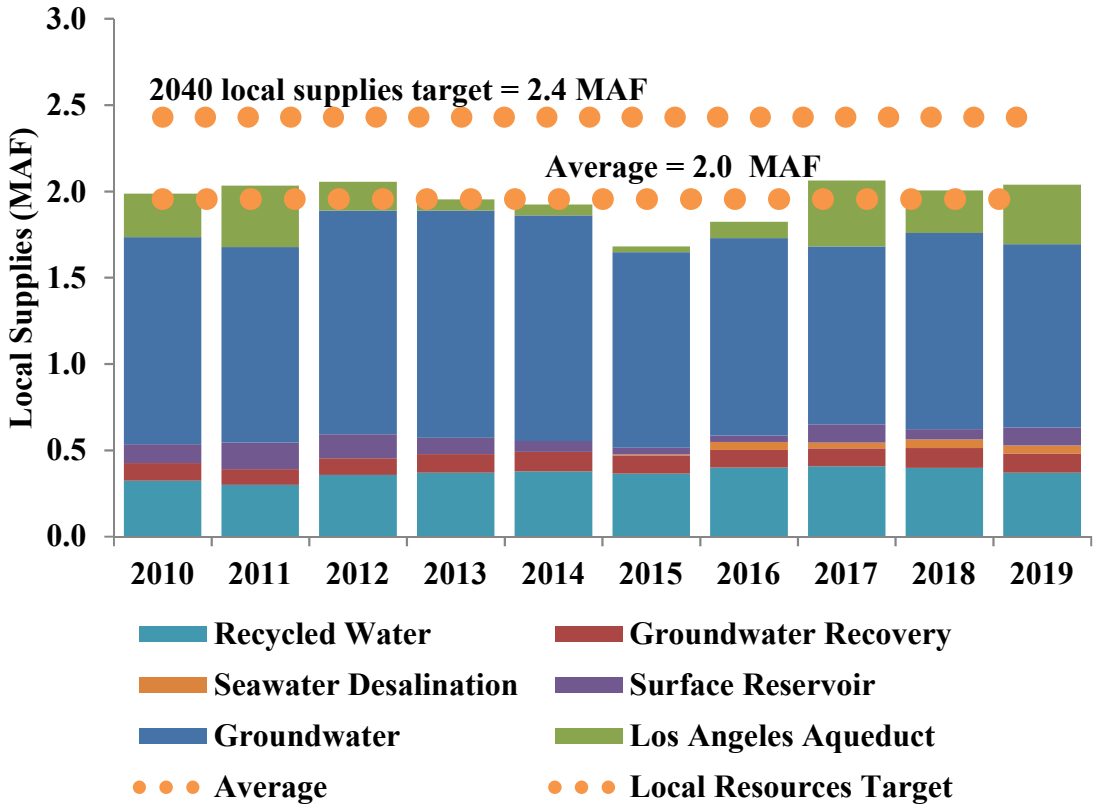
shortages and mandatory restrictions under planned conditions. Metropolitan has begun its next planning cycle with the 2020 IRP.

2.1 Progress Toward Meeting Local Resources Targets

The IRP strategy relies on maintaining local supply production into the future, the development of additional local supplies for future demands, and protection against reduction of imported water. The 2015 IRP targets for local supplies of 2.4 million AFY by 2040 from a combination of existing and new local sources. Figure 2 shows the contributions made toward meeting the local supply goal from various sources within Metropolitan's service area from 2010 to 2019. Unless new sources of water are acquired, the region will continue to fall short of the IRP local resource target and, without additional supplies, the deficit is projected to be about 400,000 AFY by 2040. When the local supplies target is not met, it is anticipated that the deficit will result in increased demands on Metropolitan. Implementation of the RRWP would afford Metropolitan the opportunity to fill that shortfall with a new, local source of water which would produce water for Metropolitan's own wholesale service.

Figure 2 shows the challenge of increasing local supply production. Member and local agencies have put significant effort into developing local supply sources. Despite these efforts, while local production has bounced back from the lows within the historic drought, production has not grown beyond historic levels. Regional efforts to build on local supplies seem only to help maintain ground, but the actual growth in total local supply production does not appear to be happening as agencies have planned.

Figure 2: Progress toward Meeting the Local Resources Target (2010-2019)



The RRWP supports the goal of developing additional local supplies, by adding up to an additional 168,000 AFY to the total local supplies available within Metropolitan's service area. Unlike typical locally produced supplies, the RRWP would be a Metropolitan owned and operated program. As such, the Program would produce purified water for Metropolitan, which in turn would be available to deliver to its member agencies. This approach differs from Metropolitan's historical local supply approaches, which have focused on the production of local supplies by member agencies or other local agencies, rather than Metropolitan. Such member agency-produced water is not available as a supply source within Metropolitan's control to provide its wholesale water services, even though it reduces the need for Metropolitan to import water into the service area.

2.2 Recent Changed Conditions and the Upcoming 2020 IRP

In the five years since completion of the 2015 IRP Update, the region's water reliability situation has continued to evolve. In 2015, the region was in the grip of an historic statewide drought. By 2017, conditions had changed, resulting in an extremely wet year. Following 2017's largest-ever additions to regional storage, calendar year 2019 was another year that combined relatively high imported supplies with low per capita water demands. Figure 3 shows the changes in Metropolitan demands since 2015. Metropolitan's end-of-year storage balance in 2019 was the highest ever. Even so, the region continues to face near- and long-term challenges, some familiar but others only becoming apparent in the last year. Notable among the new challenges are: (1) the reevaluation of the long-term Delta conveyance solution, (2) a growing consensus that climate change impacts are affecting yield of both imported and local supply sources, (3) recently-recognized threats to groundwater basins posed by emerging contaminants such as per- and polyfluoroalkyl substances (PFAS), and (4) pandemic threats to the region such as COVID-19.

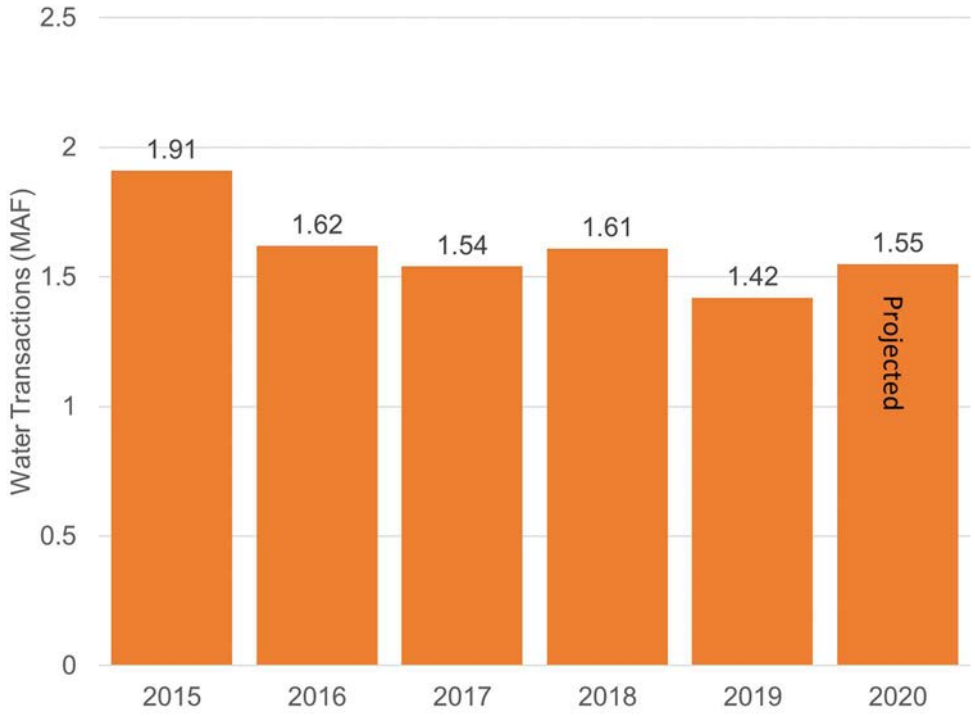
The 2020 IRP starts afresh with a new IRP with a different format that will incorporate various scenarios for the future. Given all the uncertainties the region faces, the 2020 IRP is not going to develop just a single forecast. Rather, it will include a look at multiple possible futures that could plausibly unfold. From this exercise, the 2020 IRP will evaluate resources, policies, and investments needed to maintain reliable water supplies through 2045. In addition, it will also identify a series of performance measures and reality checks to determine if a change in direction is required.

Metropolitan is currently in the early stages of developing the 2020 IRP, so planning details or scenarios to be evaluated are not yet available. While the 2020 IRP will result in updated targets for local supplies and conservation, it is likely that the underlying philosophy of working to maintain Metropolitan's imported supplies while meeting additional needs of the region through conservation and local supply development will continue. Even if the Board chose to reduce future regional local supply targets, the RRWP would still be beneficial to meet demands on Metropolitan for replenishment and consumptive use (through raw water augmentation) and to enhance Metropolitan's existing integrated water system.

2.3 The Role of the RRWP in Local Resources Development

Metropolitan has a choice with respect to local resources development. Since 1982, Metropolitan has been providing financial incentives to member agencies for developing local projects under the Local Resources Program (LRP). The LRP currently provides incentives for the development of water recycling, groundwater recovery, and seawater desalination supplies. The objective of the LRP is for local supplies to replace an existing or new demand on Metropolitan's imported water, thereby reducing the need to import water and increasing overall water supply reliability in the region as a result of the increased flexibility in Metropolitan's system. Metropolitan is also legislatively directed to increase

Figure 3: Metropolitan Water Transactions since 2015



Note: Water transactions include water sales, exchanges, and wheeling

its efforts in conservation, recycling, and groundwater replenishment pursuant to SB60. Today, nearly half of the total recycled water and groundwater recovery production in the region has been developed with LRP support. The LRP also plays an important role in meeting Metropolitan's IRP goals. In that light, in 2018, Metropolitan's Board authorized staff to solicit an additional 170,000 AFY of local supply projects under the LRP.

Since the RRWP would add to the total local supplies within Metropolitan's service area, it will help meet local supplies targets. The RRWP would have the additional benefit of providing a new supply source within Metropolitan's control to deliver to its member agencies. Although local supplies targets may be adjusted based on many different factors, the RRWP could enhance local supplies and Metropolitan's integrated water system. The RRWP would help member agencies sustain or increase local production from groundwater basins by providing a sustainable source for groundwater recharge and a future raw water augmentation source to meet needs throughout the region. Additionally, the RRWP would add to the reliability of Metropolitan's entire service.

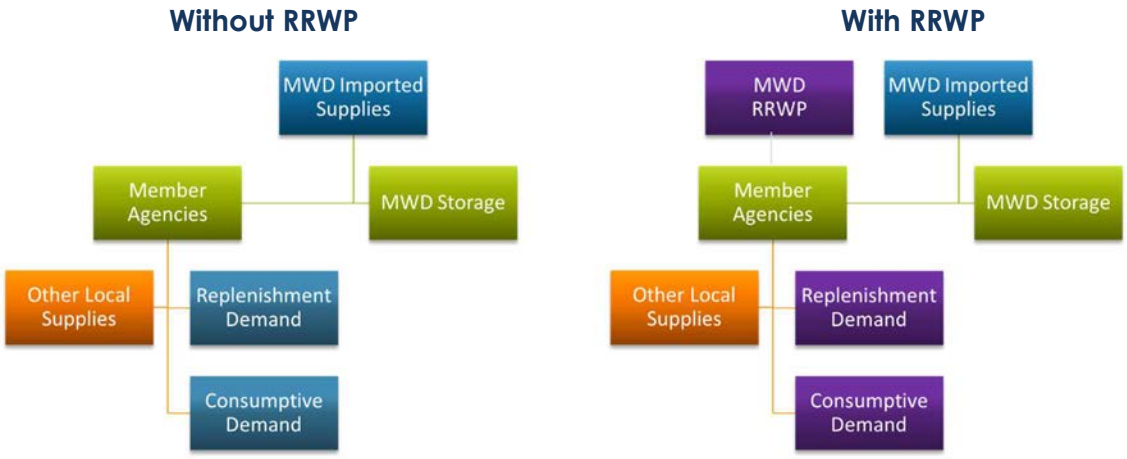
3.0 BENEFITS TO THE REGION FROM IMPLEMENTING THE RRWP

Metropolitan's purpose and focus has always been to provide regional benefits for all the District's member agencies. The District charges the same rates, for the same water services, regardless of the location of the member agency in the six-county service area, reflecting the uniform services and reliability provided to all member agencies. The District has embarked on projects, such as Diamond Valley Lake, the Inland Feeder and the Delta Conveyance, that benefit all agencies, not just some. In-District initiatives, such as the LRP described above, have reflected this regionalism, given how a local supply improvement bolsters water reliability and reduces system costs for all agencies.

The RRWP will also provide regional benefits to all member agencies, not just the agencies that would directly receive the purified water. While the RRWP would provide water directly to certain member agencies for groundwater replenishment through IPR, and potentially to some industrial users, these deliveries would replace current and future imported deliveries as well as increase Metropolitan's storage, increasing reliability for everyone. In the future, the RRWP could also deliver water through DPR via raw water augmentation to Metropolitan's Weymouth and/or Diemer plants. This DPR approach would directly serve many member agencies as treated water from Weymouth and Diemer is delivered to most of Metropolitan's service area. This would include member agencies throughout Los Angeles and Orange Counties. As an increased source within the Common Pool of Metropolitan's distribution system, other imported sources are made available for use in the rest of the service area and for storage.

Figure 4 diagrammatically illustrates the regional benefits of the RRWP. Metropolitan would primarily make groundwater replenishment deliveries through the RRWP which would free up imported water supplies for other uses by Metropolitan. Then, in the future, as DPR regulations are established, RRWP supplies can directly supplement imported supplies through a blending process at Metropolitan's Weymouth and/or Diemer treatment plants.

Figure 4: Meeting Regional Demands Without and With Program



Metropolitan faces many challenges to meet the anticipated demands of its member agencies, including long-term drought in both the Northern California and Colorado River watersheds, climate change, regulatory and environmental restrictions, changing hydrological and biological conditions in the Bay Delta, and unresolved issues with the development of a Delta Conveyance initiative. These challenges can result in variable and severe water delivery restrictions. The RRWP would help ensure a reliable supply of water in the face of these ongoing and increasing uncertainties. The following section describes benefits to Metropolitan's wholesale services anticipated from implementing the RRWP. More benefits may be identified as the Program is developed further.

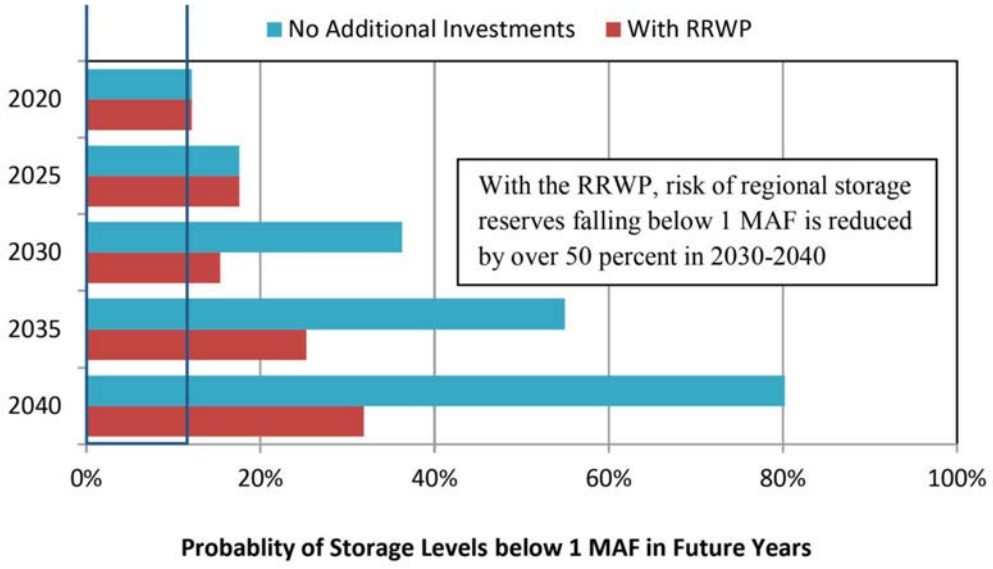
3.1 The RRWP Increases Regional Storage and Reduces Probability of Water Supply Allocations

Report No. 1530 (Feasibility Study) explored the potential for the RRWP to reduce the need for mandatory supply allocations in the future. This section summarizes the results of that analysis.

Metropolitan storage levels of less than 1 million acre-feet (MAF) are assumed to be a threshold level for the consideration of mandatory water supply allocations. Figure 5 summarizes the probabilities of low storage levels in 5-year increments, without (no new investments in imported water resources, imported water conveyance such as Delta conveyance improvements, or storage capacity) and with the RRWP. Assuming no new investment in water supply and storage capacity, estimates of the probability of storage reserves being low enough to necessitate a mandatory allocation are 36 percent of the time in 2030, 55 percent of the time in 2035, and 80 percent of the time in 2040. Adding the anticipated water supply from the RRWP would reduce the projected probabilities of low Metropolitan storage reserves and mandatory water supply allocations.

Assuming that the project is online and available by 2030, the improvements in Metropolitan storage reserves can also be seen in Figure 5. Estimates of the low Metropolitan storage reserves and the mandatory water supply allocation projections with the project decrease to 15 percent of the time in 2030, 25 percent of the time in 2035, and 32 percent of the time in 2040. These significant reductions in the probability of low Metropolitan storage reserves and mandatory water supply allocations benefit all of Metropolitan's member agencies.

Figure 5: Probability of Storage Levels Below 1 MAF



Reference: Potential Regional Recycled Water Program Feasibility Study, Report No. 1530, November 30, 2016

3.2 The RRWP Provides Operation Flexibility to Metropolitan's Integrated System

With a service area spanning 5,200 square miles in six counties, Metropolitan has built an integrated conveyance and distribution system to ensure consistent supplies, reliability, and flexibility throughout the region. The interconnected nature of the system means that Metropolitan can address constraints in one area of the system for the benefit of the system as a whole. For example, at any particular time, one area could be served exclusively from one supply source, while another area could be served a blend of water sources. The need to change the water sources may arise either from the unavailability of a water resource, a water quality issue related to a resource, or other reasons. The integration of its water resources and system flexibility are fundamental to Metropolitan's wholesale water service.

Adding the RRWP as an additional water source benefits Metropolitan's overall system flexibility by increasing the options available to meet demands throughout its service area. The additional imported water resulting from demands replaced by the RRWP purified water deliveries would increase Metropolitan's overall water resource portfolio. In the future, operations staff could potentially route some of the purified water to potable water treatment plants for DPR to convey to other areas not adjacent to the RRWP conveyance pipelines.

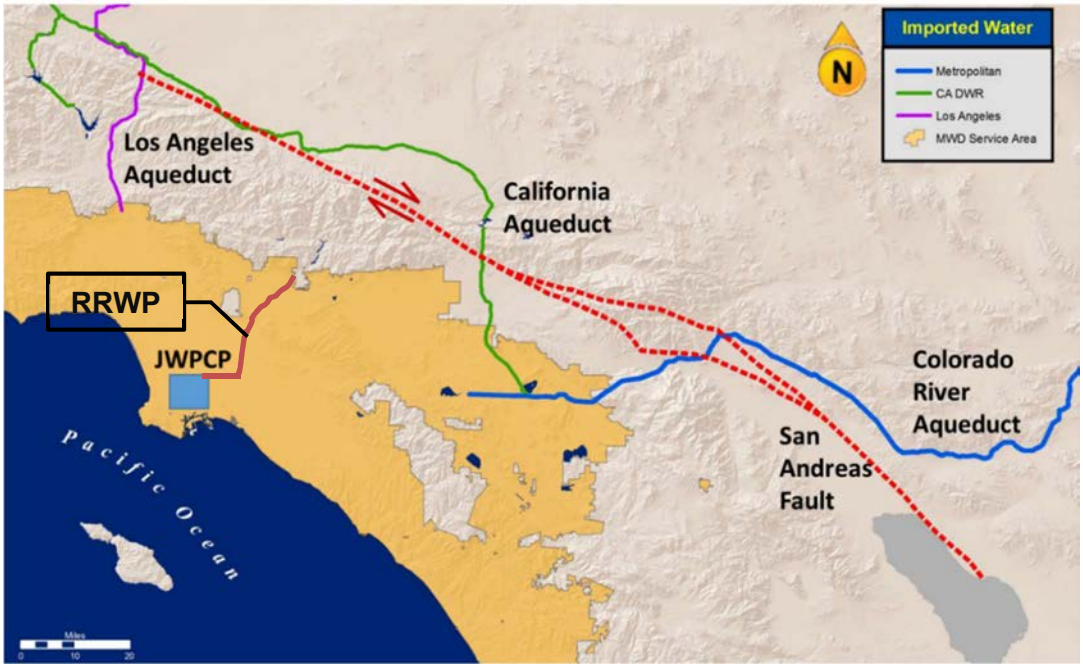
In addition to freeing up capacity in the existing facilities to meet demands by member agencies or DPR, the freed-up capacity could also be used to import water for additional storage within and outside of Metropolitan's service area. Full implementation of the RRWP would free up 168,000 AFY of capacity in the existing conveyance and distribution system. This would allow Metropolitan the flexibility to capture additional opportunities for imported water, either through transfers, exchanges, or other agreements. In addition, Metropolitan would have added flexibility for capturing more available water during wet years.

3.3 The RRWP Provides Supplies during a Major Earthquake Emergency

The RRWP would also benefit the service area in the event of a catastrophic earthquake by increasing the opportunities to ensure that supplies are maintained within the region. As result of a strong earthquake (e.g. M 7.8 ShakeOut Scenario) on the southern San Andreas Fault system, the Colorado River Aqueduct (CRA), the State Water Project (SWP), and the Los Angeles Aqueduct (LAA) could be severely damaged. The extent of damage from this type of event could potentially cause protracted outages, ranging from several months to extended periods of time on one or more aqueducts. In the aftermath of such an event, the region would need to rely entirely on local supplies such as the RRWP, surface storage, and groundwater production while repairs are being made to the aqueducts. As shown in Figure 6, the RRWP is located on the coastal side of the San Andreas Fault, which could make the water produced from the RRWP available during an earthquake emergency, and significantly improve the seismic resilience of the region.

The RRWP could also improve the seismic resilience of the region by enhancing and maintaining the storage level in groundwater basins prior to a major seismic event, and by providing a reliable, local supply of high-quality water for groundwater replenishment and for raw water augmentation throughout the emergency. During an emergency, the region would rely heavily on groundwater production, which is supported by the RRWP. In addition, purified water from the RRWP would be available to keep water flowing in Weymouth and Diemer treatment plants even if imported supplies were cut off by the earthquake event. This would allow Metropolitan to continue to meet member agency demands throughout the emergency.

Figure 6: Location of the RRWP Relative to the San Andreas Fault



3.4 Benefits to the Region from Implementing DPR

The location of two of Metropolitan's water treatment plants in relation to the proposed RRWP facilities provides an opportunity for purified water to supplement raw water supplies to a drinking water treatment plant. The median daily average flow at the Diemer and Weymouth treatment plants over a 10-year period (2009 through 2018) ranged from 120 to 293 mgd. As the Weymouth and Diemer plants are two of the three treatment plants that supply treated water to a large part of the service area, introduction of the purified water to these two treatment plants would augment a significant portion of Metropolitan's treated water distribution system, further enhancing water supply reliability and system flexibility for Metropolitan's service area. Raw water augmentation, blending RRWP purified water with imported supplies, would replace deliveries of imported supplies and allow for additional storage of those supplies in groundwater basins or Metropolitan reservoirs.

If for any reason, the full amount of purified water cannot be delivered to the groundwater basins for IPR, it may also be possible to deliver this extra recycled water for raw water augmentation instead, allowing the AWT to operate most efficiently in continuous production. The amount of RWA flow that can be utilized for DPR will be dependent on the amount of blend water required by future regulations. In light of rapid developments related to the promulgation of DPR regulations, DPR may become a primary objective of the RRWP. Figure 7 shows a schematic of the proposed RRWP facilities for the DPR option.

As appropriate regulations are codified, and DPR through RWA is permitted, purified water could be added to Metropolitan's treated water supplies as is imported surface water, available to deliver to all member agencies. The potential benefits for Metropolitan when RWA becomes available include (1) increasing the number of available raw water sources, (2) increased drought resilience as purified water is largely independent of rainfall, (3) the ability to serve purified water to additional member agencies, and (4) improved water quality from lower TDS concentrations as compared to Colorado River water. Table 1 summarizes the additional DPR benefits realized from the RRWP.

Figure 7: Proposed Regional Recycled Water Program DPR Options

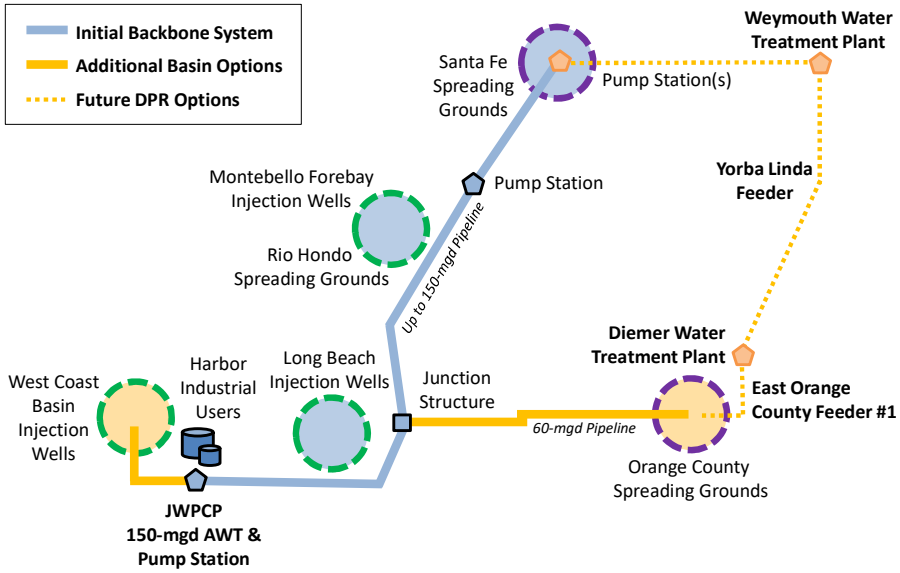


Table 1: DPR Benefits from the RRWP

Benefit	DPR Benefits
RRWP Capacity & Operations	• Helps to maintain continuous production and delivery from the RRWP that are not subject to replenishment demand variability and availability of spreading facilities • Increased flexibility for Metropolitan's integrated conveyance system to move imported water • Potential to introduce additional AWT supplies in the RRWP conveyance systems (i.e. water from LADWP's recycled water Program NEXT, see Section 6)
Drought Resistant	• Maintains raw water augmentation during droughts • Reduces potential for allocation reductions
Additional Supply Resource	• Raw water augmentation can be continued during wet weather when some IPR recharge facilities may be dedicated to stormwater capture/recharge. • Extends service along backbone pipeline to all areas served by Weymouth and Diemer WTPs
Improved Water Quality	• Lower TDS at Metropolitan's treatment plants

3.5 Compilation of Additional Benefits to the Region from Implementing the RRWP

A compilation of the RRWP's additional benefits outlined in the Feasibility and Conceptual Design Reports are shown in Table 2.

Table 2: Compilation of Additional Regional Benefits

Compilation of Regional Benefits	
Reduced reliance on imported water	• Further diversifies Metropolitan's resource portfolio by adding a new alternative source of supply with different resource attributes. • Increases the water available for a myriad of circumstances, such as short-term dry conditions, multi-year droughts, emergency curtailments on imported water, and distribution system outages. • Increases ability to rely on groundwater basins and reduces reliance on Metropolitan's imported water supplies.
Free-up conveyance capacity	• Locally produced water frees up capacity in Metropolitan's system to convey both Metropolitan water and water from non-Metropolitan sources.
Reduced vulnerability to climate change	• The effective detachment of new purified water supplies from the hydrologic cycle benefits: (1) the availability of deliveries under all weather conditions; and (2) the production of water supplies outside of critical habitat that could be adversely affected by climate change. • Protections against drought and climate change introduce a water security benefit not available with other Metropolitan sources.
Economy of scale	• Can achieve economies of scale by increasing production and lowering unit costs. • Avoids duplicative overhead costs through efficient management by a single agency.
Consistent with legislative mandate to expand water recycling, replenishment, and storage	• Production of recycled water from the RRWP would help meet future demand consistent with SB 60's directive to Metropolitan to "expand water conservation, water recycling, and groundwater recovery efforts" and "place increased emphasis on sustainable, environmentally sound, and cost-effective water conservation, recycling, and groundwater storage and replenishment measures."

4.0 POTENTIAL COST-RECOVERY APPROACHES FOR THE RRWP

This section provides a description of potential cost-recovery approaches for the RRWP. Metropolitan currently provides wholesale water services to all its member agencies, relying on a combination of water resources from the Colorado River and State Water Project, reduction in demand through local resources and conservation, and an integrated conveyance and distribution system. Accordingly, Metropolitan sets uniform rates and charges based on classes of service it provides and not by the specific water source received or portions of the system used for individual transactions. The following explores how the RRWP fits into Metropolitan's service and provides a preliminary review by staff of which cost-recovery approaches may be appropriate for RRWP deliveries.

The discussion in this section is a preliminary review of general factors and considerations for cost-recovery approaches and is not intended to be a cost-of-service study. Instead, it is provided to the Board to assist in a policy discussion about the kind of cost-recovery approach the Board would like to pursue. If, for example, the Board determines that its policy with respect to the RRWP is that all costs must only be recovered from direct recipients, then the information provided here will inform the Board about factors it should consider in adopting that policy. The Board may direct staff to conduct a cost-of-service study, internally or with consultants, at a time it deems most appropriate.

4.1 Cost Projections for the RRWP

There are many financial considerations the Board must undertake in relation to implementing a program of this magnitude. As indicated in Table 3, the RRWP is currently estimated to have a construction cost ranging from $2.6 to $3.4 billion (2018 dollars), depending on the project phasing approach approved by the Board. The estimates do not include any additional facilities needed for implementation of DPR through raw water augmentation, should that option be implemented in the future.

Table 3: Backbone System and Full Program Costs (Without DPR)[1]

Cost Description	Backbone System (2018 Dollars)	Full Program [2,3] (2018 Dollars)
Production Capacity (mgd)	100	150
Capital Program Cost [4]	$2.6 billion	$3.4 billion
Annual O&M Cost ($/year)	$69 million	$129 million
Program Unit Cost of Yield Capital Unit Cost O&M Unit Cost Total Program Unit Cost	 $1,181/AF $631/AF $1,813/AF	 $1,054/AF $772/AF $1,826/AF

Notes:
1. Costs are from the Conceptual Planning Studies Report (2018 dollars). Costs will be updated during the PEIR phase, if approved by the Board.
2. Adds Orange County and West Coast Basin deliveries to the initial Backbone System
3. Does not include cost for DPR to Weymouth or Diemer WTPs
4. Costs include a 25 percent contingency for engineering services and a 35 percent overall program contingency.

In addition to the construction costs, annual operations and maintenance costs are estimated to be $69 million for the Phase 1 Backbone System and up to $129 million for the full Program, not including DPR. Along with the Backbone System and full Program costs, Table 1 also provides the accompanying projected unit costs for the recycled water for each phase of the Program.

Estimates of the RRWP costs will be updated as part of the environmental planning process for the project. It should be noted that unit costs referenced above and later in this paper reflect the raw costs of this project divided by the acre-feet produced. Sharing of these costs with partner agencies and accounting for potential grant opportunities could substantially reduce the unit cost.

4.2 Potential Cost-Recovery Approaches Reviewed for the RRWP

The potential cost-recovery methods for a Metropolitan project must be evaluated in the context of Metropolitan's organizational structure, wholesale water services, conveyance and distribution system, and the purpose the project meets for Metropolitan. The *Technical Memo: Case Study Compilations – Methods of Recovering Revenue Requirements from Significant Capital Projects*, Appendix G to the Feasibility Study, provides examples of cost-recovery approaches for large-scale projects. The examples vary by water agency, based on the circumstances of those projects and the types of services provided by those agencies.

This section provides an overview of potential cost-recovery approaches and a discussion of whether those approaches would or would not be appropriate for the circumstances of the Program or

Metropolitan's services. The cost-recovery approaches discussed do not contain a full cost-of-service analysis. The discussion includes a review by staff of the following approaches:

1. *Direct Recipient Pays 100% of Metropolitan's RRWP Costs* - Recover 100% of Metropolitan's RRWP costs only from those member agencies that directly receive purified water from the Program (direct recipients);

2. *RRWP Costs are Integrated into Metropolitan's Water Service Rates and Charges* – Recover 100% of Metropolitan's RRWP costs by integrating those costs into Metropolitan's regional wholesale water service costs and recover the integrated costs through an integrated rate structure based on the cost-of-service process; and

3. *Hybrid Cost Recovery*– Implement a hybrid cost-recovery approach in which a portion of the costs are recovered from member agencies directly receiving purified water and the rest is recovered through Metropolitan's costs integrated rate structure.

Figure 8 provides a schematic overview of the cost-recovery approaches discussed below. Sections 4.3 through 4.5 provides a preliminary evaluation of suitability of each approach.

Funding of major projects for Metropolitan were historically funded through the collection of a special tax or charge on all real property within Metropolitan's service area. Similar to those early major projects, the RRWP is planned for the benefit of Metropolitan's entire service area, as it enhances availability of service for all member agencies and all property within Metropolitan's service area. Thus, its purpose and benefits are similar to the Colorado River Aqueduct (CRA) and the State Water Project (SWP). Those projects were paid with property taxes by all owners of real property throughout Metropolitan's service area. This approach, however, is impractical today in that Metropolitan's service area covers 5,200 square miles and procedural requirements for approval by the voters have changed significantly since the elections on the CRA and SWP. For that reason, staff has not included further evaluation of such a funding option.

Figure 8: Overview of Cost-Recovery Approaches

4.3 Approach: Direct Recipients Pay 100% of RRWP Costs

Under this approach, Metropolitan would recover 100% of the RRWP costs only from those member agencies that directly receive the purified water from the RRWP. The following factors are considered relevant for evaluating this potential cost-recovery approach.

Direct recipients would pay significantly more than they would pay for replenishment supplies they already purchase at Tier 1 rate, or any other full-service rate in place at the time of the RRWP completion. With the direct pay approach, the member agencies that purchase the purified water from the RRWP would pay approximately $1,800 per AF for replenishment supplies. If the direct recipients of the water are required to pay for the full cost of the RRWP, the direct recipients would pay significantly more for water that they can already purchase from Metropolitan at the full-service untreated rate (currently $731 per AF) for an increase of about $1,100 per AF). They would pay more to meet the same demands currently being met by Metropolitan with imported water. They would also pay for the costs of providing the RRWP benefits to all 26 member agencies. This would mean that under this approach, the direct recipients would be paying significantly more than their fair share of the project cost and would be unlikely to participate in the Program, making the benefits of the Program also unavailable to the rest of the region.

