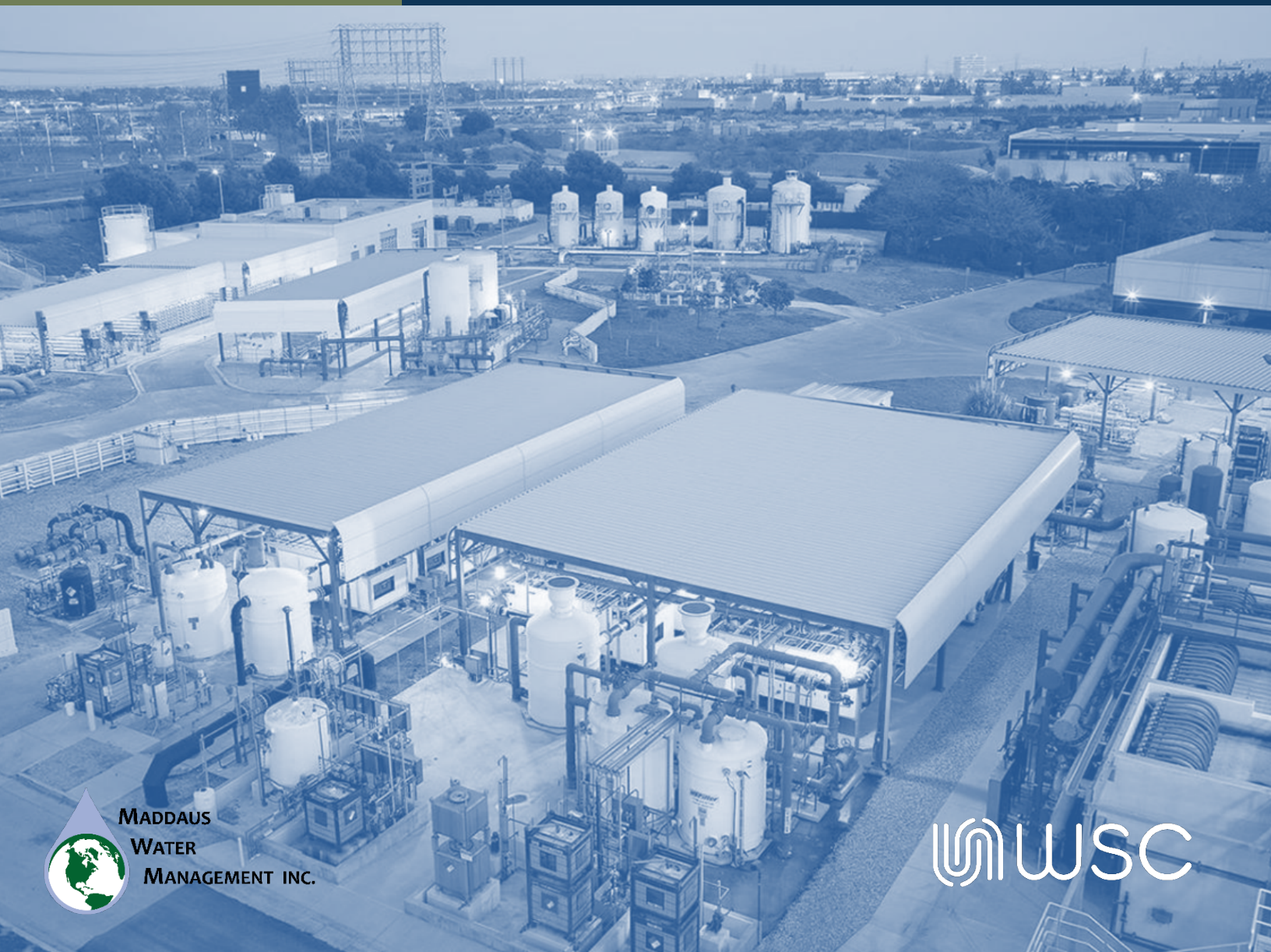
Water Shortage Contingency Plan

Final

JUNE 2021

WEST BASIN MUNICIPAL WATER DISTRICT



MADDAUS WATER MANAGEMENT INC.

WSC

WEST BASIN MUNICIPAL WATER DISTRICT

Water Shortage Contingency Plan

JUNE 28, 2021

Prepared by Maddaus Water Management, Inc and Water Systems Consulting, Inc.

MADDAUS WATER MANAGEMENT INC.

WSC

ACKNOWLEDGMENTS

The 2021 Water Shortage Contingency Plan was prepared by Maddaus Water Management, Inc. in conjunction with Water Systems Consulting, Inc. The primary authors are listed below.

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The Project Team would like to acknowledge the significant contributions of West Basin Municipal Water District, including the following staff.

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

ACRONYMS & ABBREVIATIONS

ACWA	Association of California Water Agencies
CWC	California Water Code
DRP	Drought Rationing Plan
DWR	California Department of Water Resources
IAWP	Interim Agricultural Water Program (Met)
Metropolitan	Metropolitan Water District of Southern California
UWMP	Urban Water Management Plan
WCGB	West Coast Groundwater Basin
WRD	Water Replenishment District
WSAP	Water Supply Allocation Plan
WSCP	Water Shortage Contingency Plan
WSDM	Water Shortage and Demand Management
WUE	Water Use Efficiency
West Basin	West Basin Municipal Water District

WATER SHORTAGE CONTINGENCY PLAN

1 Introduction and WSCP Overview

The Water Shortage Contingency Plan (WSCP) is a strategic planning document designed to prepare for and respond to water shortages.

IN THIS SECTION

- WSCP Overview and Organization
- Integration to Other Planning Efforts

This WSCP complies with California Water Code (CWC) Section 10632, which requires that every urban water supplier prepare and adopt a WSCP as part of its urban water management plan (UWMP). This level of detailed planning and preparation is intended to help maintain reliable supplies and reduce the impacts of supply interruptions.

West Basin Municipal Water District (West Basin) uses its WSCP as an operating manual to prevent catastrophic service disruptions through proactive, rather than reactive, management. A water shortage — when water supply availability is insufficient to meet the normally expected customer water use at a given point in time — may occur because of a number of reasons, such as drought, climate change, or catastrophic events. This WSCP provides a structured guide for West Basin to deal with temporary water shortages, incorporating prescriptive information and standardized action levels along with implementation actions, in the event of a catastrophic supply interruption. This allows West Basin's governing body, its staff, and retail agencies to easily identify and efficiently implement predetermined steps to manage a water shortage with predictability and accountability. A well-structured WSCP also allows for real-time water supply availability assessments and structured steps designed to respond to actual conditions.

The WSCP also describes West Basin's procedures for conducting an Annual Water Supply and Demand Assessment (Annual Assessment), which is required by CWC Section 10632.1. Starting in 2022, the Annual Assessment is due to the California Department of Water Resources (DWR) on or before July 1 of each year or within 14 days of receiving final allocations from the State Water Project, whichever is later. West Basin's 2021 WSCP is created as a separate plan, but is included as an attachment to its 2020 UWMP, which will be submitted to DWR by July 1, 2021 (West Basin Municipal Water District, June 2021). However, the 2021 WSCP can be amended, as needed, without amending the UWMP. It is important to note that the CWC does not prohibit an urban water supplier from taking actions not specified in its WSCP, if needed, without having to formally amend its UWMP or WSCP.

1.1 Water Shortage Contingency Plan Requirements and Organization

The WSCP provides the steps and water-shortage response actions to be taken in times of water-shortage conditions.

Each WSCP has prescriptive elements, such as:

- An analysis of water supply reliability
- The water-shortage response actions for each of the six standard water-shortage levels, which correspond to water-shortage percentages ranging from 10% to greater than 50%
- An estimate of potential demand reduction for each measure to close an anticipated water supply gap
- Protocols and procedures to communicate identified actions for any current or predicted water-shortage conditions
- Procedures for an Annual Water Supply and Demand Assessment
- Reevaluation and improvement procedures for evaluating the WSCP

This WSCP is organized into three main sections, with Section 3 aligned with the CWC Section 10632 requirements:

Section 1 Introduction and WSCP Overview – provides an overview of the WSCP fundamentals.

Section 2 Background Information – provides details on West Basin's water service area, including a description and map of the service area and retail water agencies served by West Basin.

Section 3 Water Shortage Contingency Preparation and Response – provides significant details regarding water shortage preparation and response as outlined further in the Section 3 subsections.

- **Section 3.1 Water Supply Reliability Analysis** – provides a summary of the water supply analysis and water reliability findings from the 2020 UWMP.
- **Section 3.2 Annual Water Supply and Demand Assessment Procedures** – provides a description of procedures to conduct and approve the Annual Assessment.
- **Section 3.3 Six Standard Water Shortage Levels** – explains the WSCP's six standard water-shortage levels, corresponding to progressive water-shortage ranges from up to 10% to more than 50%.

- **Section 3.4 Shortage Response Actions** – describes the WSCP's shortage response actions that align with the defined shortage levels.
- **Section 3.5 Communication Protocols** – addresses communication protocols and procedures to inform retail agencies; the public; interested parties; and local, regional, and state governments regarding any current or predicted shortages and any resulting shortage response actions.
- **Section 3.6 Compliance and Enforcement** – is not required by wholesale water providers.
- **Section 3.7 Legal Authorities** – describes the legal authorities that enable West Basin to implement and enforce its shortage response actions.
- **Section 3.8 Financial Consequences of the WSCP** – provides a description of the financial consequences of and responses to drought conditions.
- **Section 3.9 Monitoring and Reporting** – is not required by wholesale water providers.
- **Section 3.10 WSCP Refinement Procedures** – addresses reevaluation and improvement procedures for monitoring and evaluating the functionality of the WSCP.
- **Section 3.11 Special Water Feature Distinction** – is not required by wholesale water providers.
- **Section 3.12 Plan Adoption, Submittal, and Implementation** – provides a record of the process West Basin followed to adopt and implement its WSCP.

Section 3.6, **Section 3.9**, and **Section 3.11** are not required to be completed by wholesale water suppliers like West Basin. However, West Basin will provide ongoing support to its retail agencies to comply with these sections in the agencies' own individual WSCPs.

1.2 Integration with Other Planning Efforts

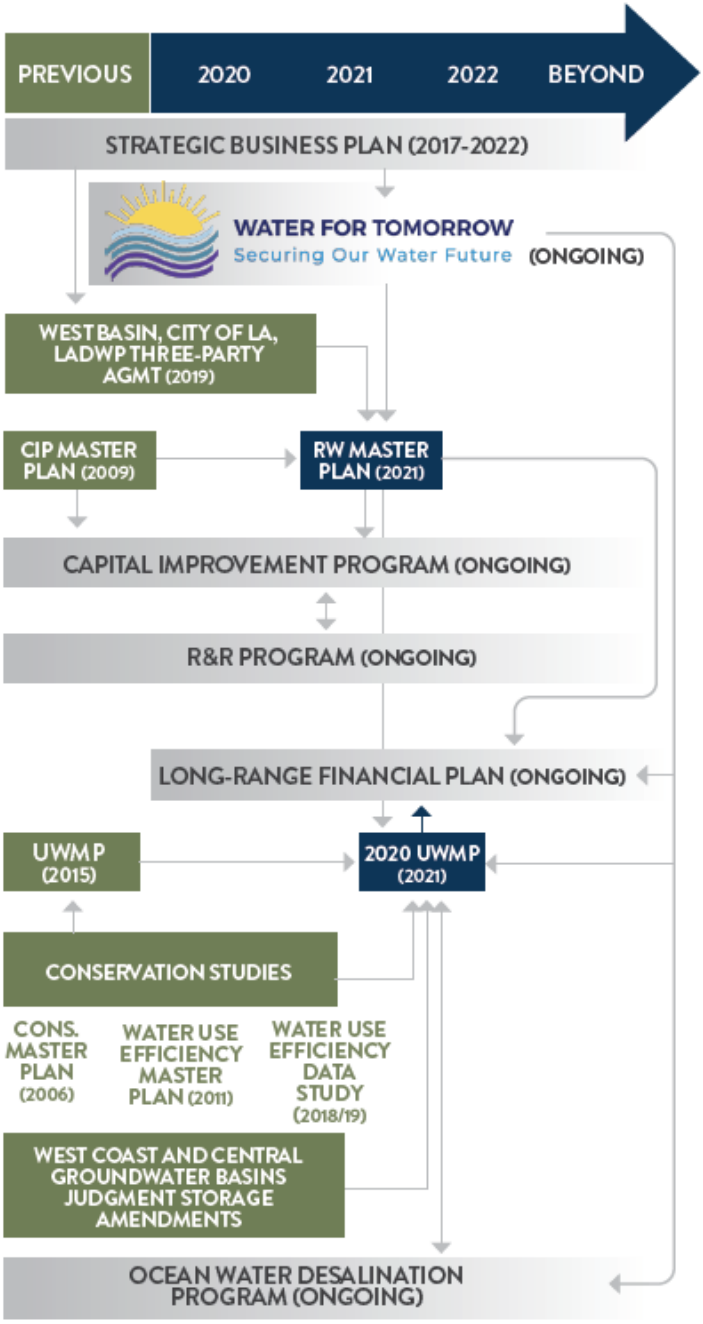
West Basin previously prepared UWMPs 2005, 2010, and 2015 to comply with the Urban Water Management Planning Act originally created in 1983[1]. The 2020 UWMP and 2021 WSCP serve as an update to the most recently adopted 2015 UWMP and comply with new requirements and regulations. In addition to completing the 2020 UWMP and 2021 WSCP, West Basin is currently updating its Recycled Water Master Plan (RWMP) and implementing its Capital Improvement Program, Rehabilitation and Replacement (R&R) plan, Long-Range Financial Plan, Strategic Business Plan, Water for Tomorrow Program, and Ocean Water Desalination Program. **Figure 1-1** shows previous and ongoing planning efforts and their relation to the 2020 UWMP update and the 2021 WSCP.

[1] The requirements for UWMPs are found in two sections of California Water Code, §10610-10656 and §10608. Every urban water supplier that either provides over 3,000 acre-feet of water annually, or serves more than 3,000 urban connections is required to submit an UWMP.

West Basin also relied on many key planning documents that aided in the preparation of this WSCP, including:

- Metropolitan's 2020 WSCP
- Metropolitan's Draft 2020 UWMP
- Metropolitan's 2020 Integrated Resources Plan (under development)
- West Basin's Water Use Efficiency Study
- Central Basin Watermaster Report 2019
- West Basin Watermaster Report 2019
- WRD's Engineering and Survey Report 2020
- West Basin's 2015 Drought Rationing Plan
- West Basin's Draft 2021 Recycled Water Master Plan
- DWR's 2019 State Water Project Delivery Capability Report
- WRD's Regional Groundwater Monitoring Report Water Year 2019–2020

Figure 1-1. Previous and Ongoing Planning Efforts



WATER SHORTAGE CONTINGENCY PLAN

2 Background Information

This chapter discusses West Basin's service area, water supplies, and its relationship with Metropolitan Water District of Southern California (Metropolitan).

West Basin is a wholesale water agency in southwestern Los Angeles County that provides imported drinking water to 17 cities and unincorporated areas of Los Angeles County throughout its 185-square-mile service area.

In addition, West Basin supplies recycled water to more than 450 customer sites for municipal, commercial, and industrial use, as well as for injection into the West Coast Basin Seawater Barrier to protect against seawater intrusion and replenish the West Coast Groundwater Basin (West Coast Basin). West Basin also supplies imported water to the Dominguez Gap Barrier to protect against seawater intrusion and replenish the West Coast Basin.

IN THIS SECTION

2.1 General Description

An innovative public agency, West Basin is a recognized leader in the production of recycled water, conservation, and educational programs. West Basin was established by a vote of the people in 1947 to help mitigate over pumping in the West Coast Basin by providing the growing region with imported water. West Basin became a member agency of Metropolitan in 1948 to purchase, on a wholesale level, potable water imported from the Colorado River. Today, West Basin supplies imported water to local municipalities, investor-owned utilities, and one county waterworks district as a means of supplementing local water resources.

West Basin and its retail agencies operating within West Basin's service area develop local supplies, including groundwater, brackish desalination, and recycled water. In addition, a blend of recycled and imported water is injected into the West Coast Basin Barrier and the Dominguez Gap Barrier to protect local groundwater supplies from seawater contamination and replenish the aquifer.

West Basin is the fourth-largest member agency of Metropolitan, which makes its participation on the Metropolitan Board of Directors critical to representing the interests of West Basin's retail agencies on regional water issues. West Basin's Board of Directors appoints two representatives to serve on the 38-member Metropolitan Board of Directors.

West Basin is governed by an elected, five-member Board of Directors, which guides the mission and policy of West Basin. Each director is elected to serve four-year terms and represent one of five divisions, totaling over 800,000 residents living in the West Basin service area. Current West Basin directors are shown in **Figure 2-1,** and the cities and communities within their associated divisions are described below.

Figure 2-1. West Basin Board of Directors

Division I: Cities of Carson, Palos Verdes Estates, Rancho Palos Verdes, Rolling Hills Estates, Rolling Hills, and unincorporated Los Angeles County areas of Rancho Dominguez.

Division II: City of Inglewood and unincorporated Los Angeles County areas of Lennox, South Ladera Heights, West Athens, and Westmont.

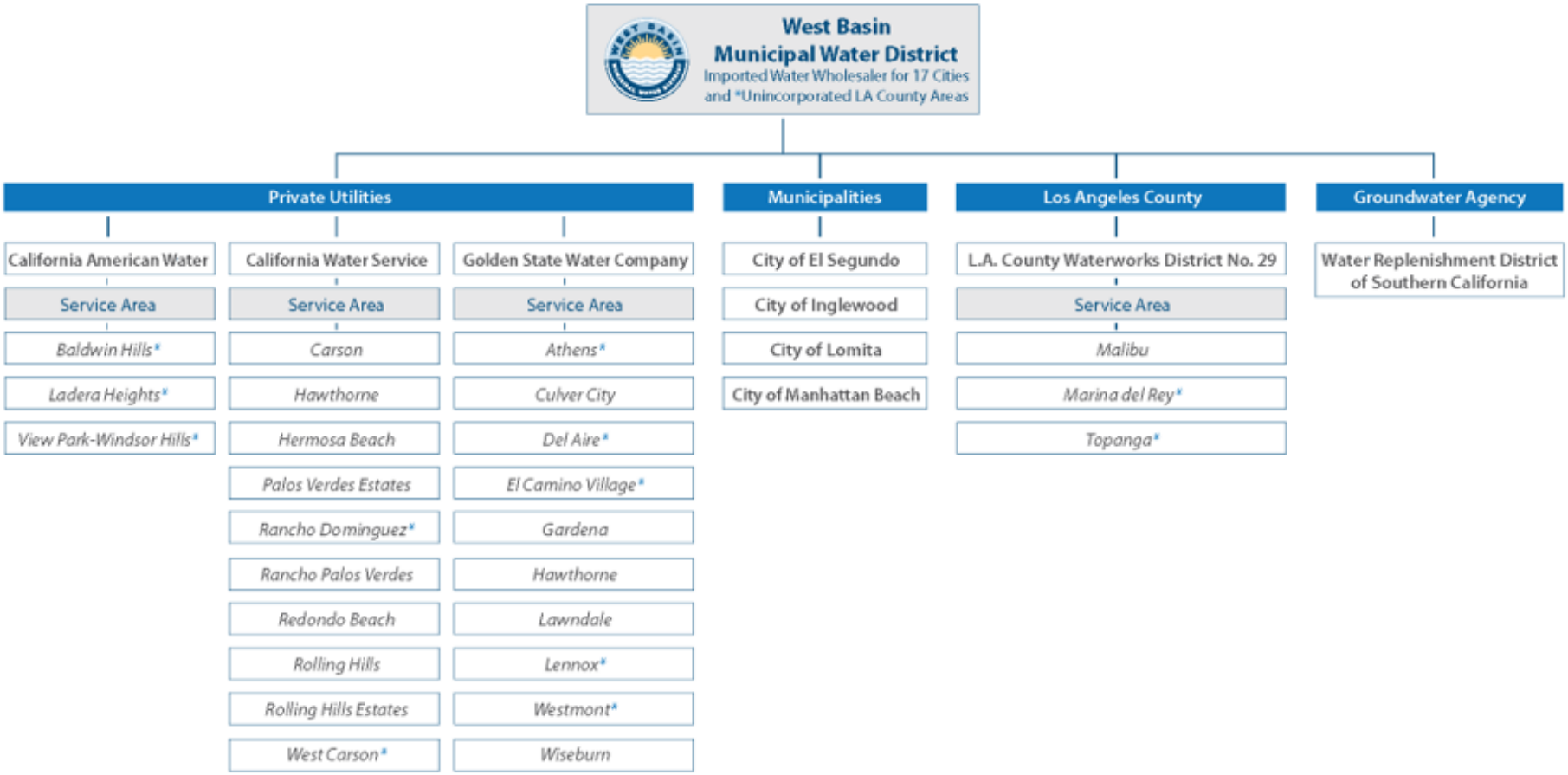
Division III: Cities of Hermosa Beach, Lomita, Manhattan Beach, Redondo Beach, and a portion of Torrance.

Division IV: Cities of Culver City, El Segundo, Malibu, and West Hollywood, and unincorporated Los Angeles County areas of Del Aire, Lennox, Marina del Rey, North Ladera Heights, Topanga, View Park, Windsor Hills, and Wiseburn.

Division V: Cities of Gardena, Hawthorne, Lawndale, and unincorporated Los Angeles County area of El Camino Village.

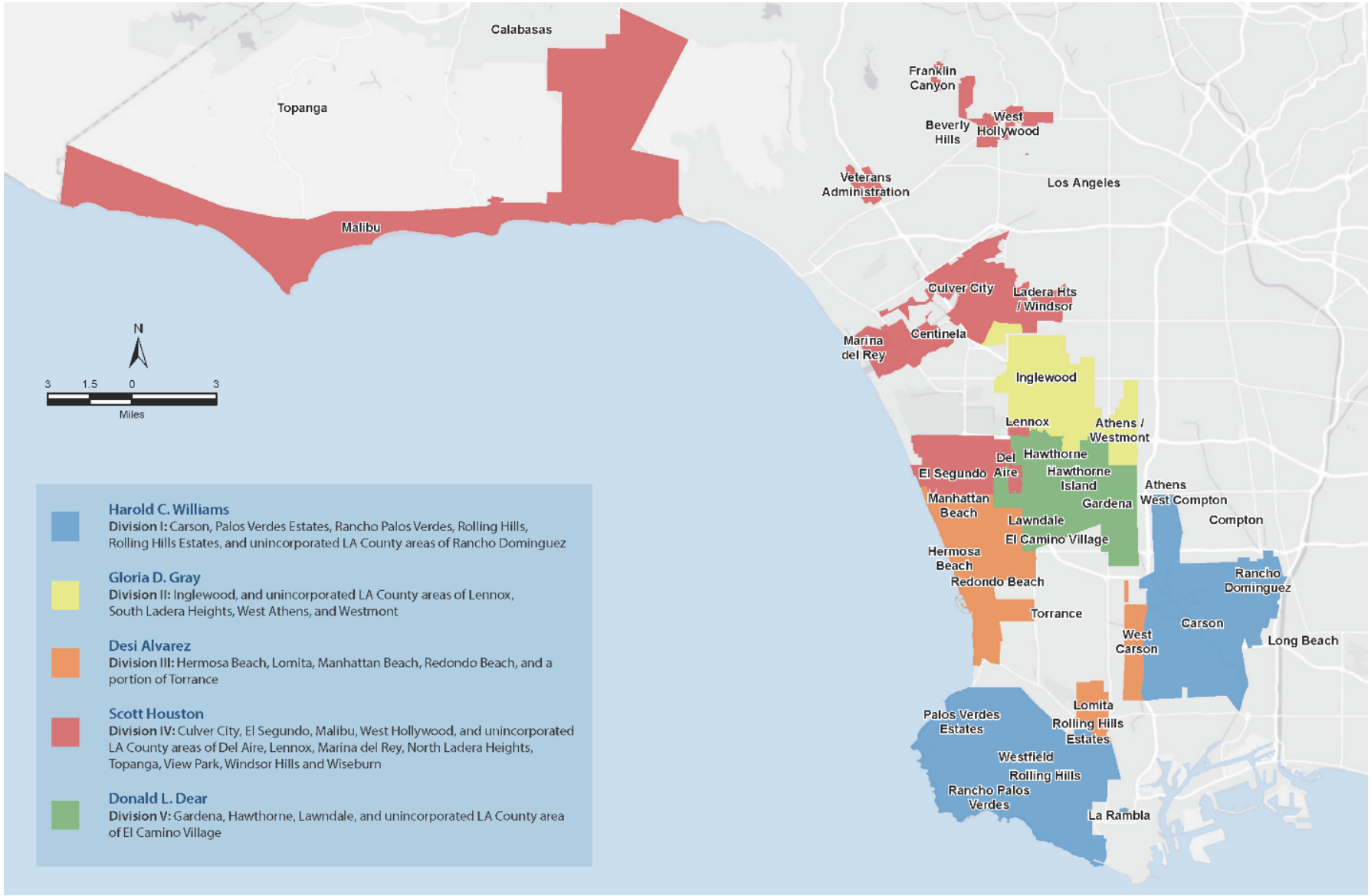
Today, West Basin provides wholesale potable water to three investor-owned utilities, four municipalities, one county waterworks district, and one groundwater agency. The relationship between West Basin and its retail agencies is illustrated in **Figure 2-2**. A map of West Basin's service area as delineated by Director divisions is shown in **Figure 2-3**.

Figure 2-2. West Basin Retail Agencies



Source: West Basin.

Figure 2-3. West Basin Service Area



Source: West Basin.

In the major drought of the late 1980s and early 1990s, West Basin's visionary Board of Directors led the agency in developing new local water supplies, including wastewater recycling for irrigation and industrial use, and implementing effective conservation and water efficiency programs.

Today, West Basin's Water for Tomorrow Program helps guide West Basin's approach to ensuring the reliability of the region's water future by focusing on the following principles:

- Protect West Basin's existing water supply
- Diversify and augment the water supply portfolio
- Innovate to prepare for the future

West Basin continuously demonstrates its commitment to being an industry leader by exploring new methods and innovative technologies to enhance the region's water supply, with the mission to "provide a safe and reliable supply of high-quality water to the communities we serve." West Basin ensures water reliability for service area residents and businesses through balanced and affordable supply diversification: maximizing water recycling, expanding water efficiency and conservation efforts, desalting brackish groundwater, and evaluating desalinated ocean water.

West Basin is dedicated to serving all of its communities by seeking increased reliability of imported water, more opportunities for groundwater projects, and additional exploration of alternative local water supplies such as both potable and non-potable water reuse and desalination.

West Basin currently manages a diverse water supply portfolio that includes imported water from Northern California and the Colorado River, locally produced recycled water, desalted groundwater, and conserved water. Additionally, West Basin is researching ocean water desalination as a potential future drought-proof supply of drinking water. The water supply types that West Basin provides to its retail agencies are detailed in **Table 2-1**.

Table 2-1. Types of Water Supplied to West Basin Retail Agencies

RETAIL AGENCY	POTABLE WATER	RECYCLED WATER	DESALTED GROUNDWATER
City of El Segundo	✓	✓	
City of Inglewood	✓	✓	
City of Lomita	✓		
City of Manhattan Beach	✓	✓	
LA County Waterworks District 29	✓		
Cal American Water	✓		
California Water Service	✓	✓	✓
Golden State Water Company	✓	✓	
Water Replenishment District	✓	✓	

Many of West Basin's retail agencies also pump groundwater supplies from the West Coast Basin to help meet their demands. In addition, California Water Service delivers a small amount of water from West Basin's C. Marvin Brewer Desalter, which treats brackish groundwater from the West Coast Basin for drinking water use.

Relationship to Metropolitan Water District of Southern California

Metropolitan is the largest water wholesaler for domestic and municipal uses in California, serving approximately 19 million customers. Metropolitan provides wholesale imported water supplies to 26 member-agency cities and water districts in six Southern California counties. Its service area covers the Southern California coastal plain, extending approximately 200 miles along the Pacific Ocean, from the City of Oxnard in the north to the international boundary with Mexico in the south. This encompasses 5,200 square miles and includes portions of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura counties. Approximately 85% of the population from the aforementioned counties reside within Metropolitan's boundaries.

Metropolitan is governed by a Board of Directors composed of 38 appointed individuals, with a minimum of one representative from each of Metropolitan's 26 member agencies. The allocation of directors and voting rights are determined by each agency's assessed valuation. Each member of the Board is entitled to cast one vote for each $10 million of assessed valuation of property taxable for district purposes, in accordance with Section 55 of the Metropolitan Water District Act.[1] Directors can be appointed through the chief executive officer of the member agency or by a majority vote of the governing board of the agency. Directors are not compensated by Metropolitan for their service.

Metropolitan is responsible for importing water into the region through its operation of the Colorado River Aqueduct and its contract with the State of California for State Water Project supplies. Major imported water aqueducts bringing water to Southern California. Member agencies receive water from Metropolitan through various delivery points and pay for service through a rate structure made up of volumetric rates, capacity charges, and readiness-to-serve charges. Every April, member agencies provide estimates of imported water demand to Metropolitan regarding the amount of water they anticipate they will need to meet their demands for the next five years. Metropolitan's approach to addressing water shortages is described in Section 2.3, and Metropolitan's Water Supply Allocation Plan (WSAP) is included in Metropolitan's Water Shortage Contingency Plan (WSCP) presented in **Attachment A.**

2.1.1 Overview of West Basin and Metropolitan

In 1948, West Basin became a member agency of Metropolitan and, as such, began wholesaling imported water from the Colorado River. Today, West Basin is the fourth-largest member agency of Metropolitan and is allowed two representatives on the Metropolitan Board of Directors. In 2021, Gloria D. Gray and Harold C. Williams served as West Basin's designated representatives to the Metropolitan Board, with Director Gray serving in the role of Metropolitan Board president. West Basin's participation on the Metropolitan Board is critical to representing West Basin's retail agency interests on regional water issues, especially with regard to imported water supplies. **Figure 2-4** illustrates the relationship West Basin has with Metropolitan and its customer agencies to provide the region with diversified and integrated water supplies.

As a member agency of Metropolitan, West Basin works closely with Metropolitan and its other member agencies to plan and implement various water resources and water efficiency programs throughout the region. Metropolitan has long supported West Basin's efforts to diversify its local water resources through the development of recycled water, groundwater augmentation, and conservation programs. Metropolitan's investment in West Basin's local programs has significantly increased the water supply reliability of coastal Los Angeles County by increasing sustainable water supplies and reducing demand on imported water supplies.

[1] More information is available online: http://www.mwdh2o.com/WhoWeAre/MWDAct

Figure 2-4. West Basin Service Area Water Supplies

2.2 Relationship with Metropolitan Water Shortage Planning

The WSCP is designed to be consistent with Metropolitan's Water Shortage and Demand Management (WSDM) Plan, Metropolitan's WSAP, West Basin's Drought Rationing Plan, and other regional and local emergency response plans. West Basin's DRP is available in **Attachment B**.

Metropolitan's WSAP and West Basin's DRP are integral to the WSCP's shortage response strategy. Should Metropolitan determine that supply augmentation and demand reduction actions are insufficient to meet projected supply needs, it would declare a shortage exists and assign a water-shortage level needed to meet West Basin's service area's reduced demands. Likewise, West Basin would need to further assess the shortage conditions within its service area to meet retail agency demands and, as required, activate the West Basin DRP to invoke appropriate water shortage level conditions (described further in **Section 2.2.3**).

2.2.1 Metropolitan Water Surplus and Drought Management Plan

Annually, Metropolitan evaluates the levels of available supplies and water in storage to determine the appropriate management stage, as outlined in the WSDM Plan. Each stage is associated with specific resource management actions to avoid extreme shortages when possible and minimize adverse impacts to retail customers should an extreme shortage occur. The sequencing outlined in the WSDM Plan reflects anticipated responses to Metropolitan's existing and expected resource mix.

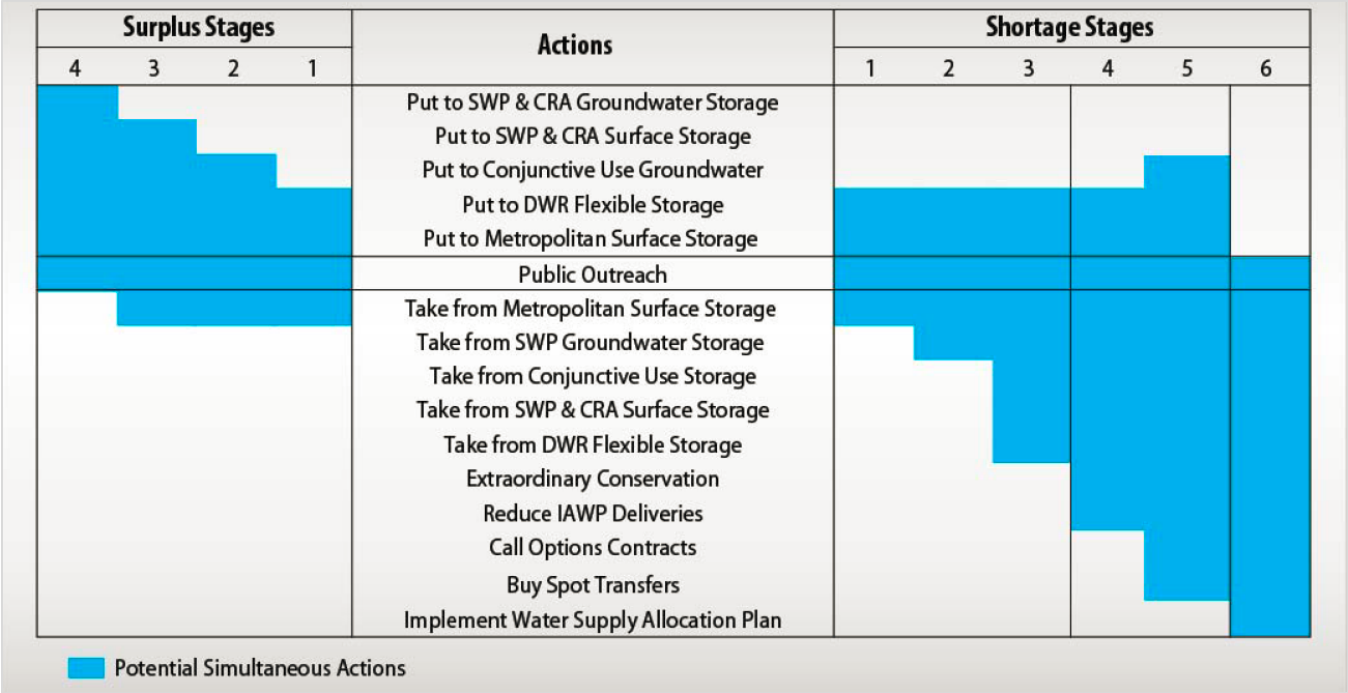
Surplus stages occur when net annual deliveries can be made to water storage programs. Under the WSDM Plan, there are four surplus management stages that provide a framework for actions to take for surplus supplies. Deliveries in Diamond Valley Lake and in State Water Project terminal reservoirs continue through each surplus stage, provided there is available storage capacity. Withdrawals from Diamond Valley Lake for regulatory purposes or to meet seasonal demands may occur in any stage.

The WSDM Plan distinguishes between shortages, severe shortages, and extreme shortages, as defined below:

- **Shortage:** Metropolitan can meet full-service demands and partially meet or fully meet interruptible demands using stored water or water transfers as necessary (**Stages 1, 2, and 3**).
- **Severe Shortage:** Metropolitan can meet full-service demands only by using stored water, using transfers, and possibly calling for extraordinary conservation (**Stages 4 and 5**).
- **Extreme Shortage:** Metropolitan must allocate available supply to full-service customers (**Stage 6**).

There are six shortage management stages to guide resource management activities. These stages are defined by shortfalls in imported supply and water balances in Metropolitan's storage programs. When Metropolitan must make net withdrawals from storage to meet demands, it is considered to be in a shortage condition. **Figure 2-5** gives a summary of actions under each surplus and shortage stage when an allocation plan is necessary to enforce mandatory cutbacks. The goal of the WSDM Plan is to avoid Stage 6, an extreme shortage.

Figure 2-5. Surplus and Shortage Stages, Anticipated Actions, and Supply Declarations



Source: Metropolitan, WSDM Plan, 1999
Note: IAWP = Interim Agricultural Water Program.

Metropolitan's Board of Directors adopted a Water Supply Condition Framework in June 2008 to communicate the urgency of the region's water supply situation and the need for further water conservation practices (Metropolitan Water District of Southern California, June 2008). The framework has four conditions, each calling for increasing levels of conservation.

Descriptions of the four conditions are listed below:

- **Baseline Water Use Efficiency:** ongoing conservation, outreach, and recycling programs to achieve permanent reductions in water use and build storage reserves
- **Condition 1 Water Supply Watch:** local agency voluntary dry-year conservation measures and use of regional storage reserves
- **Condition 2 Water Supply Alert:** regional call for cities, counties, member agencies, and retail water agencies to implement extraordinary conservation through drought ordinances and other measures to mitigate use of storage reserves
- **Condition 3 Water Supply Allocation:** implementation of Metropolitan's WSAP

As noted in Condition 3, should supplies become limited to the point where imported water demands cannot be met, Metropolitan would allocate water through the WSAP (Metropolitan Water District of Southern California, May 2021) (Metropolitan Water District of Southern California, May 2021).

2.2.2 Metropolitan Water Supply Allocation Plan

Metropolitan's imported supplies have been impacted by a number of water supply challenges, as noted earlier. In the case of extreme water shortage within its service area, Metropolitan may determine it is necessary to implement its WSAP.

Metropolitan's Board of Directors adopted the WSAP in February 2008 to fairly distribute a limited amount of water supply, applying it through a detailed method to reflect a range of local conditions and needs of the region's retail water consumers. The WSAP includes the specific formula for calculating member agency supply allocations and the key implementation elements needed for administering an allocation. Metropolitan's WSAP is the foundation for the urban water shortage contingency analysis required under CWC Section 10632 and is part of Metropolitan's 2020 UWMP (Metropolitan Water District of Southern California, May 2021).

Metropolitan's WSAP was developed in consideration of the principles and guidelines in Metropolitan's 1999 WSDM Plan, with the core objective of creating an equitable "needs-based allocation." (Metropolitan Water District of Southern California, August 1999) The WSAP's formula seeks to balance the impacts of a shortage at the retail level while maintaining equity on the wholesale level for shortages of Metropolitan supplies up to 50%. The formula takes into account a number of factors, such as the impact on retail customers, growth in population, changes in supply conditions, investments in local resources, demand-hardening aspects of water conservation savings, recycled water, extraordinary storage and transfer actions, and groundwater imported water needs.

The formula is calculated in three steps—the first two steps involve standard computations, while the third step contains a specific method developed for the WSAP.

Step 1: Base Period Calculations

The first step in calculating a member agency's water supply allocation is to estimate its water supply and demand using a historical base period with established water supply and delivery data. The base period for each of the different categories of supply and demand is calculated using data from the two most recent non-shortage years.

Step 2: Allocation Year Calculations

The next step in calculating the member agency's water supply allocation is estimating water needs in the allocation year. This is done by adjusting the base period estimates of retail demand for population growth and changes in local supplies.

Step 3: Supply Allocation Calculations

The final step is calculating the water supply allocation for each member agency based on the allocation year water needs identified in Step 2.

Although Metropolitan's 2020 UWMP forecasts that it will be able to meet projected imported water demands throughout the projected period from 2020 to 2045, uncertainty in supply conditions can result in Metropolitan needing to implement its WSAP to preserve dry-year storage and curtail demands (Metropolitan Water District of Southern California, May 2021).

To implement the WSAP, Metropolitan's Board of Directors makes a determination on the level of the regional shortage, based on specific criteria. This typically happens in April. The criteria used by Metropolitan includes current levels of storage, estimated water supply conditions, and projected imported water demands. The allocations, if deemed necessary, go into effect in July of the same year

and remain in effect for a 12-month period. The schedule is made at the discretion of Metropolitan's Board of Directors.

2.2.3 West Basin Drought Rationing Plan

West Basin continues its water reliability strategy of increasing local control over its water supplies within its service territory by maximizing water use efficiency, the use of recycled water, and through public outreach and education programs. This successful effort has drastically reduced its demand on potable water, however, the region still relies on water from Northern California and the Colorado River for nearly two-thirds of our supply. This reliance on hydrologically-dependent supplies leaves the region vulnerable to drought and the long-term impacts of changing climate patterns as well as other types of emergency shortages, such as earthquake or water quality impacts to local groundwater supplies used by West Basin retail agencies.

Drought periods in Southern California are happening more frequently and with greater severity. While Metropolitan currently projects 100% supply reliability, when Metropolitan does not have access to the supplies necessary to meet total demands and has to allocate shortages in supplies to West Basin and its other member agencies, it enacts the Water Supply Allocation Plan as a demand management tool to extend the availability of storage reserves.

On March 23, 2015, the West Basin Board adopted an update to the "Water Shortage Allocation Plan" and changed the name to Drought Rationing Plan (DRP). When Metropolitan implements the WSAP, the Drought Rationing Plan is necessary for two primary reasons: 1) to help achieve MWD's (and the Governor's 2015) conservation goal; and 2) equitably recover any financial penalties from our customer agencies should West Basin fall short of the goal. The DRP includes a "regional penalty assessment" policy that only assesses financial penalties to West Basin's customer agencies if West Basin itself incurs penalties.

As amended in 2018, and effective in 2019, the California Water Code requires urban water suppliers to adopt a water shortage contingency plan as part of its urban water management plan as specified (Section 10632). West Basin has primarily utilized the DRP to implement emergency conservation measures, and responses to drought and regional waters supply shortages. Through these efforts, West Basin's retail agencies and the communities served by West Basin have relied on the DRP as a guiding document. West Basin may update the Drought Rationing Plan and it will always be accessible at www.westbasin.org.

WATER SHORTAGE CONTINGENCY PLAN

3 Water Shortage Contingency Preparation and Response

West Basin's Water Shortage Contingency Plan is a detailed guide of how West Basin intends to act in the case of an actual water-shortage condition.

The WSCP anticipates a water supply shortage and provides preplanned and prescribed guidance for managing and mitigating a shortage. Regardless of the reason for the shortage, the WSCP uses adequate details of demand reduction and supply augmentation actions that are structured to match varying degrees of shortage to ensure relevant stakeholders, including West Basin's retail agencies, understand what to expect during a water shortage situation.

IN THIS SECTION

3.1 Water Supply Reliability Analysis

Per Water Code Section 10632 (a)(1), the WSCP shall provide an analysis of water supply reliability conducted pursuant to Water Code Section 10635 and an analysis of the key issues that may create a shortage condition when looking at West Basin's water supply portfolio. Understanding water supply reliability, factors that could contribute to water supply constraints, availability of alternative supplies, and what effect these have on meeting customer demands provides West Basin with a solid basis on which to develop appropriate and feasible response actions in the event of a water shortage.