Other agencies would receive the benefits of direct recipients' firm commitments, but not be required to pay. Under any approach, the RRWP would require a firm commitment from the direct recipients. This commitment exceeds any obligation currently required for Tier 1 purchases. Today, member agencies purchase water at their own need-based schedule, or based on a voluntary purchase order, and everyone shares in the integrated costs. However, under this approach, direct recipients would provide all 26 member agencies the reliability of a firm purchase commitment from the direct recipients but would receive no benefit for the commitment. Additionally, based on the integrated nature of the RRWP into Metropolitan's existing system and services, a cost-recovery approach that charges direct recipients the entire costs of the RRWP would not reflect costs of providing the benefits to all member agencies that are attributable to the entire regional service. Because other member agencies throughout the service area would receive benefits of the reliability and availability of Metropolitan water, they should share in the cost of the Program. As discussed in Section 3, those benefits are not incidental to Metropolitan's integrated water service.

The improved water quality from RRWP water provided to direct recipients is balanced by the use restrictions and commitments associated with receiving that water. Although direct recipients would receive higher quality water from the RRWP than may be the case for imported water, deliveries of RRWP water will not be flexible. Therefore, although improved quality would be welcomed by direct recipients, the use of RRWP is not flexible and requires additional commitments. Because Metropolitan may dedicate the use of the RRWP for replenishment and other uses by direct recipients, it frees up water and reliability of the rest of Metropolitan's system. The balance is consistent with Metropolitan's integrated service.

The direct pay approach is incompatible with DPR. The RRWP may be able to supply recycled water for both IPR for replenishment and for DPR through raw water augmentation. Therefore, it would not be equitable for direct recipients to incur 100% of the costs of a program that could also deliver water directly to Metropolitan's treated water system. Additionally, the extent of the role of DPR in the Program is undefined at this time. Therefore, it is impractical to separate costs of the program dedicated to DPR from the benefits to direct recipients.

Summary. In summary, the following factors are relevant for evaluating this approach:

- Direct recipients would pay significantly more for replenishment water than they currently pay to meet the same demands.
- Other agencies not directly receiving the water would be receiving the benefits of direct recipients' firm commitments and not paying for them.
- Firm commitment from the direct recipients would be mandatory, but not credited to them.
- The improved water quality from RRWP water provided to direct recipients is balanced by the use restrictions and commitments associated with receiving that water.
- The Program benefits Metropolitan's integrated resources and system for all 26 member agencies.
- This approach is not compatible with the DPR component of the Program.

Therefore, the direct pay approach is not currently considered a reasonable cost-recovery approach in light of the current objective and planned operation for the RRWP.

4.4 Approach: Integrated Costs into Metropolitan's Rates and Charges

Under this approach, 100% of Metropolitan's RRWP costs would be integrated into Metropolitan's regional wholesale water service costs and rates and charges for services. This means that all Metropolitan member agencies would pay for the RRWP within the integrated rate structure, in accordance with a cost-of-service study to determine the proper rates and charges. Per the Conceptual Planning Studies Report for the RRWP, it is estimated that the Metropolitan untreated rate would increase for all member agencies by about $170 per AF (full Program, 2018 dollars), if the costs are integrated in this manner. The following factors are relevant to evaluate this potential cost-recovery approach.

The effects of meeting replenishment demands with purified water support an integrated approach. Purified water would replace member agencies' current demands on Metropolitan's imported water supplies for groundwater replenishment, making that imported water available to meet other regional demands on Metropolitan. Alternatively, that water could be placed in storage for future emergency and dry-year needs for the entire service area. Currently, Metropolitan delivers approximately 213 TAF per year on average to all member agencies for groundwater replenishment. Metropolitan anticipates an increase in demand for groundwater replenishment (resulting from both increased production and increased recharge needs due to climate change), which could be met with purified water from the RRWP rather than water from the SWP or the CRA. Imported supplies replaced by the Program become available for all agencies, may be stored, and create delivery flexibility.

Mandatory firm commitments for purified water benefits all member agencies. Under any approach, the RRWP would require firm commitments from direct recipients. This commitment exceeds any obligation required for Tier 1 purchases. Currently, member agencies can purchase water for replenishment whenever they would like, which requires more planning and standby than would the constant delivery of water from the RRWP. Therefore, the stabilization of deliveries to groundwater basins is a benefit for both the direct recipients and for all of Metropolitan's member agencies and is associated with the costs of providing Metropolitan's ongoing service to all agencies.

The improved water quality from RRWP water provided to direct recipients is balanced by the use restrictions and commitments associated with receiving that water. Although direct recipients would receive higher quality water from the RRWP than may be the case with imported water, deliveries of RRWP water is not flexible. Therefore, although improved quality would be welcomed by direct recipients, the use of RRWP is not flexible and requires additional commitments. Because Metropolitan may dedicate the use of the RRWP for replenishment and other uses by direct recipients, it frees up water and reliability of the rest of Metropolitan's system. The balance is consistent with Metropolitan's integrated service, as do Metropolitan's other water resources.

DPR through raw water augmentation supports an integrated approach. If DPR is approved for direct integration of the RRWP into Metropolitan's treated water system in the future, it would further support the integrated cost-recovery approach. The RRWP would supply both direct recipients for groundwater replenishment and the Common Pool for all member agencies. Groundwater replenishment provides a use for the purified water developed by the Program until DPR methods are fully available to Metropolitan. Thus, the integration of the Program into Metropolitan's system is even more evident given the objective the RRWP to accommodate the flexibility for DPR in the future.

Use within Metropolitan's integrated system supports an integrated approach. The RRWP would be developed to integrate the Program into Metropolitan's existing water service and would meet existing and future demands by its member agencies with its new source of purified water. Accordingly, integration of the RRWP costs into its revenue requirements and recovery of those costs through generally applicable rates and charges for its water services would reflect the objective of the Program. It would reflect the costs of Metropolitan providing its water services to all its member agencies. Cost-recovery approaches that assign all costs to only those Metropolitan member agencies that directly receive purified water would not reflect the purpose of the Program and its integration into Metropolitan's wholesale water services.

The RRWP serves a purpose within Metropolitan's existing wholesale water services with benefits as detailed in Section 3 above. The approximate 168,000 AF of annual deliveries of purified water to groundwater basins for IPR and to Metropolitan's treatment plants for DPR would make an approximate equivalent amount of Metropolitan's imported water supplies available for Metropolitan's regional wholesale water service to all its 26 member agencies. The imported water freed up as a result of the RRWP would also be available for dry-year and emergency storage for use by Metropolitan for all its member agencies. Additionally, the production of purified water within Metropolitan's service area would reduce the use of, and increase capacity in, the integrated conveyance system that delivers water into Metropolitan's service area.

By increasing the options to meet demands in any particular area throughout the District service area, the RRWP adds flexibility to Metropolitan's system by ensuring full utilization of Metropolitan's water resource portfolio. Since Metropolitan's system is interconnected, Metropolitan can address constraints in one area of the system for the benefit of the entire system as a whole. Deliveries of RRWP purified water can be coordinated with imported water to optimize system operation. In the future, the fully expanded RRWP system or water previously used for IPR could be routed to potable water treatment plants for DPR, which would allow this water to be served to multiple agencies just like imported water, providing a regional benefit.

The RRWP would therefore, enhance Metropolitan's resources, system flexibility, system and reliability to benefit all Metropolitan member agencies. If direct recipients paid 100% of the RRWP, they would also pay for the system reliability and flexibility provided by the RRWP to the entire Metropolitan system. If the objective and planned operations of the program change significantly, then a different cost-recovery approach may be more reasonable. However, under the current objectives, planned operations, and purpose of the Program, an integrated cost-recovery approach is considered a reasonable cost-recovery approach for the RRWP.

The RRWP would also benefit the service area in the event of a catastrophic earthquake by increasing the seismic resilience in the service area for all member agencies. By providing a reliable, local supply of high-quality water for groundwater replenishment and for raw water augmentation throughout a seismic emergency, the RRWP would provide insurance for all member agencies. Purified water from the RRWP would be available to keep water flowing in Weymouth and Diemer treatment plants even if imported supplies were cut off by the earthquake event. This would allow Metropolitan to continue to meet member agency demands throughout the emergency.

The RRWP would also benefit all member agencies by increasing the resilience to climate change. Recycled water is largely independent of long-term weather and climate change impacts. Therefore, protections against drought and climate change introduce a water security benefit not available with other Metropolitan sources.

Summary. In summary, the following factors are relevant for evaluating this approach:

- Direct recipients would pay the integrated full-service rate for replenishment water as they currently pay, as deliveries would replace current imported supplies for deliveries.
- Other agencies not directly receiving the purified water would receive benefits and all member agencies would pay for all benefits.
- Firm commitment would still be required from direct recipients for water not used for DPR, but the integrated rate structure could account for the mutual benefits of the arrangement.
- The improved water quality from RRWP water provided to direct recipients in balanced by the use restrictions and commitments associated with receiving that water.
- Captures the role of the RRWP, which adds to the flexibility and reliability of Metropolitan's services, sources, and system.
- This approach would apply to both the IPR portion and the DPR portion and would be fully integrated into the current rate structure.

Therefore, based on the purpose and anticipated benefits of the Program, the Integrated Approach is considered a reasonable approach at this stage of development.

4.5 Approach: Hybrid of Different Cost-Recovery Approaches

The hybrid cost-recovery approach refers to one in which a portion of the costs are recovered from member agencies directly receiving purified water and the rest of the costs are integrated into

Metropolitan's costs, recovered through the integrated rate structure applicable to all member agencies. This section does not discuss a specific hybrid proposal with identified percentages for splitting the RRWP costs between direct recipients and Metropolitan's integrated rate structure. Instead, it provides general information for the Board to evaluate whether to pursue a hybrid approach. The following factors are relevant for evaluating this approach and may be used by staff in conducting a cost-of-service study.

The benefits of the RRWP for direct recipients and other member agencies are not mutually exclusive. Metropolitan operates its system to ensure reliability at each service connection. It achieves that reliability using the flexibility built into its system. For example, even though one member agency may regularly receive water only from one of Metropolitan's water sources, Metropolitan designs and operates its system so that it may be ready to serve water from a different source when necessary. This system integration and flexibility is essential to Metropolitan's operations. Therefore, it makes it unrealistic and potentially unfair to attempt to separate the costs of providing benefits to any particular agency or service connection if the RRWP is integrated into Metropolitan's operations and planning, directly or indirectly.

Costs related to benefits that are specific to the delivery of purified water to direct recipients and severable from other costs may potentially be addressed through an integrated rate structure instead. If there are quantifiable and severable costs that may be attributable solely to the delivery of water to direct recipients, those may potentially be captured through a rate or charge component in Metropolitan's integrated rate structure. A cost-of-service study is necessary to evaluate this potential option.

Rather than split RRWP costs by percentage attributable only to direct recipients and to the integrated service, the costs of particular functions associated with delivery of purified water may serve to develop rate or charge component within the integrated structure. For example, Metropolitan's capacity charge and Readiness-to-Serve charges reflect particular functions within Metropolitan's integrated rate structure; they are not a separate hybrid cost-recovery approach that separates Metropolitan's service by user, water source, or location. For the RRWP, Metropolitan may consider direct recipients' firm commitments, water quality, restricted use, the effect of the RRWP on the reliability of all of Metropolitan's service, and other factors to be determined through a cost-of-service analysis.

Therefore, the development of a rate or charge component to capture the unique functions associated with the RRWP is favored over attempting to split the purpose and costs of the RRWP between direct recipients and Metropolitan's integrated service. The costs attributable to providing regional benefits would be difficult to quantify. The benefits to all member agencies of added system flexibility, resource flexibility, increased reliability, water quality, shortage reductions, and others are not separately quantifiable for an integrated system. Thus, because not all costs attributable to providing benefits can be segregated between direct recipients and all other member agencies, a separate charge to member agencies could likely not capture all the shared benefits. A hybrid approach in which costs are split between direct recipients and Metropolitan's integrated service might be more feasible if those recipients were not member agencies already sharing in the benefits of the existing integrated system.

The hybrid approach is incompatible with DPR. DPR is developing into a significant objective of the Program, which would physically integrate the Program to the rest of Metropolitan's system. DPR would allow flexibility between deliveries to groundwater basins and to Metropolitan's treatment plants. It would also add direct resource flexibility for all the member agencies. Additionally, the extent of the role of DPR in the Program is unknown at this time. It is impractical to separate costs of the Program

dedicated to DPR from the costs of providing benefits to direct recipients. Therefore, quantifying direct benefits to direct recipients is challenging under Metropolitan's integrated wholesale water system and service. It would likely be impractical to implement a hybrid cost-recovery approach that may properly reflect the RRWP's role in Metropolitan's service.

Summary: In summary, the following factors are considered in evaluating this approach:

- The benefits of the RRWP accrue to all member agencies.
- Costs related to benefits that are specific to the delivery of purified water to direct recipients and severable from other costs may potentially be addressed in an integrated rate structure through an integrated rate structure instead.
- The hybrid approach is incompatible with the intended DPR objective of the Program.

Therefore, a hybrid approach in which the costs are attempted to be split between direct recipients and Metropolitan's integrated service may be unreasonable given the purpose and role the RRWP would have in Metropolitan's integrated system. Instead, it may be possible to capture appropriate additional costs of benefits attributable solely to the delivery of water to direct recipients through a rate or charge component added to the integrated rate structure. However, a cost-of-service study should be conducted to determine if any such component is appropriate.

4.6 Summary of Potential Cost-Recovery Approaches

Table 4 provides a summary of the cost-recovery approaches introduced in this Paper.

Table 4: Summary of Significant Factors for Cost-Recovery Approaches

Factor	Direct Recipients Pay 100%	Integrated Approach	Hybrid Approach
Cost Impact to meet same replenishment demands	Significant increase in cost to direct recipients	No significant increase in cost because cost recovery is through current rate structure	The cost impact is unclear and depends on the hybrid selected
Cost recovery accounts for regional benefits	No	Yes	Depends upon how hybrid approach is implemented
Firm commitments from direct recipients would be mandatory	Yes	Yes	Yes
Reasonable	No	Yes	Unlikely

The current evaluations and financial program planning assume that the RRWP is integrated into Metropolitan's operations and service, based on currently available information. The overview of cost-recovery approaches is provided to seek guidance from the Board regarding the cost-recovery approaches

under which it is interested in pursuing the Program. To the extent the Board envisioned a cost-recovery approach that is inconsistent with the objective and benefits of the Program, as reviewed here, the information in this White Paper may be helpful for Board discussion.

5.0 AGREEMENTS AND ARRANGEMENTS

5.1 Purchase Commitments for Water Deliveries

Metropolitan must have assurances that member agencies taking purified water are able and willing to do so and are committed to meet their purchase obligations. The flow of purified water is expected to be up to 150 MGD about 85% of the time. Disruptions in deliveries have the potential of impacting the Sanitation Districts' wastewater treatment plant processes, increasing AWT Facility O&M, and creating operational issues at the AWT Facility and along the conveyance/recharge systems. While Metropolitan is considering the future regulations for DPR in the RRWP planning, initial implementation of the RRWP may be dependent on groundwater replenishment deliveries. And even if RRWP purified water could be delivered for DPR, deliveries to groundwater basins would still be necessary to accommodate capacity or operational constraints that may arise at Metropolitan's water treatment plants.

Thus, the successful operation of the RRWP will require agreements between Metropolitan and future direct recipients of purified water, committing them to receive contracted deliveries and to pay for such deliveries. The specific terms of any purchase agreement between Metropolitan and direct recipients will depend, in part, on the finalization of details of the Program through environmental and engineering planning, the capacity of the recharge facilities and groundwater basins, a cost-of service study, and the cost-recovery approach directed by the Metropolitan Board of Directors.

Potential direct recipients of the Program are member agencies overlying four groundwater basins within Metropolitan's service area. As summarized in Chapter 6 of the Feasibility Study and also Chapter 6 of the Conceptual Planning Studies Report, Metropolitan staff has worked with staff from each of those member agencies which could take RRWP water to determine their capacity to take purified water from the Program in-lieu of Metropolitan's untreated water. However, purchase agreements, or even terms for a purchase agreement, are not likely to be developed until a cost-recovery approach is determined, and from that, the price term is known or estimated. These items would be informed by the upcoming environmental and engineering planning process.

Metropolitan has already entered into letters of intent (LOIs) with several of the parties. Prior to developing a formal purchase agreement with member agencies, Metropolitan's Board may also consider whether to enter into an interim memorandum of understanding (MOU) or some other documentation of the parties' intent to develop future purchase agreements. Discussions with the potential member agencies concerning the preparation of LOIs and MOUs are continuing discussed in Section 6. Copies of the LOIs are included in Appendix A.

5.2 Arrangements for Introduction of Purified Water into Groundwater Basins

Metropolitan does not currently operate groundwater facilities and there is no plan for Metropolitan to do so in connection with the RRWP. Metropolitan aims to deliver purified water to member agencies along the planned conveyance system to either existing service connections or to new service connections. Metropolitan may cooperate with member agencies in the construction of any new service connections, recharge ponds, or injection wells necessary to introduce water into groundwater basins. However, the

intent is for ownership of purified water to transfer to the member agency at the service connection in accordance with the Metropolitan Administrative Code, in the same manner as Metropolitan currently delivers water for replenishment.

Even though Metropolitan does not intend to operate groundwater recharge facilities in connection with the RRWP, it is necessary to generally understand the institutional arrangements that may be required in each groundwater basin for the successful use of RRWP water. Success of the RRWP depends on the receipt and storage of purified water into the intended groundwater basins.

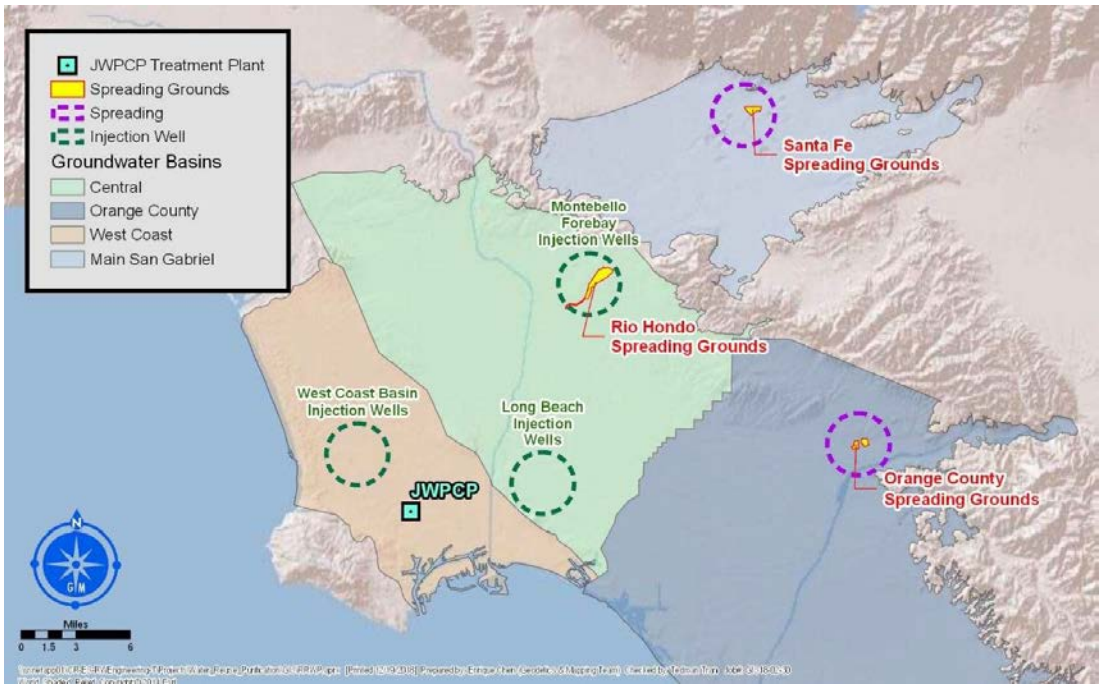
Metropolitan currently delivers water to the following agencies for replenishment within the groundwater basins in their service areas: Central Basin Municipal Water District (MWD), West Basin MWD, City of Torrance, City of Long Beach, Upper San Gabriel Valley MWD, Three Valleys MWD, and the Municipal Water District of Orange County (MWDOC). Purified water for replenishment in those basins would require many of the same institutional arrangements already in place between the member agencies and the basin managers for existing deliveries. To the extent that those groundwater basin managers require additional approval processes specifically for the introduction of purified water into the basins, Metropolitan will cooperate with the member agencies to seek such approval. In addition to replenishment, purified water may be stored by the member agencies or others in the basins for extraction at a later date. Storage in each basin is governed by a different process. Metropolitan will cooperate with member agencies to assist with those processes.

Figure 9 shows the intended groundwater basins with specific management information for each of the groundwater basins provided below.

Central and West Coast Basins. The Central Basin and West Coast Basins are governed by two separate court judgments. Implementation of those judgments is administered and governed by a Watermaster, which includes storage panels made up of representatives of water rights holders and the Board of Directors of the Water Replenishment District. Approval from the storage panels is necessary to store water in the Central and West Coast Basins. Unless Metropolitan intends to store its water directly into the basins, which is not currently proposed as noted above, it is not anticipated that the storage framework will apply differently. Deliveries of purified water for groundwater replenishment are anticipated to be treated in the same manner as current Metropolitan deliveries. New regulatory requirements may, however, be applicable for introduction specifically of the new type of water, which will be coordinated with the State Division of Drinking Water, the Los Angeles Regional Water Quality Board, the Watermaster, and other applicable regulatory agencies.

Main San Gabriel Basin. The Main San Gabriel Basin is also governed by a court judgment, administered by a Watermaster. Introduction of any water into the Main San Gabriel Basin, including current Metropolitan deliveries, is governed by the judgment. The Watermaster Rules require a cyclic storage agreement for any introduction of water. It is anticipated that deliveries of purified water to this basin will be subject to the same requirements currently in place for existing replenishment deliveries. However, new regulatory requirements specific to purified water may also apply that will involve coordination with the Watermaster and the applicable regulatory agencies.

Figure 9: Intended Groundwater Basin Participants



Orange County Basin. In the Orange County Basin, the Orange County Water District (OCWD) governs groundwater management through its statutory authority. To the extent member agencies overlying the Orange County Basin wish to store water in the basin for later extraction, it must obtain approval from OCWD. Metropolitan will work with its member agencies to the extent the introduction of purified water into the Orange County Basin is subject to different rules under the applicable rules and regulations. Metropolitan will also work with those parties to obtain all required permits from the applicable regulatory agencies. As of the date of this report, Metropolitan is not actively pursuing a Letter of Intent with the Orange County Basin parties. Deliveries to the Orange County Basin remain an option for the RRWP, which can be further considered as the environmental and engineering planning work is completed.

Table 5 highlights some of the potential arrangements required for introduction of the purified water into the groundwater basins.

6.0 POTENTIAL COLLABORATION AND FUNDING OPPORTUNITIES

6.1 Opportunities for Collaboration and Current Partnerships with Other Agencies

Metropolitan welcomes the possibility of partnering with other agencies to ensure the success of the RRWP. It is envisioned that Metropolitan will continue to be the owner and operator of the RRWP and conveyance system for the benefit of its member agencies and as an integrated part of Metropolitan's services to its agencies. This approach is consistent with Metropolitan's long-term planning, its needs, and its mission. However, Metropolitan is exploring partnership opportunities that provide funding sources for construction and operations costs, thereby reducing the estimated $1,800 per AF costs. A summary of current and potential partnerships with other agencies is provided in Table 6.

Table 5 – Arrangements for Introduction of Purified Water into Groundwater Basins

Topic	Description
Multiple Agencies Potentially Involved in the Process	Watermaster organizations, groundwater basin managers, Los Angeles County Department of Public Works, State Water Resources Control Board, Regional Water Quality Control Board (RWQCB), cities in which new facilities are built for introduction of water into basins.
MWD Service Connection Points	New connections are intended to be treated in the same manner as existing connections. Service connection agreements would be required for new connections.
Facility Requirements	Facility requirements would vary by installation, but could include pipelines, meter structures, well relocations, pump stations, discharge structures, injection wells. Maximum design discharge flows of the delivery facilities would be defined.
Delivery Schedule	The schedule for deliveries of RRWP purified water would be mutually agreed by member agencies and basin managers, and must be consistent with Purchase Agreements between member agencies and Metropolitan.
Water Quality Specifications	Purified water will meet the Water Quality Control Plan (Basin Plans) objectives for specific constituents as established by the applicable RWQCB. Detailed water quality specifications will be finalized between basin managers, any applicable regulatory agency, and the member agencies. Metropolitan will be involved as required to ensure its water quality specifications meet those required in the basins.
Groundwater Modeling	Metropolitan may provide monitoring wells to meet the regulatory travel time requirements as required by the regulations.
Ownership of the Water	Member agencies will own all delivered purified water received and accepted at the service connection, in the same manner as current Metropolitan deliveries.

Table 6 – Current Partnerships with Other Agencies

Agency	Role in Partnership	Notes
Los Angeles County Sanitation District	• Source water from JWPCP • In-kind services • New facilities and operation requirements, if Secondary MBR selected • Land, power and technical support for the demo plant	• In partnership since 2010 Demonstration plant and Term sheet for full-scale AWT Agreement in 2015 • Ongoing coordination meetings • Investigating secondary MBR impacts to the JWPCP • Amendment to 2015 Agreement proposed for November 2020 Board approval • Future full-scale AWT agreement needed
Southern Nevada Water Authority	• Potential transfers or exchanges of Colorado River or State Water Project supplies in return for investment in the RRWP	• Letter of Intent from SNWA signed and included in Appendix A • Agreement for Environmental Phase Services collaboration proposed for November 2020 Board approval

Metropolitan and the Sanitation Districts have been in partnership to develop the RRWP since 2010. As the provider of the water for the RRWP, the Sanitation Districts are integral to the success of the RRWP. They recognize that operation of the RRWP would assist in meeting the Sanitation Districts' recycled water goals. The Sanitation Districts have already provided in-kind services toward the project, and to date, have provided land, lab services, and an evaluation of source control. Importantly, Metropolitan and the Sanitation Districts will also explore the possibility of constructing new basins or converting one of the existing basins to provide secondary MBR treatment before delivery of the effluent to the AWT, which could reduce Metropolitan's overall cost for the RRWP

Metropolitan may also consider partnerships including transfers or exchanges of Metropolitan's Colorado River or SWP supplies in return for a financial investment in the RRWP. For example, there may be opportunities to transfer storage in Lake Mead in exchange for participation in the RRWP. Metropolitan and Southern Nevada Water Authority (SNWA) has recently signed a letter of intent to work cooperatively together to develop the RRWP and potential future Colorado River exchanges. SNWA is a Nevada joint powers authority and a political subdivision of the State of Nevada. Metropolitan has also received a similar joint letter of intent from the Central Arizona Project and the Arizona Department of Water Resources.

6.2 Opportunities for Collaboration and Status of Letters of Intent with Other Potential Partners

Agreements between Metropolitan and other agencies would be a two-step process, beginning with a non-binding LOI followed by a formal Memorandum of Understanding (MOU). The provisions of the LOI represent a statement of the Parties' general intent to continue collaboration discussions with the goal of developing a future agreement or MOU. The future agreement, if approved by both parties, would be binding and could include requirements for such parameters as capacities, cost, delivery schedule, and water quality. Metropolitan has already entered into LOIs will several of the parties. Table 7 summarizes the collaboration opportunities and current status of LOIs with the partners as of July 2020. Copies of completed LOIs are included in an Appendix A to this White Paper. Potential opportunities with other agencies may nor may not include financial participation. Metropolitan has already been in discussions with a number of local agencies to collaborate and maximize recycled water use within the region.

LADWP is pursuing a 150 mgd recycled water program to recycle all of the water from the Hyperion Wastewater Treatment Plant. The proposed program is called Operation NEXT. The program would convert the Hyperion Plant to a MBR facility, add advanced treatment, and deliver the water to various points in the City for potable reuse, including a connection to the RRWP's backbone pipeline for treatment at the Weymouth WTP. MWD and LADWP staff are meeting regularly and coordinating the synergy between the two programs.

6.3 Grant and Low Interest Loan Programs

Potential grant and loan funding opportunities are available from multiple sources including the federal government and state government, as well as from local agency partnering such as the Sanitation Districts and other agencies. There are also some limited opportunities for funding through non-profit research funds and public-private partnerships. Grant and loan funding is an attractive source of supplemental funding for the RRWP, but has various eligibility, timeline, and reporting requirements. Summary of grants and loans available to Metropolitan is provided in Table 8.

Table 7 – Opportunities for Collaboration and Status of LOIs with Other Potential Partners

Agency	Collaboration Opportunities	Notes
City of Los Angeles • **LADWP** • **LA Bureau of Sanitation**	• Meet demands at two South Bay refineries (up to 10 mgd included in Approach 3) • Connection to the RRWP Backbone Pipeline to supply recycled water into the RRWP (up to 50 mgd for RWA at Weymouth WTP) as part of Operation NEXT • Connection to the Jensen WTP to supply recycled water (50 mgd RWA source) as part of Operation NEXT • Source control and purified water quality	• LOI signed and included in Appendix A • Regular coordination meetings to discuss water quality, technical issues, enhanced source control, demo plant testing • Continuing demand for IPR even if RWA is implemented • Agreement to take purified water from Operation NEXT would be needed
• **USGVMWD** • **Three Valleys MWD** • **MSGB Watermaster**	• Main San Gabriel GW Basin • Raymond Basin/Six Basins demand transfer • RRWP Backbone Pipeline to supply replenishment water to the Santa Fe Dam area (potential 38 mgd up to 72 mgd)	• LOI signed and included in Appendix A • Ongoing collaboration meetings • Continuing demand for IPR even if RWA is implemented • Agreement to take purified water needed
• **LBWD** • **TORRANCE** • **WRD**	• West Coast and Central GW Basins • Regional Brackish Water Reclamation Program • Groundwater augmentation (potential up to 4 mgd) in West Coast Basin • Replenishment water (potential 9 mgd up to 20 mgd) in Central Basin	• LOI signed and included in Appendix A • Ongoing collaboration meetings • Continuing demand for IPR even if RWA is implemented • Agreement to take purified water needed
• **LACFCD**	• Shared recharge basins at Santa Fe Dam	• LOI signed and included in Appendix A • Ongoing collaboration meetings
• **CAP** • **ADWR**	• Reliability and resiliency of the Colorado River water supply • Collaboration on regulatory issues • Potential exchanges of Colorado River water supplies	• Joint LOI from the Central Arizona Project and Arizona Department of Water Resources signed and included in Appendix A.
• **CBMWD** • **WRD**	• Central GW Basin Groundwater augmentation (potential up to 9 mgd)	• LOI under consideration • Coordination with LADWP's Operation NEXT • Agreement to take purified water needed
• **WBMWD**	• West Coast GW Basin	• LOI in development • Ongoing collaborative meetings
• **MWDOC** • **OCWD**	• Orange County GW Basin • Groundwater augmentation (potential up to 46 mgd, if included in a future phase)	• Coordination with existing GW augmentation & future seawater desalination • Agreement to use spreading grounds would be needed • Demands may be impacted by proposed seawater desalination project • LOI not being pursued at this time

Table 8 - Summary of Grants and Loans Available to Metropolitan

Program	Amount	Notes
Grants		
USBR Title XVI Reuse Research Grant	$750,000	• Awarded $750,000 grant to study pathogen removal with alternative treatment technology • Requires 75% match • No feasibility study required
California Water Recycling Funding Program (WRFP) & State Prop 1 /68 WRFP	Up to $5 million	• Awarded $1,000,000 Pilot Project grant for Demonstration Plant research. • Received approximately $300,000 from four groundwater planning grants. • High demand for funding. Majority of remaining funding already allocated. Full scale RRWP should be submitted as soon as approved to be eligible for remaining funding
USBR Title XVI	Up to $20 million	• Received approval of feasibility study on 4/6/20 and our now eligible to apply for future funding under the Title XVI WIIN Program. • High demand for funding. Project funding typically occurs over multiple funding cycles.
Low Interest Loans		
USEPA Water Infrastructure Finance and Innovation Act (WIFIA) program	Up to 49% of eligible project costs	• WIFIA loans provided at the current US Treasury rate (~2-3%) with repayment terms up to 35 years. Minimum project: $20M for large communities. NEPA, Davis-Bacon, American Iron and Steel, and all other federal provisions apply.
California Clean Water State Revolving Fund (CWSRF)	Up to 50% of eligible costs	• High demand for funding. Current significant backlog & reduced future funding estimate. • Support from other agencies and political leaders may facilitate receiving funding.

Notes:

1. The Maximum amount of State Proposition 1 and Proposition 68 funding is proposed to be reduced from $15 million to $5 million in the proposed WRFP guidelines.

Staff recommends prioritizing grant opportunities, followed by funding requests through the Clean Water State Revolving Fund (CWSRF) low-interest loan program because the project eligibility is more in alignment with the proposed RRWP, the size of the loan is up to 50 percent of the project cost, the interest rate is half the general obligation bond rate (~2 percent), and repayment is up to 30 years. There are some significant concerns with the CWSRF loans requirements regarding lien parity, limitations on future bond issuances, and mandatory bond reserve funds that will need to be negotiated before an agreement should be accepted. A more detailed discussion of the grant and loan opportunities are provided in Chapter10 of the Feasibility Study.

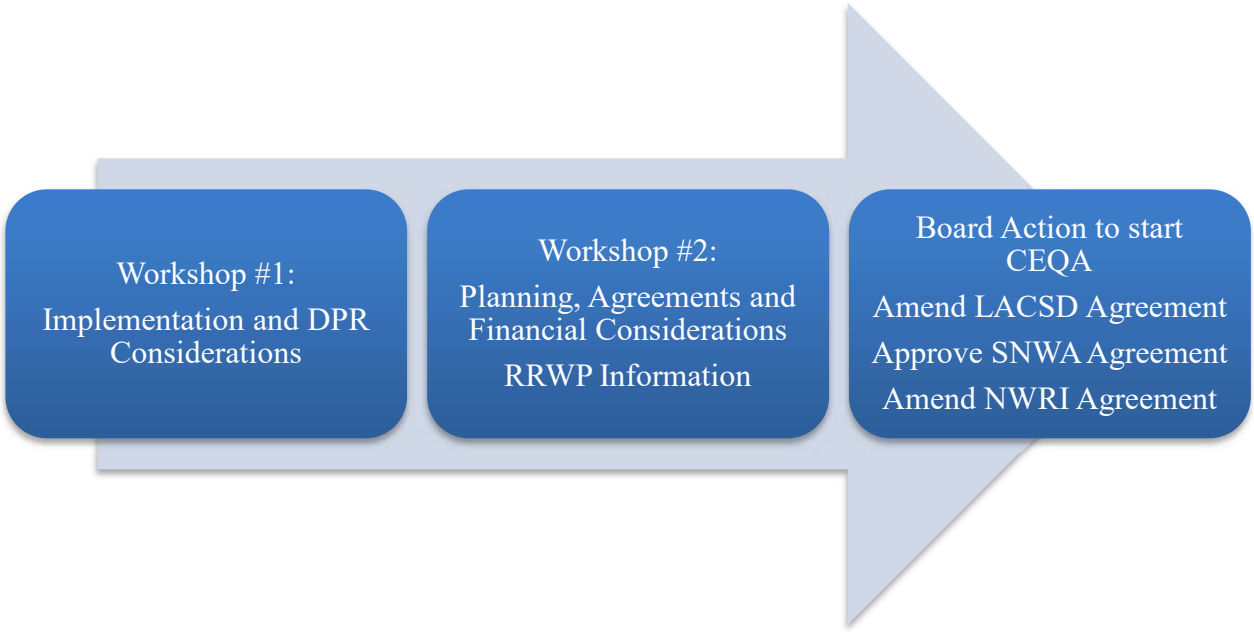
7.0 NEXT STEPS

The purpose of White Papers No. 1 and No. 2 is to provide the Board with background on the RRWP facilities that are required, how much the facilities will cost, options for how to pay for the facilities, and a

summary of the agreements that must be obtained to support the Program. Estimated costs are based on the Conceptual Study and will be updated as part of the PEIR. Figure 10 below shows the proposed next steps for the RRWP. Workshop No. 1 was held on July 17, 2019 to discuss White Paper No. 1. As with White Paper No. 1, a Board Workshop will be held at the E&O Committee meeting on October 12, 2020 to discuss White Paper No. 2. These workshops are to provide information and a forum to discuss the details of the Program, not to approve the Program.