In the 2020 UWMP, West Basin conducted a Water Reliability Assessment to compare the total water supply sources available with long-term projected water use over the next 25 years, in five-year increments, for a normal water year, a single dry water year, and a drought lasting five consecutive water years. West Basin also conducted a Drought Risk Assessment to evaluate a drought period that lasts five consecutive water years, starting in 2021. An analysis of both assessments is presented in West Basin's 2020 UWMP Chapter 7 – Water Service Reliability and Drought Risk Assessment (West Basin, 2021). The analysis concluded that sufficient supplies are available from Metropolitan under all scenarios considered.

West Basin receives imported water from Metropolitan through connections to Metropolitan's regional distribution system. Although pipeline and connected capacity do not guarantee the availability of water, they do guarantee the ability to convey water when it is available to the Metropolitan distribution system. The primary constraint on the available of water supplies has been in severe and prolonged drought conditions. West Basin's diversified supply and conservation measures combined with Metropolitan's supply reliability investments enable West Basin to meet projected demands in multiple-dry years. Metropolitan projects the ability to meet projected West Basin imported water demands under normal, single-dry year, and multiple-dry year conditions (Metropolitan Water District of Southern California, March 2021). As a result, there are no anticipated shortages under the single-dry year or multiple-dry year scenarios and West Basin service area demands are assumed to be unconstrained in each reliability scenario.

3.2 Annual Water Supply and Demand Assessment Procedures

Per Water Code Section 10632.1, West Basin will conduct an Annual Assessment of Water Supply and Demand pursuant to subdivision (a) of Section 10632 and by July 1 of each year, beginning in 2022. West Basin will submit an annual water shortage assessment with information for anticipated shortage, triggered shortage response actions, compliance and enforcement actions, and communication actions consistent with West Basin's WSCP.

This section documents the decision-making process required for formal approval of West Basin's Annual Assessment of water supply reliability each year, the key data inputs, and the methods used to evaluate the water system reliability for the coming year, considering it would be a dry year.

3.2.1 Decision-Making Process

West Basin is currently developing a comprehensive demand forecasting model that will help inform its Annual Assessment. The model will consider a variety of local and regional conditions to assess overall water supply reliability and determine whether a shortage condition exists or is expected the following year.

As a wholesaler of imported water from Metropolitan, West Basin's water supply reliability is tied directly to the reliability of Metropolitan's imported supplies. Accordingly, West Basin will carefully consider information that is provided by Metropolitan in its Annual Assessment. The information West Basin receives from its municipal and private retail water suppliers on historical demand-side data and

projected annual demands for the upcoming year will be balanced based on Metropolitan's projected supply-side data available to meet requested demands, as outlined in the WSDM Plan (Metropolitan Water District of Southern California, August 1999).

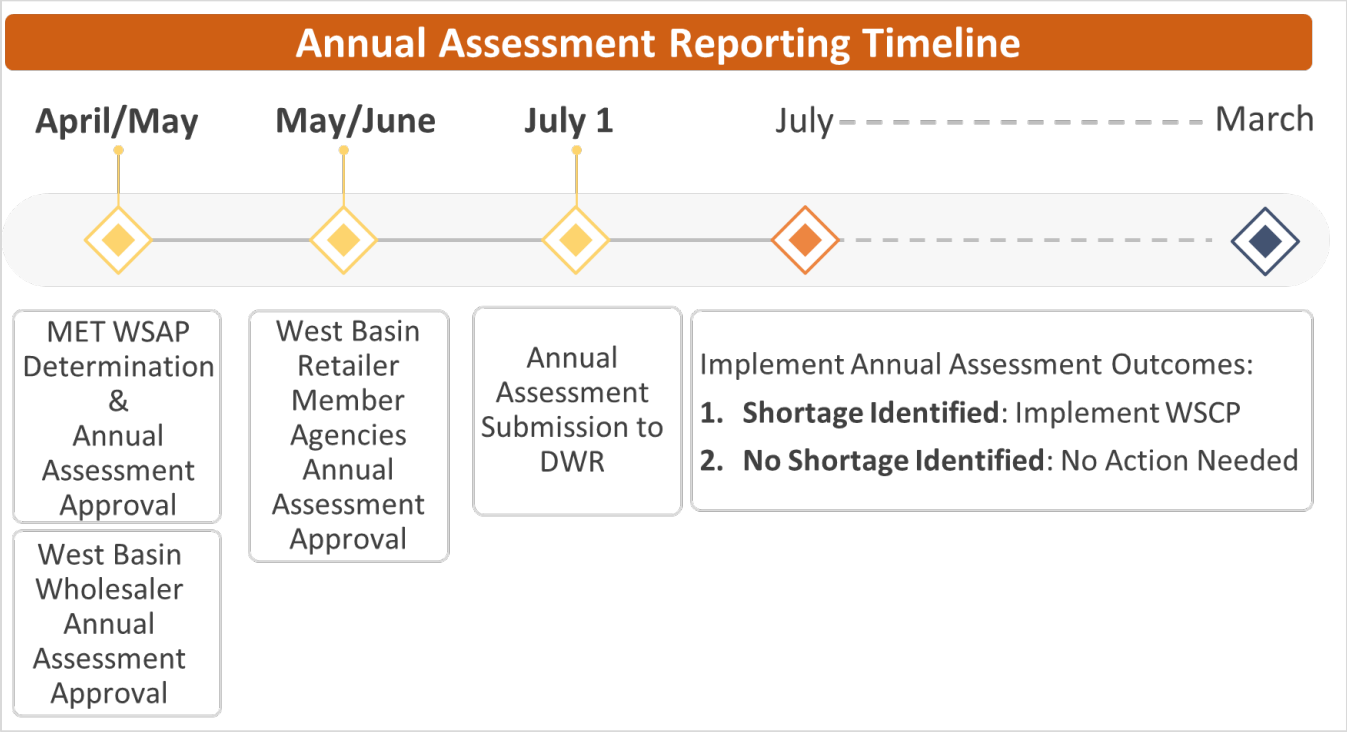
On a monthly basis, West Basin staff also provides the Board of Directors with a Metropolitan-generated report of current statewide water supply conditions. The report includes information on key water supply factors such as storage, precipitation, snowpack, and State Water Project allocations. The monthly report serves as an additional source of information for assessing the health of the region's imported water supply.

The following decision-making process describes the steps that West Basin will take to formally approve the Annual Assessment determination of water supply reliability each year. **Figure 3-1** below also illustrates the overall approach and basic timeline of the decision-making process.

1. West Basin staff and the Board of Directors will monitor statewide water supply conditions via Metropolitan's monthly water supply report. Concurrently, West Basin staff will update the demand forecasting model with the most recent data received from its cities and private retail water agencies. As a water wholesaler, West Basin is dependent on its retailers to provide accurate demand estimates to determine water demands in the service area. The forecasting model will be revisited and updated throughout the year as needed. Any major changes to the model's inputs or assumptions will be conveyed to West Basin's executive team and Board members at committee or Board meetings for further discussion as needed.
2. According to Metropolitan's Annual Assessment Decision-Making Timeline, Metropolitan staff will make a determination on its Assessment during April or May. Based on the results of that determination and in conjunction with West Basin's ongoing demand modeling, West Basin staff will develop its own Annual Assessment determination and any associated shortage response actions that may be needed to address an anticipated shortage condition.
3. In June of each year, West Basin staff will provide an initial, updated Annual Assessment at its monthly Water Policy & Legislation Committee meeting. The staff presentation will provide an overview of current supply and demand conditions and will summarize whether the findings of the Assessment necessitate the implementation of new or updated shortage response actions. During the committee meeting, staff will answer questions and solicit feedback from Board members about the Annual Assessment determination.
4. Following the committee meeting, staff will consider all feedback received by the Board for incorporation into an updated version of the Annual Assessment. The updated Annual Assessment will then be presented to the full Board of Directors at its June Board meeting for final approval.
5. Once approved, West Basin staff will submit the Annual Assessment to DWR by the July 1 submission deadline each year, starting July 1, 2022.

More information on this decision-making process and the basis for the Annual Assessment prepared for 2021 is also available in West Basin's 2020 UWMP Sections 4, 6, and 7.

Figure 3-1. Annual Assessment Reporting Timeline



3.2.2 Data and Methods

The following paragraphs document the key data inputs and methods that are used to evaluate the water system reliability for the coming year, while considering that the year to follow would be considered dry, as defined below:

Evaluation Criteria

In the 2020 UWMP, West Basin conducted an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment compares the total water supply sources available to the water supplier with the long-term total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and a drought lasting five consecutive water years. This assessment was based on the West Basin service area, water sources, water supply reliability, and water use, as described in CWC Section 10631, including available data from state, regional, or local agency population, land use development, and climate change projections within the service area. This same locally applicable evaluation criteria will be relied on for completing the Annual Assessment.

Water Supply

West Basin supplies to be used to meet retail demands consist of imported water from Metropolitan and recycled water for non-potable uses. In addition, a majority of West Basin retail agencies pump groundwater to meet a portion of their demands. The amount of groundwater pumping is limited by available rights—adjudicated rights and other additional pumping rights defined in annual reports from the Water Replenishment District (WRD).

Unconstrained Customer Demand

The WSCP and Annual Assessment define unconstrained demand as expected water use before any projected shortage response actions that may be taken under the WSCP. Unconstrained demand is

distinguished from observed demand, which may be constrained by preceding, ongoing, or future actions, such as emergency supply allocations during a multiyear drought. WSCP shortage response actions to constrain demand are inherently extraordinary; routine activities, such as ongoing conservation programs and regular operational adjustments are not considered constraints on demands.

To estimate unconstrained demands for 2022 and the following years as required by the CWC, West Basin would apply a similar method as described in West Basin's 2020 UWMP Section 4.1, which considered "normal" retail demand across the West Basin service area (which adjusts for weather and drought restrictions), growth, conservation, and groundwater pumping.

Planned Water Use for Current Year Considering Dry Subsequent Year

Water Code Section 10632 (a)(2)(B)(ii) requires the Annual Assessment to determine "current year available supply, considering hydrological and regulatory conditions in the current year and one dry year." The Annual Assessment will include two separate estimates of West Basin's annual water supply and unconstrained demand using: 1) current-year conditions and 2) assumed dry-year conditions.

The "single dry year" is characterized to resemble a year in which conditions reflect the lowest water supply available to West Basin. West Basin would apply the same single-dry-year assumptions used in West Basin's 2020 UWMP Section 7.2, which assumes:

- Imported water from Metropolitan can meet West Basin demands unless Metropolitan has implemented its WSAP. If the Metropolitan WSAP is implemented, West Basin would pass along the demand restrictions to its customers.
- Groundwater availability is based on adjudicated pumping rights and any carryover or other additional pumping rights defined in annual reports from the WRD.
- Recycled water deliveries would be similar to the previous year.

Infrastructure Considerations

Given that Metropolitan directly supplies water to West Basin retail agencies, the system improvements for supply reliability is the responsibility of Metropolitan. Plans for system upgrades are prepared, adopted, and constructed according to the Metropolitan Capital Investment Plan (Metropolitan Water District of Southern California, 2020). The Annual Assessment provided by Metropolitan to West Basin, and subsequently from West Basin to its retail agencies, will include consideration of any infrastructure issues that may pertain to near-term water supply reliability. This will include repairs, construction, and environmental mitigation measures that may temporarily constrain capabilities, as well as any new projects that may add to system capacity.

Other Factors

For the Annual Assessment provided by Metropolitan to West Basin and then West Basin to its retail agencies, any known issues related to water supply reliability (i.e., water quality impacts) would be considered for their potential effects.

3.3 Six Standard Water Shortage Levels

Per Water Code Section 10632 (a)(3)(A), West Basin must include the six standard water shortage levels defined at the state level, which represent shortages from the normal reliability as determined in the West Basin's Annual Assessment. The shortage levels have been standardized to provide a consistent regional and statewide approach to conveying the relative severity of water supply shortage conditions. This is an outgrowth of the severe statewide drought of 2012–2016 and the widely recognized public communication and state policy uncertainty associated with the many varied local definitions of water shortage.

The six levels correspond to progressively increasing estimated shortage conditions as compared to the normal reliability condition (0% shortage) and align with the response actions West Basin would

implement to meet the severity of an impending shortage as outlined in West Basin's 2015 Drought Rationing Plan.

Table 3-1. Wholesaler: Water Shortage Contingency Plan Levels (DWR Table 8-1)

SHORTAGE LEVEL	PERCENT SHORTAGE RANGE	SHORTAGE RESPONSE ACTIONS (NARRATIVE DESCRIPTION)
0	0% (Normal)	During non-shortage conditions, West Basin develops, implements, and provides cost-effective water-efficiency and conservation programs to local communities in its service area to help save water and increase local water supply reliability. In addition, West Basin educates and engages its community about important water issues through outreach and education programs. Together, these programs highlight the importance of adopting a Water Conservation as a Way of Life mindset as a means of supporting ongoing water supply reliability throughout the region.
1	Up to 10%	At this shortage level, West Basin will implement one or more of the following shortage response actions: - Call for voluntary retailer water-use reductions - Call for voluntary retailer use of non-imported potable sources - Implement additional conservation/water-efficiency programs - Deploy public outreach and communications measures - Implement mandatory retailer water-use reductions (in West Basin's DRP)
2	11% to 20%	At this shortage level, West Basin will implement and expand one or more of the shortage response actions listed for Stage 1 to achieve demand reduction target of 20%.
3	21% to 30%	At this shortage level, West Basin will implement and expand one or more of the shortage response actions listed for Stage 1 to achieve demand reduction target of 30%.
4	31% to 40%	At this shortage level, West Basin will implement and expand one or more of the shortage response actions listed for Stage 1 to achieve demand reduction target of 40%.
5	41% to 50%	At this shortage level, West Basin will implement and expand one or more of the shortage response actions listed for Stage 1 to achieve demand reduction target of 50%.
6	>50%	At this shortage level, West Basin will implement and expand one or more of the shortage response actions listed for Stage 1 to achieve demand reduction target of greater than 50%

3.4 Shortage Response Actions

Water Code Section 10632 (a)(4) requires the WSCP to specify shortage response actions that align with the defined shortage levels. West Basin has defined specific shortage response actions that align with the defined shortage levels in **Table 3-1** shown above and **Table 3-2** presented below. These shortage response actions were developed with consideration for the customer-class or water use-specific demand reduction initiatives, and increasingly stringent water-use prohibitions, supply augmentation responses, and system infrastructure and operational changes.

3.4.1 Demand Reduction

The demand reduction actions that would be implemented to address shortage levels are described in **Table 3-2** (DWR Table 8-2). This table indicates which actions align with specific defined shortage levels and estimates the extent to which that action would reduce the gap between supplies and demands. This demonstrates that the chosen suite of shortage response actions can be expected to deliver the outcomes necessary to meet the requirements of a given shortage level. This table also identifies the enforcement action, if any, associated with each demand reduction measure.

Table 3-2. Demand Reduction Actions (DWR Table 8-2)

SHORTAGE LEVEL	DEMAND REDUCTION ACTIONS	HOW MUCH IS THIS GOING TO REDUCE THE SHORTAGE GAP?	ADDITIONAL EXPLANATION	PENALTY, CHARGE, OR OTHER ENFORCEMENT?
0	Offer Water Use Surveys	Not applicable – No shortage gap at this level	West Basin currently offers water-efficiency surveys through several of its conservation programs.	No
0	Provide Rebates on Plumbing Fixtures and Devices	Not applicable – No shortage gap at this level	West Basin provides a variety of device and irrigation rebates to its service area.	No
0	Provide Rebates for Landscape Irrigation Efficiency	Not applicable – No shortage gap at this level	West Basin provides a variety of device and irrigation rebates to its service area.	No
0	Provide Rebates for Turf Replacement	Not applicable – No shortage gap at this level	West Basin provides grass removal rebates in its service area.	No
0	Other	Not applicable – No shortage gap at this level	West Basin conducts regular public outreach and education activities to highlight the importance of conservation and water efficiency.	No
0	Other	Not applicable – No shortage gap at this level	West Basin promotes awareness of permanent statewide water waste prohibitions.	No
1	Expand Public Information Campaign	0 to 100% of shortage gap	Expand public outreach and education efforts to encourage residents and industries to reduce their water usage.	No
1	Provide Rebates on Plumbing Fixtures and Devices	0 to 100% of shortage gap	Provide additional or higher-amount rebates.	No
1	Provide Rebates for Landscape Irrigation Efficiency	0 to 100% of shortage gap	Provide additional or higher-amount rebates.	No
1	Provide Rebates for Turf Replacement	0 to 100% of shortage gap	Provide additional or higher-amount rebates.	No
1	Other	0 to 100% of shortage gap	Implement new conservation and water-efficiency programs.	No
1	Other	0 to 100% of shortage gap	Call for voluntary retailer supply shift to non-imported potable sources.	No
1	Other	0 to 100% of shortage gap	Call for voluntary retailer water-use reductions.	No
1	Implement or Modify Shortage Allocation to Retailers	0 to 100% of shortage gap	Implement DRP and as appropriate Drought Rate Structure or Surcharge.	Yes
2	Not Applicable	0 to 100% of shortage gap	At this shortage level, West Basin will implement and expand one or more of the shortage response actions listed for Stage 1 to achieve demand reduction target of 20%.	Dependent on demand reduction action

SHORTAGE LEVEL	DEMAND REDUCTION ACTIONS	HOW MUCH IS THIS GOING TO REDUCE THE SHORTAGE GAP?	ADDITIONAL EXPLANATION	PENALTY, CHARGE, OR OTHER ENFORCEMENT?
3	Not Applicable	0 to 100% of shortage gap	At this shortage level, West Basin will implement and expand one or more of the shortage response actions listed for Stage 1 to achieve demand reduction target of 30%.	Dependent on demand reduction action
4	Not Applicable	0 to 100% of shortage gap	At this shortage level, West Basin will implement and expand one or more of the shortage response actions listed for Stage 1 to achieve demand reduction target of 40%.	Dependent on demand reduction action
5	Not Applicable	0 to 100% of shortage gap	At this shortage level, West Basin will implement and expand one or more of the shortage response actions listed for Stage 1 to achieve demand reduction target of 50%.	Dependent on demand reduction action
6	Not Applicable	0 to 100% of shortage gap	At this shortage level, West Basin will implement and expand one or more of the shortage response actions listed for Stage 1 to achieve demand reduction target of greater than 50%	Dependent on demand reduction action

Note: One or more of the shortage response actions listed for Level 1 will be implement and expanded as the shortage levels increase.

3.4.2 Supply Augmentation

West Basin's supply augmentation actions are described in **Table 3-3** (DWR Table 8-3). Metropolitan's supply augmentation actions, described in Metropolitan's 2020 WSCP, capture the supply augmentation actions that are relevant to West Basin. To the maximum extent possible, West Basin would coordinate with Metropolitan and its other member agencies on supply augmentation projects during normal and shortage periods to continue expanding water reliability for the entire region.

Table 3-3. Supply Augmentation and Other Actions (DWR Table 8-3)

SHORTAGE LEVEL	SUPPLY AUGMENTATION METHODS AND OTHER ACTIONS BY WATER SUPPLIER	HOW MUCH IS THIS GOING TO REDUCE THE SHORTAGE GAP?	ADDITIONAL EXPLANATION OR REFERENCE
1-6	Metropolitan Supply Augmentation	0 to 100% of shortage gap	Coordinate with Metropolitan and, if needed, purchase supplemental supplies from Metropolitan

3.4.3 Operational Changes

During water-shortage conditions, operations may be affected by supply augmentation or demand reduction responses undertaken by Metropolitan as the direct water supplier to West Basin retail agencies.

3.4.4 Additional Mandatory Restrictions

Water Code Section 10632 (a)(4)(D) calls for "additional, mandatory prohibitions against specific water-use practices that are in addition to state-mandated prohibitions and appropriate to the local conditions" to be included among the WSCP's shortage response actions. West Basin has not specifically identified additional mandatory restrictions necessary at the time of this WSCP adoption. However, West Basin may deem additional restrictions, such as reducing water allocations in all categories to meet the available water supply beyond the DRP, as directed by the West Basin Board of Directors.

3.4.5 Emergency Response Plan (Hazard Mitigation Plan)

A catastrophic water shortage would be addressed according to the appropriate West Basin water-shortage level and response actions. It is likely that a catastrophic shortage would immediately trigger Shortage Level 6 response actions. West Basin would follow Metropolitan's Emergency Response Plans in the event of a catastrophic supply interruption.

As described in Metropolitan's 2020 Water Shortage Contingency Plan (Metropolitan Water District of Southern California, May 2021), Metropolitan has two Emergency Response Plans: 1) one dated March 2019 that has been in place long-term and is updated periodically, and 2) one dated September 2020 that was prepared pursuant to the requirements of the recently enacted America's Water Infrastructure Act of 2018 (Metropolitan Water District of Southern California, 2020). The two plans work in conjunction. Together, Metropolitan's Emergency Response Plans present Metropolitan's organization and strategy for responding to emergencies caused by natural hazards, malevolent acts, or other unavoidable circumstances.

Metropolitan operates in accordance with the California Standardized Emergency Management System, the Incident Command System, and the National Incident Management System. The Emergency Response Plans describe the Emergency Response Organization and provide guidelines for evaluating and responding to an emergency situation and activating Incident Command Posts and the Emergency Operations Center. Although the plans provide a framework for emergency response,

they do not identify or discuss every potential situation or problem that may occur during an emergency. Metropolitan intends to continue updating the plans regularly.