As described above in the summary of White Paper No. 1, three approaches were proposed to implement the environmental and engineering planning for the RRWP. As part of the fiscal years 2020/21 and 2021/22 biennial budgeting process, Metropolitan's Board approved a budget for Approach 1, development of a Program Environmental Report (PEIR) and associated engineering support. In November, staff will bring an action item to the Board for consideration of beginning Approach 1. It is anticipated that if additional effort to implement Approaches 2 or 3 is desired by the Board, that additional direction would be given to staff. The biennial budget included $30 million for these efforts.

Figure 10 – Proposed Next Steps for the RRWP



As shown in this white paper, the RRWP will provide multiple benefits to Metropolitan's entire service area. Therefore, staff recommends continuing to move forward with the RRWP. After Workshop No. 2, the Board will consider whether to move forward with the next step in the implementation of the RRWP, beginning the PEIR. The November action item will include detailed information regarding the cost and scope of the PEIR and associated engineering support and an amended agreement with LACSD in support of this next phase of work. During the approximately 2 ½ years it would take to complete this phase of work, staff would also work with the Board to develop a cost-recovery approach for the project, should the Board choose to proceed once environmental and engineering planning is complete

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Appendix A

Letters of Intent (LOI)

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1. Los Angeles Department of Water and Power

LETTER OF INTENT TO COLLBORATE ON THE DEVELOPMENT OF A FUTURE MEMORANDUM OF UNDERSTANDING RELATED TO ADVANCED TREATED WATER DELIVERY SYSTEMS BETWEEN THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA AND CITY OF LOS ANGELES, THROUGH THE LOS ANGELES DEPARTMENT OF WATER AND POWER

This LETTER OF INTENT (LOI) is made by and between THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA (Metropolitan) and CITY OF LOS ANGELES (City), by and through THE LOS ANGELES DEPARTMENT OF WATER AND POWER (LADWP), who may be referred to individually as "Party" or collectively as "Parties."

BACKGROUND

A. Metropolitan and County Sanitation No. 2 of Los Angeles County (Sanitation District) are working together to develop a Regional Recycled Water Program (Program). The objective of the Program is to produce up to 150 million gallons per day (MGD) of advanced treated water from a new advanced water treatment (AWT) facility located at the Sanitation District's Joint Water Pollution Control Plant in Carson, California (Metropolitan AWT Facility). The Program's development may be phased, starting at lower levels of production with the potential to build up to 150 MGD of production as demands and conditions warrant.

B. If the Program is finalized and approved by Metropolitan's Board of Directors, it will also include plans for the development of a conveyance system consisting of approximately 60 miles of pipeline and a series of pump stations (AWT Conveyance System). The AWT Conveyance System could potentially deliver up to 150 MGD of treated water to the Central, West Coast, Orange County and Main San Gabriel Groundwater Basins. Delivery locations along the alignment will consist of either existing groundwater spreading basins, new or existing injection wells, or industrial customers of Member Agencies in the Los Angeles and Long Beach Harbor areas. Metropolitan has divided the pipeline alignment into five segments for consideration of a phased construction approach.

C. LADWP and the City's Bureau of Sanitation (LASAN) are currently developing a comprehensive program (City Program) to purify and reuse 100% of available secondary effluent from the Hyperion Water Reclamation Plant (HWRP) by 2035. Under the City Program, LASAN will be pilot-testing treatment processes that will ultimately lead to the retrofit of the HWRP to produce advanced treated water. LADWP is also currently developing a masterplan with the Water Replenishment District of Southern California (WRD) that will evaluate the most optimal locations to convey this water into the underlying aquifers within the West Coast and Central Groundwater Basins. At a future date, there may be opportunities for LADWP to convey some of its advanced treated water into Metropolitan's planned AWT Conveyance System as a potential supplemental supply source to the water source produced by the Metropolitan AWT Facility. There may also be opportunities for Metropolitan's advanced treated water to flow into the LADWP system. Both options could create flexibility for both plants.

D. Due to the size, complexity and anticipated capital investment required of both Metropolitan's and the City's programs, it will be beneficial for both organizations to coordinate and collaborate, as appropriate, during the developmental stages of both programs. Such coordination and collaboration will ensure that both systems are planned, designed, constructed and operated in a manner consistent with the best interests of the customers of each organization and its constituents.

TERMS

1. INTENT AND COMPONENTS:

a. It is the intent of the Parties to collaborate in the development and utilization of AWT supplies produced from their respective facilities, while minimizing areas of potential conflict or duplication of activities.

b. Metropolitan and LADWP intend to develop a plan to coordinate the potential integration of Metropolitan's Program and the City's Program. This collaboration will examine the operational and institutional integration of the water and facilities of the respective program. To that end, the Parties intend for the plan through a future MOU to:

i. Ensure continuity, compatibility, and flexibility of both Metropolitan and LADWP's recycled water infrastructure to meet future supply conditions;
ii. Identify and examine potential water quality issues and specifications related to integrating the two programs;
iii. Provide for related research, testing, and other technical collaborations;
iv. Provide for collaboration on regulatory developments related to both programs; and
v. Develop additional areas for collaboration and support, as identified by the Parties.

c. The Parties intend to develop an MOU that will include conducting and preparing any additional studies necessary to evaluate the integration of these two programs. These studies may include the economic and technical feasibility, financing needs, right-of-way and permitting requirements, environmental and regulatory compliance obligations, brine discharge requirements, and engineering, construction, operational, and water quality specifications.

2. The provisions of this LOI represent a statement of the Parties' general intent only, and shall not be binding on either Party. Neither Party shall have any obligation to enter into the MOU, and no course of conduct of the Parties shall evidence any binding obligations. Each Party fully understands that the terms and conditions of the proposed MOU are subject to approval by the

General Manager of the Los Angeles Department of Water and Power, the Board of Commissioners of the Los Angeles Department of Water and Power, the Los Angeles City Council, the General Manager of Metropolitan, and the Metropolitan Board of Directors, and that no Party shall have any legal obligations to the other unless and until all of the terms and conditions of the proposed MOU have been negotiated and agreed to by all Parties and set forth in the proposed MOU, which have been approved by the Board of Water and Power Commissioners and the Los Angeles City Council, and signed and delivered by all Parties.

3. NOTICES

Any notice under this LOI must be in writing and addressed as follows:

The Metropolitan Water District of Southern California
Post Office Box 54153
Los Angeles, CA 90054-0153
Attn: John Bednarski, Group Manager, Engineering Services
With a courtesy copy by email to: jbednarski@mwdh2o.com

Los Angeles Department of Water
111 North Hope Street
Los Angeles, CA 90012
Room 1460
Attn: David Pettijohn, Director of Water Resources
With a courtesy copy by email to: David.Pettijohn@ladwp.com

A properly addressed notice will be effective on the day of delivery, if delivered directly by a Party or by a nationally recognized delivery service, or on the third day after mailing, if sent postage prepaid by U.S. Mail. The Parties shall transmit a courtesy copy of any notice to the other Party by email on the day the notice is sent.

Either Party may change the address listed in this section by providing five days' notice to the other Party.

The Parties are signing this LOI in duplicate originals.

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

By: _____
General Manager

Date: July 16, 2019

APPROVED AS TO FORM:

By: _____
General Counsel

LOS ANGELES DEPARTMENT OF WATER AND POWER

By: _____ for
General Manager

Date: July 15, 2019

APPROVED AS TO FORM & LEGALITY:

Michael F. Feuer
LOS ANGELES CITY ATTORNEY

By: _____
Deputy City Attorney
Melanie A. Tory
7/15/19

2. San Gabriel Basin Agencies
   - Upper San Gabriel Valley Municipal Water District
   - Three Valleys Municipal Water District
   - Main San Gabriel Basin Water Master

LETTER OF INTENT TO COLLABORATE ON THE DEVELOPMENT OF FUTURE AGREEMENTS FOR THE PURCHASE AND DELIVERY OF ADVANCED TREATED WATER FOR REPLENISHMENT OF THE MAIN SAN GABRIEL GROUNDWATER BASIN

A. This LETTER OF INTENT (LOI) is made by and between THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA (Metropolitan), THREE VALLEYS MUNICIPAL WATER DISTRICT (Three Valleys), UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT (Upper District), and THE WATERMASTER FOR THE MAIN SAN GABRIEL GROUNDWATER BASIN (Watermaster), who may be referred to individually as "Party" or collectively as "Parties."

RECITALS

B. Metropolitan and County Sanitation No. 2 of Los Angeles County (Sanitation District) are working together to develop a Regional Recycled Water Program (Program). The objective of the Program is to produce up to 150 million gallons per day (MGD) of advanced treated water (AWT Water) from a new advanced water treatment (AWT) facility located at the Sanitation District's Joint Water Pollution Control Plant in Carson, California (Metropolitan AWT Facility). The Program's development may be phased, starting at lower levels of production with the potential to build up to 150 MGD of production as demands and conditions warrant.

C. If the Program is approved by Metropolitan's Board of Directors, it will also include plans for the development of a conveyance system consisting of approximately 60 miles of pipeline and a series of pump stations (AWT Conveyance System). The AWT Conveyance System could potentially deliver up to 150 MGD of AWT Water to the Central, West Coast, Orange County and Main San Gabriel Groundwater Basins for indirect potable reuse (IPR) through replenishment of those Basins. Delivery locations along the alignment will consist of either existing or new groundwater spreading basins or new or existing injection wells.

D. The AWT Conveyance System could also deliver some of the AWT Water to Member Agencies in the Los Angeles and Long Beach Harbor areas for delivery to industrial customers of those Member Agencies. Additionally, some of the AWT Water may be delivered through an extension of the AWT Conveyance System to certain Metropolitan treatment plants for direct potable reuse (DPR) through raw water augmentation.

E. Water rights have been adjudicated in the Main San Gabriel Basin (the "Basin") according to the Judgment in Los Angeles County Superior Court; Civil Action No. 924128 entitled "Upper San Gabriel Valley Municipal Water District vs. City of Alhambra, et al." (herein referred to as "the Judgment"). The Judgment also established the Watermaster as the agency responsible for managing the Basin and authorized Watermaster to purchase Supplemental Water, as defined in the Judgment, for replenishment of the Basin. Watermaster purchases Supplemental Water from three Responsible Agencies, as defined in the Judgment, which have a course of Supplemental Water to the Basin.

F. Three Valleys and Upper District are named as Responsible Agencies under the Judgment and sell water to the Watermaster for replenishment, and are member agencies of Metropolitan. Metropolitan is a party to the Judgment, which permits it to deliver water to Three Valleys and Upper District for replenishment of the Basin. The San Gabriel Valley Municipal Water District, as State Water Project Contractor and not a Metropolitan member agency, is also named as a Responsible Agency under the Judgment and sells water to Watermaster.

G. Metropolitan delivers water to service connections for Three Valleys and Upper District, at which point Metropolitan no longer controls or owns the water. The Watermaster has contracted with Los Angeles County Department of Public Works (LA County Public Works) for introduction of water into the Basin. LA County Public Works operates the spreading basins and related facilities that introduce water into the Basin, including Metropolitan water delivered to Three Valleys and Upper District for replenishment of the Basin. Introduction of AWT Water into the Basin may require additional facilities, separate from the existing facilities currently utilized by LA County Public Works to introduce Metropolitan potable water into the Basin.

H. At times, Metropolitan may not have sufficient quantities of imported water to meet the Watermaster's immediate Supplemental Water requirements to deliver into the Basin. To ensure additional consistency and reliability of Metropolitan deliveries, Three Valleys and Upper District are interested in purchasing and receiving AWT Water by Metropolitan via the AWT Conveyance System to meet the Watermaster's replenishment demands for the Basin.

I. Due to the size, complexity and anticipated capital investment required of Metropolitan for the Program, it will be beneficial for all Parties to coordinate and collaborate, as appropriate, during the developmental stages of the Program. Such coordination and collaboration will ensure that the system is planned, designed, constructed and operated in a manner consistent with the best interests of the Parties and to ensure delivery of AWT Water into the Basin is feasible. Coordination and collaboration between the Parties is also necessary to ensure the development of a commitment by Three Valleys and Upper District to purchase AWT Water from the Program.

TERMS

1. INTENT OF THE PARTIES:
   a. The Parties intend to develop a plan to ensure that deliveries of AWT Water from the Program can be introduced into the Basin. To that end, the Parties intend to:

      i. Collaborate to provide all information the Watermaster, LA County Public Works, or any regulatory agency, may need to approve introduction of AWT Water into the Basin;

      ii. Identify and examine potential water quality issues and specifications related to the Program that may affect the Watermaster's, or any regulatory agency's,

approval;

iii. Identify any related research, testing, and other technical work necessary to address any concerns raised by the Watermaster, or regulatory agency, in connection with approval of introduction of AWT Water into the Basin;

iv. Collaborate on regulatory developments related to introduction of AWT Water into the Basin;

v. Collaborate to develop an agreement with LA County Public Works for its operation of facilities necessary to introduce AWT Water into the Basin, including construction of new facilities that may be required for introduction of AWT Water into the Basin;

vi. Develop plans for any new infrastructure that may be necessary to introduce AWT Water into the Basin; Identify opportunities to expand scope of water deliveries to include other responsible agencies and adjacent groundwater basins; and

vii. Develop additional areas for collaboration and support, as identified by the Parties.

b. It is the intent of the Parties to collaborate in the development of a set of agreements between the Parties for:

i. the long-term purchase and receipt of at least 6,500AFY AWT Water by Three Valleys and at least 35,000 AFY AWT Water by Upper District, with a maximum range of 60,000 to 80,000 AFY AWT, collectively, for both parties, and Metropolitan's delivery of AWT Water to Three Valleys and Upper District;

ii. the Watermaster's approval of delivery of AWT water into the Basin, pursuant to a purchase agreement between Metropolitan and each of Three Valleys and Upper District; and

2. NON-BINDING INTENT

The provisions of this LOI represent a statement of the Parties' general intent only, and shall not be binding on either Party. No Party shall have any obligation to enter into any agreement listed in Section 1.b., or otherwise, and no course of conduct of the Parties shall evidence any binding obligations. Each Party fully understands that the terms and conditions of any agreements developed pursuant to Section 1.b. are subject to approval by the General Manager and the Board of Directors of Three Valleys, the General Manager and the Board of Directors of Upper District, the General Manager and the Board of Directors of Metropolitan, the Executive Officer and Board of the Watermaster. No Party shall have any legal obligations to the other unless and until all of the terms and conditions of each of the proposed agreements have been negotiated and agreed to by all Parties and set forth in the agreements, approved by the legislative bodies of all Parties, and signed and delivered by all Parties.

3. NOTICES AND CORRESPONDENCE

Any notice or correspondence under this LOI must be in writing and addressed as follows:

The Metropolitan Water District of Southern California
Post Office Box 54153
Los Angeles, CA 90054-0153
Attn: John Bednarski, Group Manager, Engineering Services
With a courtesy copy by email to: jbednarski@mwdh2o.com

Three Valleys Municipal Water District
1021 E. Miramar Avenue
Claremont, CA 91711
Attn: Matthew H. Litchfield, General Manager/Chief Engineer
With a courtesy copy by email to: mlitchfield@tvmwd.com

Upper San Gabriel Valley Municipal Water District
602 E. Huntington Drive, Suite B
Monrovia, CA 91016
Attn: Tom A. Love, General Manager
With a courtesy copy by email to: tom@usgvmwd.org

Main San Gabriel Basin Watermaster
725 North Azusa Avenue
Azusa, CA 91702
Attn: Anthony C. Zampiello, Executive Officer
With a courtesy copy by email to: tonyz@watermaster.org

A properly addressed notice will be effective on the day of delivery, if delivered directly by a Party or by a nationally recognized delivery service, or on the third day after mailing, if sent postage prepaid by U.S. Mail. The Parties shall transmit a courtesy copy of any notice to the other Party by email on the day the notice is sent.

Either Party may change the address listed in this section by providing five days' notice to the other Party.

4. COUNTERPARTS

This Agreement may be executed in counterparts, and signatures transmitted via facsimile or electronic mail shall be deemed to be originals.

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Jeffrey Kightlinger

By: _____
General Manager

Date: July 14, 2020

APPROVED AS TO FORM:

Marcia Scully

By: _____
General Counsel

THREE VALLEYS MUNICIPAL WATER DISTRICT

Matthew Litchfield P.E.

By: _____
General Manager

Date: June 16, 2020

APPROVED AS TO FORM & LEGALITY:

Steven M. Kennedy

By: _____
General Counsel

Date: June 16, 2020

UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT

Thomas A. Love

By: _____

General Manager

Date: May 26, 2020

APPROVED AS TO FORM & LEGALITY:

Steven O'Neill

By: _____

General Counsel

Date: May 26, 2020

MAIN SAN GABRIEL BASIN WATERMASTER

Anthony Zampiello

By: _____

Executive Officer

Date: _____

APPROVED AS TO FORM & LEGALITY:

By: _____

Legal Counsel

Date: _____

UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT

Tom A. Love

By: _____

General Manager

Date: _____

APPROVED AS TO FORM & LEGALITY:

By: _____

General Counsel

Date: _____

MAIN SAN GABRIEL BASIN WATERMASTER

Anthony Zampiello

By: _____

Executive Officer

Date: 6-5-2020

APPROVED AS TO FORM & LEGALITY:

Frederic Fudacz

By: _____

Legal Counsel

Date: 6-15-2020

3. West Coast and Central Basin Agencies
   - City of Long Beach
   - City of Torrance
   - Water Replenishment District

LETTER OF INTENT TO COLLABORATE ON THE DEVELOPMENT OF FUTURE AGREEMENTS FOR THE PURCHASE AND DELIVERY OF ADVANCED TREATED WATER FOR REPLENISHMENT OF THE CENTRAL AND WEST COAST GROUNDWATER BASINS

A. This LETTER OF INTENT (LOI) is made by and between THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA (Metropolitan), the CITY OF LONG BEACH acting through its Board of Water Commissioners (Long Beach), the CITY OF TORRANCE (Torrance), and the WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA (WRD), who may be referred to individually as "Party" or collectively as "Parties."

RECITALS

B. Metropolitan and County Sanitation No. 2 of Los Angeles County (Sanitation District) are working together to develop a Regional Recycled Water Program (Program). The objective of the Program is to produce up to 150 million gallons per day (MGD) of advanced treated water (AWT Water) from a new advanced water treatment (AWT) facility located at the Sanitation District's Joint Water Pollution Control Plant in Carson, California (Metropolitan AWT Facility). The Program's development may be phased, starting at lower levels of production with the potential to build up to 150 MGD of production as demands and conditions warrant.

C. If the Program is approved by Metropolitan's Board of Directors, it will also include plans for the development of a conveyance system consisting of approximately 60 miles of pipeline and a series of pump stations (AWT Conveyance System). The AWT Conveyance System could potentially deliver up to 150 MGD of AWT Water to the Central, West Coast, Orange County and Main San Gabriel Groundwater Basins for indirect potable reuse (IPR) through replenishment of those Basins. Delivery locations along the alignment will consist of either existing or new groundwater spreading basins or new or existing injection wells.

D. The AWT Conveyance System could also deliver some of the AWT Water to Member Agencies in the Los Angeles and Long Beach Harbor areas for delivery to industrial customers of those Member Agencies. Additionally, some of the AWT Water may be delivered through an extension of the AWT Conveyance System to certain Metropolitan treatment plants for direct potable reuse (DPR) through raw water augmentation.

E. Water rights have been adjudicated in the West Coast Basin and Central Basin (the "Basins") according to the Judgment in Los Angeles County Superior Court; Civil Action No. C786656 entitled "Central and West Basin Water Replenishment District, etc. v. Charles E. Adams, et al., and Civil Action No. C506806 entitled "California Water Service Co., et. al. vs City of Compton, et al. (herein collectively referred to as "the Judgments"), which have been amended over time. The Judgments also establish a Watermaster, which includes three bodies: 1) the Administrative Body, comprised of WRD, who administers the Watermaster accounting and reporting functions, 2) the Water Rights Panel, comprised of water rights holders who are selected through election and/or appointment, enforces issues related to pumping rights within the Judgments, and 3) the Storage Panel, which is

comprised of the Water Rights Panel and the WRD Board of Directors, who together approves certain groundwater storage efforts. WRD's service area overlies the Basins and engages in activities of capturing, purchasing, and producing supplemental water for replenishing the Basins. Long Beach is a water rights holder under the Judgments for the Central Basin and is a member agency of Metropolitan. Torrance is a water rights holder under the Judgment for the West Coast Basin and is a member agency of Metropolitan. Long Beach and Torrance purchase water from Metropolitan and are capable of selling water to WRD for replenishment of the Basins.

F. WRD is leading the development of a Regional Brackish Water Reclamation Program (Brackish Program) to remediate a brackish groundwater plume in the West Coast Basin and utilize unused groundwater rights to provide to a new water supply for potable consumption. WRD and the Brackish Program Stakeholders are currently completing a Feasibility Study to evaluate potential project location, capacities, and treatment technologies. WRD and the Stakeholders have identified Brackish Program capacity alternatives of up to 20,000 acre-feet per year. If the Brackish Program is finalized and approved by the WRD Board of Directors, it will also include a groundwater replenishment component to mitigate basin water level impacts and constrain plume migration. Replenishment scenarios, locations and quantities are still in development. Torrance is one of several Stakeholders participating in the Regional Brackish Water Reclamation Program and is interested in purchasing and receiving AWT Water by Metropolitan via the AWT Conveyance System to meet WRD's additional replenishment demands associated with the Brackish Program.

G. Furthermore, as specified in the Judgments, there exists a total of 450,000 acre-feet of available dewatered space within the Basins (330,000-acre-feet total in the Central Basin and 120,000 acre-feet in the West Coast Basin). That dewatered space is allocated between the Adjudicated Storage Capacity and a Basin Operating Reserve. In accordance with the Judgments, WRD may use the Basin Operating Reserve to manage available sources of water and otherwise fulfill its replenishment functions. As parties to the Judgments, Long Beach and Torrance may utilize the space available in the Adjudicated Storage Capacity for groundwater storage and/or augmentation projects in the Basins, by any means authorized under the Amended Judgments.

H. The WRD Board of Directors has recently adopted the "WIN 4 ALL" Program to work with the pumping community, including Long Beach and Torrance, to plan and develop groundwater storage and augmentation projects that will utilize the available dewatered space within the Basins for increased regional sustainability and to provide water supply resiliency. The AWT supplies developed within the Program could serve as a potential water supply source for future groundwater augmentation and storage project development. As Metropolitan member agencies, Long Beach and Torrance could serve as purchasers of AWT supplies from the Program for projects developed within the WIN 4 ALL Program.

I. Due to the size, complexity and anticipated capital investment required of Metropolitan for the Program, it will be beneficial for all Parties to coordinate and collaborate, as appropriate, during the developmental stages of the Program. Such coordination and collaboration will ensure that the system is planned, designed, constructed and operated in a manner consistent with the best interests of the Parties and to ensure delivery of AWT Water into the Basins is feasible. Coordination and collaboration between the Parties is also necessary to ensure the development of a commitment by Long Beach and Torrance to purchase AWT Water from the Program.

TERMS

1. INTENT OF THE PARTIES:
   a. The Parties intend to develop a plan to ensure that deliveries of any AWT Water produced by the Program can be introduced into the Basins. To that end, the Parties intend to:
      i. Collaborate to provide all information any regulatory agency may need to approve introduction of AWT Water into the Basins;
      ii. Identify and examine potential water quality issues and specifications related to the Program that may affect the any regulatory agency's approval for introduction of AWT Water into the Basins;
      iii. Identify any related research, testing, and other technical work necessary to address any concerns raised by any regulatory agency in connection with approval of introduction of AWT Water into the Basins;
      iv. Collaborate on regulatory developments related to introduction of AWT Water into the Basins;
      v. Develop plans for any new infrastructure that may be necessary to introduce AWT Water into the Basins; and
      vi. Develop additional areas for collaboration and support, as identified by the Parties.
   b. It is the intent of the Parties to collaborate in the development of a set of agreements between the Parties setting forth:
      i. The cost of obtaining AWT Water;
      ii. Locations of infrastructure to deliver AWT Water into the Central and West Coast Basins; and
      iii. The long-term purchase and receipt of up to 81,000 AFY of AWT Water in total by Long Beach and WRD via MWD member agencies, including Long Beach and Torrance, to be used for groundwater replenishment, augmentation, and storage projects within the Basins and for commercial and industrial purposes in the Harbor areas.

2. NON-BINDING INTENT

The provisions of this LOI represent a statement of the Parties' general intent only, and shall not be binding on either Party. No Party shall have any obligation to enter into any agreement listed in Section 1.b., or otherwise, and no course of conduct of the Parties shall evidence any binding obligations. Each Party fully understands that the terms and conditions of any agreements developed pursuant to Section 1.b. are subject to approval by the Board of Water Commissioners of the City of Long Beach, the City Council of Torrance, the Board of Directors of WRD, and the General Manager and the Board of Directors of Metropolitan. No Party shall have any legal obligations to the other unless and until all of the terms and conditions of each of the proposed agreements have been negotiated and agreed to by all Parties and set forth in the agreements, approved by the legislative bodies of all Parties, and signed and delivered by all Parties.

3. NOTICES AND CORRESPONDENCE

Any notice or correspondence under this LOI must be in writing and addressed as follows:

The Metropolitan Water District of Southern California
Post Office Box 54153
Los Angeles, CA 90054-0153
Attn: John Bednarski, Group Manager, Engineering Services
With a courtesy copy by email to: jbednarski@mwdh2o.com

Long Beach Water Department
1800 E. Wardlow Road
Long Beach, CA 90807
Attn: Christopher J. Garner, General Manager
With a courtesy copy by email to: dean.wang@lbwater.org

City of Torrance
20500 Madrona Avenue
Torrance, CA 90503
Attn: Craig Bilezerian, Public Works Director
With courtesy copies by email to: adarlak@torranceca.gov
: cschaich@torranceca.gov
: mknapp@torranceca.gov

Water Replenishment District of Southern California
4040 Paramount Boulevard
Lakewood, CA 90712
Attn: Robb Whitaker, General Manager
With a courtesy copy by email to: dgatza@wrd.org

A properly addressed notice will be effective on the day of delivery, if delivered directly by a Party or by a nationally recognized delivery service, or on the third day after mailing, if sent postage prepaid by U.S. Mail. The Parties shall transmit a courtesy copy of any notice to the other Party by email on the day the notice is sent.

Either Party may change the address listed in this section by providing five days' notice to the other Party.

4. COUNTERPARTS

This Agreement may be executed in counterparts, and signatures transmitted via facsimile or electronic mail shall be deemed to be originals.

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Jeffrey Kightlinger

By: _____
General Manager

Date: 9/10/20

APPROVED AS TO FORM:

Marcia Scully

By: _____
General Counsel

BOARD OF WATER COMMISSIONERS OF THE CITY OF LONG BEACH, ACTING FOR AND ON BEHALF OF THE CITY OF LONG BEACH AND ON ITS OWN BEHALF

Christopher J. Garner

By: _____

General Manager

Date: 8/12/20

APPROVED AS TO FORM & LEGALITY:

Charles Parkin, City Attorney

By: _____

Deputy City Attorney

CITY OF TORRANCE

Patrick J. Furey

By: _____

Mayor

Date: _____

ATTEST:

Rebecca Poirier,MMC

BY: _____

City Clerk

APPROVED AS TO FORM:

Patrick Q Sullivan

By: _____

City Attorney

BOARD OF WATER COMMISSIONERS OF THE CITY OF LONG BEACH, ACTING FOR AND ON BEHALF OF THE CITY OF LONG BEACH AND ON ITS OWN BEHALF

Christopher J. Garner

By: _____
General Manager

Date: _____

APPROVED AS TO FORM & LEGALITY:

Charles Parkin, City Attorney

By: _____
Deputy City Attorney

CITY OF TORRANCE

Patrick J. Furey

By: _____
Mayor

Date: 7/20/2020

ATTEST:

Rebecca Poirier,MMC

BY: _____
For City Clerk Rebecca Poirier

APPROVED AS TO FORM:

Patrick Q Sullivan

By: JOCELYN N. SARIGUMBA
FOR City Attorney

WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA

Robb Whitaker

By: _____
General Manager

Date: 8/20/2020

APPROVED AS TO FORM & LEGALITY:

H. Francisco Leal

By: _____
District Counsel

4. Los Angeles County Flood Control District

LETTER OF INTENT TO COLLABORATE ON THE DEVELOPMENT OF A FUTURE MEMORANDUM OF UNDERSTANDING RELATED TO ADVANCED TREATED WATER DELIVERY SYSTEMS BETWEEN THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA AND THE LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

This LETTER OF INTENT (LOI) is made by and between THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA (Metropolitan) and the LOS ANGELES COUNTY FLOOD CONTROL DISTRICT (LACFCD), who may be referred to individually as "Party" or collectively as "Parties."

BACKGROUND

A. Metropolitan and County Sanitation No. 2 of Los Angeles County (Sanitation District) are working together to develop a Regional Recycled Water Program (Program). The objective of the Program is to produce up to 150 million gallons per day (MGD) of advanced treated water from a new advanced water treatment (AWT) facility located at the Sanitation District's Joint Water Pollution Control Plant in Carson, California (Metropolitan AWT Facility). The Program's development may be phased, starting at lower levels of production with the potential to build up to 150 MGD of production as demands and conditions warrant.

B. If the Program is finalized and approved by Metropolitan's Board of Directors, it will also include plans for the development of a conveyance system consisting of approximately 60 miles of pipeline and a series of pump stations (AWT Conveyance System). The AWT Conveyance System could potentially deliver up to 150 MGD of treated water to the Central, West Coast, Orange County and Main San Gabriel Groundwater Basins. The alignment of the AWT Conveyance System could potentially include facilities and property owned by the LACFCD and delivery locations along the alignment could potentially include existing groundwater spreading basins operated by the LACFCD. Metropolitan has divided the pipeline alignment into five segments for consideration of a phased construction approach.

C. Due to the size, complexity and anticipated capital investment required of the Program, Metropolitan desires to coordinate and collaborate with the LACFCD, as appropriate, during the developmental stages of the Program. Such coordination and collaboration will help ensure that the AWT Conveyance System is planned, designed, constructed, and operated in a manner consistent with the facilities and property of the LACFCD, and will enable the parties to explore the feasibility and desirability of utilizing the facilities and property of the LACFCD in the AWT Conveyance System.

TERMS

1. INTENT AND COMPONENTS:

   a. It is the intent of the Parties to collaborate in the development of a potential future MOU memorializing the respective roles and responsibilities of the Parties in regard to a cooperative study of the feasibility, benefits and challenges of utilizing the facilities and property of the LACFCD in the AWT Conveyance System.

   b. The cooperative study could include the following topics:

      i. Help ensure continuity and compatibility of the AWT Conveyance System with LACFCD's facilities, operations, and property;
      ii. Identify and examine potential water quality issues and specifications related to utilizing the LACFCD's facilities and property in the AWT Conveyance System;
      iii. Identify related research, testing, and other technical collaborations;
      iv. Identify potential opportunities for collaboration on regulatory developments related to the Program and LACFCD's facilities, operations, and property; and
      v. Identify additional areas for collaboration and mutual support.

   c. The Parties intend that the potential future MOU could include collaboration on any additional, more detailed studies that the Parties determine are necessary to evaluate the feasibility, benefits and challenges of utilizing the facilities and property of the LACFCD in the AWT Conveyance System. These studies may include the economic and technical feasibility, financing needs, right of way and permitting requirements, environmental and regulatory compliance obligations, brine discharge requirements, and engineering, construction, operational, and water quality specifications.

2. The provisions of this LOI represent a statement of the Parties' general intent only and shall not be binding on either Party. Neither Party shall have any obligation to enter into any MOU, and no course of conduct of the Parties shall evidence any binding obligations. Each Party fully understands that whether or not to enter into any future MOU as well as the terms and conditions of that MOU are subject to approval by the Chief Engineer of the Los Angeles County Flood Control District or its Board of Supervisors, as appropriate, and the Metropolitan Board of Directors, and that no Party shall have any legal obligations to the other unless and until all of the terms and conditions of the proposed MOU have been negotiated and agreed to by all Parties and set forth in the proposed MOU, and signed and delivered by all Parties.

3. NOTICES

   Any notice under this LOI must be in writing and addressed as follows:

The Metropolitan Water District of Southern California
Post Office Box 54153
Los Angeles, CA 90054-0153
Attn: John Bednarski, Group Manager, Engineering Services
With a courtesy copy by email to: jbednarski@mwdh2o.com

Los Angeles County Flood Control District
900 S. Fremont Ave.
Alhambra, CA 91803
Attn: Dan Lafferty, Deputy Director
With a courtesy copy by email to: dlaff@dpw.lacounty.gov

A properly addressed notice will be effective on the day of delivery, if delivered directly by a Party or by a nationally recognized delivery service, or on the third day after mailing, if sent postage prepaid by United States. Mail. The Parties shall transmit a courtesy copy of any notice to the other Party by email on the day the notice is sent.

Either Party may change the address listed in this section by providing five days' notice to the other Party. The Parties are signing this LOI in duplicate originals.

4. COUNTERPARTS

This LOI may be executed in counterparts, and signatures transmitted via facsimile or electronic mail shall be deemed to be originals.

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
Jeffrey Kightlinger

By: _____
General Manager

Date: 8/18/20

APPROVED AS TO FORM:
Marcia Scully

By: _____
General Counsel

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT,
A body corporate and politic

By _____
For Chief Engineer

Date: 8/5/20

APPROVED AS TO FORM:

MARY C. WICKHAM
County Counsel

By _____
Deputy

5. Southern Nevada Water Authority

LETTER OF INTENT TO COLLBORATE ON THE DEVELOPMENT OF A FUTURE DEVELOPMENT AGREEMENT RELATED TO ADVANCED TREATED WATER DELIVERY SYSTEMS BETWEEN THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA AND THE SOUTHERN NEVADA WATER AUTHORITY

This LETTER OF INTENT ("LOI") is made by and between THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA ("Metropolitan") and the SOUTHERN NEVADA WATER AUTHORITY ("SNWA"), who may be referred to individually as "Party" or collectively as "Parties."