3.4.6 Seismic Risk Assessment and Mitigation Plan

Per Water Code Section 10632.5, suppliers are required to assess seismic risk to water supplies as part of their WSCP. Since West Basin's primary potable water supply is provided by Metropolitan, and West Basin does not exclusively own or operate any of the imported water delivery infrastructure, West Basin refers to Metropolitan's seismic risk assessment and mitigation plan documented in Metropolitan's 2020 UWMP Appendix 9: Seismic Risk Assessment and Mitigation (Metropolitan, March 2021).

3.4.7 Shortage Response Action Effectiveness

For each specific Shortage Response Action identified in the plan, the WSCP also estimates the extent to which that action will reduce the gap between supply and demand identified in **Table 3-2** (DWR Table 8-2). To the extent feasible, West Basin has estimated percentage savings for the chosen suite of shortage response actions, which can be anticipated to deliver the expected outcomes necessary to meet the requirements of a given shortage level.

3.5 Communication Protocols

Prior to issuing a water shortage level declaration, West Basin would pursue outreach to inform cities and retail water providers in its service area of water shortage levels and definitions, targeted water savings for each drought stage, guidelines for retailers to follow during each stage, and sources of current information on West Basin supply and demand response status. Water savings guidelines are predicated on being equitable across the various water use sectors.

Timely and effective communication is a key element of the WSCP implementation. Per CWC Section 10632 (a)(5), West Basin has established communication protocols and procedures to inform customers, the public, interested parties, and local, regional, and state governments regarding any current or predicted shortages as determined by the Annual Assessment described pursuant to Section 10632.1; any shortage response actions triggered or anticipated to be triggered by the Assessment described pursuant to Section 10632.1; and any other relevant communications.

This section includes specific communication protocols that would be triggered to address each shortage level and the response actions implemented. This element focuses on communicating the water shortage contingency planning actions that can be derived from the results of the Annual Assessment. The Annual Assessment results would likely trigger a shortage based upon the decision-making process described in Section 3.2.1 of this WSCP and/or emergency communications protocols to address earthquakes, fires, infrastructure failures, civil unrest, and other catastrophic events. The type and degree of communication varies with each shortage level; thus, predefined and actionable communication protocols improve West Basin's ability to message necessary events. These communication protocols and procedures are summarized below, categorized by shortage levels.

Public information and outreach are important elements of West Basin's WSCP because the customer response to drought will ultimately dictate the amount of water savings achieved. West Basin's Public Information and Education department would lead public outreach and communications efforts in close coordination with its retail water supply agencies, who have direct means of communications with residential, commercial, industrial, and institutional customers. West Basin would also collaborate with Metropolitan and other Metropolitan member agencies to develop and implement regional public outreach initiatives that seek to promote and achieve Conservation as a Way of Life goals. West Basin would share information publicly and provide guidance to its retail agencies, closely monitoring water

user responses and attitudes toward both voluntary and mandatory response actions. Consistent customer outreach activities are required to successfully achieve targeted water savings during each drought stage.

West Basin has outlined a flexible water shortage response approach centered on voluntary compliance and mandatory restrictions implemented throughout a range of shortage levels. West Basin will communicate information about drought stage, targeted water savings, and water-saving guidelines that customers are expected to practice. Example drought specific information and materials to support public outreach in times of water shortage are included in **Attachment C**. West Basin is currently updating its Drought Outreach Plan to align with the WSCP's stated communication protocols.

Coordination with Retail Water Suppliers and Local Stakeholders

West Basin conveys critical information about droughts, water shortages, and other supply-related issues to its customer agencies, local governments, the general public, and other stakeholders in a number of ways. Regularly scheduled committee and partner meetings bring together representatives from retail agencies and other stakeholder organizations to discuss relevant topics and updates.

West Basin either leads or participates in stakeholder groups, including the following:

- Metropolitan Caucus Committee — monthly meetings
- West Basin Water Association — monthly meetings
- Water Use Efficiency Coordinators — quarterly meetings
- Public Information Officer Coordinators — quarterly meetings
- School/Education Coordination — regularly scheduled meetings
- Business/Industry Groups (e.g., Chambers of Commerce and other civic groups) — periodic meetings

Target Audiences

When communicating relevant information during critically dry or shortage periods, West Basin would focus its efforts on targeting the following stakeholder audiences in its service area:

- City staff
- Los Angeles County staff (for unincorporated areas served by West Basin)
- Elected officials and staff
- Investor-owned utilities
- Homeowners and renters
- Disadvantaged communities
- Property owners and managers
- Business owners
- Local industries
- School district administrators and teachers
- Environmental/public interest groups
- Local media
- General public

Communication During Non-Shortage Periods

West Basin continuously engages nearly 1 million people in its service area through ongoing outreach, education, and water-efficiency programs that seek to convey the importance of adopting a Conservation as a Way of Life mindset. In order to foster and sustain a long-term water conservation

ethic in the region, West Basin utilizes a variety of outreach methods to communicate important messages and programs to partner agencies, community leaders, and other stakeholders. These efforts have allowed West Basin to maintain reduced service-area water demand levels following the 2012–2016 drought despite relaxation of statewide water-use regulations.

West Basin primarily uses the following outreach methods to communicate with customer agencies, local government, and commercial/industrial water users the importance of conservation:

- Website
  - www.westbasin.org/conservation
- Social media
  - Facebook
  - Twitter
  - Instagram
  - LinkedIn
  - YouTube
- E-newsletter
  - Quarterly
  - Special editions
- Print and digital advertising/marketing
  - Annual advertising campaigns
- Community outreach
  - In-person and online classes, tours, and workshops
  - Speakers bureau for communicating with business, industry, and civic leaders
  - Community and public events
  - Annual Water Harvest Festival
  - West Basin's existing conservation programs and rebates
  - Talking points
- School outreach/education
  - In-person and online classes and tours
  - Various on-site and remote learning opportunities
  - WaterStar conservation kits for students
- Media relations
  - Press releases and statements
  - Editorials
  - Interviews
- Sharing of collateral/co-branding partner kits through website and file-sharing sites (e.g., Dropbox, OneDrive)

Communication Protocols for Levels 1 & 2 Water Shortages (0–20%)

This section summarizes the communication protocols that West Basin would employ during a Level 1 or 2 water shortage, which includes shortage conditions up to and including 20%. During this type of shortage, West Basin would implement the following communications strategies. These actions would supplement West Basin communications efforts that occur during periods of non-shortage conditions.

- Website
  - Highlight water-shortage information on home page of website
  - Create a home page banner that drives users to a drought-specific landing page that provides up-to-date information about drought, water conditions, and any announced or expected shortage stages for West Basin water retailers and the general public
    - Embed U.S. Drought Monitor "widget" (California conditions map)
    - Link to local city and private retailer conservation/water-efficiency resources
    - Provide a Spanish translation feature for drought page
  - Post news stories and/or press releases about shortage conditions
- Social media
  - Distribute regularly scheduled posts that convey information about the shortage as well as helpful conservation and water-efficiency tips
  - Share retailer and other partner/stakeholder (Metropolitan, Association of California Water Agencies [ACWA], etc.) posts with important messages
  - Share current local, regional, and state news stories about conditions
  - Create and/or share Spanish language posts
  - Develop boosted posts in geo-targeted areas for increased presence
- Print and digital advertising/marketing
  - Evaluate direct-marketing opportunities and print and online advertising with broad community reach and market penetration
  - Seek out retailer partner funding support for outreach campaigns
  - Evaluate Spanish language outreach for targeted areas
- Community outreach
  - Include drought and water shortage-related content in public education and outreach efforts
  - Seek out additional opportunities to present information at public events
  - Increase frequency of speaker bureau presentations to chambers of commerce and other civic-based organizations
  - Audit efficient-fixture giveaway supplies to increase water-saving device inventory
- School outreach/education
  - Highlight drought-related content in school education programs
  - Add shortage-specific overviews to tours and classroom events
- Media relations
  - Distribute press releases to announce any water shortage declaration or other critical information
  - Hold press conferences or provide statements regarding declarations of water shortage
  - Update talking points based on shortage severity

- Communication with cities, private retail water providers, and commercial/industrial water users
  - Seek out opportunities to present water shortage announcements at city council meetings, committee meetings, and other municipal settings
  - Provide water shortage overview and any associated voluntary/mandatory actions based on the shortage declaration to city/retailer leadership

Communication Protocols for Levels 3 & 4 Water Shortages (21–40%)

This section summarizes the communication protocols that West Basin would employ during a Level 3 or 4 water shortage, which includes shortage conditions from 21–40%. During this type of shortage, West Basin would increase the frequency and intensity of its communications efforts. The actions summarized below would supplement ongoing West Basin communications efforts already implemented during Levels 1 and 2 water shortages.

- Website
  - Build out and bring further exposure to water shortage landing page and website call-outs
  - Update theme and tone of online stories and/or press releases to be more serious in nature—revise language from voluntary (we “should” do this) to mandatory (we “must” do this) call to action
  - Evaluate local, city, and private-retailer conservation/water-efficiency website resources and offer additional support to ensure water users have access to relevant, updated shortage information
  - Invest more resources into Spanish language microsite to convey increased severity of messaging regarding shortage and the need to use less water
  - Create additional web page for mandatory water-use restrictions and/or drought rationing/allocation plan, if triggered in these stages
- Social media
  - Regularly schedule posts that convey more serious messages about the heightened shortage stages, moving from voluntary conservation and water-efficiency tips to mandatory conservation measures that trigger immediate and sustained water-use reductions.
    - Update cover art/imagery to reflect a serious tone in line with shortage severity
  - Continue to share retailer and other partner/stakeholder (Metropolitan, ACWA, etc.) posts but focus on the more serious and mandatory calls to action
  - Evaluate service area for additional geo-targeted advertising opportunities in languages other than English and Spanish
    - Repurpose targeted micro-community outreach messaging provided by Metropolitan to achieve cost savings
- Print and digital advertising/marketing
  - Increase direct-marketing opportunities for print and online publications by adding smaller publications to the established list of media outlet advertising
  - Continue to seek out additional retailer partner funding support for outreach campaigns
  - Develop a collateral piece with drought information and resources
  - Evaluate additional languages to supplement English and Spanish for outreach in targeted areas of West Basin

  - Consider other potential advertising forums, either self-funded or in partnership with other water providers, including
    - Television
    - Movie theaters
    - Radio
    - Billboards/bus shelters
    - Guerilla or nontraditional marketing
- Community outreach
  - Continue to seek out targeted opportunities to present critical information at public, civic, and business/industry events concerning worsening water conditions and any mandatory water-use regulations/actions
    - Provide water-saving devices as giveaways
  - Focus annual festival on water-use efficiency and drought-related matters
- School outreach/education
  - Refer to worsening water conditions and mandatory measures in school education programs, including classrooms and tour events
  - Encourage students to engage with their families in conserving water at home
- Media relations
  - Additional press release to announce increased water shortage declaration
  - Develop opinion pieces and letters to the editor from members of the Board regarding the severity of the water shortage and the necessary call to action for everyone to conserve
  - Additional press conference or statement on more severe water-shortage stage as needed
  - Talking points updated based on shortage severity
- Communication with cities, private retail water providers, and commercial/industrial water users
  - Host drought/water-shortage town hall meetings in all five Divisions of West Basin
  - Host elected official forums
  - Help distribute fact sheets, ordinances, and water-saving guidelines to municipalities and other major water-using sectors of the service area

Communication Protocols for Level 5 & 6 Water Shortages (41-50+%)

West Basin considers a Level 5 or 6 water shortage to be a severe or critical/catastrophic shortage. This includes water-shortage conditions of 41% and higher. During this type of shortage, West Basin would significantly expand the frequency and intensity of its communications efforts, even from those actions taken during a Level 3 or 4 shortage. As the shortage exceeds 50%, West Basin would shift its communications focus to maintaining water use for health and safety purposes. Communications efforts at this stage will almost completely be focused on stressing immediate, mandatory actions, with voluntary conservation mostly being reserved for the lower shortage levels.

- Website
  - Increased focus on mandatory water-use restrictions and/or drought rationing/allocation plan in all targeted languages
  - Update theme and tone of online stories and/or press releases to convey even more serious messaging/branding

  - Ensure that city and private water provider websites are in sync with West Basin messaging to convey severity of water shortage
- Social Media
  - Increased focus on mandatory water-use restrictions and/or drought rationing/allocation plan in all targeted languages
  - Continue to share most serious messages and mandatory calls to action at the state, regional and local levels
- Print and Digital Advertising/Marketing
  - Implement comprehensive, robust marketing campaigns in partnership with local and regional agencies
    - English, Spanish, and other languages as needed
  - Increase frequency of advertising opportunities in the previously mentioned mediums
    - Television
    - Movie theaters
    - Radio
    - Billboards/bus shelters
    - Guerilla or non-traditional marketing
  - Record and distribute weekly or monthly video updates on the status of the water shortage and any ongoing water-use restrictions
- Community Outreach
  - Information provided at public, civic, and business/industry events would focus on critical/catastrophic nature of water shortage and clearly convey mandatory water-use regulations/actions
- School Outreach/Education
  - Continue ramping up messaging to students and school administrators regarding the severity of water shortage
- Media Relations
  - Continue series of opinion pieces and letters to the editor from members of the Board on the severity of the water shortage and the needed call to action for everyone to conserve
  - Additional press conferences as needed
- Communication with Cities, Private Retail Water Providers, and Commercial/Industrial Water Users
  - Host additional drought/water-shortage townhall meetings in all five of West Basin's divisions as needed
  - Host additional elected official forums as needed
  - Increase efforts to distribute fact sheets, ordinances, and water-saving guidelines to municipalities and other major water-using sectors of the service area
  - Implement and/or participate in regional or local joint-information centers to communicate critical information to all water-use sectors
    - Ensure that Public Information Officer contact information for each and every retailer is updated and ready for coordinating activities once a severe/critical water shortage is triggered

3.6 Compliance and Enforcement

Per the Water Code Section 10632 (a)(6), as a wholesale water provider, West Basin is not responsible for compliance and enforcement of shortage response actions.

3.7 Legal Authorities

Per Water Code Section 10632 (a)(7)(A), West Basin, as formed under the Municipal Water District Law of 1911, shall have the legal authority to empower West Basin to implement and enforce its shortage response actions pursuant to California Water Code Sections 71640-71644, and may adopt any resolution or ordinance as needed to declare or respond to any water-shortage emergency.

Per Water Code Section 10632 (a)(7)(B), West Basin shall declare a water-shortage emergency condition to prevail within its service area whenever it finds and determines that the ordinary demands and requirements of water consumers cannot be satisfied without depleting the water supply to the extent that there would be insufficient water for human consumption, sanitation, and fire protection (Water Code Section 353).

Per Water Code Section 10632 (a)(7)(C), West Basin shall coordinate with any city or county for which it provides water supply services for the possible proclamation of a local emergency under California Government Code, California Emergency Services Act (Article 2, Section 8558). Along with developed coordination protocols, West Basin can facilitate compliance with this section of the Water Code in the event of a local emergency as defined in subpart (c) of Government Code Section 8558.

3.8 Financial Consequences of WSCP

Per Water Code Section 10632 (a)(8), West Basin must include a description of the overall anticipated financial consequences of implementing the WSCP. This description must include potential reductions in revenue and increased expenses associated with implementation of the shortage response actions. This should be coupled with an identification of the anticipated mitigation actions needed to address these financial impacts.

The water shortage response actions designed to address a range of water shortage conditions have the potential to impact West Basin's revenues and expenditures. To assess these impacts, West Basin calculated the revenue impacts resulting from each shortage stage in terms of percent reduction in sales compared to an estimate of a normal year baseline. Other factors incorporated into the analysis included water losses, pricing structure, and avoided costs.

West Basin develops its annual budget and designated fund levels through careful consideration of many different factors to achieve its mission, strategic goals, and other priorities. West Basin's annual budgeting process incorporates feedback from critical stakeholders, such as its retail water suppliers, to help guide West Basin in meeting its financial goals and objectives. As financial stewards of the West Basin service area, the Board of Directors is cognizant to set appropriate rates and charges to cover required program expenditures.

Nearly 90% of West Basin's revenues are generated from volumetric sales to retail agencies. These retail water sales vary based on a variety of factors such as hydrologic conditions, water demand, and water supply availability. West Basin staff employs comprehensive analysis and forecasting strategies to determine sales assumptions for future years. Variability in water sales levels can have significant impacts on West Basin's budget and overall financial health. Future water shortages are likely to result in financial impacts that affect the ability of West Basin to meet its ongoing goals and objectives.

West Basin's options for shortage response actions include demand management measures, operational flexibility, and (to a lesser extent) supply augmentation. Employing any one or more of these actions could trigger a financial impact on West Basin's budget and fiscal health.

Measures that reduce overall imported water use in its service area causes West Basin to purchase less water from Metropolitan and sell less water to its retailers. While this would result in both lower expenses and lower revenues, the net impact is a greater loss of water sales revenue than expenditure savings on reduced water purchases. The combination of lower water sales and increased expenditure levels that are needed to address water-shortage situations is likely to have some impact on West Basin's budget, which could also affect its rates. To mitigate these impacts and provide additional fiscal stability, West Basin conducts annual and long-term financial planning. Long-term planning allows West Basin to better understand and anticipate its current and forecasted revenue streams and expenses, providing flexibility to plan for known conditions in the future. West Basin also employs an extensive annual budget and rate-setting process that includes a comprehensive evaluation of its designated funds. This process may be utilized to help buffer the financial impacts of water-shortage situations that lead to reduced revenues and increased costs.

As a result, when West Basin is impacted by short-term water shortages, it can look more critically at current operations to determine which programs and/or capital projects may need to be deferred or eliminated in order to manage a combination of higher costs and reduced water sales. Likewise, by implementing long-term planning strategies, West Basin can more easily weather a longer-lasting water-shortage crisis. Through this prudent and forward-looking planning and budgeting process, West Basin is more adequately prepared to manage the unexpected financial impacts that may occur due to future water shortages.

In addition to utilizing designated funds to buffer the financial impacts of future water shortages, West Basin may implement other cost-saving actions, including the following:

- Reduced operations and/or maintenance activities
- Organizational restructuring and streamlining
- Deferral of Capital Investment Plan projects
- Increasing rates and/or other charges

While the above actions are not preferred, they serve as potential tools to use as part of an overall strategy that allows West Basin to continue meeting its mission and objectives.

West Basin's designated-fund policy provides for a minimum reserve requirement and target amount of unrestricted reserves on June 30 of each year. Funds in excess of the target amount can be utilized for capital expenditures in lieu of the issuance of additional debt or for the redemption, defeasance, or purchase of outstanding bonds or commercial paper as determined by the Board.

3.9 Monitoring and Reporting

Per Water Code Section 10632 (a)(9), since West Basin is a wholesale water supplier it is not required to provide a description of the monitoring and reporting requirements and procedures that have been implemented to ensure appropriate data is collected, tracked and analyzed for purposes of monitoring customer compliance and to meet state reporting requirements.

3.10 WSCP Refinement Procedures

Per Water Code Section 10632 (a)(10), West Basin must provide reevaluation and improvement procedures for systematically monitoring and evaluating the functionality of the WSCP. This ensures that shortage risk tolerance is adequate and appropriate water-shortage mitigation strategies are implemented as needed.

West Basin will regularly review and update its WSCP as needed. West Basin views the WSCP as a living document that should reflect the most recent conditions, including water supply and demand,

climate, policy, regulatory, or other operational conditions at a given point in time. Revisions to the WSCP may be implemented either during upcoming UWMP cycles or as standalone revisions that are needed to incorporate the most up-to-date information and requirements.

Revisions to the WSCP may include, but are not limited to, the following:

- Updates to shortage plan and stages
- Demand reduction actions
- Supply augmentation actions
- Operational changes
- Updates to communication protocols

In conjunction with preparing the Annual Assessment, West Basin staff will evaluate the efficacy of the overall WSCP and prepare recommendations for West Basin's Board of Directors to consider should updates to the plan be deemed necessary.

West Basin will also collaborate with its retail agencies to explore the possibility of developing a regionally coordinated WSCP in future years. The implementation of such a plan could help to streamline information sharing among water providers and offer regular updates to the shortage response strategies and actions for all water suppliers in West Basin's service area.

In addition to its retail agencies, West Basin will solicit feedback from the public and other interested stakeholders concerning any future modifications to the WSCP. Any feedback received will be carefully considered and evaluated by the West Basin Board of Directors and staff before making any revisions or refinements to the WSCP.

3.11 Special Water Feature Distinction

West Basin defines water features that are artificially supplied with water — including ponds, lakes, waterfalls and fountains — separately from swimming pools and spas, per subdivision (a) of Section 115921 of the Health and Safety Code.

3.12 Plan Adoption, Submittal, and Availability

West Basin met the required 60-day public hearing notification to stakeholders in its service area. Notification was sent to West Basin's retail water suppliers and to cities and counties in the West Basin service area. The public notice provided a summary of West Basin's intent to review and update the 2021 WSCP. Additional public notification was posted on the West Basin website on April 8, 2021.[3] A copy of the 60-day public hearing notice is included in **Attachment D.**

Per Water Code Section 10632 (a)(c), West Basin provided notice of the availability of its draft 2021 WSCP and notice of the public hearing to consider adoption of the 2021 WSCP in accordance with CWC Sections 10621(b) and 10642 and Government Code Section 6066. The public review draft of the 2021 WSCP was posted prominently on West Basin's website on May 25, 2021, ahead of the public hearing on June 10, 2021. The notice of availability of the documents was sent to West Basin's retail agencies and to cities and counties in West Basin's service area. In addition, a public notice advertising the public hearing was published in five local newspapers. Copies of the notification letter that were sent to West Basin's retail agencies and cities and counties in West Basin's service area, as well as copies of the public notice published in local newspapers, are included in **Attachment D**.

[3] https://www.westbasin.org/

West Basin held the public hearing for the draft 2021 WSCP on June 10, 2021, at the West Basin Board of Directors meeting. The meeting was conducted online due to ongoing COVID-19 precautions. The West Basin Board of Directors reviewed and adopted the 2021 WSCP at the Board's June 28, 2021 meeting. **Attachment E** contains a copy of the adoption resolution.

Per Water Code Sections 10632 (c) and 10645 (a) and (b), the 2021 WSCP was posted on West Basin's website on June 30, 2021, following its adoption by the West Basin Board of Directors. Copies were sent to West Basin's retail agencies and to cities and counties in the service area. Copies were also submitted electronically to the California State Library. These actions satisfy the requirement to make the plan publicly available and identifiable to local government stakeholders in West Basin's service area. The 2021 WSCP was also submitted electronically to the State of California through DWR's Water Use Efficiency (WUE) data website on June 30, 2021.[4]

Based on DWR's review of the WSCP, West Basin will make amendments to its adopted WSCP as required. If West Basin revises its WSCP after the 2020 UWMP is approved by DWR, then an electronic copy of the revised WSCP will be submitted to DWR within 30 days of its adoption.

[4] https://wuedata.water.ca.gov/secure/

R

References

All links below were accessed in June 2021 unless otherwise indicated.

Metropolitan Water District of Southern California. (2020). *Capital Investment Plan.*

Metropolitan Water District of Southern California. (2020). *Seismic Resilience Report.*

Metropolitan Water District of Southern California. (August 1999). *Water Surplus and Drought Management Plan.*

Metropolitan Water District of Southern California. (June 2008). *Water Supply Condition Framework.*

Metropolitan Water District of Southern California. (May 2021). *2020 Urban Water Management Plan.*

Metropolitan Water District of Southern California. (May 2021). *Water Shortage Contingency Plan.*

West Basin Municipal Water District. (June 2021). *2020 Urban Water Management Plan.* Retrieved from https://www.westbasin.org/policy-planning/reports-plans/

A

Attachment A: Metropolitan 2020 WSCP

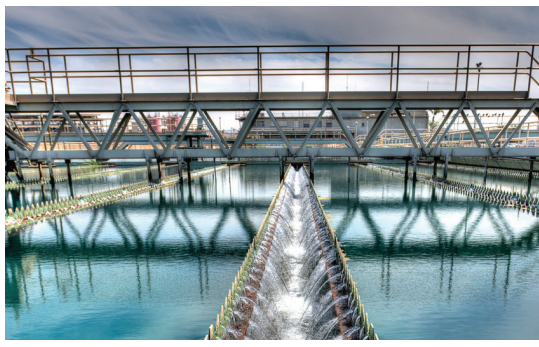
Metropolitan Water District of Southern California, Water Shortage Contingency Plan (June 2021) was adopted on May 11, 2021 and submitted to the California Department of Water Resources on June 3, 2021. Reference Metropolitan's Final 2020 WSCP online: http://www.mwdh2o.com/AboutYourWater/Planning/Planning-Documents

WATER SHORTAGE CONTINGENCY PLAN

JUNE 2021





THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

The Metropolitan Water District of Southern California

WATER SHORTAGE CONTINGENCY PLAN

June 2021

Including
Water Surplus and Drought Management Plan,
Water Supply Allocation Plan, and
WSCP Resolution 9281

Table of Contents

List of Acronyms and Abbreviations

AF	Acre-feet
CRA	Colorado River Aqueduct
CUP	Conjunctive Use Programs
CVWD	Coachella Valley Water District
CWC	California Water Code
DWA	Desert Water Agency
DWR	California Department of Water Resources
IID	Imperial Irrigation District
IRP	Integrated Water Resources Plan
ICS	Lake Mead Intentionally Created Surplus
MAF	Million Acre-feet
MWD	The Metropolitan Water District of Southern California
MWD Act	Metropolitan Water District Act
PVID	Palo Verde Irrigation District
QSA	Quantification Settlement Agreement
SNWA	Southern Nevada Water Authority
SWP	State Water Project
TAF	Thousand Acre-Feet
USBR	United States Bureau of Reclamation
UWMP	Urban Water Management Plan
WSAP	Water Supply Allocation Plan
WSCP	Water Shortage Contingency Plan
WSDM	Water Surplus and Drought Management

WATER SHORTAGE CONTINGENCY PLAN

Appendix 4 in The Metropolitan Water District of Southern California's 2020 Urban Water Management Plan

This Water Shortage Contingency Plan (WSCP) complies with California Water Code (CWC) Section 10632, which requires that every urban water supplier shall prepare and adopt a WSCP as part of its urban water management plan (UWMP). Section 10632.2 provides, "An urban water supplier shall follow, where feasible and appropriate, the prescribed procedures and implement determined shortage response actions in its water shortage contingency plan...or reasonable alternative actions, provided that descriptions of the alternative actions are submitted with the annual water shortage assessment report pursuant to Section 10632.1." Notwithstanding, the CWC does not prohibit an urban water supplier from taking actions not specified in its WSCP, if needed, without having to formally amend its UWMP or WSCP.

The WSCP is a guide for the Metropolitan Water District of Southern California's (Metropolitan's) intended actions during water shortage conditions. It is meant to improve preparedness for droughts and other impacts on water supplies by describing the process used to address varying degrees of water shortages. Certain elements of the WSCP are required by the CWC, including response actions that align with six standard water shortage levels based on water supply conditions, as well as shortages resulting from catastrophic supply interruptions. The WSCP also describes Metropolitan's procedures for conducting an Annual Water Supply and Demand Assessment (Annual Assessment) that is required by CWC Section 10632.1 and is to be submitted to the California Department of Water Resources (DWR) on or before July 1 of each year, or within 14 days of receiving final allocations from the State Water Project (SWP), whichever is later.

Metropolitan's WSCP is included as Appendix 4 to its 2020 UWMP which will be submitted to DWR by July 1, 2021. However, this WSCP is created separately from Metropolitan's 2020 UWMP and can be amended, as needed, without amending the UWMP.

Organization of this Document

The WSCP covers the required elements as set forth by CWC Section 10632. Because Metropolitan is a wholesale urban water supplier, elements that pertain only to retail water suppliers are not addressed in this WSCP.[1] The document contains eight sections. Section A.4.1 is an introduction that explains the purpose of the WSCP and provides background on Metropolitan's service area and system. Section A.4.2 is a summary of the water supply analysis and water reliability findings from the 2020 UWMP, pursuant to CWC Section 10635. Section A.4.3 is a description of procedures to conduct and approve the Annual Assessment. Section A.4.4 explains the WSCP's six standard water shortage levels corresponding to progressive ranges of up to 10, 20, 30, 40, 50, and more than 50 percent shortages and describes the WSCP's shortage response actions that align with the defined shortage levels. Section A.4.5 addresses communication protocols and procedures to inform customers, the

[1] WSCP elements that apply specifically to retailer water suppliers are: (1) a description of customer compliance, enforcement, appeal, and exemption procedures for triggered response actions (CWC Section 10632(a)(6)); (2) a description of the cost of compliance with Chapter 3.3 (commencing with Section 365) of Division 1 (CWC Section 10632(a)(8)(c)); and (3) monitoring and reporting requirements and procedures that ensure appropriate data is collected, tracked, and analyzed for purposes of monitoring customer compliance and to meet state reporting requirements (CWC Section 10632(a)(9)).

public, interested parties, and local, regional, and state governments regarding any current or predicted shortages and any resulting shortage response actions. Section A.4.6 is a description of the legal authorities that enable Metropolitan to implement and enforce its shortage response actions. Section A.4.7 is a description of the financial consequences of and responses for drought conditions. Section A.4.8 addresses reevaluation and improvement procedures for monitoring and evaluating the functionality of the WSCP and describes the process to adopt, submit, and amend the WSCP.

A.4.1 Background Information on Metropolitan

Background

Metropolitan is a public agency organized in 1928 by a vote of the electorate of 13 Southern California cities. The agency was enabled by the adoption of the original Metropolitan Water District Act (MWD Act) by the California Legislature "for the purpose of developing, storing, and distributing water for domestic purposes." The MWD Act also allows Metropolitan to sell "surplus water not needed or required for domestic or municipal uses within the district for beneficial purposes." In 1992, the Metropolitan Board of Directors adopted the following mission statement:

> *"To provide its service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way."*

Water used in Southern California comes from several sources. The investments that Metropolitan has made and its ongoing efforts in many different areas coalesce toward its goal of long-term regional water supply reliability. The first function of Metropolitan was building the Colorado River Aqueduct (CRA) to convey water from the Colorado River. Deliveries through the CRA to member agencies began in 1941 and supplemented the local water supplies of the Southern California member cities. In 1960, to meet growing water demands in its service area, Metropolitan contracted with DWR for participation in the SWP, which delivers water to Metropolitan's service area via the California Aqueduct. SWP deliveries began in 1972. Metropolitan currently receives imported water from both of these sources: (1) Colorado River via the CRA, and (2) the SWP via the California Aqueduct. Beyond its core imported supplies from the Colorado River and SWP, Metropolitan actively supports efforts to develop storage and groundwater management programs, and to increase conservation, water recycling, groundwater recovery, and seawater desalination projects.

Service Area

Metropolitan's service area covers the Southern California coastal plain. It extends about 200 miles along the Pacific Ocean from the city of Oxnard to the north to the international boundary with Mexico to the south, and it reaches as far as 70 miles inland from the coast. The total area served is approximately 5,200 square miles, and it includes portions of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura counties. Table A.4-1 shows that although only 14 percent of the land area of the six Southern California counties is within Metropolitan's service area, approximately 86 percent of the population of those counties resides within Metropolitan's boundaries.

Table A.4-1
July 1, 2020 Area and Population in the
Six Counties of Metropolitan's Service Area

County	Total County	In Metropolitan Service Area	Percent in Metropolitan
Land Area (Square Miles)			
Los Angeles County	4,061	1,408	35%
Orange County	789	699	89%
Riverside County	7,208	1,057	15%
San Bernardino County	20,052	242	1%
San Diego County	4,200	1,420	34%
Ventura County	1,845	365	20%
Metropolitan's Service Area	**38,155**	**5,191**	**14%**
Population (Persons)			
Los Angeles County	10,172,000	9,275,000	91%
Orange County	3,191,000	3,184,000	100%
Riverside County	2,449,000	1,813,000	74%
San Bernardino County	2,184,000	872,000	40%
San Diego County	3,352,000	3,261,000	97%
Ventura County	841,000	630,000	75%
Metropolitan's Service Area	**22,189,000**	**19,035,000**	**86%**

Metropolitan is currently composed of 26 member agencies, including 14 cities, 11 municipal water districts, and one county water authority. Metropolitan is a water wholesaler with no retail customers. It provides treated and untreated water to its member agencies.

Metropolitan's 26 member agencies deliver to their customers a combination of local groundwater, local surface water, recycled water, desalinated seawater, and imported water received from Metropolitan. For some member agencies, Metropolitan supplies all the water used within that agency's service area, while others obtain varying amounts of water from Metropolitan to supplement local supplies. Between 2011 and 2020, Metropolitan has provided between 40 and 50 percent of the municipal, industrial, and agricultural water used in its service area. The remaining water supply comes from local wells, local surface water, recycling, and the city of Los Angeles' aqueducts from the Owens Valley/Mono Basin east of the Sierra Nevada. Member agencies also implement conservation programs that can be considered part of their supplies.

Some member agencies provide retail water service, while others provide water to their local area as wholesalers. Table A.4-2 shows Metropolitan's member agencies and the type of service that they provide. As shown in the table, 15 member agencies provide retail service to customers, nine provide only wholesale service, and two provide a combination of both. Metropolitan's member agencies serve residents in 152 cities and 89 unincorporated communities. Throughout Metropolitan's service area, approximately 250 retail water suppliers directly serve the population.

Table A.4-2
Metropolitan's Member Agencies and Type of Water Service Provided

Member Agency	Retail or Wholesale
Los Angeles County	
Beverly Hills, City of	Retail
Burbank, City of	Retail
Central Basin Municipal Water District	Wholesale
Compton, City of	Retail
Foothill Municipal Water District	Wholesale
Glendale, City of	Retail
Las Virgenes Municipal Water District	Retail
Long Beach, City of	Retail
Los Angeles, City of	Retail
Pasadena, City of	Retail
San Fernando, City of	Retail
San Marino, City of	Retail
Santa Monica, City of	Retail
Three Valleys Municipal Water District	Wholesale
Torrance, City of	Retail
Upper San Gabriel Valley Municipal Water District	Wholesale
West Basin Municipal Water District	Wholesale
Orange County	
Anaheim, City of	Retail
Fullerton, City of	Retail
Municipal Water District of Orange County	Wholesale
Santa Ana, City of	Retail
Riverside County	
Eastern Municipal Water District	Retail & Wholesale
Western Municipal Water District	Retail & Wholesale
San Bernardino County	
Inland Empire Utilities Agency	Wholesale
San Diego County	
San Diego County Water Authority	Wholesale
Ventura County	
Calleguas Municipal Water District	Wholesale

Reliability Planning

Metropolitan continuously engages in planning for various aspects of its water management, including operations, long-term reliability, and emergency response. These planning efforts include the 1996 Integrated Water Resources Plan (IRP) and its three updates in 2004, 2010, and 2015; the 2020 IRP (currently in development); the WSCP; the Water Surplus and Drought Management (WSDM) Plan; the Water Supply Allocation Plan (WSAP); the Emergency Storage Objective; and the Seismic Risk Assessment and Mitigation Plan. Collectively, they provide a policy framework, operating guidelines, and resource targets for Metropolitan to ensure regional water supply reliability.

The IRP is Metropolitan's evolving long-term plan to assure adequate water supplies for Southern California. The first IRP was adopted in 1996 to address the complexity of developing, maintaining and delivering water to meet changing demands in the face of growing challenge. The IRP has been updated several times over the past 25 years. In 2020, Metropolitan started development of a new IRP that incorporates planning for multiple future scenarios to address an extended range of uncertainty. While Metropolitan coordinates regional supply planning through its inclusive IRP process, Metropolitan's member agencies also conduct their own planning analyses, including their own urban water management plans, and may develop projects independently of Metropolitan.

The WSCP is designed to be consistent with the WSDM Plan and the WSAP described below. Throughout the year, Metropolitan evaluates member agency demands, available water supplies, and existing water storage levels on a monthly basis to determine the appropriate actions identified in the WSDM Plan.

The 1999 WSDM Plan provides policy guidance for managing regional water supplies during surplus and shortage conditions. Similar in concept to the WSCP, the WSDM Plan provides an overall vision for operational supply management and characterizes a flexible sequence of actions to minimize the probability of severe shortages and reduce the likelihood of extreme shortages. WSDM Plan principles guide the specific actions to be taken under WSCP shortage stages (see section A.4.4). Data collection, continual analysis, and monthly reporting processes of WSDM Plan implementation will form the basis for Metropolitan's Annual Water Supply Demand Assessment that will be provided annually to the state beginning in July 2022. The WSDM Plan is included as Attachment A to this WSCP.

The WSAP is Metropolitan's policy and formula for equitably allocating available water supplies to the member agencies during extreme water shortages when Metropolitan determines it is unable to meet all of its demands. The WSAP is included as Attachment B to this WSCP.

The Emergency Storage Objective is the regional planning estimate for emergency storage, which represents the amount of water that Metropolitan would hold in storage for the region in preparation for a catastrophic earthquake that would damage the aqueducts that transport imported water supplies to Southern California: the CRA, both the East and West branches of the California Aqueduct, and the Los Angeles Aqueduct. In 2019, Metropolitan and its member agencies completed a process to update the planning estimate of Metropolitan's Emergency Storage Objective. The emergency storage allows Metropolitan to deliver reserve supplies to the member agencies to supplement local production. This helps avoid severe water shortages during periods when the imported water aqueducts may be out of service.

Beginning January 2020, CWC Section 10632.5 mandates urban water suppliers to include in their UWMP a seismic risk assessment and mitigation plan to assess the vulnerability of each of the various facilities of a water system and mitigate those vulnerabilities. For Metropolitan, this requirement was addressed as part of developing its resilience strategy and is presented in detail in Metropolitan's seismic resiliency reports in Appendix 9 to the 2020 UWMP, which are incorporated herein by reference.

A.4.2. Analysis of Water Supply Reliability

Besides the WSCP, the Urban Water Management Planning Act requires suppliers to conduct two other planning analyses to evaluate supply reliability. The first is a Water Reliability Assessment that compares the total water supply sources available to the water supplier with long-term projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and a drought lasting five consecutive water years. The second is a Drought Risk Assessment that evaluates a drought period that lasts five consecutive water years starting from the year following when the assessment is conducted.

Metropolitan completed its Water Reliability Assessment and Drought Risk Assessment as part of the 2020 UWMP. Through the Water Reliability Assessment, Metropolitan determined that, under the conditions required by the Urban Water Management Planning Act, it has supply capabilities sufficient to meet expected demands from 2025 through 2045 under a single dry-year condition and a period of drought lasting five consecutive water years, as well as in a normal water year hydrologic condition. Metropolitan's near-term Drought Risk Assessment revealed that its supply capabilities are expected to exceed its projected water use for the year 2022. However, estimates of projected water supply and use reveal that there could be a possible shortfall of core supplies in 2021, 2023, 2024, and 2025. This shortfall is largely triggered by the assumed low supply conditions from the SWP under a repeat of the historical condition of 1988 to 1992, which is modeled at 12% for 2021, 15% for 2023, 23% for 2024, and 18% for 2025. Actual supply conditions for the next five years may prove different from historic supply conditions. The WSCP shows Metropolitan's potential shortage response actions if such shortfalls were to happen. The Drought Risk Assessment projected supplies and demands for the years 2021 through 2025 using the driest five-year sequence.

Metropolitan's principal sources of water supplies are the SWP and the Colorado River. Metropolitan receives water delivered from the SWP under State Water Contract provisions, including contracted supplies, use of carryover storage in San Luis Reservoir, and surplus supplies. Metropolitan holds rights to Colorado River water for CRA diversion at Lake Havasu. Water management programs supplement these Colorado River supplies. To secure additional supplies, Metropolitan has groundwater banking partnerships and water transfer and storage arrangements within and outside its service area.

Hydrologic conditions and environmental regulations can have a significant impact on Metropolitan's imported water supply sources. For Metropolitan's SWP supplies, precipitation in California's northern Sierra Nevada during the fall and winter helps replenish storage levels in Lake Oroville, a key SWP facility. The source of Metropolitan's Colorado River supplies is primarily the watersheds of the Upper Colorado River Basin in the states of Colorado, Utah, and Wyoming. Although precipitation is primarily observed in the winter and spring, summer storms are common and can affect water supply conditions. Hydrologic variability, potential climate change, and regulatory risk are embedded in Metropolitan's modeling efforts. Metropolitan's modeling utilizes historical hydrologic conditions from 1992 to 2017 to simulate expected demands on Metropolitan supplies, as well as capacities and constraints of its storage facilities and supply programs. While potential impacts from climate change remain subject to study and debate, climate change is among the uncertainties that Metropolitan seeks to address through its various planning processes. Metropolitan's 2020 IRP is further addressing ways to account for and mitigate these uncertainties.

As demonstrated by the findings of both the Water Reliability Assessment and the Drought Risk Assessment, Metropolitan is able to mitigate the challenges posed by hydrologic variability, potential climate change, and regulatory risk on its imported supply sources through the significant storage capabilities it has developed over the last two decades, both dry-year and emergency storage.

A.4.3. Annual Water Supply and Demand Assessment Procedures

As an urban water supplier, Metropolitan is required under CWC Section 10632(a)(2) to prepare and submit an "annual water supply and demand assessment" (Annual Assessment). The Annual Assessment is a determination of Metropolitan's near-term outlook for supplies and demands and how a perceived shortage may relate to WSCP shortage stage response actions in the current calendar year. This determination will be based on known circumstances and information available to Metropolitan at the time of analysis. Starting in 2022, the Annual Assessment will be due by July 1 of every year, as indicated by CWC Section 10632.1. CWC Section 10632.1 also states that *"[a]n urban water supplier that relies on imported water from the State Water Project or the Bureau of Reclamation shall submit its annual water supply and demand assessment within 14 days of receiving its final allocations, or by July 1 of each year, whichever is later*." The Annual Assessment and related reporting are to be conducted based on the procedures described in this WSCP. This section describes Metropolitan's procedures for conducting the Annual Assessment, which include: (1) the written decision-making process to determine water supply reliability; and (2) the key data inputs and assessment methodology to evaluate water supply reliability for the current year and one dry year.