BACKGROUND

A. SNWA is a Nevada joint powers authority and political subdivision of the State of Nevada, created by agreement dated July 25, 1991, as amended November 17, 1994, and January 1, 1996, pursuant to Nevada Revised Statutes § 277.180, inclusive. Metropolitan is a water district established under the California Metropolitan Water District Act, codified in Section 109-1 et seq., of the Appendix to the West's Annotated California Water Code, for the purpose of serving water to the coastal plain of southern California. The Parties have collaborated on previous projects and agreements involving water supplies and continue to seek new strategies to help maximize the availability of limited water supplies.

B. Metropolitan and SNWA are working together to develop a Regional Recycled Water Program ("Project"). The objective of the Project is to produce up to 150 million gallons per day ("MGD") of advanced treated water from a new advanced water treatment ("AWT") facility located at Los Angeles County Sanitation District's Joint Water Pollution Control Plant in Carson, California ("Metropolitan AWT Facility"). The Project's development may be phased, starting at lower levels of production with the potential to build up to 150 MGD of production as demands and conditions warrant.

C. If the Project is finalized and approved by Metropolitan's Board of Directors, it will also include plans for the development of a conveyance system consisting of approximately 60 miles of pipeline and a series of pump stations ("AWT Conveyance System"). The AWT Conveyance System could potentially deliver up to 150 MGD of treated water to the Central, West Coast, Orange County and Main San Gabriel Groundwater Basins. Delivery locations along the alignment will consist of either existing groundwater spreading basins, new or existing injection wells, or industrial customers of Member Agencies in the Los Angeles and Long Beach Harbor areas, or raw water augmentation. Metropolitan has divided the pipeline alignment into five segments for consideration of a phased construction approach.

D. Due to the size, complexity and anticipated capital investment required for the Project, SNWA will assist in the Project development by providing resources to assist with the planning, design, and construction of the Project. These resources may include, but are not limited to, time, materials, expertise, and financial investment.

E. The Parties intend to exchange Project water volumes for MWD Colorado River allocation water volumes, conditioned upon final Project authorization and pursuant to the terms of the Development Agreement.

TERMS

1. **Intent**: It is the intent of the Parties to lay the foundation for a cooperative working relationship, to establish the role of each Party in that relationship as they continue to work together to further their common goal of developing the Project, and to lay the foundation for a joint development agreement to develop the Project and allocate future water disbursements ("Development Agreement").

2. **Additional Parties**: The Parties recognize that other entities may be of assistance from time to time in various capacities and that the Parties may desire to add such entities as Parties to this LOI or to the Development Agreement. Accordingly, the Parties may at any time agree in writing to add Parties to this LOI, and anticipate including within the Development Agreement provisions for the addition of Parties by mutual, written consent.

3. **Development Agreement**: The Parties anticipate that the Development Agreement will describe the scope of the Project, including studies, planning, design, and construction; describe the distribution and allocation of resources to be provided by each Party toward the development of the Project; commit the Parties to future water distributions upon Project completion; and provide for the ongoing relationship between the Parties as it relates to the Project upon Project completion. Ancillary agreements with third parties may also be necessary as will regulatory changes. The Parties will cooperate to implement such agreements and regulations, inclusive of Colorado River operational rules providing any necessary flexibility for contemplated water exchanges.

4. **Project Representative**: Each Party will designate a project representative to represent the Parties on all issues relating to the Project. Within 30 days of the execution of this LOI, the Parties will identify their respective Project Representative through the notice provisions provided in Section 8 this LOI.

5. **Project Workplans**: Prior to executing the Development Agreement, the Parties may develop a project workplan ("Project Workplan") that will define tasks to be completed, an approximate schedule for completing the tasks, and, if necessary, the funding or personnel requirements for such tasks. The Project Representatives will oversee the task of developing the Project Workplan and shall review and revise the Project Workplan as necessary.

6. **Technical Collaboration**: The Parties acknowledge that the Project will require advanced technical skills and expertise and that sharing such information is an essential component of their collaboration. To support technical collaboration throughout the Project, the Parties agree to:

   a. Share information and technology to the greatest extent allowable under their governing legislation and confidentiality requirements;

   b. Reasonably provide personnel as necessary to assist in implementing shared information and technology;

   c. Subject to applicable public records laws, maintain all records of Parties in the strictest confidence and use them solely for purposes directly related to such services or as required by law;

   d. Develop technological enhancements that allow interfaces of common information needs, as appropriate; and

e. Ensure that sufficient system security provisions shall be utilized by the Parties.

7. **Funding and SNWA Staff Time**:

a. If necessary, funding for the Project prior to the effective date of the Development Agreement will be provided for in a Project Workplan. The Parties agree that such funding will come from a variety of sources. However, the Parties understand that they will each be responsible for a share of the costs related to the Project.

b. SNWA's participation in funding for the Project will require approval from the SNWA Board of Directors. Until such approval, SNWA may commit SNWA staff time and resources necessary to facilitate the development process in a timely manner and may assume and be responsible for all internal costs associated with that process, including, but not limited to, the costs of reviewing, analyzing, and commenting upon the Project, environmental studies and review, Project Workplans, Transaction Documents, lobbying efforts, and necessary reports.

c. The ability to complete the services identified in this LOI are contingent upon the availability of sufficient funds in the budgets approved by the Parties' respective governing bodies.

8. **Non-Binding**: The provisions of this LOI represent a statement of the Parties' general intent only, and shall not be binding on either Party. Neither Party shall have any obligation to enter into the Development Agreement, and no course of conduct of the Parties shall evidence any binding obligations.

9. **Notices**: Any notice under this LOI must be in writing and addressed as follows:

The Metropolitan Water District of Southern California
Post Office Box 54153
Los Angeles, CA 90054-0153
Attn: Deven Upadhyay
With a courtesy copy by email to DUpadhyay@mwdh2o.com

Southern Nevada Water Authority
1001 South Valley View Boulevard
Las Vegas, NV 89153
Attn: General Manager
With a courtesy copy by email to greg.walch@lvvwd.com

A properly addressed notice will be effective on the day of delivery, if delivered directly by a Party or by a nationally recognized delivery service, or on the third day after mailing, if sent postage prepaid by U.S. Mail. The Parties shall transmit a courtesy copy of any notice to the other Party by email on the day the notice is sent.

Either Party may change the address listed in this section by providing five days' notice to the other Party.

[Signatures Next Page]

The Parties are signing this LOI in duplicate originals.

SOUTHERN NEVADA WATER AUTHORITY

By: _____
John J. Entsminger
General Manager

Date: 3.12.20

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

By: _____
Jeffrey Kightlinger
General Manager

Date: March 12, 2020

6. Central Arizona Project/Arizona Department of Water Resources

1110 W Washington St. Suite 310 - Phoenix, AZ 85007 - 602-771-8500

CAP CENTRAL ARIZONA PROJECT
P.O. Box 43020 - Phoenix, AZ 85080 - 623-869-2333

August 26, 2020

Gloria D. Gray, Chairwoman
Metropolitan Water District of Southern California
P.O. Box 54153
Los Angeles, CA 90054-0153

Dear Chairwoman Gray:

The Arizona Department of Water Resources (ADWR) and the Central Arizona Water Conservation District (CAWCD) would like to pursue collaborative efforts toward the development of the Metropolitan Water District of Southern California's (MWD) Regional Recycled Water Program (Project). The Project will purify wastewater to produce high quality water that could be reused and potentially offset use of imported water supplies including Colorado River water.

ADWR and CAWCD believe that significant opportunities to augment the Colorado River could emerge from MWD's Project. Supply augmentation supports our mutual interest– increasing the reliability and resiliency of the Colorado River water supply. Over the years, water managers across the Colorado River basin have worked collectively to address the shared goals of increasing the reliability and resiliency of the water supply provided by the Colorado River through conservation and augmentation. CAWCD, in partnership with MWD and the Southern Nevada Water Authority ("SNWA") have jointly invested in water conservation and augmentation projects such as Brock Reservoir, the Pilot Operation of the Yuma Desalting Plant, and the Pilot System Conservation Project. More recently, ADWR, MWD, SNWA, and Colorado River Commission of Nevada (CRC-NV) entered into an ICS capacity sharing agreement to more effectively use the available ICS storage capacity provided in the Lower Basin Drought Contingency Plan ("LBDCP"). Moreover, one of the goals of the Governor's Water Augmentation, Innovation and Conservation Council, established by Arizona Governor Doug Ducey, is to investigate long-term water augmentation strategies for the state of Arizona. ADWR and CAWCD recognize the potential for MWD's Project to augment Colorado River supplies in the Lower Basin, including supplies that could benefit water users in Arizona.

ADWR and CAWCD are pleased to submit this Letter of Interest in participating with MWD on development of the Project including collaborating on any regulatory changes that may be necessary to facilitate potential exchanges of augmented Lower Basin Colorado River supplies. We look forward to continuing our long history of cooperation and collaboration as we work toward opportunities that will benefit the entire Lower Colorado River Basin.

Sincerely,

Thomas Buschatzke
Director
Arizona Department of Water Resources

Theodore C. Cooke, D.B.A.
General Manager
Central Arizona Water Conservation District

Item No. 4

DISCUSSION ITEM
November 4, 2020

TO: **Board of Directors**

FROM: **Robert Hunter, General Manager**

Staff Contact: Harvey De La Torre
Melissa Baum-Haley

SUBJECT: **METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INTEGRATED RESOURCES PLAN (IRP) DISCUSSION SERIES PART 10**

STAFF RECOMMENDATION

Staff recommends the Board of Directors discuss and file this information.

REPORT

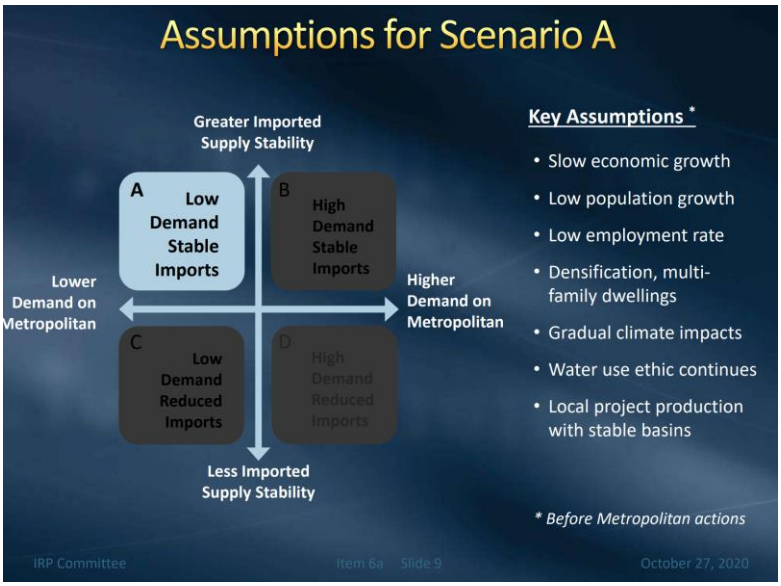
At the October 27 IRP Special Committee Meeting, Metropolitan staff provided discussion on the draft scenario assumptions and examples of preliminary analysis (presentation attached).

The current scenario framework iteration is based on combinations of stable/reduced imported water stability in conjunction with higher/lower demands on Metropolitan. These axes amplify the core objectives of the IRP and provide a common-sense explanation of the impacts to be identified.

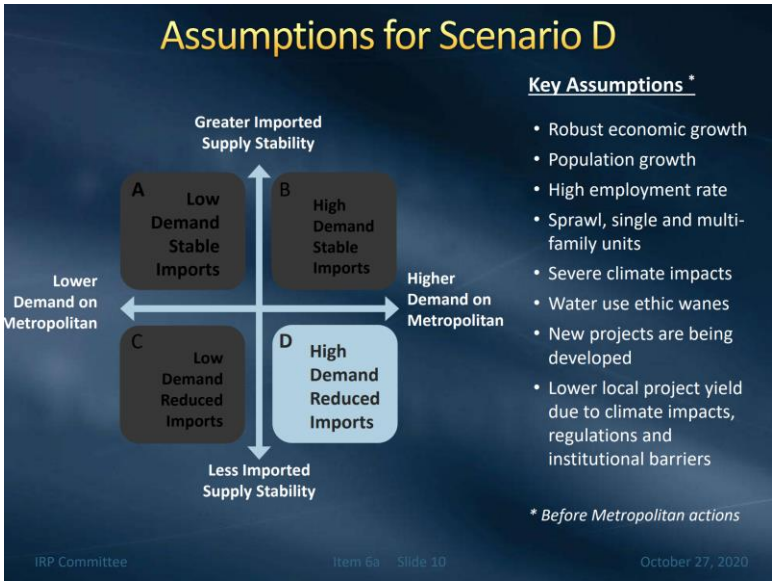
The following are examples of bookends of potential scenario descriptions and assumptions that would result in the largest and smallest gaps:

- Scenario A - *Lower demand on Metropolitan and stable imports (smallest gap, if any):* This scenario would be driven by a combination of plentiful regional and local supplies, a struggling economy, low population growth, and a strengthening water use ethic across the state. Member agency efforts to reduce their dependence on Metropolitan would have also succeeded.

Budgeted (Y/N): N/A	Budgeted amount: None	Core _X_	Choice __
Action item amount: N/A	Line item:		
Fiscal Impact (explain if unbudgeted):			



- Scenario D - *Higher demand on Metropolitan and reduced imports (largest gap):* This scenario would be driven by severe climate impacts affecting both imported and local supplies. Demands on Metropolitan would increase due to the loss of local groundwater supply as well as impaired yield on the Los Angeles Aqueduct. Losses in regional imported supplies would be equally dramatic. All this would be occurring during a period of population and economic growth.



The next step will be to quantify how drivers of change might inform each of these scenarios, and ultimately develop the results of the Gap Analyses. Each scenario will ultimately include a resource mix that could specifically address the scenario's situation. By comparing the resource mix across the scenarios, the Metropolitan Board will be able to recognize common elements for multiple scenarios as well as unique resource elements that might need to be implemented if the future tends toward that specific scenario.

The development of scenario assumptions and quantification will be an iterative process, with feedback requested for preliminary assumptions and analysis. The next step will be to refine the scenarios and policy discussion by the Metropolitan Board.

The next steps in the IRP process will follow the general schedule below:

- Construct Scenarios (October 2020 – December 2020)
    - October
        - Member Agency technical focus on local supplies and retail demand assumptions
    - November
        - Member Agency technical focus on imported supply assumptions and provide feedback on the draft Gap Analysis
    - December
        - Engage with expert panels
        - Metropolitan Board to review draft scenarios and Gap Analysis
        - Member Agency technical feedback on refined Gap Analysis
    - January
        - Metropolitan Board to continue policy discussions based on refined Gap Analysis
        - Engage with expert panels
- Develop Resource Mix (December 2020 – February 2021)
- Develop Adaptive Management Approach (February 2021 – March 2021)
- Draft IRP Report (April 2021)

Within the developed IRP Resource Mixes, there are potentially high stakes involved with the development of future investments. These Metropolitan investments could translate into higher Metropolitan water rates and charges. MWDOC staff believes the nature of the recommended work being conducted by the Brattle Group and CDM Smith will provide valuable information towards an improved understanding of where some of the policy issues may head.

The future reliability options within the IRP, and decisions about investments in reliability both at the Metropolitan level and by the local agencies in Orange County, are at stake. MWDOC staff believes these future investments will be large and having an improved understanding through the Economic Benefits Study, will result in a better understanding of the reliability impacts these investments may have. This will serve our staff, MWDOC Board, and MWDOC-MET Directors well in helping to represent our member agencies. It is important for our agencies to benefit from these efforts, which will result in an

improved understanding of how local decisions impact our collective and individual reliability.

Attachments: (1) Integrated Resources Plan Presentation on Draft Scenarios Assumptions and Preliminary Analysis

Draft Scenario Assumptions and Preliminary Analysis

Integrated Resources Plan Special Committee
Item 6a
October 27, 2020

Overview

- Recent Activity
- Scenario Development Update
  - Assumptions and quantification will be an iterative process
  - Feedback requested for preliminary assumptions and analysis
- Schedule and Next Steps
  - Refinement of scenarios and policy discussion

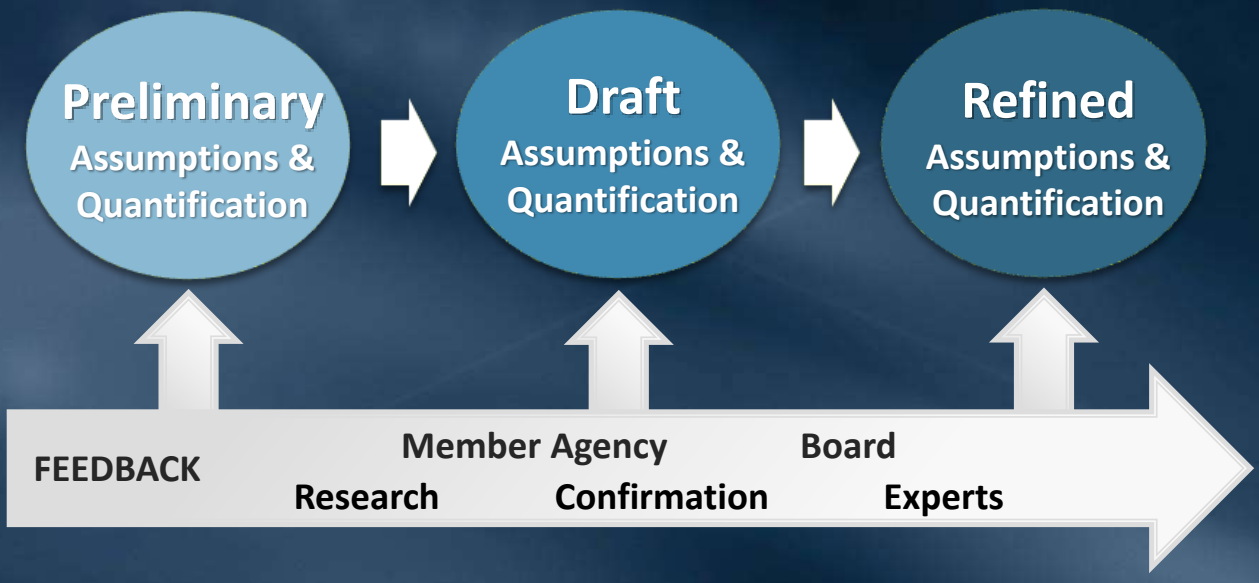
Recap of Activities

- Member Agency Collaboration
  - October 14 - Member Agency Technical Workgroup
  - October 16 – Member Agency Managers Meeting
  - Preliminary assumptions and quantification for two of the scenarios
- 2015 IRP Retrospective Report

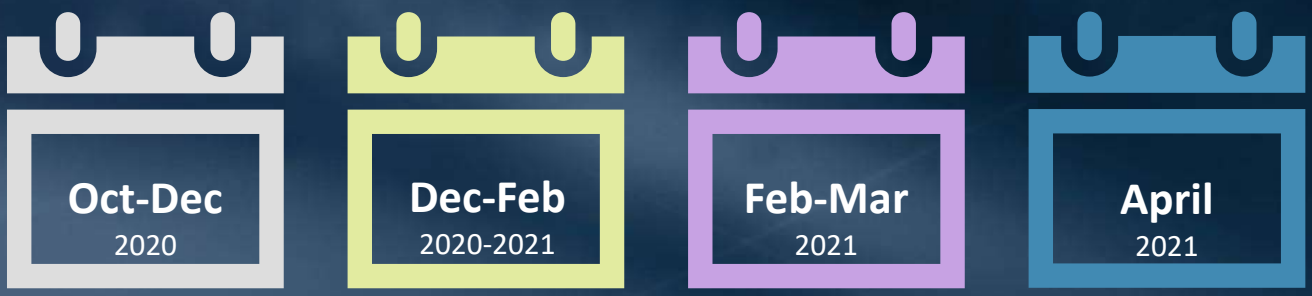
Outreach

- Timing for Next Stakeholder Outreach
  - Provide time to develop and refine scenarios with member agencies and Board
  - First quarter 2021
- Objectives
  - Obtain feedback on scenarios that have been reviewed by Member Agencies and Board
  - Relay stakeholder feedback to Board

Scenario Assumptions and Quantification Iterative Approach



IRP Schedule



STEP 2 Construct Scenarios

STEP 3 Develop Resource Mix

STEP 4 Develop Adaptive Management Approach

Draft IRP Report

IRP Schedule

Oct-Dec
2020

STEP 2
Construct Scenarios

MEMBER AGENCIES

October
- Focus on Local Supplies and Retail Demand assumptions

November
- Imported Supply assumptions
- Feedback on Draft Gap Analysis

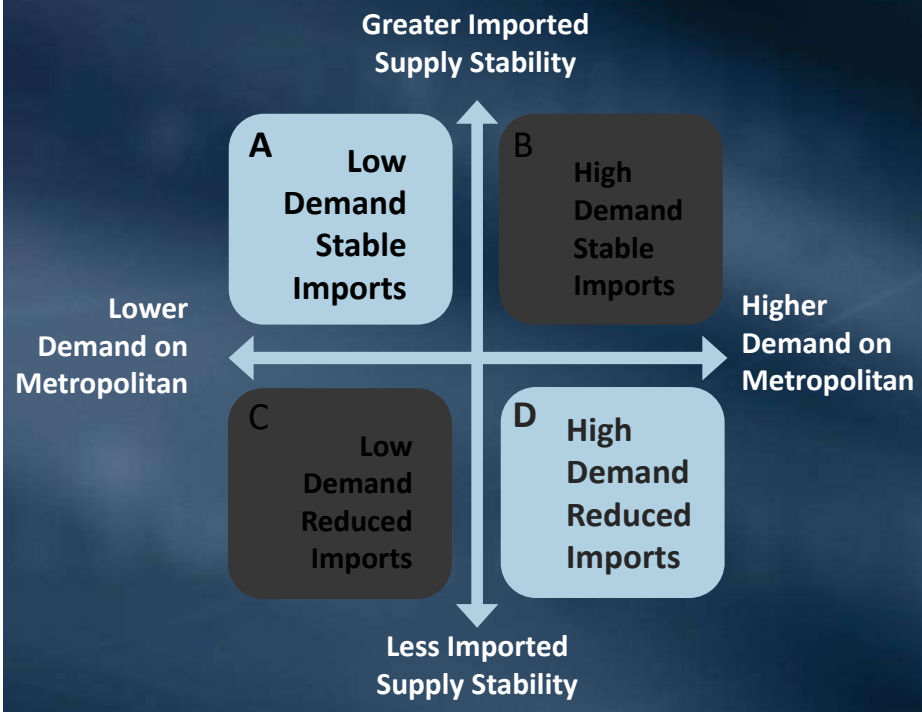
December
- Feedback on Refined Gap Analysis
- Engage with Experts

MWD BOARD

December
- Review Draft Scenarios and Gap Analysis
- Review proposed policy questions

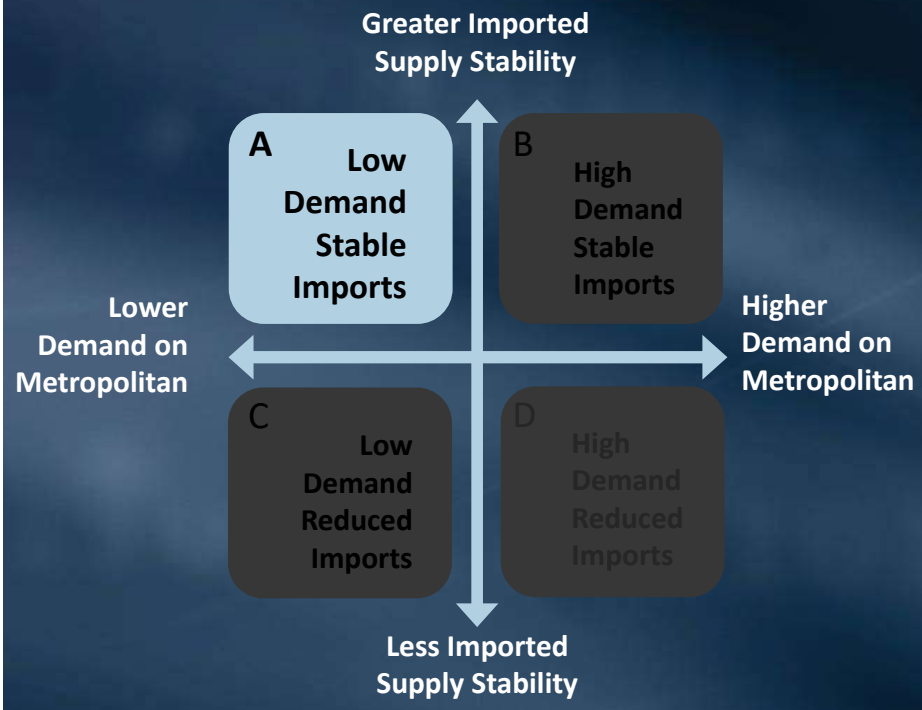
January
- Continue policy discussion based on Refined Gap Analyses
- Engage with Experts

Progress to date



- Draft Scenario Assumptions
- Focus on Retail Demand and Local Supply

Assumptions for Scenario A

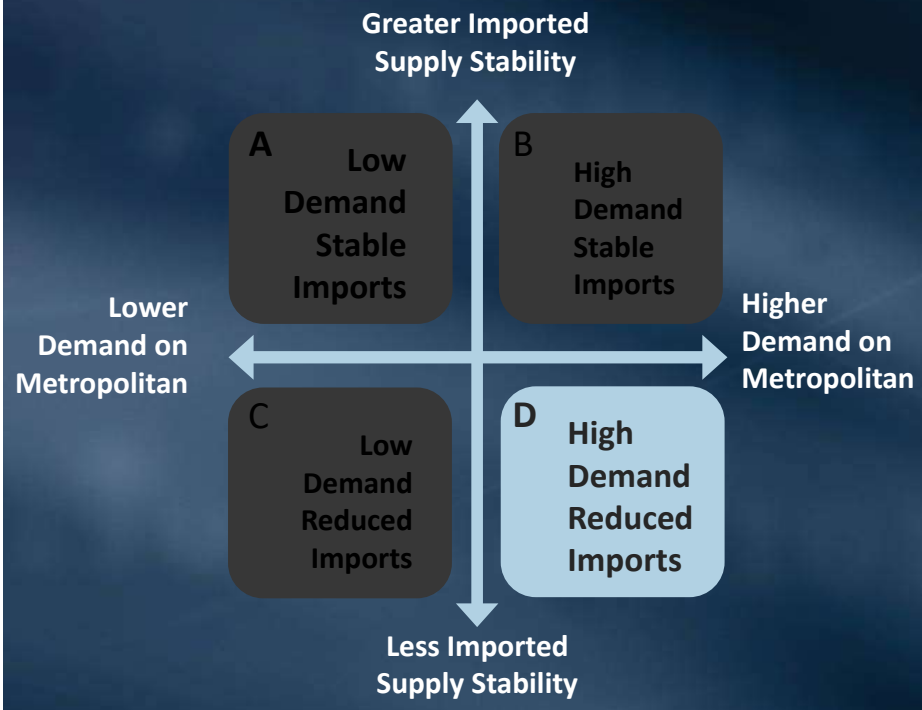


Key Assumptions *

- Slow economic growth
- Low population growth
- Low employment rate
- Densification, multi-family dwellings
- Gradual climate impacts
- Water use ethic continues
- Local project production with stable basins

** Before Metropolitan actions*

Assumptions for Scenario D



Key Assumptions *

- Robust economic growth
- Population growth
- High employment rate
- Sprawl, single and multi-family units
- Severe climate impacts
- Water use ethic wanes
- New projects are being developed
- Lower local project yield due to climate impacts, regulations and institutional barriers

** Before Metropolitan actions*

Relative Impacts of Assumptions

Relative to each scenario

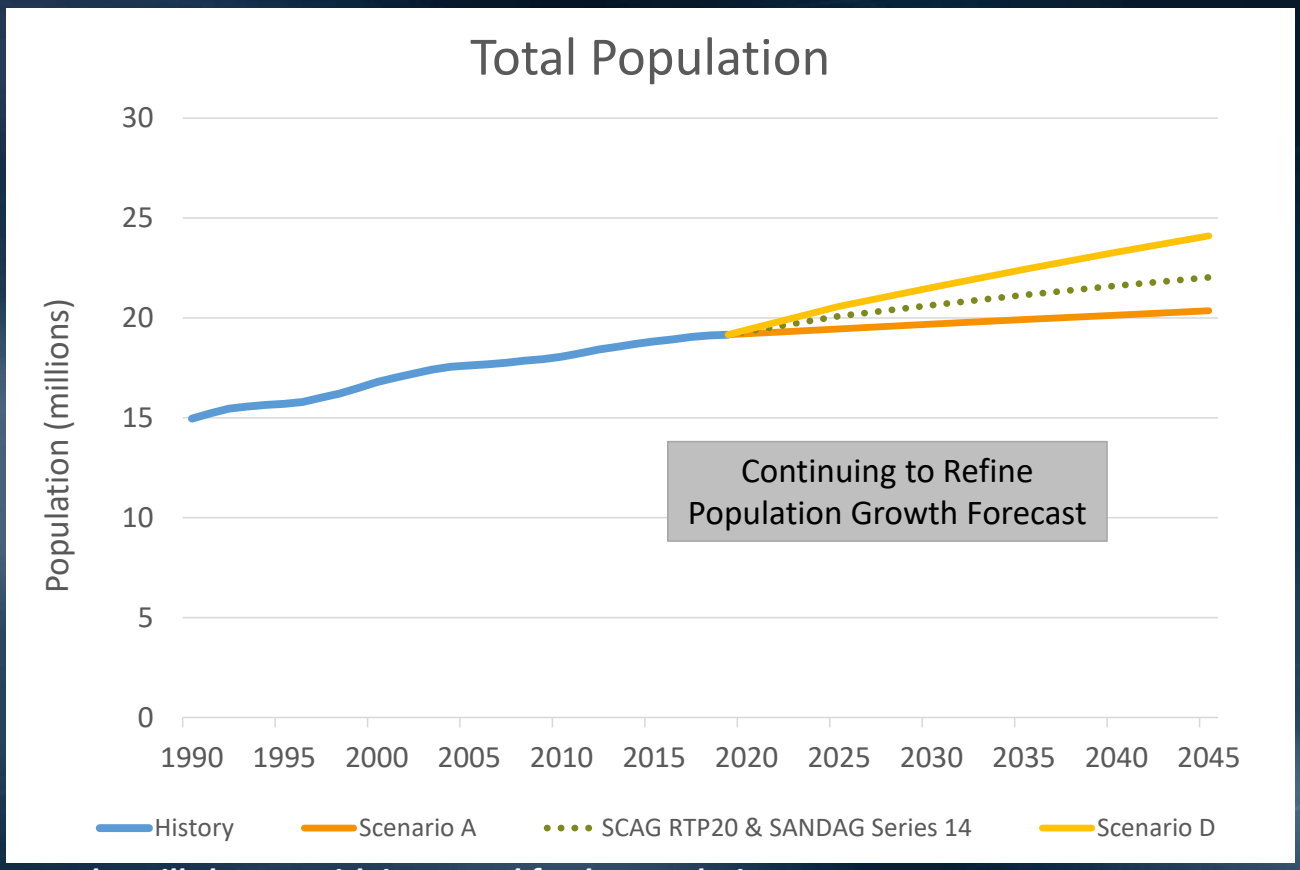
	SCENARIO A	SCENARIO D
Retail Demands		
Local Supply		
Imported Supply	STABLE	LESS STABLE
Demands on MWD		

Preliminary Analysis

Quantification of Supply/Demand Links

Results will change with input and further refinement of assumptions

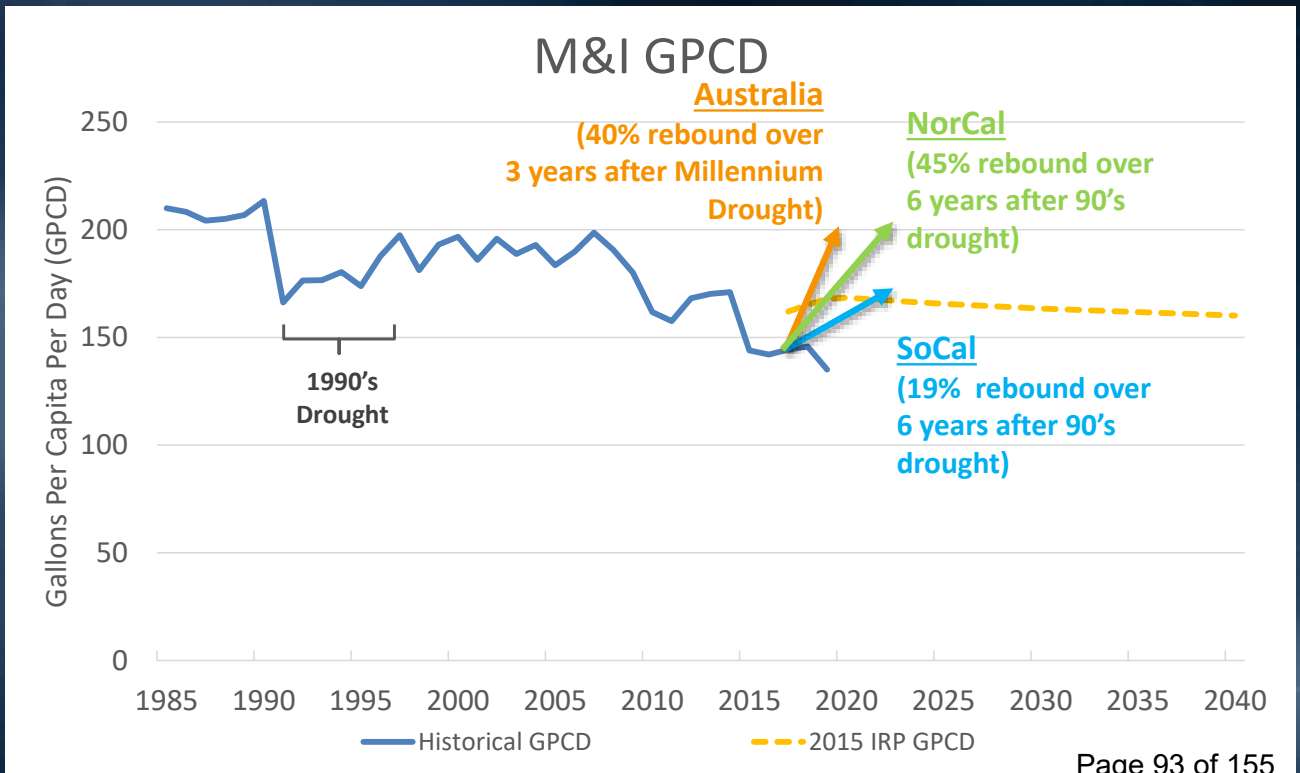
Preliminary Analysis Results



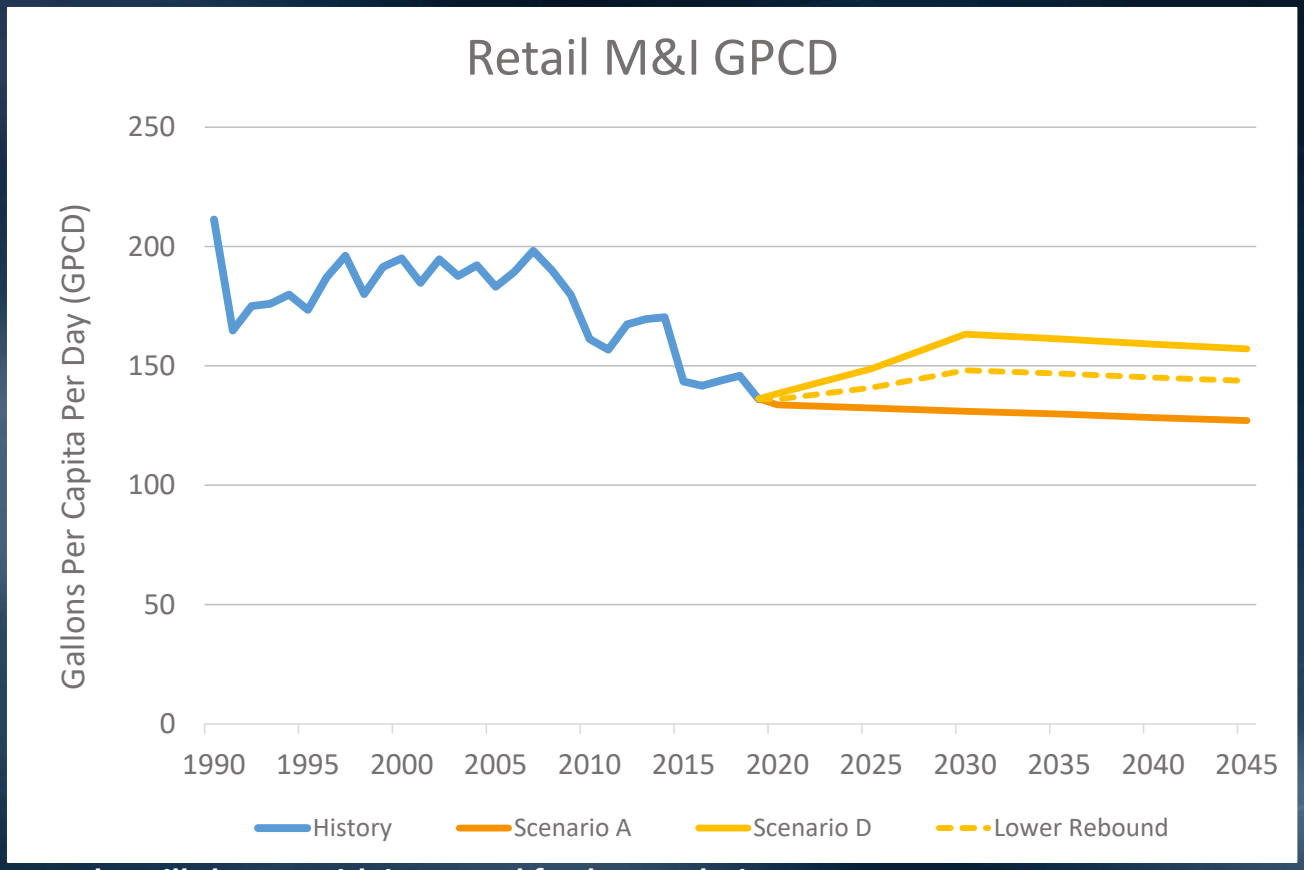
Results will change with input and further analysis