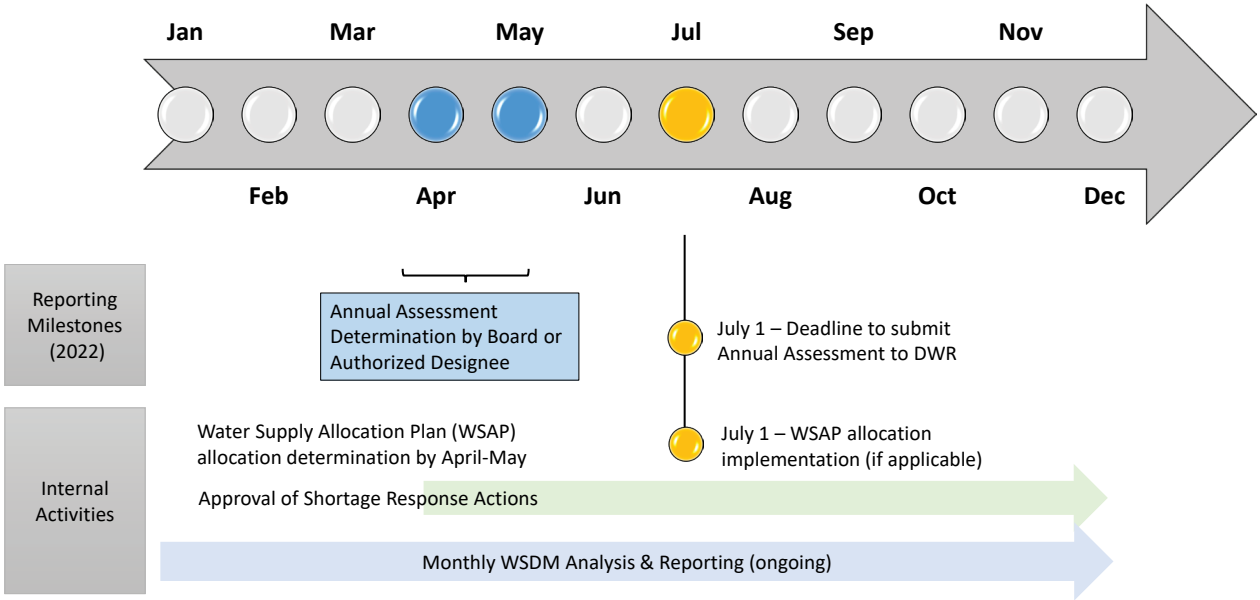
Steps to Approve the Annual Assessment Determination

The Annual Assessment will be primarily based on Metropolitan's ongoing WSDM supply-demand tracking process which is exhibited in monthly reporting to the Board of Directors throughout the year. WSDM planning activities involve examination of developing demand and supply conditions for the calendar year, as well as considerations of potential actions consistent with the WSDM Plan. These monthly analyses provide key information for Metropolitan to manage resources to meet a range of estimated demands and adjust to changing conditions throughout the year.

As a water supply wholesaler, Metropolitan's water demands are a function of retail-level demands and local water production. Water from Metropolitan serves as a supplemental source of supply for its 26 member agencies. For many member agencies, their primary source of water is produced locally from groundwater basins, surface reservoirs, recycled water projects, groundwater recovery projects, and seawater desalination. When local supplies are not enough to meet retail demands, member agencies purchase supplemental water from Metropolitan. Some member agencies rely heavily on Metropolitan due to limited local supplies. As described below, Metropolitan collects estimates of projected consumptive and replenishment water demands from its member agencies. This information is adjusted to determine unconstrained demands for the purpose of the Annual Assessment shortage percentage evaluation.

By June, Metropolitan staff will present a completed Annual Assessment for approval by the Board of Directors or by the Board's authorized designee with expressly delegated authority for approval of Annual Assessment determinations. This presentation will include a request that the approval of the Annual Assessment determination also appropriately triggers any recommended specific shortage response actions resulting from the assessment. Upon approval, Metropolitan staff will then formally submit the Annual Assessment to DWR by July 1. Figure A.4-1 provides a graphic representation of the decision-making process.

Figure A.4-1
Sample Annual Assessment Decision-Making Timeline



Data Inputs and Assessment Methodology

This section describes how Metropolitan will evaluate water supply reliability for the current year and one dry year for the purpose of the Annual Assessment. The Annual Assessment determination will be based on considerations of available core water supplies, unconstrained water demand, and infrastructure considerations. The difference between core water supplies and unconstrained demand will be used to determine what, if any, shortage stage is expected under the WSCP framework. The standard shortage stage percentage will be calculated by dividing the difference between core supplies and unconstrained demand by unconstrained demand. This calculation will be performed separately for anticipated current year conditions and for an assumed dry year condition.

Locally Applicable Evaluation Criteria

Because shortages are based on the difference between expected core supplies and unconstrained demand under current year and dry year conditions, the locally-applicable evaluation criteria to be used in the Annual Assessment for determining a shortage include the following:

- Characterization of current year and dry year scenarios based on best-available data, including anticipated hydrologic conditions for Metropolitan's supply source watersheds in the Colorado River basin and Northern California, as well as for local conditions in Metropolitan's service area in Southern California.
- Estimation of available core supplies (see below) for current year and dry year scenarios
- Estimation of unconstrained demands (see below) for current year and dry year scenarios

Together, these three criteria provide the necessary information to calculate shortage percentages by dividing the difference between core supplies and unconstrained demand by unconstrained demand, under current year and dry year scenarios. These criteria findings will also be given additional context and influenced by infrastructure considerations discussed below which will differ from year to year.

The information and analyses that comprise the Annual Assessment will be based on ongoing planning processes that include the monthly WSDM supply-demand reporting. The Annual Assessment represents a mid-year evaluation at a given point in time; even after formal approval and submittal of the Annual Assessment determination by July 1, Metropolitan will continue to monitor emerging supply and demand conditions and take appropriate actions consistent with the flexibility and adaptiveness inherent to this WSCP. Some locally-applicable conditions that affect Metropolitan's wholesale supply and demand, such as the Higher Priority Water Use Adjustment for Colorado River use (see below), local supply production, annual SWP allocations, the status of Metropolitan storage accounts, the status of the local groundwater basins, changed water use practices, and local economic activity entail a high degree of uncertainty and can differ significantly from earlier projections throughout the year.

Description and Quantification of Each Source of Water Supply (Core Supplies)

Metropolitan's core water supplies are counted as the supply component of the Annual Assessment. Core supplies include estimated water supplies from the Colorado River and the SWP for the current year. Imported core supplies vary from year to year and are influenced by annual weather and hydrology, as well as demand by other higher priority users and operational and regulatory factors.

Because core supplies are used every year, they are differentiated from the WSCP's shortage response actions for supply augmentation; supply augmentation actions are comprised of Metropolitan's portfolio of water storage reserves and flexible supply sources that are available on an as-needed basis.

Metropolitan's core supplies come from several programs, which are shown in Table A.4-3 and described below.

Table A.4-3
Core Water Supplies

Source	Core Supply
Colorado River	Colorado River Basic Apportionment Higher Priority Water Use Adjustment to Colorado River Basic Apportionment IID/MWD Conservation Program PVID Fallowing Program Bard Water District Seasonal Fallowing Program Lower Colorado Water Supply Project Exchange with SDCWA Exchange with the United States
State Water Project	MWD SWP Table A SWP Article 21 Interruptible Supplies SWP Port Hueneme Lease of Ventura Table A Desert Water Agency/Coachella Valley Water District/Metropolitan Water Exchange and Advance Delivery Programs San Gabriel Valley Municipal Water District Program

Colorado River

Colorado River Basic Apportionment

Metropolitan built, owns, and operates the 242-mile CRA. The CRA originates at Lake Havasu on the Colorado River and winds through a series of pump stations and reservoirs through the California desert to its terminal reservoir at Lake Mathews in Riverside County. The CRA has a full delivery capacity of about 1.25 MAF.

The state of California holds a 4.4 MAF per year normal apportionment to Colorado River water. Metropolitan has the Fourth Priority right to normal apportionment of 550,000 AF per year of the State's normal apportionment. Metropolitan also holds the Fifth Priority right for an additional 662,000 AF per year which is utilized during surplus conditions or when supplies from other Colorado River users are available.

Higher Priority Water Use Adjustment to Metropolitan's Colorado River Basic Apportionment

Entitlements to use Colorado River water in California under priorities 1, 2, and 3 are limited to 3.85 MAF per year. Priority 3(a) is held by the Imperial Irrigation District and the Coachella Valley Water District (CVWD) totaling 3.43 MAF. After accounting for contractual conservation and transfers, any unused volume available to Priority 3(a) becomes available for use by Metropolitan. Of the 3.85 MAF, the remaining 420,000 AF is available for use under priorities 1, 2, and 3(b) held by the Palo Verde Irrigation District and the Yuma Project lands within California. Any unused amount from this volume is available for use by Metropolitan,

however, Metropolitan must forego its otherwise available Colorado River supplies to meet annual uses under priorities 1, 2, and 3(b) that are in excess of 420,000 AF. Lastly, there are additional high-priority "present perfected rights" within California not incorporated into the priorities, for which Metropolitan must forego its otherwise available Colorado River supplies to meet uses of present perfected rights that exceed 14,500 AF. The net sum of these volumes is the "higher priority water use adjustment" to Metropolitan's base supply.

Imperial Irrigation District-Metropolitan Conservation Program

Since 1988, Metropolitan has funded water conservation programs within Imperial Irrigation District's (IID) service area. The amount of water conserved from these programs is then transferred to Metropolitan. Conservation approaches range from distribution system improvements (such as canal lining, spill capture and the installation of non-leak irrigation gates) to efficient on-farm water management practices (such as delivering water to farmers on a 12-hour rather than a 24-hour basis). Through this program, a total of 105,000 AF per year of water is conserved and made available to Metropolitan.

Palo Verde Irrigation District Land Management, Crop Rotation and Water Supply Program

In 2005, Metropolitan entered a 35-year program with the Palo Verde Irrigation District (PVID). Under the program, participating farmers in PVID are paid to reduce their water use by leaving acreage unirrigated. A base amount of 25 percent of the program acreage must be fallowed every year. Metropolitan may elect to call for additional acreage to be fallowed up to 90.3%. Fallowing calls must be made at least one year in advance by July 31 of each year and would take effect on August 1 of the following year. The reduced consumptive use due to fallowed lands reduces uses under priorities 1, 2, and 3(b), thereby increasing the Colorado River water supply available to Metropolitan. The fallowing program saves a minimum of 33,000 AF per year and up to 133,000 AF in certain years.

Metropolitan/Bard Seasonal Fallowing Program

At its December 2019 meeting, Metropolitan's Board authorized a 7-year seasonal fallowing program with the Bard Water District (Bard). Under the program, participating farmers in Bard are being paid to reduce their water use by not irrigating a portion of their land. A maximum of 3,000 acres can be fallowed in any given year. Under the terms of the QSA, water savings within the Bard service area are made available to Metropolitan. Bard Unit, as part of the Yuma Project, has the first priority for Colorado River water under the water delivery contracts with the USBR. Implementation of the program began in March 2020. It is estimated that the Seasonal Fallowing Program would provide up to 6,000 AF per year of additional Colorado River water. This water would be available in any year as needed and in accordance with the provisions described in the agreements with Bard Unit farmers and Bard.

Lower Colorado Water Supply Project

Groundwater is pumped by the Lower Colorado Water Supply Project near the All-American Canal and is discharged to the Canal. IID reduces its net diversions of Colorado River water by an amount equal to the amount of Project water discharged into the Canal, permitting entities along the Colorado River that do not have rights or have insufficient rights to divert Colorado River water to obtain a supply of water. In 2007, Metropolitan entered into a contract with the USBR and the City of Needles to utilize the unused Project capacity.

Exchange with the San Diego County Water Authority (SDCWA)

SDCWA has acquired conserved Colorado River water reaching an annual volume of 277.7 TAF by 2023. SDCWA makes this water available at Lake Havasu for Metropolitan diversion, where Metropolitan takes possession of the water and provides a matching volume from Metropolitan's blended supplies to SDCWA by exchange in equal monthly amounts. The conserved water is acquired by SDCWA through its transfer agreement with IID and from the lining of the All-American and Coachella canals.

Under the transfer agreement with IID, the stabilized annual transfer volume of 200 TAF is generated from conservation of water through on-farm efficiency conservation arrangements made by IID with its customers and other system efficiency measures.

The Coachella Canal Lining Project consists of a 35-mile concrete-lined canal, including siphons, which replaced an earthen canal. The project was completed in December 2006 and conserves 30,850 AF annually. The All-American Canal Lining Project consists of a concrete-lined canal constructed parallel to 23 miles of earthen canal and was completed in 2009, conserving 67,700 AF annually.

Pursuant to the QSA and related agreements, the 98,550 AF of water resulting from these projects annually is allocated as follows: 16,000 AF to the San Luis Rey Settlement Parties in San Diego County, 77,700 AF to SDCWA, and 4,850 AF for Coachella Canal Lining Project mitigation.

Exchange with the United States

Of the 16 TAF allocated to the San Luis Rey Settlement Parties from the All-American and Coachella canal lining projects, the United States furnishes this water at Metropolitan's Colorado River Intake on Lake Havasu. Metropolitan takes possession of the water and by exchange delivers an equal volume of Metropolitan's blended supplies to SDCWA. By separate agreement, SDCWA conveys the water to the San Luis Rey Settlement Parties. So long as water conserved by the All-American Canal Lining Project and Coachella Canal Lining Project is allocated to and available for use by the San Luis Rey Settlement Parties, the United States will make 16 TAF available for diversion by Metropolitan in perpetuity.

State Water Project

Table A Contract Amount

In accordance with its participation contract with DWR, Metropolitan's basic contract amount is for 1,911,500 AF per year. This represents the amount of water supply that would be available to Metropolitan in years where there is sufficient water supply for the SWP to deliver 100 percent of its total contract amounts. The amount of supply actually available on an annual basis is allocated to the State Water Contractors based on their proportionate Table A amounts.

DWR estimates the amount of supplies that are available each year. Metropolitan uses a forecasting method for SWP deliveries based on historical patterns of precipitation, runoff and actual deliveries of water. Annual SWP allocations have ranged from 5 percent to 100 percent of the Table A contract amounts.

Article 21 Interruptible Supplies

Metropolitan has a contract to water supplies that are made available on an intermittent basis. Storm flows can occasionally make water supplies available that are in excess to the

Table A allocation. State Water Contractors can take delivery of these supplies, with their rights being based on their proportional Table A contract amounts. Historically, Article 21 interruptible supplies have ranged from 0 to 240,000 AF annually.

SWP Port Hueneme Lease of Ventura Table A

Metropolitan has a right to delivery of up to 1,850 AF of Table A supply from the Ventura County Watershed Protection District (Ventura), one of 29 SWP contractors, via a sublease agreement with the Port Hueneme Water Agency (Port Hueneme). United Water Conservation District, one of three agencies holding a contract right to Ventura Table A supply, leases this portion of their total 5,000 AF of Table A supply to Port Hueneme, which in turn subleases the Table A supply to Metropolitan. The long-term lease is a condition of the 1996 annexation of the Port Hueneme service area to Calleguas Municipal Water District and Metropolitan. This water supply is in addition to Metropolitan's Table A, and the amount available each year is determined by the SWP allocation, with 1,850 AF available at a 100 percent allocation.

Desert Water Agency/Coachella Valley Water District/Metropolitan Water Exchange and Advance Delivery Programs

The Desert Water Agency (DWA) and CVWD, both in Riverside County, have rights to SWP deliveries, but do not have any physical connections to the SWP facilities. Both agencies are adjacent to the CRA. For DWA and CVWD to obtain water equal to their SWP allocations, Metropolitan has agreed to exchange an equal quantity of its Colorado River water for DWA and CVWD's SWP water. DWA has a SWP Table A contract right of 55.75 TAF per year, and CVWD has a SWP Table A contract right of 138.35 TAF per year, for a total of 194.1 TAF per year. Additionally, CVWD has a long-term water supply agreement for 9.5 to 16.5 TAF annually from Rosedale Rio-Bravo Water Storage District.

Under the existing agreements, Metropolitan provides water from its CRA to DWA and CVWD in exchange for SWP deliveries. Metropolitan can deliver additional water to its DWA/CVWD service connections, permitting these agencies to store water. When supplies are needed, Metropolitan can then receive its full Colorado River supply, as well as the SWP allocation from the two agencies, while the two agencies can rely on the stored water for meeting their water supply needs. The amount of DWA and CVWD SWP Table A water available to Metropolitan depends on total SWP deliveries and varies from year to year.

In addition to their Table A and long-term water supplies, DWA and CVWD, subject to available capacity, may take delivery of SWP supplies available under Article 21, the Turn-back Pool Program, and non-SWP water supplies they may acquire and convey through the SWP facilities. These other supplies are delivered to DWA and CVWD by exchange with Metropolitan in the same manner as Table A deliveries. DWA and CVWD are participants in the Yuba Dry Year Water Purchase Program. Additionally, DWA participated in the 2009 Drought Water Bank and the 2015-2016 Multi-Year Water Pool Demonstration Program.

San Gabriel Valley Municipal Water District Program

The San Gabriel Valley Municipal Water District Program allows Metropolitan to exchange supplies to provide additional water for normal and dry year needs. Under this program, Metropolitan delivers supplies to the City of Sierra Madre, a San Gabriel Valley Municipal Water District member agency. In exchange for Metropolitan delivering one AF, San Gabriel Valley Municipal Water District returns two AF to Metropolitan in the Main San Gabriel Basin, up to 5 TAF. For any exchange amount less than 5 TAF, Metropolitan purchases the balance of the 5 TAF. The program provides increased reliability to Metropolitan by allowing additional

water to be delivered to Metropolitan member agencies that rely upon the Main San Gabriel Basin for their supplies – Three Valleys Municipal Water District and Upper San Gabriel Valley Municipal Water District.

Unconstrained Demands

For the purpose of the Annual Assessment and WSCP, CWC Section 10632(a)(2)(B)(i) directs Metropolitan to use current year "unconstrained demand" when assessing water supply reliability. The WSCP and Annual Assessment define unconstrained demand as expected water use in the current assessment year, based on recent water use, and before any projected shortage response actions that may be taken under the WSCP. Unconstrained demand is distinguished from observed demand, which may be constrained by preceding, ongoing, or future actions, such as emergency supply allocations during a multi-year drought. WSCP shortage response actions, if any are in place, that result in extraordinary demand reductions in the current year to constrain demand are inherently extraordinary; routine activities such as ongoing conservation programs and regular operational adjustments are not considered as constraints on demands.

To forecast near-term demands, Metropolitan begins by gathering data from its member agencies. In July of each year, member agencies submit their five-year demand forecasts to Metropolitan. Metropolitan uses this information as the foundation for forecasting demands. As the year progresses, the member agency forecasts are compared to the current demand trend. This comparison allows Metropolitan to adjust member agency forecasts to current conditions, while collaborating with member agencies as needed.

Metropolitan builds upon member agency demand projections to develop its own near-term forecast for its monthly WSDM supply-demand reporting. This forecast considers additional factors such as historical demand trends, changes in local supply production, weather trends, water-use efficiency trends, retail demand estimates, and updated estimates from member agencies.

Because these forecasted demands would be "constrained" observed demands rather than unconstrained demands, Metropolitan will adjust its near-term demand forecast for the Annual Assessment to account for extraordinary demand management measures that Metropolitan may intend or have already put into effect for the current year. Extraordinary demand management measures may include intensified communication and public outreach, and shortage allocations to its member agency customers through implementation of Metropolitan's WSAP. Non-extraordinary water savings from regular conservation and community outreach activities are considered part of Metropolitan's baseline demands and are not counted again for assessments of unconstrained demand.

Water Conditions for Current Year Available Supply Considering Current Year Conditions and One Dry Year

CWC Section 10632(a)(2)(B)(ii) requires the Annual Assessment to determine "*current year available supply, considering hydrological and regulatory conditions in the current year and one dry year.*" The Annual Assessment will include two separate estimates of Metropolitan's annual water supply and unconstrained demand using: 1) current year conditions, and 2) assumed dry year conditions. Accordingly, the Annual Assessment's shortage analysis will present separate sets of findings for the current year and dry year scenarios. The CWC does not specify the characteristics of a dry year, allowing discretion to the Supplier. Metropolitan will use this discretion to refine and update its assumptions for a dry year scenario in each Annual Assessment as information becomes available.

In the 2020 UWMP, the "single dry year" is characterized to resemble conditions as a year in which conditions reflect the lowest water supply available to the Supplier. Metropolitan developed estimates of future demands and supplies from local sources and from Metropolitan sources based on 96 years (1922-2017) of historic hydrologic conditions. Supply and demand analyses for the single-dry year case was based on conditions affecting the SWP as this supply availability fluctuates the most among Metropolitan's sources of supply. Based on the 96-year period, 1977 was the single driest year for SWP supplies to Metropolitan. In addition, staff analysis of the 8-river index indicated that 1977 was the single driest year from 1922 through 2017. The 8-river index is used by DWR and other water agencies as an estimate of the unimpaired runoff (or natural water production) of the Sacramento and San Joaquin River basins, which are sources of water for the SWP.

Infrastructure Considerations

The Annual Assessment will consider any infrastructure issues that may pertain to near-term water supply reliability, including repairs, construction, and environmental mitigation measures that may temporarily constrain capabilities, as well as any new projects that may add to system capacity.

Metropolitan operates a distribution system that is flexible and adaptable allowing delivery of supplies from a combination of SWP, Colorado River, and regional storage sources to meet demands throughout its service area, as shown in Figure A.4-2. System distribution capabilities and limitations can add complexity to near-term reliability. For example, a portion of Metropolitan's service area currently cannot be served by Colorado River supplies. In the event of very low SWP supplies and available storage along the SWP system, Metropolitan's operations may be acutely challenged to meet SWP-only demands even though in that same year total supplies including Colorado River supplies may exceed total demands.

Metropolitan also has five regional water treatment plants, with capacities presented in Table A.4-4. Portions of Metropolitan's service area may receive water treated by one or a combination of several of these water treatment plants. Over the last 40 years, Metropolitan effectively delivered to its member agencies water supplies to meet demands ranging from 1.2 MAF per year to over 2.5 MAF per year.