Retrospective Report

Analysis of Rebound Effect



Preliminary Analysis Results



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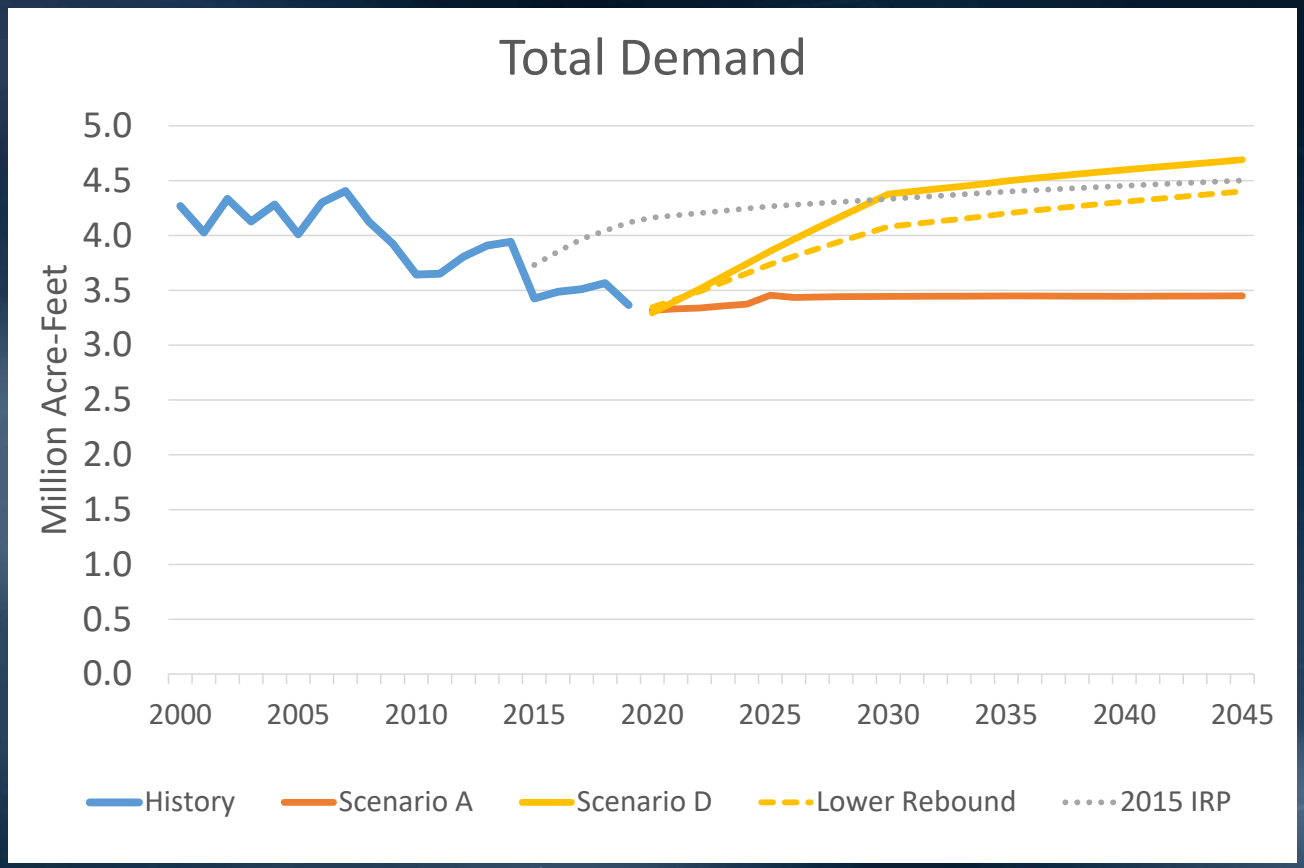
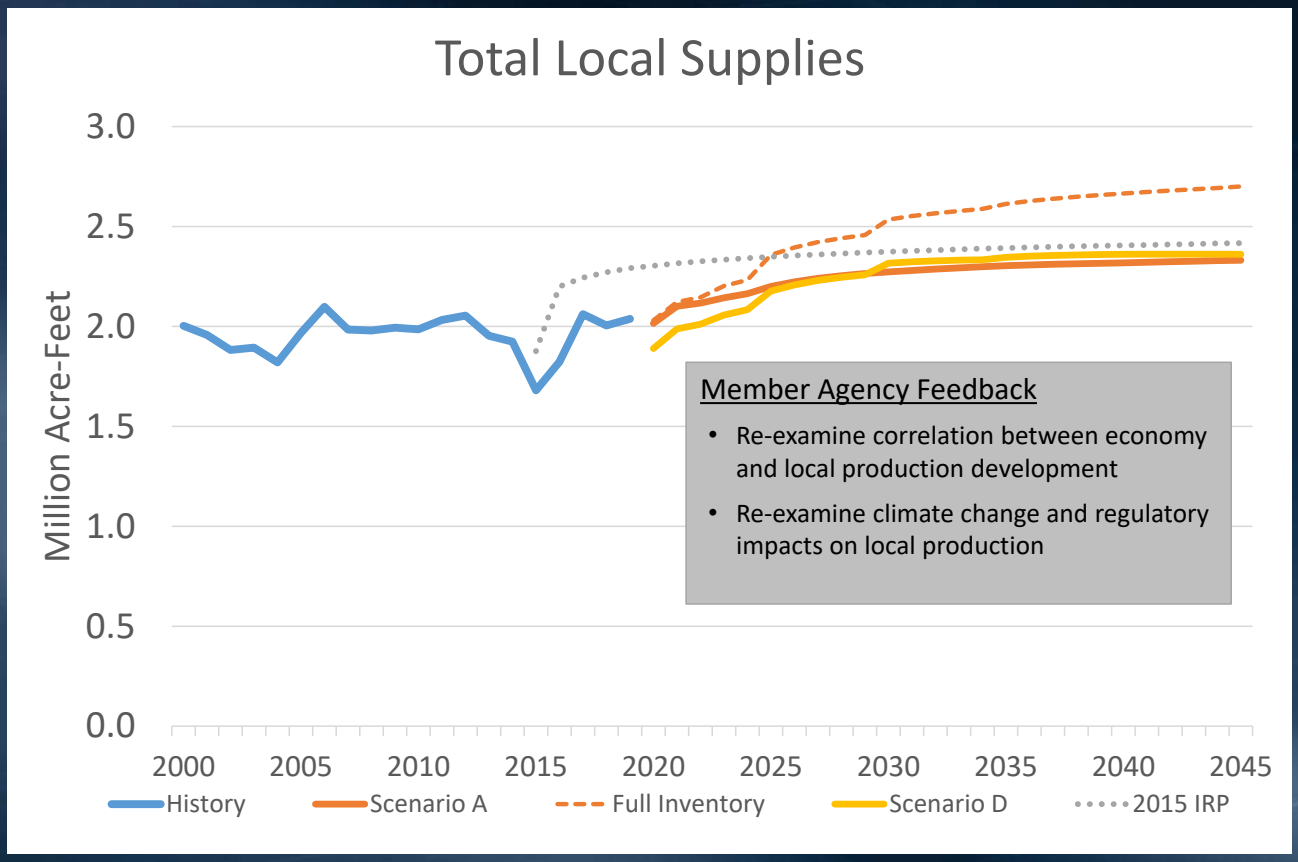
Preliminary Analysis Results



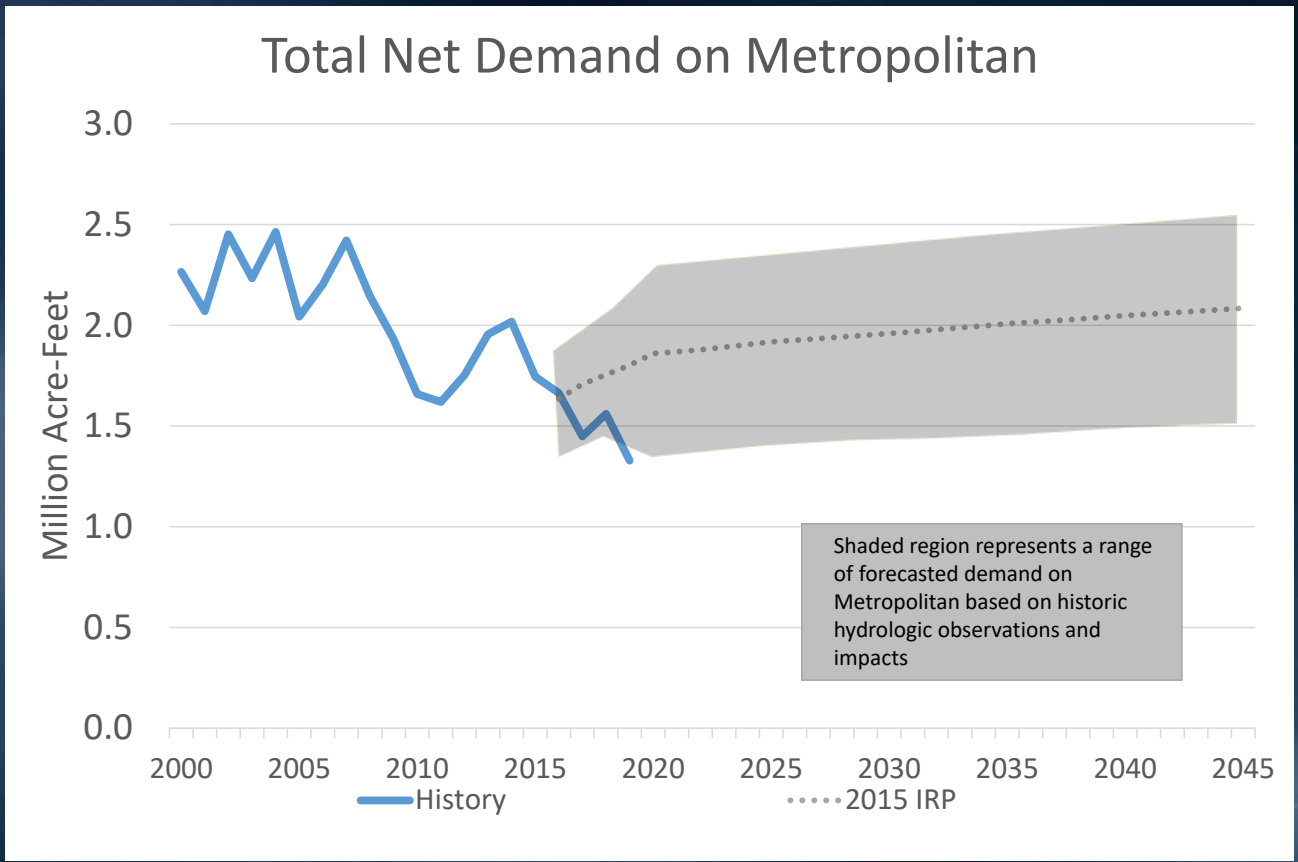
Results will change with input and further analysis

Preliminary Analysis Results



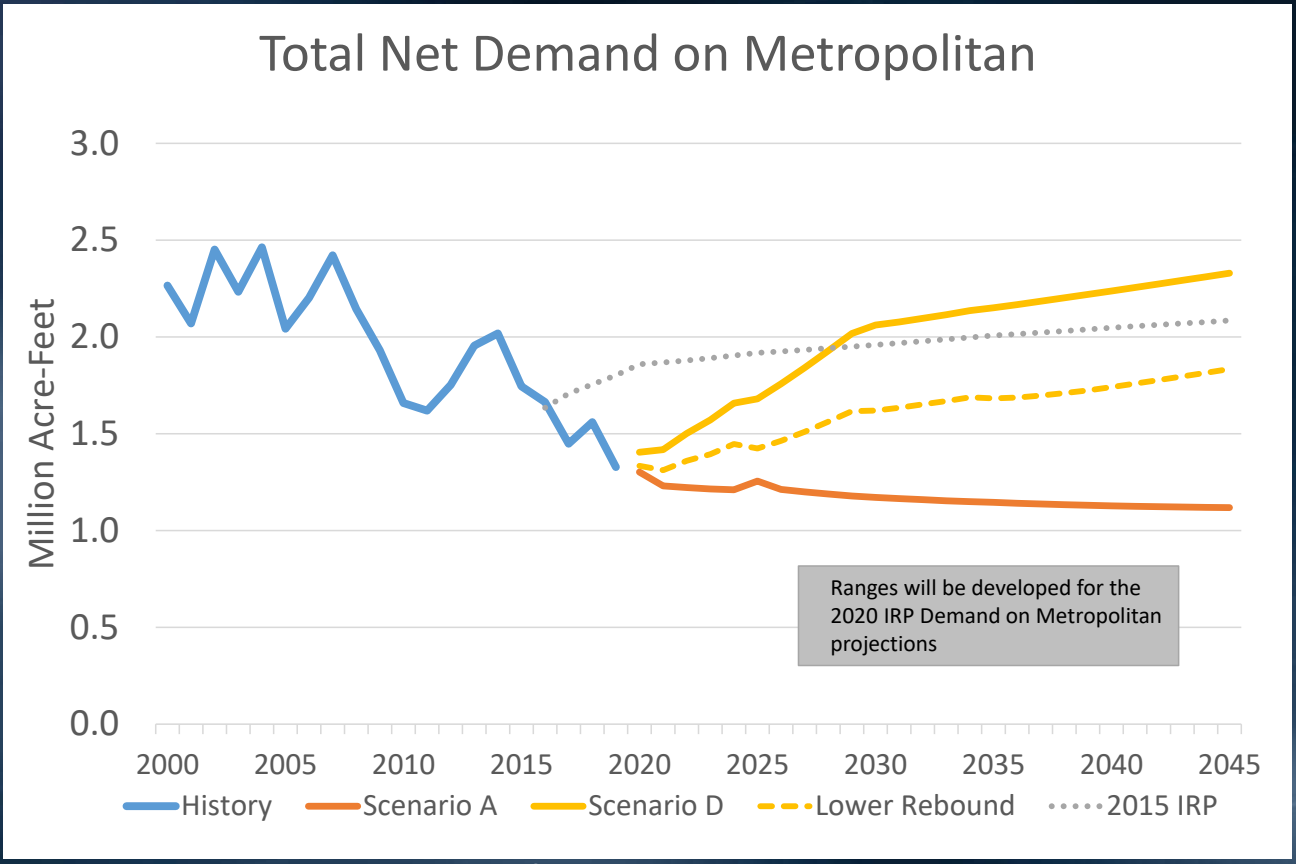
Results will change with input and further analysis

Preliminary Analysis Results



Results will change with input and further analysis

Preliminary Analysis Results



Results will change with input and further analysis

What's Next

- Committee Meetings for Remainder of Year
  - November: No Special IRP Committee Meeting
  - December: Special IRP Committee Meeting scheduled for second week - Review policy questions informed by Draft Gap Analysis
- Member Agency Collaboration
  - Monthly meetings as scheduled
  - Additional workgroup meetings to focus on scenario assumptions as needed
- Constructing Scenarios
  - Continue developing assumptions and conducting quantification for Member Agency review per schedule


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
1928

Item No. 5

DISCUSSION ITEM
November 4, 2020

TO: **Board of Directors**

FROM: **Robert Hunter,**
General Manager

Staff Contact: Melissa Baum-Haley

SUBJECT: **METROPOLITAN WATER DISTRICT (MET) ITEMS CRITICAL TO ORANGE COUNTY**

STAFF RECOMMENDATION

Staff recommends the Board of Directors to review and discuss this information.

DETAILED REPORT

This report provides a brief update on the current status of the following key MET issues that may affect Orange County:

a) MET's Finance and Rate Issues
b) MET's General Manager Recruitment Process
c) MET's Water Supply Conditions
d) Colorado River Issues
e) Delta Conveyance Activities and State Water Project Issues

ISSUE BRIEF #A

SUBJECT: MET's Finance and Rate Issues

RECENT ACTIVITY

Current Update

Water Transactions for August 2020 totaled 148.9 thousand acre-feet (TAF), which were 5.6 TAF lower than the budget of 154.5 TAF. This translates to $131.8 million in revenues for August 2020, which were $7.9 million lower than budget.

At the September 14, 2020 Finance and Insurance Committee at MET, the Board received a review of the impacts of COVID-19. From this review, the Board Approved the following recommended cost-containment measures to address the COVID-19 financial impacts as amended:

a. Continue to track COVID-19 impacts to the member agencies with a focus on retail payment delinquencies. If interest from the member agencies, develop a payment deferral program which exempts penalties or interest for those agencies that record and report significant delinquencies and likewise grant deferrals to their customers. Bring back any deferral program criteria to the Board for review and consideration
b. Monitor water demands, sales and expenditures and prepare additional cost-containment measures, as needed, for mid-cycle budget review.
c. Maintain the current rates adopted by the Board to address the impacts of lower water sales and lower revenues while maintaining current credit ratings.
d. Include in the mid-cycle budget review new revenue generation options including through a ground water replenishment program.
e. Implement a moratorium on non-emergency unbudgeted proposals for the remaining part of the fiscal year that have not been anticipated in the budget.

Rate Issues

In December 2019, the MET Board voted to discontinue the collection of the Water Stewardship Rate (WSR) as part of the upcoming 2021 and 2022 rates and charges (December 2019 Board Letter). The Demand Management program will use program reserves to cover the costs of LRP, Conservation, and the Future Supply Actions Program for the next two years, or until a new funding mechanism is in place.

At the October 13, 2020 Finance and Insurance Committee at MET, the Board received a review of the Water Stewardship Fund in relation to funding for Metropolitan's Demand Management Programs (October 2020 Board Letter). Metropolitan's robust demand management programs have been enormously successful and have been one of the strongest tools in building Southern California's high degree of water reliability and resilience. Additionally, the successful implementation of demand management programs has been cost-effective and reduced the need for spending on infrastructure upgrades and

supplemental water supplies. The continuance of these successful programs requires the adoption of a funding mechanism through the rate structure that enjoys broad support from the Board and the public. Metropolitan staff will be engaging with the Board and Member Agency staff in the coming months to bring forward options for consideration, with the goal of adopting a new funding approach by the close of CY 2021.

ISSUE BRIEF #B

SUBJECT: MET's General Manager Recruitment Process

RECENT ACTIVITY

Current Update

On August 18 the Metropolitan Board authorized an agreement with The Hawkins Company as the executive search firm for the General Manager recruitment process. The Hawkins Company previously recruited the General Counsel (Jeff Kightlinger and Marcia Scully) and General Auditor (Gerry Riss) positions.

At the September 22 Special Organizational Personnel & Technology (OP&T) Committee, the Board discussed the input process for the job description versus executive profile, and discussed the stakeholder engagement process.

- A *Job Description* is high level description of expectations and responsibilities, including specific goals and objectives. It is established via the General Manager business plan, performance goals, and approved budget.
- An *Executive Profile* defines leadership core competencies used to identify, screen, and evaluate candidates. It informs and guides the recruitment strategy.

At the October 13 OP&T Committee, the Metropolitan Board discussed the draft *Job Description*, including an additional responsibility for Human Resources processes and policies, including diversity and inclusion. Additionally, the following recruitment schedule was outlined:

- Approve updated job description, brochure and outreach plan
  - November or December Board
- Advertise for 30 to 60 days
  - May need to advertise longer based on holidays
- Executive Committee to work with Executive Search firm to prepare questions, develop an interview process
  - November, December or January Executive Committee
- Executive Committee to work with Executive Search firm to screen candidates and develop candidate pool for first round of interviews
  - January, February or March Executive Committee
- Executive Committee to interview candidates and recommend three to five finalists for Board interview
  - February, March or April Executive Committee
- Board interview final candidates
  - Special Board meeting to be scheduled

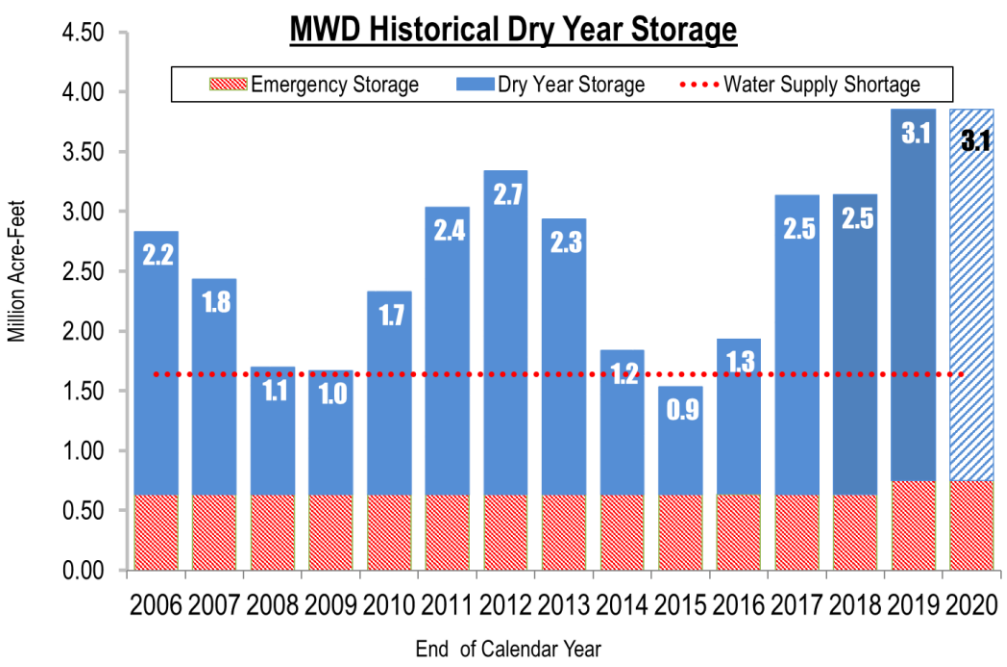
ISSUE BRIEF # C

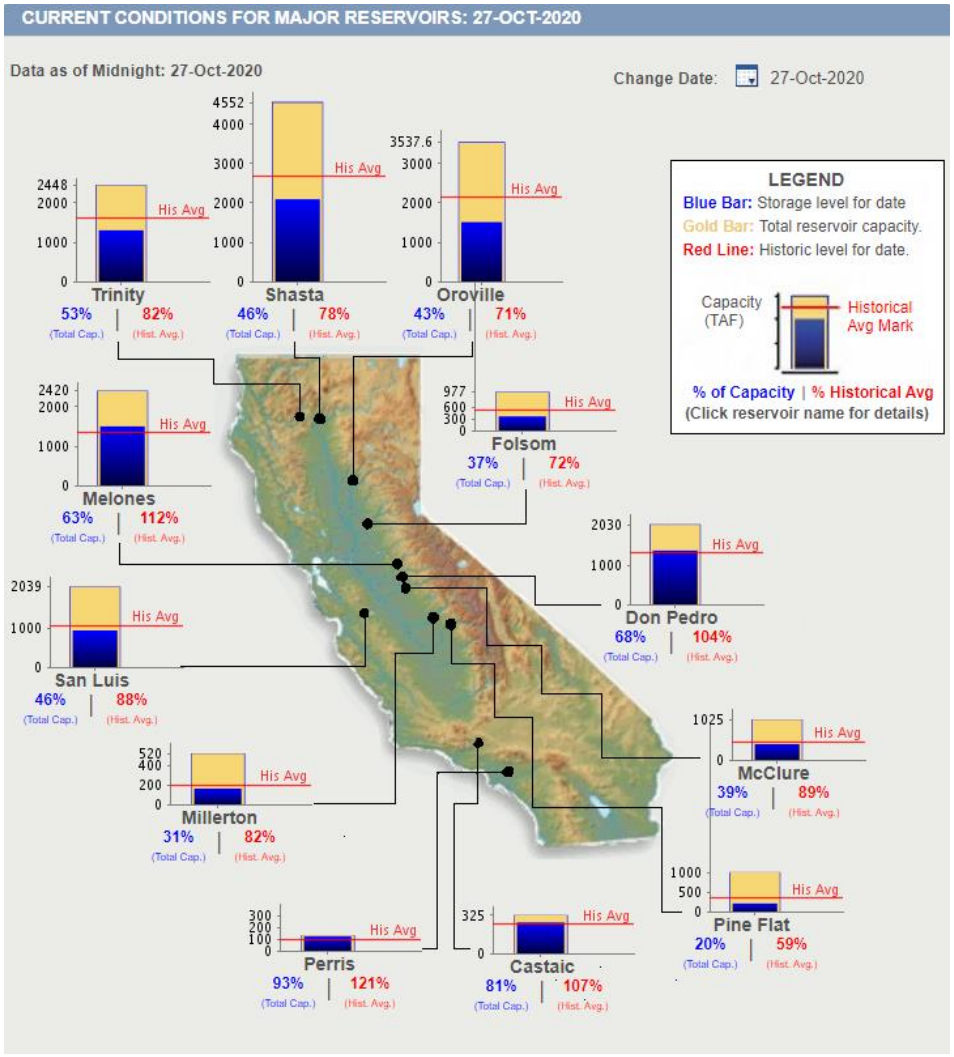
SUBJECT: MET's Water Supply Conditions

RECENT ACTIVITY

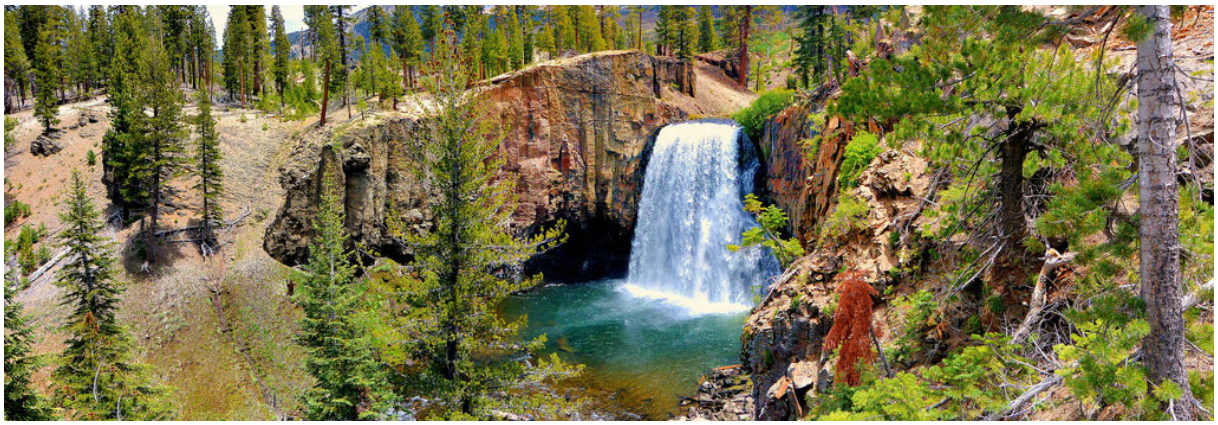
With estimated total demands and losses of 1.54 million acre-feet (MAF) and with a 20% SWP Table A Allocation, Metropolitan is projecting that demands will meet supply levels in Calendar Year (CY) 2020. Based on this, estimated total dry-year storage for Metropolitan at the end of ***CY 2020 will remain at approximately 3.1 MAF.***

A projected dry-year storage supply of ***3.1 MAF will be the highest amount for Metropolitan***. A large factor in the increase in water storage is because ***water demands regionally have been at approximately 36-year lows***.





Attachment: Water Supply Conditions Presentation

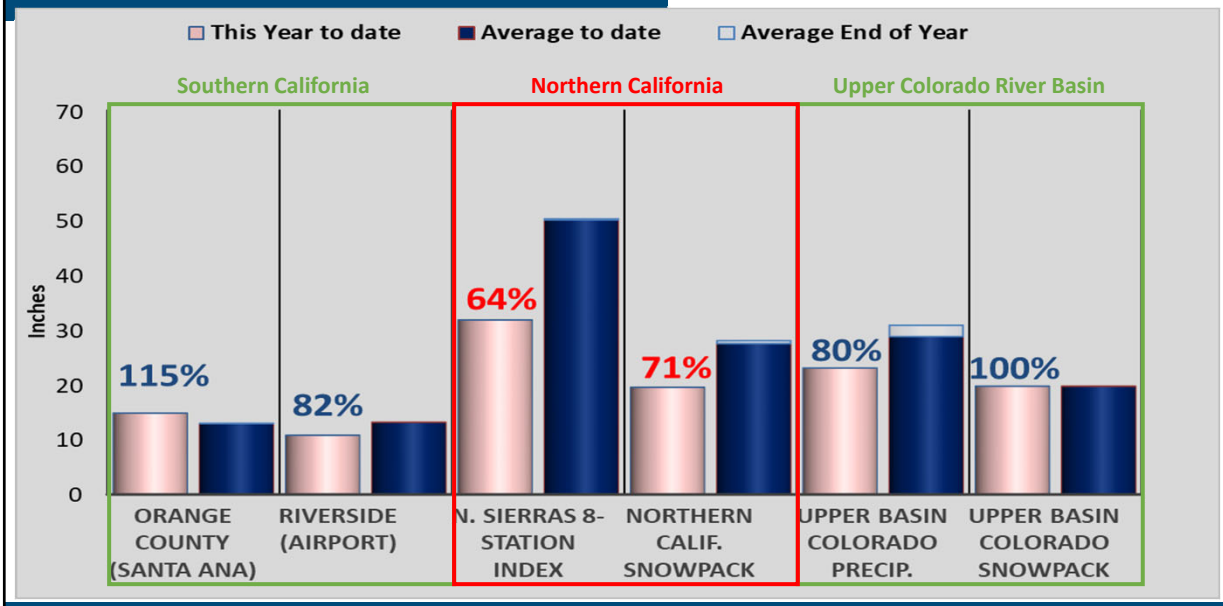


Water Supply Conditions

Kevin Hostert, Water Resources Analyst
Municipal Water District of Orange County

October 28th 2020

Comparing the Three Regions



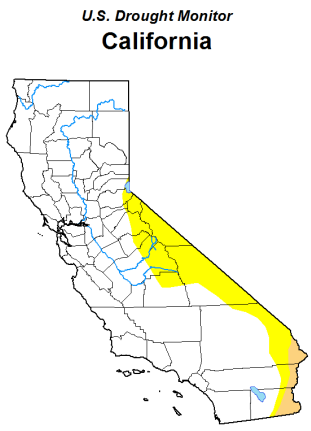
California Drought Monitor

October 2019 = 2% drought Moderate Drought (D1) in California

October 2019 = 0% Severe to Extreme Drought (D2 to D3) in California

October 2020 = 68% drought Moderate Drought (D1) in California

October 2020 = 36% Severe to Extreme Drought (D2 to D3) in California



October 22, 2019
(Released Thursday, Oct. 24, 2019)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

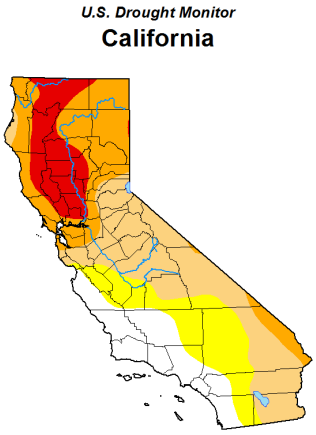
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	82.26	17.74	2.06	0.00	0.00	0.00
Last Week 10-15-2019	85.40	14.60	2.06	0.00	0.00	0.00
3 Months Ago 07-23-2019	95.68	4.32	0.00	0.00	0.00	0.00
Start of Calendar Year 01-01-2019	7.77	92.23	75.17	14.12	2.10	0.00
Start of Water Year 10-01-2019	95.29	4.71	2.06	0.00	0.00	0.00
One Year Ago 10-23-2018	15.16	84.84	47.94	19.30	2.73	0.00

Intensity:
None
D0 Abnormally Dry
D1 Moderate Drought
D2 Severe Drought
D3 Extreme Drought
D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
Richard Heim
NCEI/NOAA

droughtmonitor.unl.edu



October 20, 2020
(Released Thursday, Oct. 22, 2020)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	15.40	84.60	67.54	35.61	12.74	0.00
Last Week 10-13-2020	15.40	84.60	67.54	35.61	12.74	0.00
3 Months Ago 07-21-2020	40.34	59.66	48.21	21.50	3.04	0.00
Start of Calendar Year 12-31-2019	96.43	3.57	0.00	0.00	0.00	0.00
Start of Water Year 09-29-2020	15.35	84.65	67.65	35.62	12.74	0.00
One Year Ago 10-22-2019	82.26	17.74	2.06	0.00	0.00	0.00

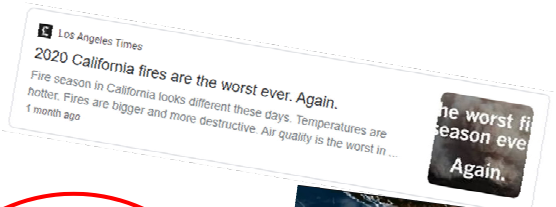
Intensity:
None
D0 Abnormally Dry
D1 Moderate Drought
D2 Severe Drought
D3 Extreme Drought
D4 Exceptional Drought

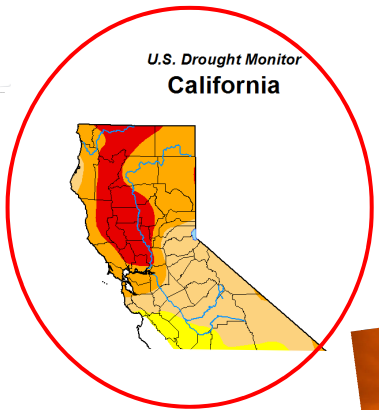
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

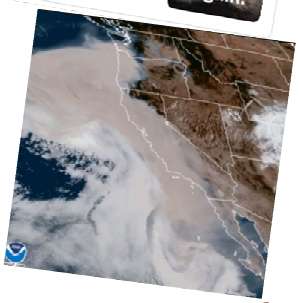
Author:
Curtis Riganti
National Drought Mitigation Center

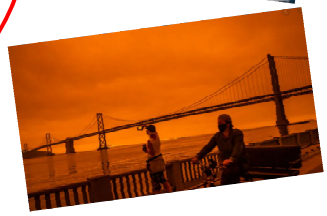
droughtmonitor.unl.edu

California Drought Monitor

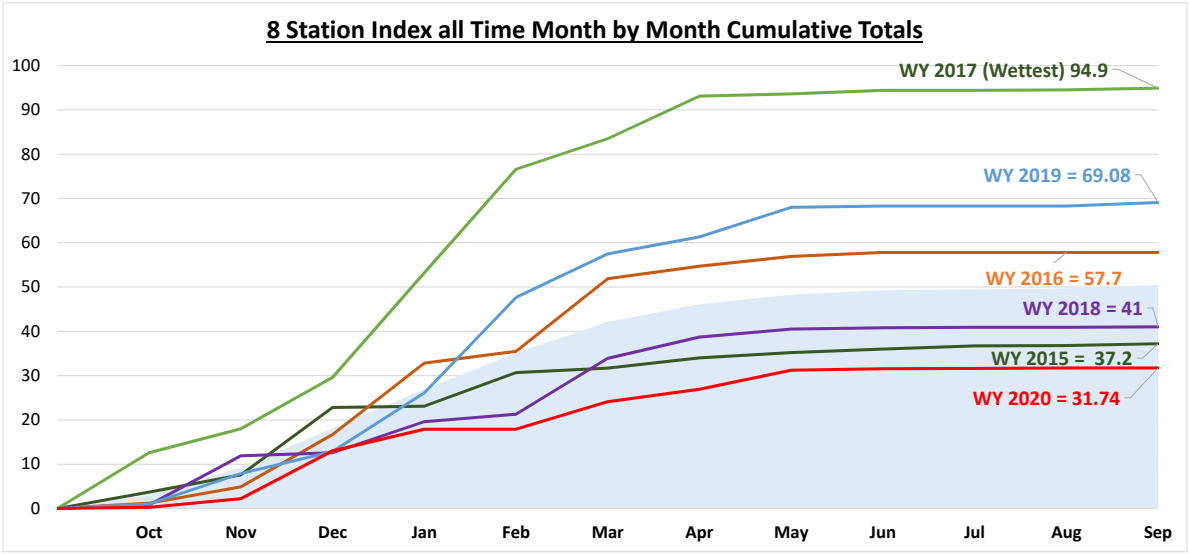




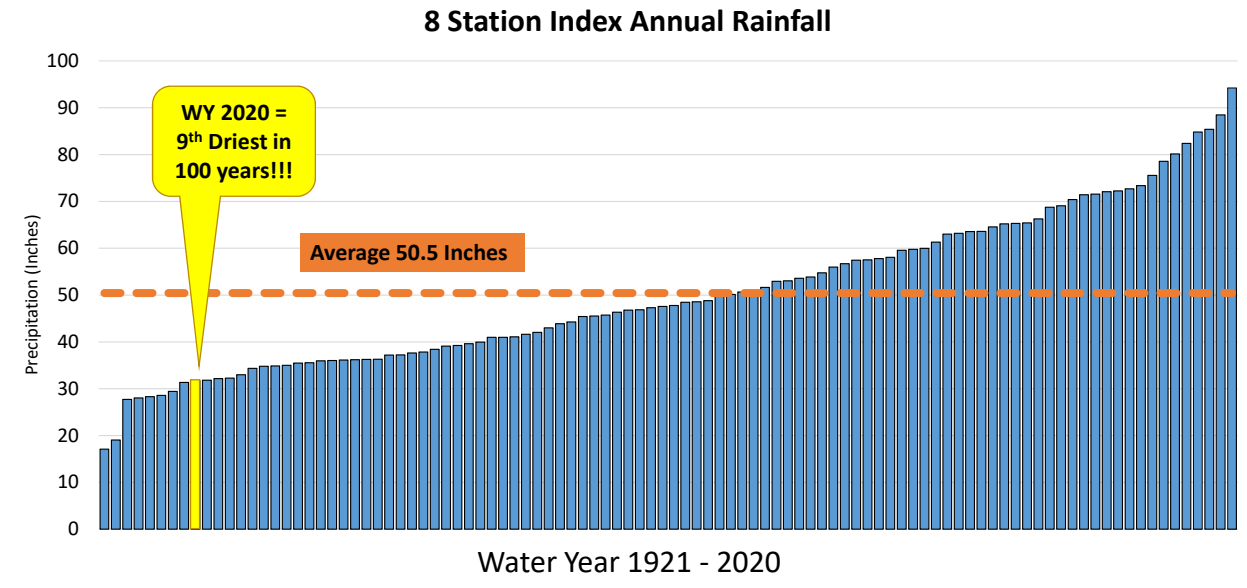




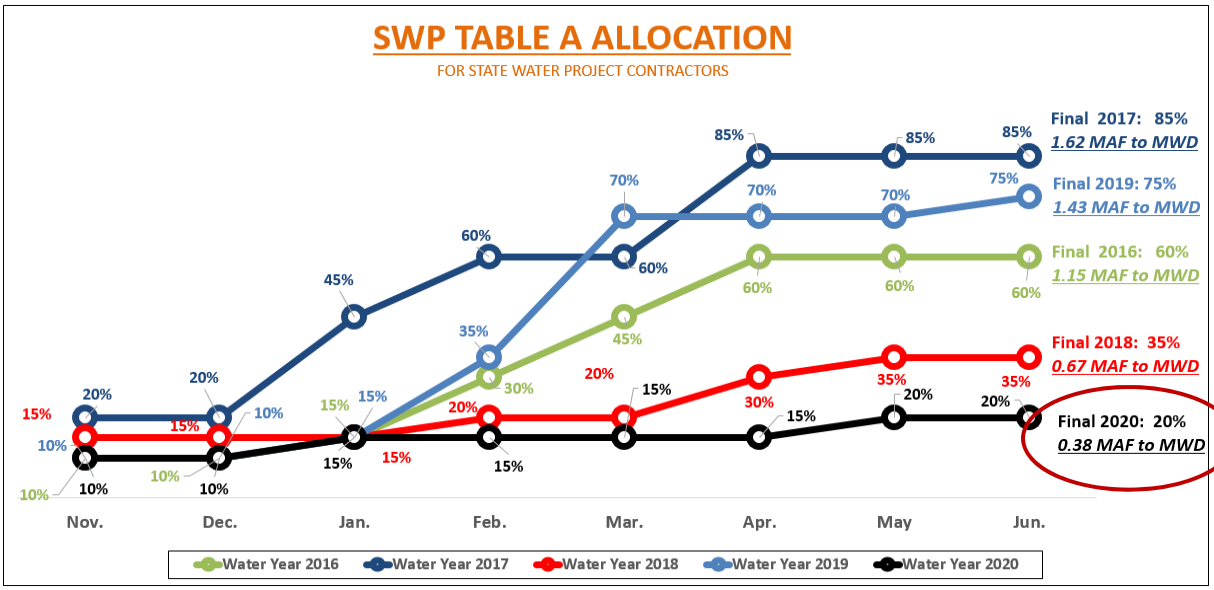
Historical Northern California Precipitation



Historical Northern California Precipitation

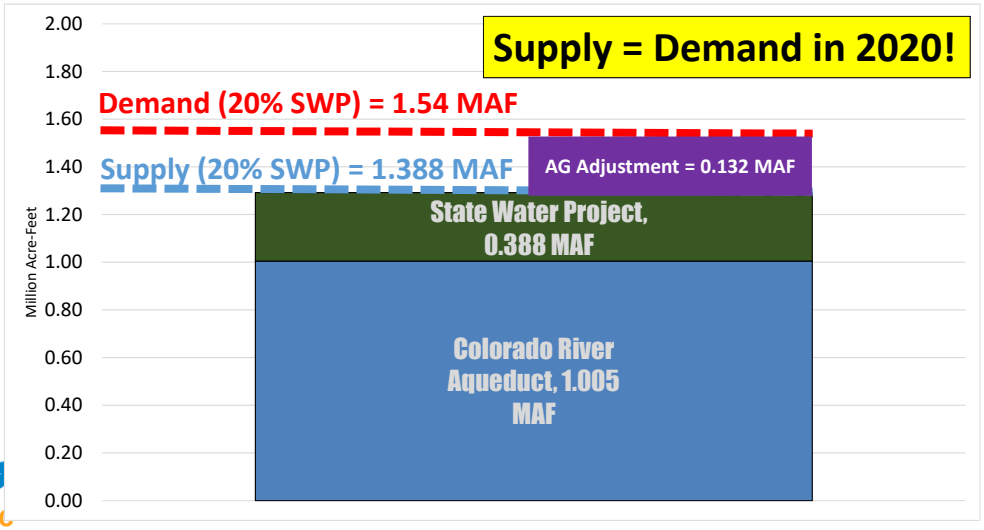


2020 SWP Table A Allocation

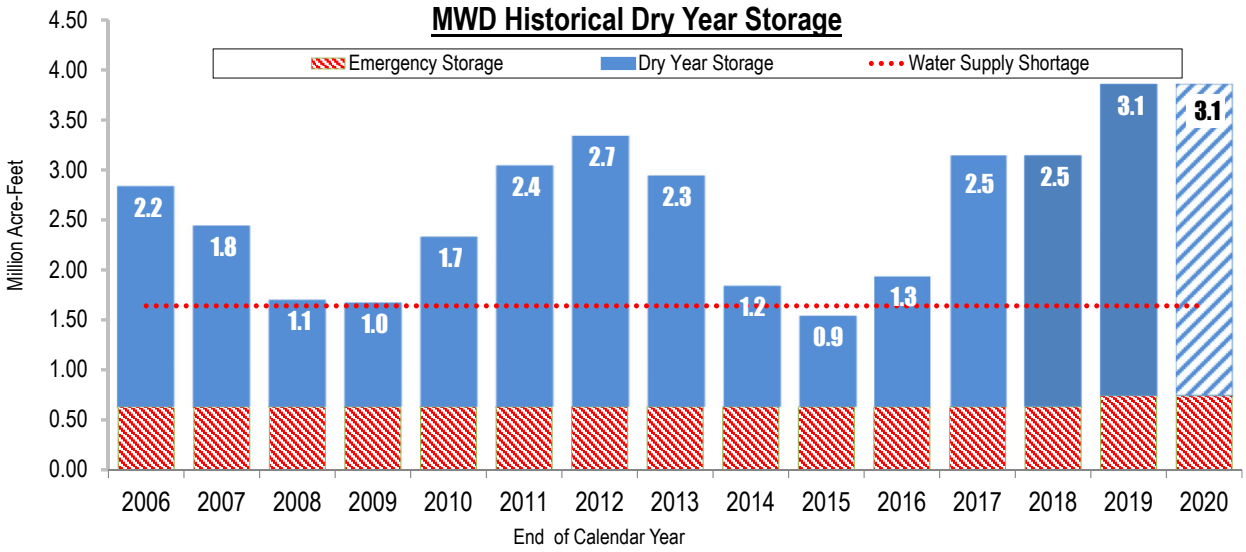


MWD 2020 Water Storage

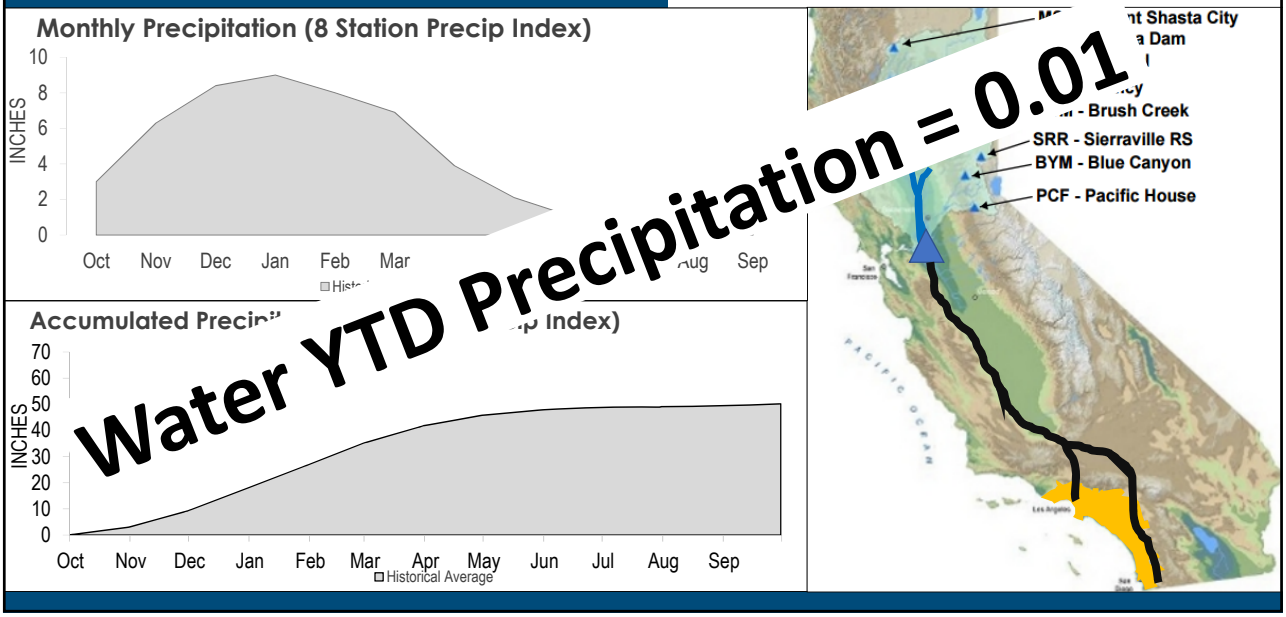
MWD 2020 Estimated Water Storage



MWD 2020 Estimated Water Storage



Northern California Accumulated Precipitation WY 2021



ISSUE BRIEF # D

SUBJECT: Colorado River Issues

RECENT ACTIVITY

Lake Powell Pipeline Draft Environmental Impact Statement Update

On September 24, 2020, the Utah Division of Water Resources (UDWR) and Washington County Water Conservancy District requested an extended timeline from the U.S. Bureau of Reclamation (Reclamation) to consider comments received on the Lake Powell Pipeline project (LPP) draft Environmental Impact Statement (EIS) submitted by the Colorado River Basin States, Tribes, water users, non-government organizations and members of the public. Following Reclamation's publication of the LPP draft EIS on June 20, 2020, over 14,000 comments were submitted during the public comment period. Metropolitan, the Colorado River Board of California, and the six Colorado River Basin States each submitted comment letters to Reclamation regarding the LPP DEIS. In response to this request for an extension of time, Reclamation will establish a new schedule for preparing a supplement to the draft EIS.

The LPP is a proposal by the state of Utah, through UDWR, to construct a pipeline that would divert approximately 86,000 acre feet (AF) of water from Lake Powell near Glen Canyon Dam in Page, Arizona, to Sand Hollow Reservoir near St. George, Utah, for use in Washington County, Utah. The UDWR is proposing to build the LPP in order to bring a second source of water to Washington County, Utah to meet future water demands, diversify the regional water supply portfolio, and enhance the reliability of the water supply.

Metropolitan's Colorado River Water Order for 2021

On September 15, Metropolitan submitted its Colorado River Diversion Estimate and Part 417 Consultation Questionnaire (Water Order) to Reclamation for calendar year 2021. Submitting the Water Order helps ensure Metropolitan's ability to fully access available Colorado River supplies. Metropolitan's 2021 Water Order estimates a total Colorado River water supply of 1.01 million AF, with a minimum diversion of 561,000 AF and a maximum creation of 450,000 AF of Extraordinary Conservation Intentionally Created Surplus. The Water Order reflects the 45,000 AF of water that will be generated through the Palo Verde Irrigation District/Metropolitan Forbearance and Fallowing Program and the Bard Seasonal Fallowing Program.

Metropolitan Submits Seasonal Fallowing Call for Bard Water District

On September 30, Metropolitan submitted its notice to Bard Water District to fallow up to 3,000 acres of fallowable land during the spring and summer of 2021, which is the maximum allowed under the seasonal fallowing program. The program, which is in its second year, incentivizes farmers in Bard to not irrigate a crop between April 1 and August 30, when water use is high and crop value low. Bard farmers are not obligated to meet the full fallowing call and will respond to Metropolitan's request later this year to determine how

many acres will be fallowed next year. Based on 2020 participation, it is anticipated that nearly the full fallowing call will be met.

ISSUE BRIEF # E

SUBJECT: Delta Conveyance Activities and State Water Project Issues

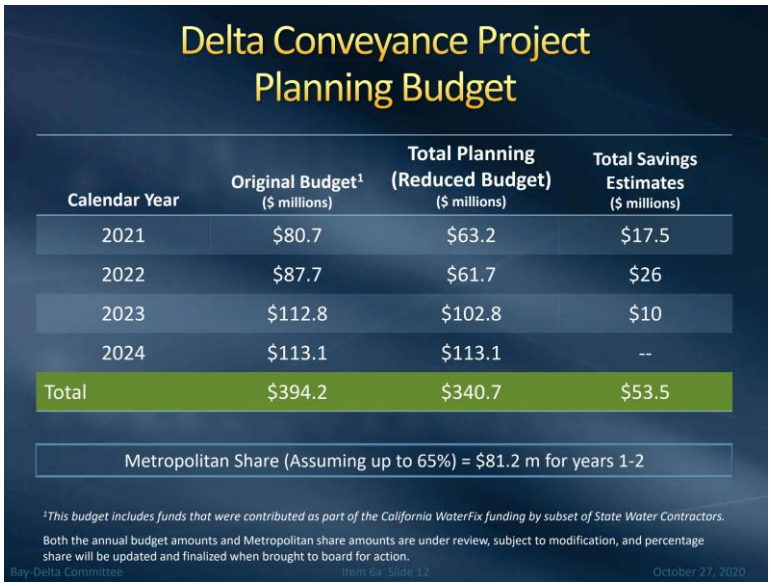
RECENT ACTIVITY

Delta Conveyance

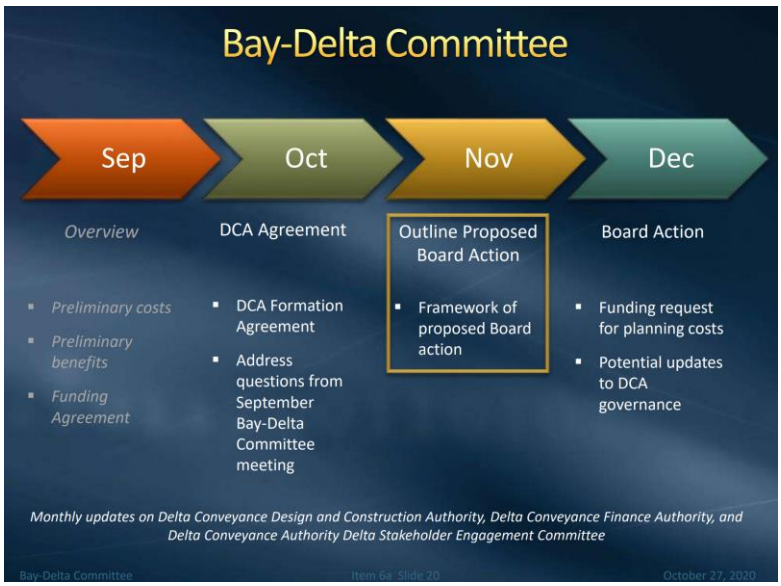
A comprehensive update on Delta Conveyance activities, including the Agreement in Principal for the Delta Conveyance to the State Water Project Contract as well as discussion regarding the planning budget, funding agreements, and Design and Construction Authority amendments can be found attached.

Timeline for Future Metropolitan Board Discussions & Actions

By the end of 2020, the MET Board will be asked to make a commitment for planning costs for the Delta Conveyance Project for 2021 and 2022. Assuming MET has up to a 65% share of the project, the forecasted funding agreement costs would be up to $81.2 million for 2021 and 2022. Of note, the Biennial Budget already includes MET's planned contribution of $25 million per year for Delta Conveyance project planning activities. This in addition to State Water Contract expenditures. Following the same 65% share assumption, MET's forecasted planning costs for all four years would be $221.5 million.



By the end of 2022, the MET Board will be asked to provide additional funding for continued planning costs. A final decision point on the level of MET's participation in the project is expected to occur in the latter half of 2024.



Sites Reservoir

At their September 17 joint meeting, the Sites Authority Board and Reservoir Committee approved Alternative 1 as the Authority's preferred project for the purposes of the Revised Draft EIR analysis and for the purposes of the federal and state permitting processes. Alternative 1 includes a 1.5 million acre-feet reservoir size and the utilization of both existing and proposed new facilities, all of which will be in northern California in Glenn, Colusa, Tehama, and Yolo Counties.

Stemming from the recent strategic planning session, the Sites Authority Board and Reservoir Committee also approved a new vision statement - "affordable water sustainability managed for California's farms, cities, and environment for generations to come," a new mission - "the Sites Project Authority will build and operate a climate-resilient, 21st Century water storage system to responsibly manage and deliver water; improve the environment; and provide flood control and recreational benefits;" and defined new values and goals. A legal service contract to provide initial assistance in securing water right approvals for the project was awarded to the firm of Somach, Simmons and Dunn.

Regulatory Activities

On September 8-10, Metropolitan staff participated in a Delta Science Program sponsored workshop on the Sacramento River Drainage Spring-run Chinook salmon. The purpose of the virtual workshop was to convene subject-matter experts to develop the best possible approach to accurately estimate the population of spring-run Chinook salmon in the Sacramento River basin, which is a requirement in the DWR State Endangered Species permit (state permit) for SWP operations. Agency and stakeholder input provided at the workshop will be considered to inform the development and implementation of the Juvenile Production Estimate (JPE) for Spring-run Chinook salmon. The JPE will be used to set action triggers for managing State Water Project operations under the state permit.

Metropolitan staff also continued to participate in the collaborative groups called for in the 2019 federal Endangered Species permit for the State Water Project (SWP) and Central Valley Project (CVP), and the 2020 state permit for Longterm Operation of the SWP, to address science needs to inform management and operation of the water projects. The Delta Coordination Group is to coordinate the CVP and SWP management for federal listed species and is currently focused on Delta smelt summer/fall actions. The Longfin smelt Science Program is the cooperative science technical team to inform the management of longfin smelt under the state permit.

Science Activities

Metropolitan staff continued participating in the Collaborative Science and Adaptive Management Program (CSAMP), including participation on the Collaborative Adaptive Management Team (CAMT). The September 15 CAMT meeting included a presentation on the draft report for the Coordinated Salmonid Science Plan project. The presentation provided a summary of the methods used to identify and prioritize salmon activities, and the results of the project. Metropolitan staff is reviewing and preparing comments on the report. CAMT also received an update on the efforts to monitor habitat restoration in the Delta and discussed priorities for the CAMT work plan for 2021/22.

Metropolitan's Bay-Delta Initiatives (BDI) staff, Ms. Alison Collins and Dr. Shawn Acuña, with co-authors from Cramer Fish Sciences, ICF consultants, DWR, and the U.S. Bureau of Reclamation, published a paper on a Chinook salmon predation study. Chinook salmon were exposed to largemouth bass in a net pen under different conditions to evaluate the effects of man-made structures and aquatic weeds on predation. The results showed that aquatic weeds were a significant factor in affecting predation by Largemouth bass. The study was supported by grant funding from the California Department of Fish and Wildlife.

The Interagency Ecological Program is holding their annual workshop virtually with workshop sessions held in two-hour blocks from August 25 to October 13, 2020. BDI staff is participating in the workshop, and sessions are addressing a variety of Delta science topics including Delta fish abundance and habitats, aquatic vegetation management,

environmental stressors and activities in Suisun Marsh. On September 15, BDI staff person Dr. Corey Phillis gave a presentation on an on-going study to model juvenile Chinook salmon response to food web subsidies from rice field drain water in the Sacramento River.

Delta Flood Emergency Management Plan

DWR is conducting emergency response exercises to train personnel, test response effectiveness and upgrade Delta emergency preparedness plans. A large-scale emergency exercise is planned in the spring 2021 involving multiple-island failures requiring robust response measures of the Delta Flood Emergency Management Plan (DFEMP), including the emergency freshwater pathway. It is planned as a tabletop exercise requiring preliminary testing in fall 2020 to prepare for a more comprehensive exercise in the spring. DWR is preparing input materials and manuals for the exercise and will use findings to prepare an after-action report and update the DFEMP. In connection with these processes, DWR conducts monthly meetings to review DWR and USACE emergency stockpile inventories and local emergency supplies and machinery for levee breach repairs.

Attachment: Metropolitan Bay-Delta Committee Item Update on Delta Conveyance

- Bay-Delta Committee

10/27/2020 Committee Meeting

6a

Subject

Update on Delta Conveyance

Details

Background

Consistent with Executive Order N-10-19, in early 2019, the state announced a new single tunnel project, which was notably included as part of the Governor's 2020 Water Resilience Portfolio. In 2019 the California Department of Water Resources (DWR) initiated planning and environmental review for a single tunnel Delta Conveyance Project (DCP) to protect the reliability of State Water Project (SWP) supplies from the effects of climate change and seismic events, among other risks.

Staff plans to bring an action to the Board in December for funding Metropolitan's share of the state's environmental review and planning process for a single tunnel DCP as described below, and to also consider modifications to the existing Delta Conveyance Design and Construction Authority (DCA) formation agreement to address governance structure.

Conveyance Project Purpose and Notice of Preparation

DWR completed its public scoping process for the DCP earlier this year. The project purpose is "to develop new diversion and conveyance facilities in the Delta necessary to restore and protect the reliability of [SWP] water deliveries, and, potentially, Central Valley Project water deliveries south of the Delta, consistent with the state's Water Resilience Portfolio." The following project objectives are contained in the Governor's Water Resilience Portfolio: Climate Resiliency, Seismic Resiliency, Water Supply Reliability, and Operational Resiliency."[1] These objectives are included as the proposed Delta Conveyance Project Description within DWR's "Notice of Preparation of Environmental Impact Report for the Delta Conveyance Project" (NOP) published on January 15, 2020, included as **Attachment 1** to this report.

Project Planning Schedule

DWR's schedule for completing the environmental review and permitting process extends through the end of 2024 with key milestones shown below:

- Completion of Public Draft Environmental Impact Report (EIR) in 2022.
- Completion of Final EIR and issuance of Endangered Species Act permits in 2023.
- Completion of State Water Resources Control Board Change in Point of Diversion to DWR's permits and Delta Stewardship Council Delta Plan certification of consistency and any administrative appeals in 2024.

[1] These project objectives are subject to refinement during the process of preparing a Draft EIR.

Agreement in Principal for Amendment for Delta Conveyance to SWP Contract

Public negotiations between DWR and Public Water Agencies (PWA's) for the DCP began in July 2019 and were completed in April 2020. These negotiations led to an Agreement in Principle (AIP) for an Amendment to the State Water Contract for the DCP. The goal was to equitably allocate new costs and benefits of a Delta Conveyance Facility and to preserve existing SWP benefits and capability.

The DCP would be constructed and operated as an integrated component of the SWP. For this reason, negotiations focused not only on how the costs and benefits would be accounted for in contract language, but also how DWR would administer and operate the SWP if and when a DCP becomes operational. The parties have developed a white paper that describes the accounting and administrative principles to be utilized for the DCP.

A. AIP – Provides an Opt-out Approach

The AIP, included as **Attachment 3**, is based on the principle that each PWA is obligated to pay for the necessary DCP under its existing contract with DWR. The AIP is structured to allow PWAs to opt out of the costs and benefits of the DCP. Under the AIP, a PWA may choose not to pay for costs of building and operating the DCP, but it would also forgo the benefits. However, a PWA may not be partially in, so it must opt out of all or none of its entire Municipal and Industrial Table A or Agricultural Table A share. A PWA may invest in more than its Table A share, if excess is available.

Because there is the ability to opt out, the DCP benefits are clearly articulated in the AIP as those water supply and capacity benefits attributable to the DCP,[2] which includes, but is not limited to, water supply benefits and use of available capacity. The PWAs who choose to opt out of the project will not be charged for the project, will forgo benefits below, and their contracts would be amended accordingly:[3]

- Forgo right to or delivery of SWP water attributable to the DCP.
- Forgo delivery of Article 21 interruptible water until DCP benefits have been allocated to those participating in the project.
- Forgo the right to use DCP and unused conveyance capacity for SWP purposes for non-project water unless fair compensation[4] is paid.
- Forgo the right to use DCP to convey SWP water in the event south Delta diversion and/or pumping is impaired (applies with physical impairment, regulatory/contractual disruption, sea level rise, seismic events, flooding, or other uncontrollable event).
- Forgo the right to carriage water savings and any credit from fair compensation collected by DWR for use of capacity.

B. Participation and Billing

The AIP includes a participation table that denotes each PWA's investment percentage, which must equal one hundred percent to fully fund the project. The table provides the DCP allocation factors. The allocation factors are carried into the billing section. Each PWA will pay for the costs and receive the benefits in line with each participants' associated allocation factors. The billing provisions and allocation table are detailed in AIP objective 4.

C. Proportionate Benefits

The AIP provides that a PWA will receive the benefits in proportion to their allocation factor percentage. The benefits are defined more broadly, but specifically include the following: (see **Attachment 3** Section *VI. Objective 5 – Delta Conveyance Facility Benefits Allocation*)

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[2] The AIP referred to the Delta Conveyance Facility ("DCF"). DCF and DCP are interchangeable and refer to the same project.

[3] **Attachment 3** Section *VI. Objective 5 – Delta Conveyance Facility Benefits Allocation*

[4] Fair compensation is defined in the AIP to, "include but is not limited to capital recovery, operations, maintenance, replacement, and variable charges associated with the use of the DCF capacity."

- Delivery of Table A amounts diverted at and conveyed through or attributed to the DCP.
- Article 21 Interruptible Water attributable to DCP.
- Available DCP conveyance capacity unused by DWR for SWP purposes to convey non-project water for ultimate use within that PWA's service area.
- Carriage water savings that DWR determines are realized during its operation of any DCP for purposes of conveying SWP water.
- Available DCP conveyance capacity to convey SWP water in the event diversion facilities and/or pumping in the south Delta is prevented or impaired by a physical, regulatory or contractual disruption, including but not limited to sea level rise, seismic events, flooding, or other uncontrollable event.
- A credit from fair compensation collected by DWR for use of available DCP conveyance capacity by non-participants.

Additionally, if DWR moves water through the DCP that it could have moved through Clifton Court Forebay, participating PWAs will have priority to move non-project water through the existing south Delta diversion at Clifton Court Forebay in the same time and quantity based on their participation percentage.

D. AIP White Paper

The AIP white paper, included as **Attachment 4**, describes the current understanding of how DWR would account for and administer the DCP benefits. DWR will include information regarding the accounting and administration of water attributable to DCP in relevant Notice(s) to SWP Contractors consistent with prior practice. The white paper does not create any legally binding obligations, rather, it provides the administrative detail regarding how DWR would operate the DCP as an integrated part of the SWP consistent with the contractual language contained in the amendment. For instance, the white paper provides details on when Article 21 water will be made available to those PWAs who invest in the DCP and when it will be made available for those who opt out.

Planning Budget, Funding Agreements, and DCA Amendments

Following the AIP public negotiations, participating PWAs are proceeding with the next steps to advance project investment and engagement. Key topics for advancing the project include the following: adequate funding for project planning and pre-construction activities, PWA funding decisions for the DCP, and the respective DCA governance amendments to reflect PWA participation levels.

A. Planning Costs

When the DCA was originally formed in May 2018, DWR had completed the environmental review of and approved the California WaterFix, and state and federal Endangered Species Act permits had been issued. The DCA had a clear task ahead of it: to design and construct CA WaterFix. Currently, DWR is focused on preparing single tunnel environmental review documents and obtaining key permits for DCP. Due to the state's planning process now extending through 2024, and given the current economic conditions, participating PWAs and the DCA have been evaluating their respective budgets for potential cost savings.

Approximately $331.5 million of investment is needed over four years. This includes both DWR and DCA expenditures for environmental planning and stakeholder engagement efforts. After diligent review of the preliminary planning budget, a short-term reduction in DCA activities has been identified to both streamline expenditures and create efficiencies. This reduction is focused on overhead and organization expenses within the DCA. The collective DWR and DCA planning budget reduction identified would be $43.5 million over two years, and $53.5 million over four years, reducing the original four-year planning budget from $385 million to $331.5 million.

Under this revised planning schedule and budget, activities to support environmental planning would continue, including necessary engineering support and geotechnical surveys. Near-term modifications to

the DCA activities include a one-year deferral of some geotechnical work and engineering work, not on the critical path. In addition, overhead expenses would be reduced, including some contracted staffing reductions. While some DCA activities would be deferred or reduced, other critical work supporting the environmental planning process, including the Stakeholder Engagement Committee, would continue. It is anticipated that the DCA engineering and design activities would resume at full capacity once environmental planning is complete, key permits have been obtained, and final design and construction services are actually needed.

B. Funding Agreement

To finish the DCP environmental review and planning work, each PWA investing in the project would contribute its percentage of the planning costs. As noted previously, the revised four-year planning budget is $331.5 million, with an estimated $121.5 million for 2021 and 2022 (calendar years 1 and 2). In 2020, four PWA's provided $9.2 million in advance of the AIP to fund DCP planning activities. These four agencies would be reimbursed (during the four-year planning period) for their advance payments, resulting in a total funding need of $340.7 million during the four years. The $9.2 million will be collected through the funding agreements over the four-year period, consistent with the cash flow projection of planning budget costs and will be credited to those four agencies who advanced the funds. Based on cash flow projections over the four-year planning horizon, the estimated funding amount is $124.9 million for 2021 and 2022 (calendar years 1 and 2).