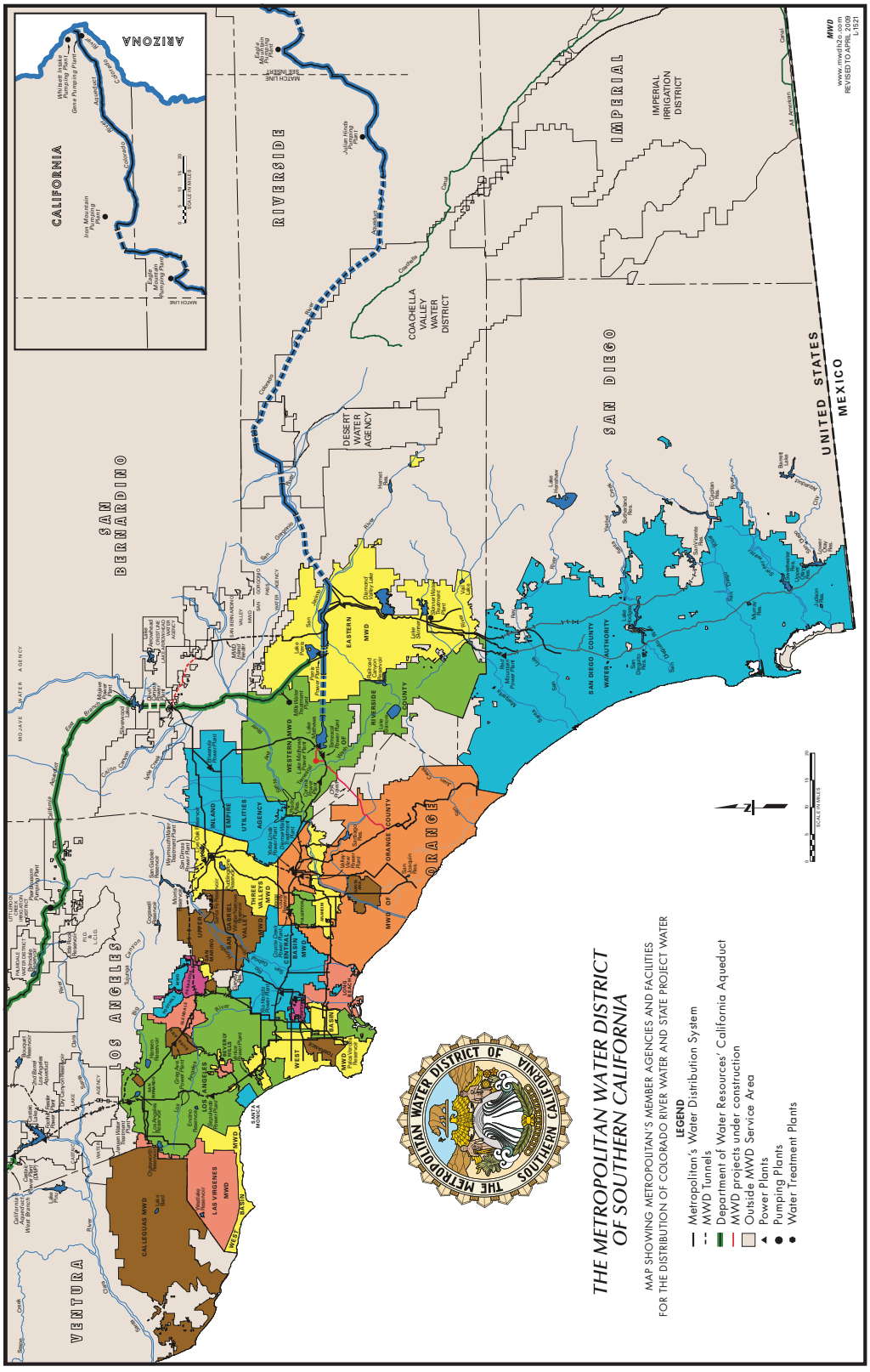
Table A.4-4
Metropolitan's Water Treatment Plants

Water Treatment Plant	Capacity (in MGD)
Jensen	750
Weymouth	520
Diemer	520
Mills	220
Skinner	350

Note: Rated capacity. Effluent capacities may be less to account for backwash.

Metropolitan and its member agencies continue to implement system improvements and modifications to effectively increase system flexibility during both normal operations when imported supplies are available and during extraordinary times when SWP supplies are reduced to maximize the use of more readily available Colorado River water and Diamond Valley Lake supplies.

Figure A.4-2
Metropolitan's Service Area



Throughout each year, Metropolitan regularly carries out preventive and corrective maintenance of its facilities. Metropolitan plans and performs shutdowns to inspect and repair pipelines and facilities and support capital improvement projects. These shutdowns involve a high level of planning and coordination within Metropolitan, as well as with member agencies, other affected organizations, contractors, and the community. These shutdowns are scheduled to ensure that major portions of the distribution system are not out of service at the same time. Operational flexibility within Metropolitan's system and the cooperation of member agencies allow shutdowns to be successfully completed while continuing to meet all system demands.

Metropolitan's Infrastructure Reliability Strategy helps to ensure long-term reliable performance of the system in an efficient and cost-effective manner. Infrastructure reliability is addressed through three programs: the Maintenance Management Program, the Infrastructure Protection Plan, and the Dam Safety Program. The activities performed under these programs allow for Metropolitan to extend the life span of its facilities and equipment and improve the overall reliability of the entire conveyance, treatment, and distribution system. In addition, seismic resiliency issues are addressed in the Seismic Risk Assessment and Mitigation Plan, which is included in Appendix 8 to the 2020 UWMP and incorporated herein by reference.

In the event that Metropolitan anticipates that an infrastructure issue is likely to impede or expand Metropolitan's capability to convey, treat, or distribute water during the current year, then the issue would be documented, and the determination of water reliability in the Annual Assessment would be adjusted accordingly.

Other Factors

Water quality is of paramount importance to water supply reliability. Metropolitan owns and operates five water treatment plants. Metropolitan is a national leader in providing safe drinking water that meets increasingly stringent standards, testing for over 400 constituents and performing nearly 200,000 water quality tests annually on samples gathered throughout its distribution system. Metropolitan's Water Quality Laboratory analyzes these samples to ensure that Metropolitan's delivered water meets or surpasses all state and federal drinking water standards. Because treatment to remove specific contaminants can be more costly than measures to protect water at the source, Metropolitan also actively supports improved watershed protection programs for its source waters in the Colorado River and SWP. For the Annual Assessment, any known issues related to water quality will be considered for their potential effects on water supply reliability.

A.4.4. Shortage Levels and Shortage Response Actions

Six Standard Water Shortage Levels

As required by California Water Code Section 10632(a)(3)(A), the WSCP is framed around six standard water shortage levels that correspond to progressive ranges of up to 10, 20, 30, 40, and 50 percent shortages and greater than 50 percent shortages. As shown in Table A.4-5, each of the six shortage levels represents an increasing gap between Metropolitan's estimated core supplies and unconstrained demand as determined in the Annual Assessment. As explained above, shortage percentages will be calculated by dividing the difference between core supplies and unconstrained demand by unconstrained demand. This calculation will be performed separately for anticipated current year conditions and for assumed dry year conditions. Shortage levels also apply to catastrophic interruption of water supplies, including, but not limited to, a regional power outage, an earthquake, and other emergency events. The shortage levels are defined in terms of the percent shortfall of supplies against demands.

Shortage Response Actions

California Water Code Section 10632(a)(4) requires the WSCP to specify shortage response actions that align with the defined shortage levels, and include, at a minimum, all of the following:

- Locally appropriate supply augmentation actions
- Locally appropriate demand reduction actions to adequately respond to shortages
- Locally appropriate operational changes
- Additional, mandatory prohibitions against specific water use practices that are in addition to state-mandated prohibitions and appropriate to the local conditions (Not applicable to Metropolitan)
- An estimate of the extent to which the gap between supplies and demand will be reduced by implementation of each action.

As indicated in Table A.4-5, shortage responses will be customized to meet the circumstances for the particular shortage. Because circumstances can change at any time, Metropolitan's shortage responses actions will be adjusted accordingly throughout the year. To determine specific actions that would be taken at each standard shortage level, Metropolitan will evaluate conditions specific to cost, timing, distribution needs and capabilities, and other variables that include SWP allocation, Colorado River conditions, demand reduction measures, supply program take capacities, and storage balances.

Shortages are characterized not merely by shortfalls in annual core water supplies, but also by the water balances in Metropolitan's storage programs. Thus, a 10 percent shortfall in core supplies could be met entirely with stored water if storage levels are high. If storage levels are already depleted, the same shortfall in core supplies could potentially require a more complex mix of supply augmentation and demand reduction actions. In the most severe situations, allocating shortages to member agencies through the WSAP would address any remaining shortages not already mitigated by supply augmentation and lesser demand reduction actions.

Metropolitan has invested extensively in a diverse portfolio of supply sources and system resiliency to prepare for a wide range of possible challenging conditions. Metropolitan follows the principles of its WSDM Plan, which was adopted in 1999 and provides policy guidance for managing regional water supplies to achieve reliability. It identifies a broad sequence of actions during surpluses and shortages to minimize probability of severe shortages, based on detailed modeling of Metropolitan's existing and expected resource mix. The WSDM Plan recognizes the link between surplus and shortages and integrates planned operational actions with respect to both conditions. The WSDM Plan is included as Attachment A to this document.

Table A.4-5
Shortage Stages and Response Actions

Shortage Stage	Shortage Percentage	Shortage Response	
1	Up to 10%	Take from Storage Execute Flexible Supplies Implement Voluntary Demand Reduction Implement Water Supply Allocation Plan	• 0 to 100% met by Storage • 0 to 100% met by Flexible Supplies • 0 to 20% of total retail water use met by implementing Communication Plan • 0 to 50% of total base demand met by WSAP supply allocation
2	10% to 20%	Take from Storage Execute Flexible Supplies Implement Voluntary Demand Reduction Implement Water Supply Allocation Plan	• 0 to 100% met by Storage • 0 to 100% met by Flexible Supplies • 0 to 20% of total retail water use met by implementing Communication Plan • 0 to 50% of total base demand met by WSAP supply allocation
3	20% to 30%	Take from Storage Execute Flexible Supplies Implement Voluntary Demand Reduction Implement Water Supply Allocation Plan	• 0 to 100% met by Storage • 0 to 100% met by Flexible Supplies • 0 to 20% of total retail water use met by implementing Communication Plan • 0 to 50% of total base demand met by WSAP supply allocation
4	30% to 40%	Take from Storage Execute Flexible Supplies Implement Voluntary Demand Reduction Implement Water Supply Allocation Plan	• 0 to 100% met by Storage • 0 to 100% met by Flexible Supplies • 0 to 20% of total retail water use met by implementing Communication Plan • 0 to 50% of total base demand met by WSAP supply allocation
5	40% to 50%	Take from Storage Execute Flexible Supplies Implement Voluntary Demand Reduction Implement Water Supply Allocation Plan	• 0 to 100% met by Storage • 0 to 100% met by Flexible Supplies • 0 to 20% of total retail water use met by implementing Communication Plan • 0 to 50% of total base demand met by WSAP supply allocation
6	More than 50%	Take from Storage Execute Flexible Supplies Implement Voluntary Demand Reduction Implement Water Supply Allocation Plan Take from Emergency Storage, if needed	• 0 to 100% met by Storage • 0 to 100% met by Flexible Supplies • 0 to 20% of total retail water use met by implementing Communication Plan • 0 to 50% of total base demand met by WSAP supply allocation • Take from emergency storage during a catastrophic event

Supply Augmentation Actions

Generally, Metropolitan's first response to any gap between core supplies and demand is to make optimal use of its supply augmentation options consisting of draws from flexible supply programs and storage reserves listed in Table A.4-6. To supplement its core water supplies from the SWP and Colorado River, Metropolitan has developed and actively manages a portfolio of water supply programs, including water transfer, storage and exchange agreements, the supplies created by which are conveyed through available CRA capacity or the California Aqueduct. Metropolitan pursues voluntary water transfer and exchange programs with other entities to help mitigate supply/demand imbalances and provide additional dry-year supply sources. Metropolitan has also developed significant storage capacity in reservoirs and groundwater banking programs both within and outside of the Southern California region. In a hypothetical single dry year assessment within the 2020 Urban Water Management Plan, Metropolitan could take up to approximately 1.8 MAF in a single year to meet dry year demands. Actual take capabilities would depend on various factors including water balances, location, and operational constraints.

Flexible Supplies

Metropolitan can augment its core Colorado River supplies through agreements with other agencies that have rights to use such water. Metropolitan determines the delivery schedule of these supplies throughout the year based on changes in the availability of SWP and to a smaller extent the higher priority water use adjustment for Colorado River water.

In addition to the basic SWP contract provisions, Metropolitan has other contract rights that facilitate augmentation of its SWP supply. Each SWP contractor has the right to use the facilities to move water supplies associated with agreements, water transfers, and water exchanges at the incremental cost. Metropolitan utilizes this ability in conveying water obtained through a number of agreements and exchanges with agencies in California's Central Valley north of the Bay-Delta and southward to Southern California.

Storage

A key component of Metropolitan's water supply capability is the amount of water in Metropolitan's storage facilities and programs in which surplus amounts of water in normal and wet years are captured until needed to augment core supplies. Metropolitan has developed an extensive storage portfolio made up of units within and outside Metropolitan's service area that includes both dry-year and emergency storage capacity. Such units, totaling approximately 6.0 MAF, include reservoirs, conjunctive use and other groundwater storage programs within the service area, and groundwater and surface storage accounts outside the service area delivered through the CRA or SWP. Consistent with the Emergency Storage Objective that was revised in 2019, approximately 750,000 AF of total stored water is emergency storage reserved for use in the event of supply interruptions from earthquakes or similar emergencies.

Table A.4-6
Supply Augmentation Actions: Flexible Supplies and Storage

Source	Flexible Supplies	Storage
Colorado River		Lake Mead Intentionally Created Surplus (ICS) Storage Program Southern Nevada Water Agency Storage and Interstate Release Agreement Desert Water Agency/Coachella Valley Water District Advanced Delivery Account Imperial Irrigation District Storage
State Water Project	SWP Transfers: State Water Contractors Buyers Group SWP Transfers: Yuba Accord Dry-Year Purchase San Bernardino Valley Municipal Water District Program	SWP Carryover DWR Flexible Storage (Castaic Lake and Lake Perris) SWP Banking Programs
In-Region		Diamond Valley Lake Lake Mathews Lake Skinner Conjunctive Use Programs (CUP)

Demand Reduction Actions

Demand reduction actions are extraordinary measures taken to temporarily constrain water demand during a shortage. For the purpose of the WSCP and the Annual Assessment, it is important to separate temporary reductions in demand from baseline conservation as they relate to constrained and unconstrained demands. WSCP demand reduction actions result in constrained demands. Water savings from WSCP demand reduction actions must be factored into estimates of unconstrained demands for Annual Assessment shortage determinations. Intensity of demand reduction measures will vary by the severity of shortage and availability of other cost-effective supply augmentation measures. Early demand reduction actions tend to be voluntary measures that are comprised of outreach and education actions from Metropolitan's WSCP Communication Plan (see following section A.4.5). More severe conditions may necessitate supply allocations to wholesale customers through implementation of the WSAP. Table A.4-7 shows the demand reduction measures available to Metropolitan.

Table A.4-7
Demand Reduction Actions

	Demand Reduction Actions
Voluntary Measures	Implement Communication Plan (May apply to Shortage Levels 1-6, Crisis) • Public information campaigns • Community outreach and media relations • Public opinion research • Interagency and intergovernmental coordination
Mandatory Measures	Implement Water Supply Allocation Plan (May apply to Shortage Levels 1-6, Crisis)

Benefits of public information campaigns include rapid implementation and raising public awareness of the severity of the water shortage. For this reason, public information campaigns are included as a Demand Reduction Action in the WSCP. According to the American Water Works Association, water savings from this measure alone range from 5 to 20 percent, depending on the time, money, and effort spent.[2] If public outreach targets between 5 and 10 percent of population, then demand would be assumed to be reduced by 5 to 20 percent of the 5 to 10 percent. The size of media campaign is correlated with the number of people being reached.

Implement Communications Plan

Metropolitan's WSCP Communication Plan details Metropolitan's action-oriented strategy for education, outreach, and coordination during each WSCP standard shortage stage and in response to a catastrophic loss of supply. See the following section A.4.5 for the WSCP Communications Plan.

Enhanced Conservation Program

Although not considered as a WSCP demand reduction action because of their limited effect in the immediate term, Metropolitan administers regional conservation programs and co-funds member agency conservation programs designed to achieve greater water use efficiency in residential, commercial, industrial, institutional, and landscape uses. Metropolitan may implement extraordinary measures to temporarily enhance conservation during a shortage which include, but are not limited to, increasing rebates, reducing program eligibility requirements, working with rebate vendors to create in-store marketing and direct outreach to businesses, increasing direct install efforts with member agencies and partners, and working with water retailers and retail customers to develop onsite leak prevention programs. While the savings from conservation programs may not be realized quickly enough to mitigate the need for other shortage response actions, water-efficient device retrofit rebates, landscape conversions, and leak prevention all contribute to ongoing structural water savings. Conservation device retrofits help to recover storage in future years by lowering demands in all years, not only shortage years.

[2] American Water Works Association. 2019. Manual of Water Supply Practices – M60, Second Edition: Drought Preparedness and Response. p. 35

Water Supply Allocation Plan

Under most conditions, Metropolitan can meet all of its service area's wholesale water needs. However, during severe water shortage situations when pubic information campaigns and enhanced conservation programs are insufficient to generate the needed demand reduction, Metropolitan may find it necessary to temporarily limit and allocate supplies to its member agencies. Metropolitan's WSAP allocates Metropolitan's water supplies among its member agencies, based on the principles contained in the WSDM Plan, to mitigate drawdowns from water storage reserves. The WSAP was originally approved by Metropolitan's Board in February 2008 and has been implemented three times since its adoption, most recently in April 2015. The WSAP provides a formula for equitable distribution of limited water supplies. If needed, a WSAP action is typically approved in the month of April with implementation beginning in the following July. This allows Metropolitan's member agencies time to prepare and to adjust their estimates for Metropolitan current year supply for their own WSCP Annual Assessments.

The WSAP allocation is a costly shortage response action that places acute burdens upon member agencies and the public. Other shortage response actions are generally preferred to the extent practicable. Metropolitan's overall strategy considers WSAP allocations to be a fallback option to address any remaining shortages when supply augmentation actions and other demand management measures are insufficient to meet demand reduction objectives. For reference, the WSAP is included as Attachment B to this document.

Operational Changes

During shortage conditions, operations may be affected by supply augmentation or demand reduction responses. For example, Metropolitan may temporarily alter maintenance cycles, defer planned system outages, and adjust the flow and routing of water through its system to more effectively distribute available supply across the service area, including areas that are currently only able to be served by SWP water supplies.

Because of the extensive and complex nature of Metropolitan's conveyance and distribution system, and the varying levels of local supplies available among each of the member agencies, by necessity, any supply-related shortage response actions triggered under the WSCP would be carefully chosen to optimally match available resources with specific localized demands by the member agencies.

Metropolitan's diversified portfolio of water supplies presents operational opportunities and challenges during droughts. Because water resources available to the Metropolitan service area come from three geographically distinct regions – Northern California, the Colorado River, and local resources – a relatively dry year affecting one of these three regions can be offset by relatively abundant supplies from the other two regions. For example, a year of ample precipitation within Metropolitan's service area tends to depress demand and enhances local water resources, further reducing demands on imported supplies. A wet year in the Sacramento-San Joaquin watersheds increases the SWP allocation, facilitating reduced diversions from the Colorado River in favor of storing supplies in Lake Mead or in the Desert Water Agency/Coachella Valley Water District Advanced Delivery Account. Conversely, a shortfall on the SWP may require system operational modifications to maximize Colorado River diversions and the delivery of Colorado River supplies to areas normally served with SWP supplies. Metropolitan's Colorado River core supplies are relatively stable from year to year and are less subject to severe supply reductions.

Additional Mandatory Prohibitions (not applicable)

California Water Code Section 10632(a)(4)(D) calls for "additional, mandatory prohibitions against specific water use practices that are in addition to state-mandated prohibitions and appropriate to the local conditions" to be included among the WSCP's shortage response actions. However, this item is not applicable to Metropolitan. As a regional wholesaler, Metropolitan does not dictate or control the end uses of water by retail consumers.

Shortage Response Action Effectiveness

As shown in Table A.4-5, WSCP shortage response actions will be implemented to reflect the overall conditions facing Metropolitan and the resources available in that given year. Supply augmentation actions consisting of stored water and as-needed flexible supplies are expected to address between 0 to 100 percent of anticipated shortages for any shortage stage, depending on availability of those supplies; in lesser WSCP shortage stages, it is likely that shortages can be completely addressed through supply augmentation.

Efficacy of demand reduction efforts is difficult to estimate or predict, but water savings are a function of the extent to which public information campaigns reach water users and the degree of consumer response to those messages. Given the estimate of between 5 to 20 percent effectiveness described above, in concept, up to 20 percent of retail demands could be reduced if a successful media campaign reached and influenced the entire service area population. Consistent with the WSCP Communications Plan in the following section A.4.5, anticipated shortages will involve an appropriately-sized outreach campaign to address the targeted demand reduction, which depends on the combined effectiveness of other shortage response actions.

As shown in Table A.4-8 below, the WSAP is designed to reduce demands by up to approximately 50 percent of the WSAP's calculated base demand. The WSAP contains 10 levels of allocation, and each level is approximated to generate an additional 5 percent reduction from base demands. Table A.4-8 gives examples of estimated savings by each WSAP level using a hypothetical base demand of 1.8 MAF. Actual reductions and base demands are based on a formula that includes various factors such as actual local supply production, population growth, and conservation. The WSAP is expected to address any remaining shortage not met by other shortage response actions.