At this time, other PWA board decisions on participation levels have not occurred, but assuming up to a 65-percent share of the project for Metropolitan, forecasted funding agreement costs would be up to $81.2 million for calendar years 2021 and 2022. Metropolitan's forecasted planning costs for all four years, assuming up to a 65-percent share, would be $221.5 million.

The funding agreement would be between Metropolitan and DWR and would describe the purposes for which funding is authorized. These purposes include funding environmental and pre-construction activities for DWR and work that is authorized by DWR under the JEPA Joint Exercise of Powers Agreement with the DCA. The funding agreement would initially provide up to $81.2 million for calendar years 2021 and 2022, but allow Metropolitan the ability to contribute additional funds in calendar years 2023 and 2024. The funding agreement allows Metropolitan and DWR to determine the timing and collection of funds. Finally, like prior agreements, the funding agreement will provide that funds would be reimbursed to Metropolitan if the project is approved and bonds are issued. An action to fund for planning does not commit Metropolitan to participate in the project. Any final decision to commit to the project and incur final design and construction costs would need Board approval following environmental review, which will not occur until 2024 or later.

C. DCA Governance and Amendment

DCA's current board includes the following seats: Metropolitan (SWP), Metropolitan (Non-SWP capacity), Kern County Water Agency (Kern), Santa Clara Valley Water District (Santa Clara), and a SWP contractor (selected by otherwise non-represented SWP contractor). In the existing structure, two additional directors are added if there is CVP participation, bringing the board seats to seven. This structure was negotiated for California WaterFix, which contemplated Central Valley Project participation. Currently, investment decisions are being contemplated only by SWP PWAs.

To address the changed investment structure and level of participation in the DCP, an amendment to the DCA Joint Powers Agreement (DCA JPA Amendment) has been developed to align the board composition and voting procedures with PWAs' respective financial commitments. Under the current proposal, the revised board would become a seven-member board to better reflect the investment in the project. The new seven-member board would include one seat with each for the following: Metropolitan, Kern, Santa Clara, Class 3/5/7 contractors, and Class 2 Contractors, and two seats for Class 8 contractors. Table 1 below provides a list of PWAs which are current or anticipated project participants by class.

Table 1: Current or anticipated PWA's for proposed DCA Board Seats by Contractor Class

Class Contractors	State Water Contractors
Class 2	Alameda Flood Control & Water Conservation (Zone 7) Alameda County Water District (ACWD)
Class 3/5/7	Dudley Ridge Water District (Class 3) San Luis Obispo County Flood Control & Water Conservation District (Class 5) Casitas Municipal Water District (Class 7) Santa Clarita Valley Water Agency (Class 7)
Class 8 Contractors	Antelope Valley – East Kern Water Agency Coachella Valley Water District Crestline – Lake Arrowhead Water Agency Desert Water Agency Mojave Water Agency Palmdale Water District San Bernardino Valley Municipal Water District San Gabriel Valley Municipal Water District San Gorgonio Pass Water Agency

Additionally, updated voting provisions are proposed to reflect the new DCA governance. Most actions would be decided by a majority vote, with each Director having one vote. However, in order to account for each PWA's financial investment, following an initial vote by the DCA board, a reconsideration provision would be allowed on certain financial decisions. This would allow any DCA Director to move to reconsider an action related to annual budget, budget modification, construction contracts exceeding $10 million, and service contracts exceeding $1 million over the life of the contract.

Reconsideration of an item approved by a majority vote must be initiated during the same meeting, and a reconsideration vote must be agendized for the next scheduled DCA board meeting, which may not be less than 14 days and not more than 30 days from the original action. To overturn an original board vote, the reconsideration vote would be based on contracted proportionate share, which is the level of investment represented by each board seat, except for Class 8, the contracted proportionate share will be divided equally between the two board seats. For the reconsideration vote to pass and overturn the initial vote, it would require the support of at least 70 percent of the contracted proportionate share.

Preliminary Project Cost Information and Preliminary Benefits (September 2020 Bay-Delta Committee)

During the September 2020 Bay-Delta Committee Meeting, staff provided an update on preliminary cost information and a range of potential project benefits for the DCP. The preliminary cost information was generated by the DCA and estimates the project would be $15.9 billion (2020 dollars). The purpose of the preliminary cost information was to provide PWA's with cost information to support respective board funding decisions for planning costs.

Key points - Preliminary Project Cost Information:

- Includes early estimates for total project costs – construction, management, oversight, mitigation, planning, soft costs, and contingencies.
- No Preliminary Engineering Report is available at this time; however, the DCA is conducting preliminary engineering work, which helped inform the development of the cost information.
- PWA's requested a review of the DCA cost assessment, and the results of that review identified that the level of contingencies could vary. Further, it indicated that the DCA estimated contingency amount exceeds industry standards by $2.3 billion to $4.4 billion, and that the contingency would be expected to narrow over time as the planning process proceeds.
- Cost Information will be revised after necessary engineering is complete.

Preliminary project benefits were also estimated. The primary project benefits were compared to future conditions consistent with the NOP objectives of climate resiliency, seismic resiliency, water supply reliability, and operational resiliency. The range of potential project benefits included preservation, or protection, of existing

water supplies ranging from 100,000 AF to 1,000,000 AF. Potential enhanced water supply benefits may include water quality improvements and protection against climate change effects such as sea level rise, including greater sea level rise than currently projected. Both preliminary cost information and preliminary project benefits will be further refined as the project planning proceeds and a decision to participate in the project construction nears.

Next Steps

Staff will continue to work with DWR, DCA, and other PWAs to advance the following: funding agreement for project planning, DCA JPA Amendment, and update the environmental planning workplan and budget. In November 2020, staff will continue to review the status of developments with the Bay Delta Committee, including any development related to other PWA actions. In December 2020, staff will propose actions to authorize the General Manager to enter the funding agreement with DWR and the DCA JPA Amendment.

Policy

By Minute Item 45753, dated May 11, 2004 the Board adopted refined Bay-Delta finance and cost allocation policy principles for communication with the California Bay-Delta Authority and interested parties, as set forth in the letter signed by the Chief Executive Officer on April 20, 2004.

By Minute Item 46637, dated April 11, 2006, the Board adopted policy principles regarding long-term actions for the Sacramento-San Joaquin River Delta as described in the revised letter signed by the General Manager on April 4, 2006.

By Minute Item 47135, dated June 12, 2007, the Board adopted a proposed Delta Action Plan. Subsequent to adoption of the Delta Action Plan, a Board of Directors Retreat was held on April 13-14, 2007 where the Board discussed a framework directing Metropolitan staff actions related to Delta issues. The framework compromises of three major time-based components: A Short-Term Action Plan, a Mid-Term Action Plan and a Long-Term Action Plan.

By Minute Item 47232, dated September 11, 2007, the Board adopted criteria for support of conveyance options in Implementation of a Long-term Delta Improvement Plan. These criteria are as follows: provide water supply reliability, improve export water quality, allow flexible pumping operations in a dynamic fishery environment, enhance delta ecosystem, reduce seismic risks and reduce climate change risks.

Stephen N. Arakawa 10/21/2020
Stephen N. Arakawa *Date*
Manager, Bay-Delta Initiatives

10/22/2020
Jeffrey Kightlinger *Date*
General Manager

Attachment 1 – DWR's Notice of Preparation Delta Conveyance Project

Attachment 2 – DWR's Planning Schedule for DCP

Attachment 3 – Agreement in Principle

Attachment 4 – White Paper on AIP

Ref# eo12679071

NOTICE OF PREPARATION

NOTICE OF PREPARATION OF ENVIRONMENTAL IMPACT REPORT FOR THE DELTA CONVEYANCE PROJECT

January 15, 2020

INTRODUCTION

Pursuant to the California Environmental Quality Act (CEQA), the California Department of Water Resources (DWR) will initiate the preparation of an Environmental Impact Report (EIR) for the Delta Conveyance Project in the Sacramento-San Joaquin Delta, California. DWR is the lead agency under CEQA.

The Delta Conveyance Project will also involve federal agencies that must comply with the National Environmental Policy Act (NEPA), likely requiring the preparation of an environmental impact statement (EIS). Federal agencies with roles with respect to the project may include approvals or permits issued by the Bureau of Reclamation (Reclamation) and United States Army Corps of Engineers. To assist in the anticipated federal agencies' NEPA compliance, DWR will prepare an EIR that includes relevant NEPA information where appropriate. Once the role of the federal lead agency is established, that federal lead agency will publish a Notice of Intent to formally initiate the NEPA process.

BACKGROUND INFORMATION

In July 2017, DWR had previously approved a conveyance project in the Delta involving two tunnels referred to as "California WaterFix." In his State of the State address delivered February 12, 2019, Governor Newsom announced that he did not "support WaterFix as currently configured" but does "support a single tunnel." On April 29, 2019, Governor Newsom issued Executive Order N-10-19, directing several agencies to (among other things), "inventory and assess… [c]urrent planning to modernize conveyance through the Bay Delta with a new single tunnel project." The Governor's announcement and Executive Order led to DWR's withdrawal of all approvals and environmental compliance documentation associated with California WaterFix. The CEQA process identified in this notice for the proposed Delta Conveyance Project will, as appropriate, utilize relevant information from the past environmental planning process for California WaterFix but the proposed project will undergo a new stand-alone environmental analysis leading to issuance of a new EIR.

PROPOSED DELTA CONVEYANCE PROJECT DESCRIPTION

Purpose and Project Objectives

CEQA requires that an EIR contain a "statement of the objectives sought by the proposed project." Under CEQA, "[a] clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers

in preparing findings or a statement of overriding considerations. The statement of objectives should include the underlying purpose of the project and may discuss the project benefits" (State CEQA Guidelines Section 15124[b]).

Here, as the CEQA lead agency, DWR's underlying, or fundamental, purpose in proposing the project is to develop new diversion and conveyance facilities in the Delta necessary to restore and protect the reliability of State Water Project (SWP) water deliveries and, potentially, Central Valley Project (CVP) water deliveries south of the Delta, consistent with the State's Water Resilience Portfolio.

The above stated purpose, in turn, gives rise to several project objectives. In proposing to make physical improvements to the SWP Delta conveyance system, the project objectives are:

- To address anticipated rising sea levels and other reasonably foreseeable consequences of climate change and extreme weather events.
- To minimize the potential for public health and safety impacts from reduced quantity and quality of SWP water deliveries, and potentially CVP water deliveries, south of the Delta resulting from a major earthquake that causes breaching of Delta levees and the inundation of brackish water into the areas in which the existing SWP and CVP pumping plants operate in the southern Delta.
- To protect the ability of the SWP, and potentially the CVP, to deliver water when hydrologic conditions result in the availability of sufficient amounts, consistent with the requirements of state and federal law, including the California and federal Endangered Species Acts and Delta Reform Act, as well as the terms and conditions of water delivery contracts and other existing applicable agreements.
- To provide operational flexibility to improve aquatic conditions in the Delta and better manage risks of further regulatory constraints on project operations.[1]

Description of Proposed Project Facilities

The existing SWP Delta water conveyance facilities, which include Clifton Court Forebay and the Banks Pumping Plant in the south Delta, enable DWR to divert water and lift it into the California Aqueduct. The proposed project would construct and operate new conveyance facilities in the Delta that would add to the existing SWP infrastructure. New intake facilities as points of diversion would be located in the north Delta along the Sacramento River between Freeport and the confluence with Sutter Slough. The new conveyance facilities would include a tunnel to convey water from the new intakes to the existing Banks Pumping Plant and potentially the federal Jones Pumping Plant in the south Delta. The new facilities would provide an alternate location for diversion of water from the Delta and would be operated in coordination with the existing south Delta pumping facilities, resulting in a system also known as "dual conveyance"

[1] These objectives are subject to refinement during the process of preparing a Draft EIR.

because there would be two complementary methods to divert and convey water. New facilities proposed for the Delta Conveyance Project include, but are not limited to, the following:

- Intake facilities on the Sacramento River
- Tunnel reaches and tunnel shafts
- Forebays
- Pumping plant
- South Delta Conveyance Facilities

Figure 1 shows the areas under consideration for these facilities. Other ancillary facilities may be constructed to support construction of the conveyance facilities including, but not limited to, access roads, barge unloading facilities, concrete batch plants, fuel stations, mitigation areas, and power transmission and/or distribution lines.

Under the proposed project, the new north Delta facilities would be sized to convey up to 6,000 cfs of water from the Sacramento River to the SWP facilities in the south Delta (with alternatives of different flow rates, as described in the "Alternatives" section below). DWR would operate the proposed north Delta facilities and the existing south Delta facilities in compliance with all state and federal regulatory requirements and would not reduce DWR's current ability to meet standards in the Delta to protect biological resources and water quality for beneficial uses. Operations of the conveyance facilities are proposed to increase DWR's ability to capture water during high flow events. Although initial operating criteria of the proposed project would be formulated during the preparation of the upcoming Draft EIR in order to assess potential environmental impacts and mitigation, final project operations would be determined after completion of the CEQA process, obtaining appropriate water right approvals through the State Water Resources Control Board's change in point of diversion process, and completing the consultation and review requirements of the federal Endangered Species Act and California Endangered Species Act. Construction and commissioning of the overall conveyance project, if approved, would take approximately 13 years, but the duration of construction at most locations would vary and would not extend for this full construction period.

Reclamation is considering the potential option to involve the CVP in the Delta Conveyance Project. Because of this possibility, the connection to the existing Jones Pumping Plant in the south Delta is included in the proposed facility descriptions below. The proposed project may include a portion of the overall capacity dedicated for CVP use, or it may accommodate CVP use of available capacity (when not used by SWP participants). If Reclamation determines that there could be a role for the CVP in the Delta Conveyance Project, this role would be identified in a separate NEPA Notice of Intent issued by Reclamation.

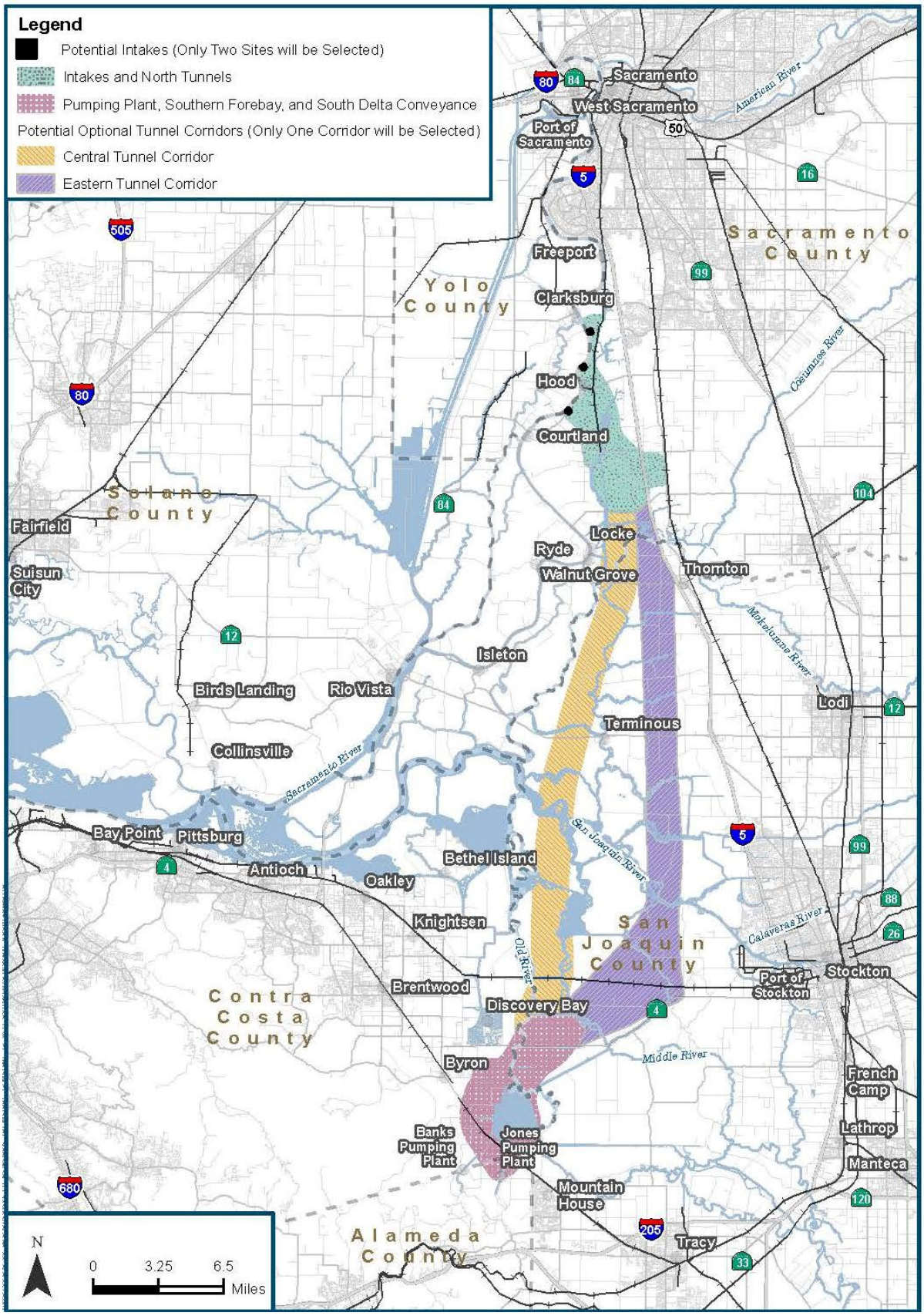


Figure 1. Proposed Project Facility Corridor Options

Intake Facilities

The proposed intake facilities would be located along the Sacramento River between Freeport and the confluence with Sutter Slough, as shown in Figure 1. The proposed project would include two intakes with a maximum diversion capacity of about 3,000 cfs each. The size of each intake location could range from 75 to 150 acres, depending upon fish screen selection, along the Sacramento River and include a state-of-the-art fish screen, sedimentation basins, tunnel shaft, and ancillary facilities. An additional 40 to 60 acres at each intake location would be temporarily disturbed for staging of construction facilities, materials storage, and a concrete batch plant, if needed.

Tunnel and Tunnel Shafts

The proposed project would construct up to two north connecting tunnel reaches to connect the intakes to an Intermediate Forebay (see "Forebays" section below), a single main tunnel from the Intermediate Forebay to a new Southern Forebay, and two connecting south tunnel reaches as part of the proposed project's South Delta Conveyance Facilities (see "South Delta Conveyance Facilities" section below) to connect to the existing SWP and, potentially CVP, facilities in the south Delta. The single main tunnel would follow one of two potential optional corridors as shown in Figure 1.

The proposed single main tunnel and connecting tunnel reaches would be constructed underground with the bottom of the tunnel at approximately 190 feet below the ground surface. Construction for the tunnel would require a series of launch shafts and retrieval shafts. Each launch and retrieval shaft site would require a permanent area of about four acres. Launch sites would involve temporary use of up to about 400 acres for construction staging and material storage. Depending on the location, the shafts may also require flood protection facilities to extend up to about 45 feet above the existing ground surface to avoid water from entering the tunnel from the ground surface if the area was flooded. Earthen material would be removed from below the ground surface as tunnel construction progresses; this reusable tunnel material could be reused for embankments or other purposes in the Delta or stored near the launch shaft locations.

Forebays

The proposed project would include an Intermediate Forebay and a Southern Forebay. The Intermediate Forebay would provide potential operational benefits and would be located along the tunnel corridor between the intakes and the pumping plant. The Southern Forebay would be located at the southern end of the single main tunnel and would facilitate conveyance to the existing SWP pumping facility and, potentially the CVP pumping facilities. The forebays would be constructed above the ground, and not within an existing water body. The size of the Intermediate Forebay would be approximately 100 acres with an additional 150 acres disturbed during construction for material and equipment storage, and reusable tunnel material storage. The embankments would be approximately 30 feet above the existing ground surface. Additional appurtenant structures, including a permanent crane, would extend up to 40 feet above the embankments.

The Southern Forebay would be located near the existing Clifton Court Forebay and would be approximately 900 acres with an additional 200 acres disturbed during construction for material and equipment storage, potential loading and offloading facilities, and reusable tunnel material storage. The Southern Forebay embankments would be up to 30 feet above the existing ground surface.

Pumping Plant

The proposed project would include a pumping plant located at the new Southern Forebay and would receive the water through the single main tunnel for discharge in the Southern Forebay. The pumping plant would be approximately 25 acres along the side of the Southern Forebay and would include support structures, with a permanent crane for maintenance as the highest feature that would extend approximately 70 feet above the existing ground surface. The temporary and permanent disturbed area for the pumping plant is included in the Southern Forebay area, described above.

South Delta Conveyance Facilities

The proposed project would include South Delta Conveyance Facilities that would extend from the new Southern Forebay to the existing Banks Pumping Plant inlet channel. The connection to the existing Banks Pumping Plant would be via canals with two tunnels to cross under the Byron Highway. The canals and associated control structures would be located over approximately 125 to 150 acres. Approximately 40 to 60 additional acres would be disturbed temporarily during construction. These facilities could also be used to connect the Southern Forebay to the CVP's Jones Pumping Plant.

Contract Amendment for Delta Conveyance

The proposed project may involve modifications to one or more of the State Water Resources Development System (commonly referred to as the SWP) water supply contracts to incorporate the Delta Conveyance Project. Therefore, if modifications move forward, the Delta Conveyance Project EIR will assess, as part of the proposed project, potential environmental impacts associated with reasonably foreseeable potential contract modifications.

PROJECT AREA

The proposed EIR project area for evaluation of impacts consists of the following three geographic regions, as shown in Figure 2, below.

- Upstream of the Delta region
- Statutory Delta (California Water Code Section 12220)
- South-of-Delta SWP Service Areas and, potentially, South-of-Delta CVP Service Areas.

The study areas will be specifically defined for each resource area evaluated in the EIR. Figure 3 shows the SWP South-of-Delta water contractors.

Figure 2. Project Area

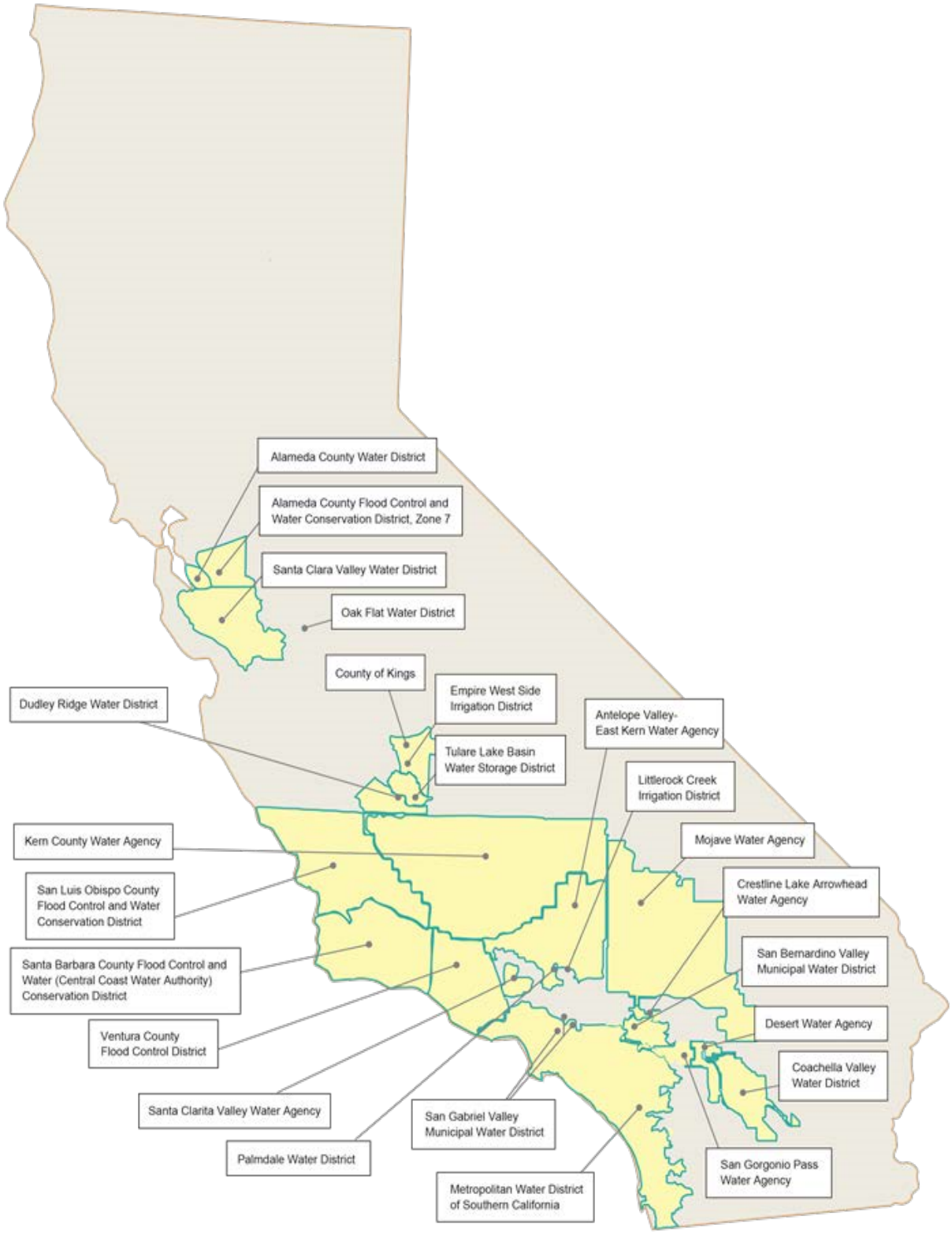


Figure 3. SWP South-of-Delta Service Areas

ALTERNATIVES

As described above, the proposed project has been informed by past efforts taken within the Delta and the watersheds of the Sacramento and San Joaquin Rivers, including those undertaken through the Bay Delta Conservation Plan (BDCP)/California WaterFix. As stated in CEQA Guidelines Section 15126.6(a), the "EIR shall describe a range of reasonable alternatives to the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible."

The scoping process will inform preliminary locations, corridors, capacities and operations of new conveyance facilities to be evaluated in the EIR. In identifying the possible EIR alternatives to be analyzed in detail, DWR is currently considering alternatives with capacities that range from 3,000 to 7,500 cfs, with varying degrees of involvement of the CVP, including no involvement. DWR will make its final choice of potentially feasible alternatives to include in the Draft EIR after receipt of scoping comments.

POTENTIAL ENVIRONMENTAL EFFECTS

DWR as the lead agency will describe and analyze the significant environmental effects of the proposed project. DWR did not prepare an initial study so none is attached; the EIR will include the suite of resource categories contained in Appendix G of CEQA Guidelines. Probable effects may include:

- Water Supply: changes in water deliveries.
- Surface Water: changes in river flows in the Delta.
- Groundwater: potential effects to groundwater levels during operation.
- Water Quality: changes to water quality constituents and/or concentrations from operation of facilities.
- Geology and Seismicity: changes in risk of settlement during construction.
- Soils: changes in topsoil associated with construction of the water conveyance facilities.
- Fish and Aquatic Resources: effects to fish and aquatic resources from construction and operation of the water conveyance facilities.
- Terrestrial Biological Resources: effects to terrestrial species due to construction of the water conveyance facilities.
- Land Use: incompatibilities with land use designations.
- Agricultural and Forestry Resources: preservation or conversion of farmland.
- Recreation: displacement and reduction of recreation sites.
- Aesthetics and Visual Resources: effects to scenic views because of water conveyance facilities.
- Cultural and Tribal Cultural Resources: effects to archeological and historical sites and tribal cultural resources.
- Transportation: vehicle miles traveled; effects on road and marine traffic.

- Public Services and Utilities: effects to regional or local utilities.
- Energy: changes to energy use from construction and operation of facilities.
- Air Quality and Greenhouse Gas: changes in criteria pollutant emissions and localized particulate matter from construction and greenhouse gas emissions.
- Noise: changes in noise and vibration from construction and operation of the facilities.
- Hazards and Hazardous Materials: potential conflicts with hazardous sites.
- Public Health: changes to surface water could potentially increase concerns about mosquito-borne diseases
- Mineral Resources: changes in availability of natural gas wells due to construction of the water conveyance facilities.
- Paleontological Resources: effects to paleontological resources due to excavation for borrow and for construction of tunnels and canals.
- Climate Change: increase resiliency to respond to climate change
- Growth Inducement and Other Indirect Effects: changes to land uses as a result of changes in water availability resulting from changes in water supply deliveries

Where the potential to cause significant environmental impacts are identified, the EIR will identify avoidance, minimization, or mitigation measures that avoid or substantially lessen those impacts.

ADDITIONAL BACKGROUND INFORMATION

DWR previously studied a similar project through efforts on the BDCP and subsequently the California WaterFix. The proposed Delta Conveyance Project is a new project and is not supplemental to these past efforts or tiered from previous environmental compliance documents. This section provides background on these past efforts.

In October 2006, various state and federal agencies, water contractors, and other stakeholders initiated a process to develop what became known as the BDCP to advance the objectives of contributing to the restoration of ecological functions in the Delta and improving water supply reliability for the SWP and CVP Delta operations in the State of California.

In December 2013, after several years of preparation, DWR, Reclamation, the United States Fish and Wildlife Service, and the National Marine Fisheries Service, acting as joint lead agencies under CEQA and NEPA, published a draft of the BDCP and an associated Draft EIR/EIS. The Draft EIR/EIS analyzed a total of 15 action alternatives, including Alternative 4, which was identified as DWR's preferred alternative at that time.

In July of 2015, after taking public and agency input into account, the lead agencies formulated three new sub-alternatives (2D, 4A, 5A) and released a Partially Recirculated Draft EIR/Supplemental Draft EIS (RDEIR/SDEIS) for public comment. Alternative 4A, which is known as "California WaterFix" was identified as DWR and Reclamation's preferred alternative in the RDEIR/SDEIS.

On July 21, 2017, DWR certified the Final EIR and approved California WaterFix. Following

that approval, DWR continued to further refine the project, resulting in reductions to environmental impacts. These project refinements required additional CEQA/NEPA documentation.

On January 23, 2018, DWR submitted an addendum summarizing proposed project modifications to California WaterFix associated with refinements to the transmission line corridors proposed by the Sacramento Municipal Utility District. The Addendum described the design of the applicable modified California WaterFix power features, proposed modifications to those power features (including an explanation of the need for the modifications), the expected benefits of the modifications to the transmission lines, and potential environmental effects as a result of those power related modifications (as compared to the impacts analyzed in the certified Final EIR).

On July 18, 2018, DWR released the California WaterFix Draft Supplemental EIR, which evaluated proposed changes to the certain conveyance facilities of the approved project. (No Final Supplemental EIR was ever completed, due to the change in direction dictated by Governor Newsom's State of the State speech and Executive Order N-10-19.) On September 21, 2018, Reclamation issued the California WaterFix Draft Supplemental EIS, including an alternatives comparison.

SCOPING MEETINGS

The proposed project is of statewide, regional or area-wide significance; therefore, a CEQA scoping meeting is required pursuant to Public Resources Code Section 21083.9, subdivision (a)(2). Public Scoping meetings are scheduled to take place at the following times and locations:

- Monday, February 3, 2020, 1 p.m. – 3 p.m. California Environmental Protection Agency Building, 1001 I Street, Sacramento
- Wednesday, February 5, 2020, 6 p.m. – 8 p.m. Junipero Serra State Building, 320 West Fourth Street, Los Angeles
- Monday, February 10, 2020, 6 p.m. – 8 p.m. Jean Harvie Community Center, 14273 River Road, Walnut Grove
- Wednesday, February 12, 2020, 6 p.m. – 8 p.m. Santa Clara Valley Water District Board Room, 5750 Almaden Expressway, San Jose
- Thursday, February 13, 2020, 6 p.m. – 8 p.m. San Joaquin Council of Governments Board Room, 555 Weber Avenue, Stockton
- Wednesday, February 19, 2020, 6 p.m. – 8 p.m. Clarksburg Middle School Auditorium, 52870 Netherlands Road, Clarksburg
- Thursday, February 20, 2020, 6 p.m. – 8 p.m. Brentwood Community Center Conference Room, 35 Oak Street, Brentwood

Anyone interested in more information concerning the EIR process, or anyone who has information concerning the study or suggestions as to significant issues, should contact Marcus Yee at (916) 651-6736.

WRITTEN COMMENTS

This notice is being furnished to obtain suggestions and information from other agencies and the public on the scope of issues and alternatives to consider in developing the EIR. The primary purpose of the scoping process is to identify important issues raised by the public and responsible and trustee public agencies related to the issuance of regulatory permits and authorizations and natural resource protection. Written comments from interested parties are invited to ensure that the full range of environmental issues related to the development of the EIR are identified. All comments received, including names and addresses, will become part of the official administrative record and may be made available to the public.

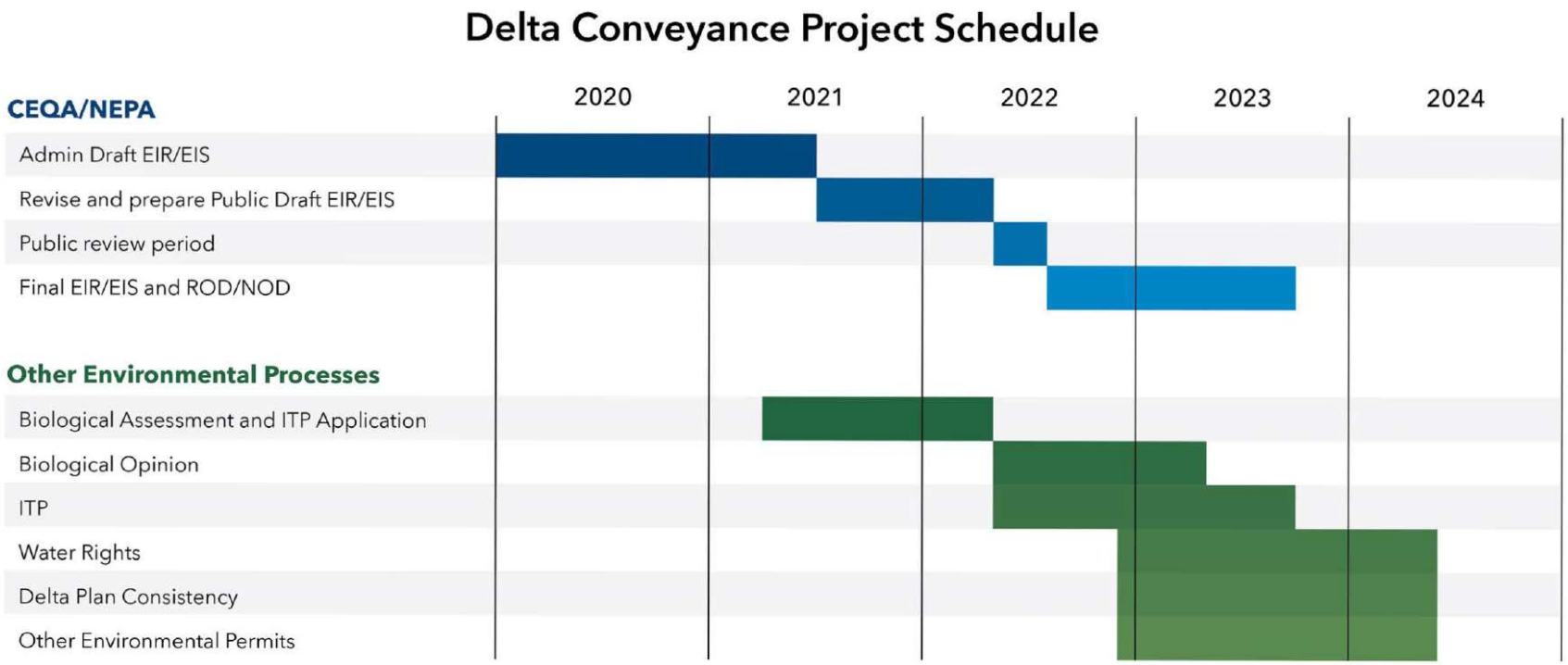
Written comments on this part of the Scoping process will be accepted until 5 p.m. on March 20, 2020 and can be submitted in several ways:

- Via email: DeltaConveyanceScoping@water.ca.gov
- Via Mail: Delta Conveyance Scoping Comments, Attn: Renee Rodriguez, Department of Water Resources, P.O. Box 942836, Sacramento, CA 94236

As required by the CEQA Guidelines, within 30 days after receiving the Notice of Preparation, each responsible and trustee agency is required to provide the lead agency with specific detail about the scope, significant environmental issues, reasonable alternatives, and mitigation measures related to the responsible or trustee agency's area of statutory responsibility that will need to be explored in the EIR. In the response, responsible and trustee agencies should indicate their respective level of responsibility for the project.

PLEASE NOTE: DWR's practice is to make the entirety of comments received a part of the public record. Therefore names, home addresses, home phone numbers, and email addresses of commenters, if included in the response, will be made part of the record available for public review. Individual commenters may request that DWR withhold their name and/or home addresses, etc., but if you wish DWR to consider withholding this information you must state this prominently at the beginning of your comments. In the absence of this written request, this information will be made part of the record for public review. DWR will always make submissions from organizations or businesses, and from individuals identifying themselves as representatives of, or officials of, organizations or businesses, available for public inspection in their entirety.

Attachment 2: DWR's Planning Schedule for DCP



AGREEMENT IN PRINCIPLE

April 30, 2020

This Agreement in Principle has been developed from the State Water Contractor Public Water Agencies' offers presented from July 24, 2019 to present, Department of Water Resources' offers presented from July 31, 2019 to present, and information discussed and presented by the technical and legal work groups.

Agreement in Principle for the State Water Project Water Supply Contract Amendment
on a
Delta Conveyance Project

This Agreement in Principle (**AIP**) is by and between certain State Water Project Public Water Agencies (**PWAs**) and the State of California through the Department of Water Resources (**DWR**) for the purpose of amending the State Water Project Water Supply Contracts.

AIP Objective:

1. Develop an agreement between the State Water Project Contractor Public Water Agencies and Department of Water Resources to equitably allocate costs and benefits of a potential Delta Conveyance Facility that preserves operational flexibility such that the Department of Water Resources can manage the State Water Project to meet regulatory requirements, contractual responsibilities, and State Water Project purposes.

AIP Outline:

I. Definitions

II. Objective 1 - Availability of an option to opt out of costs and benefits of Delta Conveyance Facilities of the State Water Project

III. Objective 2 - Availability of an option to assume, or partially assume, costs and benefits of Delta Conveyance Facilities of the State Water Project

IV. Objective 3 - Pursuit of State Water Project Delta Conveyance Facilities under the State Water Project Water Supply Contracts

V. Objective 4 - Delta Conveyance Facility billing

VI. Objective 5 - Delta Conveyance Facility benefits allocation

VII. Objective 6 - Affect upon other Water Supply Contract provisions

VIII. Other Provisions

IX. Environmental Review Process

X. Authorized Representative Signatures

I. Definitions

a. **Clifton Court Forebay** shall mean the existing State Water Project diversion at Clifton Court Forebay facility through its intake located on Old River in the southern Delta and the associated Skinner Fish Facility.

b. **Delta** shall mean the Sacramento-San Joaquin Delta as defined in Section 12220 of the California Water Code on the date of approval of the Bond Act by the votes of the State of California.

c. **Delta Conveyance Facility (DCF)** shall mean those facilities of the State Water Project consisting of a water diversion intake structure, or structures, located on the Sacramento River and connected by facilities to Banks Pumping Plant in the southern Delta with a single tunnel that will serve the water supply purposes of the State Water Project.

d. **DCF Benefits** shall mean those water supply and capacity benefits attributable to the DCF including but not limited to: (1) Table A water supplies; (2) Article 21 water supplies; (3) carriage water savings; (4) reliable water supply and use of DCF available capacity in the event of a temporary or permanent physical, regulatory, or contractual disruption of southern Delta diversions; and (5) use of DCF available capacity to move non-project water through the proposed DCF.

e. **Fair Compensation** shall include but is not limited to capital recovery, operations and maintenance, replacement, and variable charges associated with the use of the DCF capacity.

f. **State Water Project (SWP)** shall mean the State Water Resources Development System as described in California Water Code section 12931.

g. **State Water Project Contractor Public Water Agencies (PWAs)** shall include the 29 entities holding State Water Project Water Supply Contracts with the Department of Water Resources.

II. Objective 1 - Availability of an option to opt out of costs and DCF Benefits

a. This AIP makes available to each PWA an option to opt out of the costs and benefits of the DCF through a contract amendment that establishes a Statement of Charges (SOC) percentage of DCF Benefits based on the percentages in the Delta Conveyance Allocation Factors table to water attributable to the DCF, as described in Section VI of this AIP.

b. PWAs indicating an intent to opt out of costs and benefits of the DCF shall be described in Section VI(a) of this AIP.

c. An option to opt out of DCF costs and benefits are limited such that a PWA must opt out of at least a minimum 100% of its Municipal and Industrial Table A or 100% of its Agricultural Table A. This provision doesn't prohibit a PWA from taking more than their Table A share, if available, in the Delta Facilities Allocation Factor table.

III. Objective 2 - Availability of an option to assume additional costs and benefits of the DCF

a. This AIP makes available to each PWA an option to assume additional costs and benefits of the DCF through a contract amendment that establishes additional costs on the SOC in exchange for DCF Benefits based on the percentages in the Delta Conveyance Allocation Factors table to water attributable to the DCF, as described in Section VI of this AIP.

b. PWAs indicating an intent to assume DCF costs and benefits shall be described in Section VI(b) of this AIP.

IV. Objective 3 - Pursuit of State Water Project Delta Conveyance Facilities under the State Water Project Water Supply Contracts

a. The DCF shall be constructed and operated as an integrated component of the State Water Project, and DWR will continue to operate the State Water Project at its sole discretion.

b. The DCF is an authorized component of the State Water Project pursuant to California Water Code sections 11100 et seq. and 12930 et seq.

c. Effective Date: A contract amendment pursuant to this AIP shall have an effective date no sooner than the billing transition date set forth in State Water Project Water Supply Contract Amendment known as The Contract Extension Amendment.

d. Administration of DCF: DWR will forecast and account for Project Water attributable to the DCF and DWR will determine whether or not that Project Water would not have been available at Clifton Court Forebay. A whitepaper describing the DWR's and the PWAs' current understanding of the approach on forecasting, administration, and accounting is contained in Attachment 1. Attachment 1 will not be incorporated into contract language.

V. Objective 4 - Delta Conveyance Facility billing

a. These costs would be billed to and collected from SWP PWAs consistent with the Delta Facilities Allocation Factor table below through their annual SOC.

b. Delta Conveyance Facilities Charge Components: All capital and minimum operations, maintenance, power and replacement (OMP&R) costs associated with the DCF are 100% reimbursable and shall be recovered by DWR from PWAs through their annual SOCs consistent with the Delta Facilities Allocation Factor table. These costs shall be allocated to and billed under two new charges as follows:

(1) Delta Conveyance Facilities Capital Charge Component.

(2) Delta Conveyance Facilities Minimum OMP&R Component.

c. Delta Conveyance Facilities Capital Charge Component Method of Computation

1. This computation will recover actual annual debt service created by financing activities (Financing Method) for DCF.

2. Each Financing Method shall provide an annual repayment schedule, which includes all Financing Costs.

3. Financing Costs shall mean the following: Principal of and interest on Revenue Bonds, debt service coverage required by the applicable bond resolution or indenture in relation to such principal and interest, deposits to reserves required by the bond resolution or indenture in relation to such Revenue Bonds, and premiums for insurance or other security obtained in relation to such Revenue Bonds.

d. Financing Method shall be divided into four categories: DCF Capital Costs paid with the proceeds of Revenue Bonds; DCF Capital Costs paid with amounts in the State Water Resources Development System Reinvestment Account; DCF Capital Costs paid annually for assets that will have a short Economic Useful Life or the costs of which are not substantial, and DCF Capital Costs prepaid by the PWAs consistent with the Delta Facilities Allocation table.

e. DCF Capital Charge Component should be allocated to the PWAs in proportion to the Delta Conveyance Facilities Allocation Factors for each calendar year and consistent with the Delta Facilities Allocation Factor table.

f. Delta Conveyance Facilities Minimum OMP&R Charge Component Method of Computation

1. Recovery will be estimated and/or actual annual OMP&R costs determined for the DCF each year.

2. DCF Minimum OMP&R Charge Component shall be allocated to the PWAs in proportion to the Delta Conveyance Facilities Allocation Factors for each calendar year.

g. Delta Conveyance Facilities Energy Charges: The DCF energy costs are 100% reimbursable by the PWAs and the methodology will be determined by DWR, reviewed in the SWRDS Finance Committee, and approved by the Director.

h. Redetermination: These charges shall be subject to redetermination.

i. Step-up: PWAs that execute a contract amendment to opt out will not be allocated any portion of a step-up required in the event of a default on a DCF Capital Charge.

j. Delta Conveyance Facilities Allocation Factors: The following table is a preliminary allocation of DCF participation percentages. Only PWAs with a greater than 0 percentage would be billed for DCF Charge Components through their annual SOC, using the Delta Conveyance Facility Allocation Factors described in the table. PWAs with a zero allocation factor would not be billed for repayment of costs for construction, operation and maintenance of facilities associated with DCF, except to the extent there is a permanent transfer of Table A which would increase a PWA from a greater than zero allocation factor through a subsequent contract amendment.

Public Water Agency	**Delta Conveyance Facilities Allocation Factors**
City of Yuba City	0
County of Butte	0
Plumas County FC&WCD	0
Napa County FC&WCD	0
Solano County Water Agency	0
Alameda County FC&WCD, Zone 7	
Alameda County Water District	
Santa Clara Valley Water District	
Dudley Ridge Water District	
Empire-West Side Irrigation District	0
Kern County Water Agency-Total	
County of Kings	0
Oak Flat Water District	0
Tulare Lake Basin Water Storage District	0
San Luis Obispo County FC&WCD	
Santa Barbara County FC&WCD	0
Antelope Valley-East Kern Water Agency	
Santa Clarita Valley Water Agency	
Coachella Valley Water District	
Crestline-Lake Arrowhead Water Agency	
Desert Water Agency	
Littlerock Creek Irrigation District	0
Mojave Water Agency	
Palmdale Water District	
San Bernardino Valley Municipal Water District	
San Gabriel Valley Municipal Water District	
San Gorgonio Pass Water Agency	
The Metropolitan Water District of Southern California	
Ventura County Watershed Protection District	
Total	100.000%

VI. Objective 5 - Delta Conveyance Facility Benefits Allocation

a. PWAs that execute a contract amendment to opt out of DCF costs and benefits will agree, within that amendment, to the following:

i. Charges as set forth in Section V of this AIP will not appear on its SOC.

ii. Forego and waive any contractual rights to the following:

a. Right to or delivery of Project Water attributable to the DCF, provided that DWR determines that such water would not have been available for diversion at Clifton Court Forebay. This AIP will not modify the amounts within Table A but will memorialize this limited reduction for DCF Benefits by adding a footnote to the PWA's Table A to reflect their zero allocation for DCF Benefits.

b. Any contractual rights to or delivery of Article 21 Interruptible Water prior to the point(s) in time each year DWR determines that a volume of water equal to the volume of current year Project Water for Table A in San Luis Reservoir attributable to DCF in the SWP share of San Luis Reservoir storage will be displaced or evacuated by a quantity of exports equal to the quantity of exports from Clifton Court Forebay that would have been stored in San Luis Reservoir absent the DCF. Provided that, when Article 21 Interruptible Water supply is greater than demand from PWAs with a greater than zero Delta Conveyance Facility Allocation factor, Article 21 Interruptible Water will be made available to all PWAs based on Table A percentage.

c. Any contractual rights to or delivery of Article 21 Interruptible Water attributable to the DCF after a volume of water equal to the volume of current year Project Water for Table A in San Luis Reservoir attributable to DCF has been evacuated or displaced by the exports from Clifton Court Forebay that would have been stored in San Luis Reservoir absent DCF. Provided that, when Article 21 Interruptible Water supply is greater than demand from PWAs with a greater than zero Delta Conveyance Facility Allocation Factor, Article 21 Interruptible Water will be made available to all PWAs based on Table A percentage.

d. Right to use DCF conveyance capacity unused by DWR for SWP purposes to convey non-project water, except as provided in subsection h.

e. Right to use available DCF conveyance capacity to convey Project Water in the event that pumping directly from the south Delta is prevented or impaired by a physical, regulatory or contractual disruption, including but not limited to sea level rise, seismic events, flooding, or other uncontrollable event.

f. Right to carriage water savings that DWR determines are realized during its operation of any DCF for purposes of conveying Project Water.

g. Right to any credit from Fair Compensation collected by DWR for use of available DCF conveyance capacity.

h. Rights to use of the DCF, unless a subsequent contract with DWR is entered that provides for payment of Fair Compensation associated with such use.

iii. For the North of Delta PWAs, DWR will not change the current administrative process for determining the availability of Article 21 due to the DCF. This process will be documented in the Article 21 administration that is distributed via a Notice to Contractors.

b. PWAs that execute a contract amendment to assume costs and benefits of the DCF will agree, within that amendment, to the following:

i. Charges will appear on the SOC as set forth in the table in the percentages shown in Section V of this AIP.

ii. DCF Benefits in proportion to the percentage table in Section V of this AIP, including but not limited to:

a) Delivery of Table A amounts diverted at and conveyed through the DCF. This AIP will not modify the amounts within Table A but will memorialize this DCF Benefits by amending the PWA's Table A with a footnote. The footnote will recognize each PWA's DCF Benefits consistent with the Delta Conveyance Facilities Allocation Factors.

b) Article 21 Interruptible Water attributable to DCF.

c) Available DCF conveyance capacity unused by DWR for SWP purposes, to convey non-project water for ultimate use within that PWA's service area.

d) Carriage water savings that DWR determines are realized during its operation of any DCF for purposes of conveying Project Water.

e) Available DCF conveyance capacity to convey Project Water in the event that pumping in the south Delta is prevented or impaired by a physical, regulatory or contractual disruption, including but not limited to sea level rise, seismic events, flooding, or other uncontrollable event.

f) A credit from Fair Compensation collected by DWR for use of available DCF conveyance capacity.

c. Nothing in this AIP changes Article 18(a) in the existing State Water Project Water Supply Contracts.

VII. Objective 6 - Affect Upon Other Water Supply Contract Provisions

a. Unless specifically stated in this AIP and incorporated into a subsequent contract amendment, there are no changes to the PWAs' rights and obligations under the existing State Water Project Water Supply Contracts.

b. Transfers and exchanges are not intended to be modified under this AIP and shall be subject to the provisions of the then existing State Water Project Water Supply Contracts.

VIII. Other Provisions

a. Clifton Court Forebay Diversion Priority: In the event that DWR uses its discretion to move Project Water through the DCF that could have been moved through Clifton Court Forebay Intake, PWAs with a greater than zero Delta Conveyance Facilities Allocation Factor will be given a first priority of available capacity, as determined by DWR, based on their percentage in section V to move up to that same amount of non-project water at Clifton Court Forebay Intake.

IX. Environmental Review Process

DWR and the PWAs agree that this AIP is intended to be used during the environmental review process for the California Environmental Quality Act (CEQA), to define the proposed project description for the purposes of CEQA, and to permit the next steps of the SWP water supply contract amendment process, including scoping and the preparation of the EIR. The AIP principles are not final contract language and do not represent a contractual commitment by either DWR or the PWAs to approve any proposed project or to sign contract amendments. By concurring with the AIP, DWR and the PWAs express their intent to move forward with the CEQA process with DWR as lead agency and the PWAs as responsible agencies, and ultimately develop a proposed project consisting of contractual amendments consistent with the AIP principles and prepare the EIR for consideration by DWR and the PWAs.

At the end of the CEQA process and in compliance with CEQA, DWR and the PWAs will each individually evaluate the EIR and Contract Amendment, exercise their independent judgment, and determine whether or not to certify the EIR, approve the proposed project and sign the contract amendment or to approve an alternative project. Consequently, even though DWR and the PWAs have agreed to the AIP for the purposes described in the preceding paragraphs, DWR and each PWA retain their full discretion under CEQA to consider and adopt mitigation measures and alternatives, including the alternative of not going forward with the proposed project.

Attachment 1: Final White Paper

I. Background

This white paper describes current understanding of how the Department of Water Resources (DWR) would account for and administer the Delta Conveyance Facility (DCF) Benefits. DWR will include information regarding the accounting and administration of water attributable to DCF in relevant Notice(s) to State Water Project Contractors consistent with prior practice. No legally binding obligations are created by this white paper. This white paper may be updated from time to time by DWR, in consultation with the Public Water Agencies (PWAs), in response to factors including, but not limited to, changes in laws, regulations or permits applicable to DWR and/or the State Water Project (SWP). Capitalized terms not defined herein shall have the meanings ascribed to them in the DCF Agreement in Principle (AIP).

II. Draft Delta Conveyance Accounting and Administration Concepts

The DCF will be integrated into the State Water Project and operated to provide maximum flexibility to meet water supply, regulatory requirements and contractual obligations. There are some PWAs that may opt out of the DCF Benefits and charges. For this reason, it will be necessary to account for DCF Benefits. DCF Benefits are described in the AIP and are "those water supply and capacity benefits attributable to the DCF including but not limited to: (1) Table A water supplies; (2) Article 21 water supplies; (3) carriage water savings; (4) reliable water supply and use of DCF available capacity in the event of a temporary or permanent physical, regulatory, or contractual disruption of southern Delta diversions; and (5) use of DCF available capacity to move non-Project Water through the proposed DCF." To account for DCF Benefits, DWR will need to determine the amount of water attributable to the DCF. DWR will primarily use two tools: 1) **forecasting** Project Water attributable to the DCF for the coming year; and, 2) **accounting** for Project Water attributable to the DCF in a timely manner. Both are described below.

A. Forecasting- DWR will forecast, as shown below, to quantify the amount of Project Water attributable to DCF.

1. DWR anticipates that it will provide three water supply allocation forecasts:
    a. North of Delta allocation that includes water attributable to the south Delta diversions (similar to current practice).
    b. South of Delta allocation that includes water attributable to the south Delta diversions (similar to current practice).
    c. Allocation of water attributable to the DCF.
2. The allocation forecasts will continue to be updated monthly and each forecast will include updated information on hydrology including runoff projections, SWP storage conditions, PWA demands, regulatory requirements, and actual exports attributable to the south Delta diversions and the DCF.

3. DWR will continue to include in the allocation forecasts any potential DCF capacity available for conveyance of non-Project Water.

4. Seasonal Forecast: Should conditions warrant additional forecasts, (i.e. wet hydrological conditions and/or DWR determines that San Luis Reservoir is likely to fill) DWR will provide more frequent forecasts on one or more of the following:

   a. San Luis Reservoir fill projection.

   b. Potential Article 21 availability.

B. Accounting

1. DWR will continue to create operational schedules for the south Delta and the DCF which will include any operational constraints and in accordance with applicable regulatory requirements and contractual obligations in order to account for water attributable to the DCF.

2. DWR will reconcile water exports attributable to DCF and the south Delta facilities in a timely manner.

3. If there is a difference in the amount of water conveyed through the south Delta facilities between the planned operations and actual operations there will be a determination about the cause of any identified differences. If the difference is due to a physical, regulatory, or contractual disruption of south Delta diversions or other south Delta restrictions, then water conveyed through the DCF will be considered water attributable to DCF. If the difference is the result of DWR's discretionary decision to convey Table A water through the DCF instead of south Delta, no charge/credit will occur. However, DWR will estimate the carriage water savings associated with the discretionary use of DCF and carriage water savings will be considered water attributable to DCF.

4. Carriage water savings that DWR determines are realized by conveying Project Water through the DCF that would have otherwise been moved through the south Delta facilities, will be credited to Participants. PWAs with a zero Delta Conveyance Allocation Factor that make arrangements with DWR to pay for use of available capacity in the DCF for non-Project Water may be credited carriage water savings associated with this use.

5. Available DCF capacity, as determined by DWR, to convey transfers and exchanges of Project Water between PWAs with a Delta Conveyance Facility Allocation Factor of zero and PWAs with a greater than zero Delta Conveyance Facility Allocation Factor is interpreted as capacity in the DCF attributed to the PWAs with a greater than zero Delta Conveyance Facility Allocation Factor and no additional capital or minimum operations, maintenance, power and replacement (OMP&R) charges for use of DCF capacity will apply notwithstanding any PWA's interpretation of existing contract language to the contrary. Nothing in this provision shall be construed as altering any party's position regarding the application for use of facility charges in other contexts.

6. **Article 21 attributable to DCF for South of Delta PWAs:** As set forth in the AIP, PWAs opting out of the DCF will influence the administration of water made available pursuant to Article 21. To determine the quantity of Article 21 water that PWAs with a zero Delta Conveyance Facilities Allocation Factor will initially forego and the quantity of Article 21 water those PWAs with a Delta Conveyance Facilities Allocation Factor greater than zero will receive, it is necessary to determine the amount of water attributable to the DCF in the San Luis Reservoir at Point A. Determining this water quantity will provide the basis upon which DWR can administer the DCF Benefits contained in the contract amendment that results from the AIP.

    a. Process (See Table 1):

        i. **Point A:** The point at which DWR determines Article 21 water attributable to DCF will be available. DWR will determine volume of Project Water for Table A attributable to the DCF in San Luis Reservoir.

        ii. DWR will work with PWAs to develop an accounting methodology that considers exports attributed to DCF, exports from south Delta facilities, deliveries to PWAs, San Luis Reservoir fill point and the PWAs DCF allocation factors to determine the volume of Project Water for Table A in San Luis Reservoir attributable to DCF at Point A.

        iii. **Point B:** The point at which DWR determines Article 21 water would have been made available absent Project Water for Table A attributable to DCF in San Luis Reservoir, and/or DWR determines through the accounting process that San Luis Reservoir would have filled absent current year Project Water attributable to DCF. This point is reached when a volume of water equal to the volume of current year Project Water for Table A in San Luis Reservoir attributable to DCF at Point A has been displaced or evacuated by the quantity that would have been exported from Clifton Court Forebay and stored in San Luis Reservoir absent the DCF.

    b. Deliveries of Article 21 water attributable to DCF Between Point A and Point B:

        i. PWAs may submit Article 21 requests to DWR prior to point A. DWR will satisfy those requests according to the following priority:

            1. PWAs up to their Delta Conveyance Facility Allocation Factor;

            2. All PWAs based on Table A percentage. Only Variable and DCF Energy charges will apply for those PWAs with a greater than zero Delta Conveyance Facility Allocation Factor. For those PWAs with a zero Delta Conveyance Facility Allocation Factor, Article 21 water will be made available at the following charges:

                a. the Variable and DCF Energy charges for the amount up to Article 56(c)(1) and Article 56(c)(2) water spilled within the

PWAs proportionate share of San Luis Reservoir storage at Point A;

b. Fair Compensation for any additional amounts.

c. Deliveries of Article 21 water attributable to DCF After Point B:

i. PWAs may submit requests to DWR. DWR will satisfy those requests according to the following priority:

1. PWAs' proportion based upon the Delta Conveyance Facility Allocation Factors;

2. All PWAs based on Table A percentage. Only Variable and DCF Energy charges will apply for those PWAs with a greater than zero Delta Conveyance Allocation Factor. For those PWAs with a zero Delta Conveyance Facility Allocation Factor, this water will be provided at Fair Compensation.

TABLE 1: Article 21 Interruptible Water Attributable to the Delta Conveyance Facilities

PWA	Point A - Point B	At/After Point B
FIRST PRIORITY: PWAs participating in DCF (PWAs with a greater than zero DCF Allocation Factor %)	• Quantity (AF): Up to DCF Allocation Factor % • Charge ($): Variable and DCF Energy Charges	• Quantity (AF): Up to DCF Allocation Factor % • Charge ($): Variable and DCF Energy Charges
SECOND PRIORITY: All PWAs	• Quantity (AF): Based on Table A % • Charge to DCF Participant ($): Variable and DCF Energy Charges • Charge to DCF Non-Participant for AF <= to spilled carryover water ($): Variable and DCF Energy Charges • Charge to DCF Non-Participant for AF > spilled carryover water ($): Fair Compensation	• Quantity (AF): Based on Table A % • Charge to DCF Participant ($): Variable and DCF Energy Charges • Charge to DCF Non-Participant ($): Fair Compensation

C. Collaborative Development of Administrative Procedures

As a subset to the Water Operations Committee, a DCF workgroup will be created similar to the current San Luis Reservoir Workgroup. This group will meet and confer as needed, and may discuss items such as forecasting, operations, accounting, and administration of the DCF. Members may include representatives from DWR (SWPAO and OCO) and PWAs and will report back to the PWA Water Operations Committee.

Summary Report for
The Metropolitan Water District of Southern California
Board Meeting
October 13, 2020

CONSENT CALENDAR ITEMS – ACTION

The Board:

Certified the Final Program Environmental Impact Report for the Right-of-Way and Infrastructure Protection Program for the Western San Bernardino County region and take related CEQA actions; and approved the program for the Western San Bernardino County region for the purposes of CEQA. **(Agenda Item 7-1)**

Awarded $276,373 contract to Minako America Corp., for rehabilitation of the Diamond Valley Lake wave attenuator. **(Agenda Item 7-2)**

Awarded $1,294,800 contract to Kaveh Engineering & Construction, Inc. for drainage and erosion control improvements at Garvey Reservoir. **(Agenda Item 7-3)**

Amended the current CIP to include the implementation of BESS at four Metropolitan facilities; and authorized an agreement with Stantec Inc. in an amount not-to-exceed $900,000. **(Agenda Item 7-4)**

Authorized the General Manager to enter into a Contributed Funds Agreement funded in an amount not-to exceed $400,000 to the U.S. Department of the Interior, Bureau of Land Management. **(Agenda Item 7-5)**

Authorized the General Manager to sign the Second Amendment to the 2019 Reservoir Project Agreement with the Sites Project Authority and other participants for participation in the Phase 2 Workplan process for an amount not to exceed $5,000,000; and appropriated $5,000,000 for the Phase 2 Workplan based on reserving an option for 50,000 AF of water supply yield. **(Agenda Item 7-6)**

Authorized the use of up to $2.75 million annually from the Conservation Program Budget for the Multi-Family Property Toilet Replacement Program. **(Agenda Item 7-7)**

Approved implementation of the Flow Monitoring Device Pilot Program; and adopted the resolution; authorized the General Manager to accept grant funds, if awarded; authorized the General Manager to enter into a contract for the grant funds. **(Agenda Item 7-8)**

Authorized the General Counsel to amend the existing agreement with the Thomas Law Group to increase the maximum amount payable by Metropolitan by $150,000 to an amount not-to-exceed $250,000. **(Confidential letter heard in Closed Session at committee) (Agenda Item 7-9)**

Authorized an increase in the maximum amount payable under contract with Meyers, Nave, Riback, Silver & Wilson, PLC for legal services by $100,000 to an amount not-to-exceed $200,000. **(Confidential letter heard in Closed Session at committee) (Agenda Item 7-10)**

OTHER BOARD ITEMS – ACTION

None.

CONSENT CALENDAR OTHER ITEMS – ACTION

Approved committee assignment for Director Matt Petersen to serve on the Water, Planning and Stewardship Committee. **(Agenda Item 6B)**

OTHER MATTERS AND REPORTS

Gloria Gray was elected to serve a second term as Chairwoman of the Board, effective January 1, 2021. **(Agenda Item 5D)**

Induction of new Director Matt Petersen representing the City of Los Angeles.
(Agenda Item 5I)

OTHER MATTERS

Discussed and Approved Compensation Recommendation Option 1: No increases for General Manager, General Counsel, General Auditor, and Ethics Officer. **(Agenda Items 10-3)**

THIS INFORMATION SHOULD NOT BE CONSIDERED THE OFFICIAL MINUTES OF THE MEETING.

Board letters related to the items in this summary are generally posted in the Board Letter Archive approximately one week after the board meeting. In order to view them and their attachments, please copy and paste the following into your browser:
http://mwdh2o.com/WhoWeAre/Board/Board-Meeting/Pages/search.aspx

All current month materials, before they are moved to the Board Letter Archive, are available on the public website here: http://mwdh2o.com/WhoWeAre/archived-board-meetings

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

MWD MEETING AGENDA

Item No. 6b

Regular Board Meeting

November 10, 2020

12:00 p.m.

Tuesday, November 10, 2020 Meeting Schedule	
9:30 AM	L&C
10:30 AM	RP&AM
12:00 PM	Board
12:30 PM	Bay-Delta

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.

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

1. Call to Order

(a) Invocation: Mary Sue Jackinsky, Eastern Capital Technologies

(b) Pledge of Allegiance: Director Camacho, Inland Empire Utilities Agency

2. Roll Call

3. Determination of a Quorum

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

5. OTHER MATTERS AND REPORTS

A. Report on Directors' events attended at Metropolitan expense for month of October 2020

B. Chairwoman's Monthly Activity Report

C. Report from Executive Committee on nominations for Board Secretary

D. Nomination and Election for Board Secretary for two-year term effective January 1, 2021

E. General Manager's summary of activities for the month of October 2020

F. General Counsel’s summary of activities for the month of October 2020

G. General Auditor’s summary of activities for the month of October 2020

H. Ethics Officer’s summary of activities for the month of October 2020

CONSENT CALENDAR ITEMS — ACTION

6. CONSENT CALENDAR OTHER ITEMS — ACTION

A. Approval of the Minutes of the Meeting for October 13, 2020 (Copies have been submitted to each Director)
Any additions, corrections, or omissions

B. Approve committee assignments

7. CONSENT CALENDAR ITEMS — ACTION

7-1 Authorize an increase of $150,000 in change order authority to a procurement contract to furnish valves for the F. E. Weymouth Water Treatment Plant; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. (E&O)

7-2 Award $2,435,000 contract to J.F. Shea Construction, Inc. for relining of Prestressed Concrete Cylinder Pipe (PCCP) within a portion of the Allen-McColloch Pipeline (AMP); the General Manager has determined that the AMP PCCP rehabilitation project is exempt or otherwise not subject to CEQA; authorize an increase of $2.1 million to an agreement with HDR Engineering, Inc. for a not-to-exceed amount of $6.5 million for engineering design services for the Sepulveda Feeder PCCP rehabilitation; authorize an increase of $150,000 to an agreement with Helix Environmental Planning, Inc. for a not-to-exceed amount of $2.25 million to prepare environmental documentation for the Sepulveda Feeder PCCP rehabilitation; and adopt CEQA determination that the Sepulveda Feeder rehabilitation project was previously addressed in the certified 2017 Prestressed Concrete Cylinder Pipe Rehabilitation Program Final Programmatic Environmental Impact Report. (E&O)

7-3 Authorize preparation of environmental documentation and technical studies, and public outreach activities for the Regional Recycled Water Program; and amend agreement with National Water Research Institute to facilitate additional technical workshops related to the Program's Demonstration Plant; the General Manager has determined that the proposed actions are exempt or otherwise not subject to CEQA. (E&O) **[Posting Separately]**

7-4 Authorize an amendment to an existing agreement with County Sanitation District No. 2 of Los Angeles County and a new agreement with Southern Nevada Water Authority to support continued evaluation and development of the Regional Recycled Water Program; the General Manager has determined that the proposed actions are exempt or otherwise not subject to CEQA. (E&O) **[Posting Separately]**

7-5 Authorize an increase of $600,000 in change order authority for the contract to rehabilitate the Greg Avenue Pump Station; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. (E&O)

7-6 Authorize an agreement with Securitas to provide security guard services for a maximum period of five years at a total cost not to exceed $55 million; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. (E&O) **[Posting Separately]**

7-7 Review and consider the city of Hemet's adopted Mitigated Negative Declaration and take related CEQA actions, and authorize the General Manager to grant a permanent easement for public road widening and utility purposes to the city of Hemet on Metropolitan-owned property in the county of Riverside. (RP&AM)

7-8 Authorize the General Manager to grant a permanent easement for public road purposes to the city of Fontana on Metropolitan-owned property in the county of San Bernardino; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. (RP&AM)

7-9 Authorize an amendment to an agreement with Roesling Nakamura Terada Architects for master planning activities in support of the District Housing and Property Improvement Program and the consolidation of certain projects into the District Housing and Property Improvement Program; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. (RP&AM)

7-10 Approve The Metropolitan Water District of Southern California's salary schedules pursuant to CalPERS regulations; the General Manager has determined that the proposed action is exempt or otherwise no subject to CEQA. (OP&T)

7-11 Authorize an agreement with SYNTECH Group Inc., in an amount not-to-exceed $3,480,000 for the procurement of equipment for the Primary location space for the Datacenter Modernization/Relocation project; the General Manager has determined the proposed action is exempt or otherwise not subject to CEQA. (OP&T)

[Conference with Metropolitan Information Technology Unit Manager of the Program Management Office Alex Encarnacion, or designated agents on threats to public services or facilities; may be heard in closed session pursuant to Gov. Code Section 54957(a)]

7-12 Authorize and direct the Ethics Officer to enter into a contract with an external consultant in an amount not-to-exceed $150,000 to conduct an independent review of allegations of systemic workplace harassment and retaliation, Metropolitan's Equal Employment Opportunity programs and practices, and related issues and concerns; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. (OP&T) **[Posting Separately]**

END OF CONSENT CALENDAR ITEMS

8. OTHER BOARD ITEMS — ACTION

8-1 Approve Resolution to hire retired Annuitant and waive 180-day waiting period; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. (L&C)

9. BOARD INFORMATION ITEMS

9-1 Update on Conservation Program

9-2 Review of the proposed COVID-19 Member Agency Payment Deferment Program and proposed amendment to the Administrative Code to add Section 4519 delegating authority to the General Manager to administer the Program. (F&I)

10. FOLLOW-UP ITEMS

11. FUTURE AGENDA ITEMS

12. ADJOURNMENT

NOTE: Each agenda item with a committee designation will be considered and a recommendation may be made by one or more committees prior to consideration and final action by the full Board of Directors. The committee designation appears in parentheses at the end of the description of the agenda item e.g., (E&O, F&I). Committee agendas may be obtained from the Board Executive Secretary.

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.