Table A.4-8
Water Supply Allocation Plan Levels

WSAP Level	Approximate Percent Reduction	Example Base Demand	Estimated Demand Reduction
1	5%	1.8 MAF	90,000 AF
2	10%		180,000 AF
3	15%		270,000 AF
4	20%		360,000 AF
5	25%		450,000 AF
6	30%		540,000 AF
7	35%		630,000 AF
8	40%		720,000 AF
9	45%		810,000 AF
10	50%		900,000 AF

Catastrophic Interruption of Water Supplies

Metropolitan's Emergency Storage Objective is a planning estimate that represents the amount of water that Metropolitan would hold in storage for the region in preparation for a catastrophic earthquake that would damage the aqueducts that transport imported water supplies to Southern California, including: the Colorado River Aqueduct, both the East and West branches of the California Aqueduct, and the Los Angeles Aqueduct. Emergency storage allows Metropolitan to deliver reserve supplies to the member agencies to supplement local production. This helps avoid severe water shortages during periods when the imported water aqueducts may be out of service.

The Emergency Storage Objective considers a six- and twelve-month outage period for the imported supply aqueducts incorporating latest seismic information and operational flexibility of Metropolitan's system, a retail water demand cutback ranging from 25 to 35 percent considering the level of conservation that the region achieved during the recent drought, and an aggregated loss of 10 to 20 percent of local supplies accounting for factors that could affect local production during emergency conditions.

In 2019, Metropolitan and its member agencies completed a process to update the Emergency Storage Objective, which was set at 750,000 AF. This level of storage would prevent severe water shortages to the region given new information on expected recovery durations. The emergency storage volume represents a planning estimate for how much water Metropolitan would store for the region in preparation for a catastrophic earthquake or other disaster. It is not intended to set a basis or a policy for allocating or apportioning storage for any individual member agency.

As an additional tool, in July 2019, the Board adopted amendments to Metropolitan's Administrative Code enabling deliveries of member agency water supplies in Metropolitan's system in an emergency. These deliveries are intended to provide Metropolitan's member agencies the ability to deliver member agency water through Metropolitan's system under specific emergency conditions. Emergency deliveries can only be made if Metropolitan is unable to make deliveries to a member agency due to physical damage to Metropolitan's system resulting from a natural disaster or other emergency, and there are no alternate

means for Metropolitan or the member agency to provide service to an area without the use of a portion of Metropolitan's system.

Metropolitan's strategy for catastrophic water shortage conditions is further discussed in Appendix 8 to the 2020 UWMP and incorporated herein by reference.

Emergency Freshwater Pathway (Sacramento-San Joaquin Delta)

DWR has estimated that in the event of a major earthquake in or near the Delta, water supplies could be interrupted for up to three years, posing a significant and unacceptable risk to the California business economy. A post-event strategy would provide necessary water supply protections to avert this catastrophe. Such a plan has been coordinated through DWR, the Army Corps of Engineers, USBR, California Office of Emergency Services, Metropolitan, and the State Water Contractors. Additional information on the creation of an emergency freshwater pathway and other actions in the Delta is included in Section 2.5 of the 2020 UWMP and incorporated herein by reference.

Emergency Response Plans

Metropolitan also has two Emergency Response Plans: one dated March 2019 that has been in place long-term and is updated periodically; and a second dated September 2020, prepared pursuant to the requirements of the recently-enacted America's Water Infrastructure Act of 2018. The two plans work in conjunction. Together, Metropolitan's Emergency Response Plans present Metropolitan's organization and strategy for response to emergencies caused by natural hazards, malevolent acts, or other unavoidable circumstances. Metropolitan operates in accordance with the California Standardized Emergency Management System, the Incident Command System, and the National Incident Management System. The Emergency Response Plans provide guidelines for evaluating an emergency situation, responding to an emergency, and activating Incident Command Posts and the Emergency Operations Center. They also describe the Emergency Response Organization. Although the plans provide a framework for emergency response, they do not attempt to identify and discuss every potential situation or problem that may occur during an emergency. The plans will be exercised and updated regularly.

Seismic Risk Assessment and Mitigation Plan

Although the magnitude of damages resulting from a significant seismic event are impossible to predict, Metropolitan's water conveyance and distribution facilities are designed either to withstand a maximum probable seismic event or to minimize the potential repair time in the event of damage. Metropolitan's holistic strategy for seismic resilience follows a "defense in depth" multi-layered approach for managing risk. Metropolitan's Seismic Resilience Strategy has three primary objectives:

1. Provide a diversified water supply portfolio, system flexibility, and emergency storage
2. Prevent damage to water delivery infrastructure in probable seismic events and limit damage in extreme events
3. Minimize water delivery interruptions through a dedicated emergency response and recovery organization

Beginning January 2020, CWC Section 10632.5 mandates urban water suppliers to include in their UWMPs a seismic risk assessment and mitigation plan to assess the vulnerability of each of the various facilities of a water system and mitigate those vulnerabilities. For Metropolitan, the required seismic risk assessment and mitigation plan is part of its resilience strategy and is included in Metropolitan's 2020 UWMP Appendix 9: Seismic Risk Assessment and Mitigation Plan and incorporated herein by reference.

A.4.5. WSCP Communications Plan

Introduction

Following the record-breaking drought of 2012-2016, Metropolitan concentrated on building on its conservation and education outreach programs to emphasize water efficiency as a sustainable way of life, rather than solely a response to dry conditions or drought. Messaging has encouraged behavioral changes that can be sustained regardless of weather and uses tools and technology that can be implemented to permanently save water in homes and businesses, particularly outdoors where up to 70% of total water use occurs. These efforts have helped solidify a conservation ethic across Southern California, supporting a $1.5 billion investment in conservation, recycling and groundwater recovery since 1990. When combined with additional investments in storage, local supply development and programs to increase water storage reserves in wet years, the region is well positioned to withstand future droughts. Still, in response to the challenges of climate change and other abnormal supply conditions, increased water efficiency will still be necessary. And as those conditions become more prevalent, effective communication strategies and a common understanding of necessary actions between water agencies, the public, elected officials and other key stakeholders become even more important should the district need to activate the WSCP. These relationships and communication tools must be well-established to be successful. To that end, water providers should aim to communicate to customers in the following areas:[3]

1. Steps customers should take to plan for and protect themselves in emergency situations, ranging from abnormal to catastrophic water supply conditions
2. Actions water providers are taking to plan for and respond to these emergency situations
3. Efforts to invest and maintain critical water infrastructure
4. Steps water providers are taking to prepare for and respond to emergency situations that could impact water supplies – from drought to natural disasters

Several factors influence the communication strategies needed to address the diverse characteristics of Metropolitan's 5,200 square-mile service area, particularly when there is an urgent need for conservation. As a wholesaler serving 26 member agencies and a diverse region that is home to 19 million people, no single communication message or strategy connects with everyone in the region. Furthermore, state and local water regulations during periods of drought or supply shortages can result in a broad range of water-saving requirements and goals across the region. Qualitative research from previous droughts has also provided valuable insight on attitudes and behaviors toward water conservation, including drought fatigue, water quality concerns, increasing water rates and equity issues. These factors, though inherently complex, are conducive to collaboration that elevates the importance of drought resiliency. This section of the WSCP describes the basic communications strategies needed to help Metropolitan effectively communicate vital information for each of the six standard water shortage levels that represent changes from normal reliability. The six standard water shortage levels depicted in this communications plan correspond to:

- Progressively increasing estimated shortage conditions: up to 10, 20, 30, 40, 50, and greater than 50% shortage compared to the normal reliability conditions

[3] Source: 2019 Statewide Survey of Residential Customers Covering Water

Collaboration

Collaboration with its member agencies is central to Metropolitan's outreach plans during drought, water shortages or other demand management periods. Developing and delivering a concise regional message in multiple languages is made possible through consistent coordination with member agencies and their constituents. Metropolitan's External Affairs group regularly engages and interacts with member agency staff in several capacities, including but not limited to the following groups:

- Member agency managers
- Legislative and government affairs representatives
- Water use efficiency/conservation coordinators
- Public information officers
- Education coordinators

In addition to member agency coordination, Metropolitan interacts with agencies and organizations outside of the region, including:

- Department of Water Resources
- State Water Resources Control Board
- Association of California Water Agencies
- California Municipal Utilities Association
- Colorado River Water Users Association
- California Water Efficiency Partnership
- Alliance for Water Efficiency
- Other state and federal agencies

As seen in past droughts, the methods of communication within these groups and the frequency of meetings fluctuate based on the changing needs of our member agencies and their key audiences. Water shortage conditions are ever-evolving, therefore remaining flexible yet focused not only reduces the risk of discordance, it also ensures key audiences throughout Southern California receive timely, valuable and cohesive information.

As mentioned, Metropolitan's WSCP includes six levels of potential shortage. The water-savings actions associated with each level of shortage will vary greatly, and Metropolitan recognizes the many different approaches to properly respond to each WSCP level. This section provides a general description of messaging strategies that would be implemented at each level, leading up to more focused crisis communication strategies. The plans need to be adaptable and cannot offer one-size-fits-all approaches. Metropolitan management and/or Board of Directors could also call for specific messaging strategies that address unique shortage scenarios.

Key Audiences

Communicating to various stakeholders is essential during normal supply periods and becomes increasingly more involved during water shortages. Below is a list of key audiences:

- Member agencies and their customers
- General public

- State, federal and local elected officials and their district office staff
- Homeowners and renters
- Multi-family property owners/managers/landlords
- Business associations/chambers of commerce
- Commercial-industrial property owners/managers
- Landscape contractors/suppliers
- Restaurant/hotel industries
- School districts/educators/students
- Building and construction trade associations
- Community/civic leaders
- Land-use agencies
- Environmental groups
- Community-based and non-profit organizations
- Non-English-speaking populations
- Disadvantaged/under-invested communities

Communicating to these audiences requires varying levels of involvement depending on the status of supply conditions. Feedback, research, and leveraging existing relationships are central to an effective communications plan; therefore, External Affairs and Water Resource Management staff will continue to coordinate closely with member agencies, stakeholders, and governing agencies on an ongoing basis to ensure appropriate messaging is culturally competent and provided in multiple languages to reflect the region's demographics.

Goals and Objectives

Metropolitan's communications goals are rooted in the following guiding principles:

- Motivate key audiences to:
  - Increase conservation
  - Follow voluntary or mandatory water use guidelines
  - Participate in water-saving incentive programs
  - Encourage family, friends, neighbors and colleagues to do all the above
- Raise awareness about:
  - Water shortage and/or drought conditions
  - Water sources, supplies and reserves
  - Local, regional and state regulations
- Educate key audiences about:
  - Water supply reliability
  - Water infrastructure and delivery
  - Water quality

- Prepare the region for:
    - Varying water supply conditions
    - Escalating supply shortage levels

Standard Communication

Conservation as a way of life remains central to messaging during normal supply conditions. Regional rebate programs, indoor and outdoor water use efficiency, investments to maintain infrastructure, emergency preparedness, local supply programs, water quality, and regional supply reliability are among some of the themes that make up a normal supply period's communications mix to encourage ongoing conservation actions. Below is a snapshot of the various strategies involved:

- Media relations (news releases and advisories, interviews, op-eds)
- Social media (Twitter, Instagram, Facebook, YouTube, LinkedIn)
- Websites and Blogs
    - mwdh2o.com
    - bewaterwise.com
    - socalwatersmart.com
- Digital, print and other paid media marketing
- Search engine optimization
- E-newsletters
- Community events
- Education outreach
- Business outreach

Level 1 Communications – up to 10% Shortage

This section addresses communications strategies Metropolitan uses during periods of 10% water shortage conditions. In addition to the district's ongoing communications efforts, a 10% shortage would require the following elements:

- Media relations and communications
    - Maintain media relations activities with enhanced communication about the specific need to conserve; provide media with regional water supply conditions and Metropolitan's shortage response action updates
        - Press releases, advisories, op-eds, direct outreach to media to drive earned media opportunities
        - Ethnic media outreach in multiple languages
    - Produce and distribute fact-based informational materials such as fact sheets, podcasts, and B-roll video
- Social media
    - Emphasize ways to conserve immediately (shorter showers, less watering, links to tools on bewaterwise.com, etc.), as well as continued promotion of conservation as a way

of life initiatives such as regional water use efficiency incentives and other rebate programs including the district's Turf Replacement Program

        - Paid social media boosting to target the district's entire service area
    - Encourage member agency co-branding and messaging continuity
        - Share social media creative with the public information officer working group and conservation coordinators
- Web
    - Establish a SharePoint site for member agency and public to download all water supply and conservation materials
    - Update all Metropolitan websites with pertinent conservation and water supply information and highlight such information
    - Provide links to local watering restrictions and conservation efforts
- Member agency coordination
    - Enhance collaboration and communication with member agencies to streamline messaging
    - Involve member agencies in development of a communications plan
    - Provide regular campaign updates to member agency managers, staff and board members.
    - Provide member agencies with campaign outreach materials (newsletter articles, creative design, bill inserts, etc.) for customization and distribution
- Community outreach
    - Make water supply conditions and conservation messaging a key component of all regular community outreach
    - Make additional, specialized outreach to inform non-profit organizations and civic/community leaders about water supply conditions and conservation efforts
        - Community events/webinars
        - Non-profit organization e-newsletters
- Education outreach
    - Update district curriculum to reflect the enhanced need to conserve and make water supply conditions and conservation messaging a key component of all regular education outreach
    - Communicate to K-12 school districts and colleges/universities about the need for increased conservation
    - Provide regional water and environmental education programs with materials addressing the need for increased conservation
- Legislative and government affairs
    - Coordinate with local, state and other elected officials in the region about the need to conserve
    - Encourage officials to promote these efforts to constituents

In addition:

- Work with member agencies to target key industries or groups to raise awareness about water-use efficiency programs and regional water supply conditions
    - Restaurants
    - Hotels/motels
    - Public agencies
- Research and public opinion
    - Conduct research to gain insights on public opinion, attitudes and beliefs toward conservation and water shortage levels
    - Message testing with key audiences

Level 2 Communications – up to 20% Shortage

In a more severe supply shortage or demand management period, Metropolitan will continue actions outlined in Level 1 communications strategies, and add the following efforts, which are designed to address a 20% percent mandatory conservation under the WSCP:

- Media relations and communications
    - Paid advertising – Execute a multimedia, multilingual regional advertising campaign to reflect a more urgent message emphasizing the need for compliance with mandatory water-use restrictions. Place paid advertisements in the following platforms:
        - Out of Home (billboards, bulletins, bus shelter ads)
        - Radio
        - Television
        - Digital
        - Grassroots
    - Host press conference to discuss current water shortage conditions, shortage response actions, and outlook
    - Coordinate with other regional or state agencies for greater impact and reach
- Social media
    - Emphasize a clear and practical message conveying mandatory water-use restrictions, drought conditions and ways to save water
    - Establish more targeted and focused social media advertising strategies – targeted boosting and messaging
- Member agency coordination
    - Meet with member agencies to streamline a more urgent and serious campaign tone
    - Coordinate paid media flights with member agencies to leverage regional exposure and distribution
    - Provide multimedia and multilingual campaign materials for member agency customization

- Community outreach
    - Coordinate with community-based organizations and leaders with higher impact, reach and credibility
    - Inform, debrief and prepare community/civic leaders to become water conservation ambassadors in their respective communities
- Legislative and government affairs
    - Increase briefing activity with state and local officials on water supply conditions, shortage response actions, and water conservation advertising campaign

In addition:

- Help prepare and distribute materials about restrictions, ordinances and guidelines through stakeholder communication channels, including but not limited to:
    - Business organizations
    - Civic organizations
    - Elected officials
    - Building/plumbing/construction associations
    - Building managers
    - Landscape contractors
- Increase outreach efforts to key associations and interest groups throughout the region, emphasizing immediate conservation goals

Level 3 and 4 Communications – up to 30% or 40% Shortage

In addition to Level 2 communications strategies, the following efforts will address an even more severe shortage of 30%-40% mandatory conservation under the WSCP:

- Media relations and communications
    - Increase media relations activities, with an added emphasis on the severe regional water supply conditions, the shortage response actions triggered or expected to be triggered, and the mandatory need to conserve
    - Host news conference in multiple languages alongside high-level public officials to highlight severity and extreme measures needed
    - Continue the following with greater frequency and stronger, more critical messaging:
        - Paid advertising campaign
        - Press releases, advisories, op-eds, etc.
        - Direct media outreach offering pre-recorded radio and TV interviews
        - Ethnic media outreach in multiple languages
- Social media
    - Messaging shift to reflect severity of supply conditions and shortage response actions triggered or expected to be triggered– conservation is mandatory to maintain day-to-day activity and future supplies, quality of life now being impacted

- Web
    - Make conservation messaging front and center on all websites
- Community Outreach
    - Host a community leader briefing, bringing together representatives from community-based organizations from across the region to learn about the severity of water supply conditions
- Member agency coordination
    - Continue to streamline messaging about WSCP level escalation to ensure message continuity throughout the region
    - Help member agencies address local and mandatory conservation needs
    - Coordinate with member agencies on any updated messages and campaign activities emphasizing extreme actions that must be taken
- Legislative and government affairs
    - Outreach to legislative leadership at state and federal level to raise awareness at high levels

In addition:

- Specialized targeted outreach to:
    - Special interest groups
    - Public agencies
    - County and city departments
- Assess the goals and objectives of regional rebate programs, begin a shift toward immediate water-saving actions
- Research and public opinion
    - Conduct public opinion research studies including focus groups to determine attitudes and beliefs toward extreme conservation levels in order to effectively communicate severity of supply conditions and the mandatory need to conserve

Level 5-6 Communications – 50% Shortage or more

The severity of this level of the WSCP calls for immediate, extreme conservation measures and a focus on water use for health and safety only. As with previous levels, communications strategies at this level of the WSCP incorporate and build upon ongoing efforts.

Key Communications Strategies

- Consider establishing a Joint Information Center (JIC) to pool crisis communications among emergency responders and affected local, state and federal agencies
- Produce and distribute fact-based informational materials such as fact sheets, podcasts, and B-roll video
- Host a press conference to announce the severity of water shortage level and shortage response actions triggered or anticipated to be triggered, to be held in conjunction with regional and/or state emergency response and public health authorities

- Emphasize work being done by Metropolitan and its member agencies to alleviate the impacts of such a severe shortage
- Focus on the need for residential and commercial customers across the region to do their part to get through the crisis situation
- Offer vulnerable populations increased assistance, in coordination with regional emergency response teams
- Keep the media and key stakeholders informed with frequent supply condition reports
- Shift from traditional advertising campaign efforts to emergency and crisis communication approach
- Messaging is no longer conservation-focused, begin shift to crisis response communications protocols

Crisis Communications – Catastrophic Shortage

In the event of a catastrophic shortage due to an infrastructure failure and/or natural disaster, Metropolitan will enact its crisis communications plan in accordance with local, regional, state and federal emergency response guidelines that ensure a coordinated effort and effective response. This plan utilizes the Standard Emergency Management System, the Incident Command System and the National Incident Management System.

Strategic Message Development

- In an emergency, communications messages will be created in a complex environment in which the tensions of multidirectional information flows must be balanced with the need for strategic message development

Message Dissemination

Communication efforts will center on the core identified tasks: providing information to the public and external audiences. Information dissemination tools:

- Website (mwdh2o.com, bewaterwise.com)
- Social Media (Twitter, Facebook, Instagram, YouTube)
- MetAlert Emergency Notification System + RSS Feeds
- Press Releases and statements
- Participation in joint information centers

Information Dissemination

- Public Information
    - Activate and manage the mechanisms for responding to public requests for information via social media, telephone, in writing, or by e-mail
    - Prepare Metropolitan's telephone operators for responding to and monitoring calls related to emergency incidents; brief them and provide scripts on how to respond to questions and where to direct calls for other requests
    - Work with subject matter experts to create situation-specific fact sheets, Q&A documents and updates
    - Respond to requests and inquiries from special interest groups

- Oversee and manage Metropolitan's emergency response website if needed, in addition to mwdh2o.com, social media, telephone, and public email correspondence response systems; establish and maintain links to other emergency response websites
- Manage the development and testing of messages and materials for cultural and language requirements of special populations
- Post updates on social media channels. Monitor and respond to comments as needed/appropriate

- Member agencies, partnering agencies and elected/legislative officials:
  - The Public Information Officer (PIO) or Crisis Communications Team will communicate, as needed, with the PIOs for member agencies and other partnering agencies
  - Help organize and facilitate official meetings and briefings to provide information and receive input from member agencies, other partners or stakeholders
  - Notify legislative/elected officials as needed

A.4.6. Legal Authorities

This section describes the legal authorities that empower Metropolitan to implement and enforce its shortage response actions. Metropolitan is a wholesale water provider organized as a cooperative of 26 voluntary members. Metropolitan was formed pursuant to the Metropolitan Water District Act, Statutes 1969, chapter 209, codified at California Water Code, Appendix Section 109 (the "MWD Act"). Pursuant to the MWD Act, Metropolitan has the express and implied statutory authority to "[p]rovide, sell, and deliver water at wholesale for municipal and domestic uses and purposes," among other powers. (MWD Act, §§ 120, 130.) To accomplish the provision of water, Metropolitan is also expressly authorized to promote and implement conservation programs, including during times of water shortage. (MWD Act, § 130.5.)

Metropolitan also has authority under the California Water Code to implement supply shortage programs. (Cal. Water Code, §§ 350-359, 375-378.) For example, Section 375(a) of the Water Code provides:

> *Notwithstanding any other provision of the law, any public entity which supplies water at retail or wholesale for the benefit of persons within the service area or area of jurisdiction of the public entity may, by ordinance or resolution adopted by a majority of the members of the governing body after holding a public hearing upon notice and making appropriate findings of necessity for the adoption of a water conservation program, adopt and enforce a water conservation program to reduce the quantity of water used by those persons for the purpose of conserving the water supplies of the public entity.*

Cal. Water Code, § 375(a). Water Code Section 375(b) also provides the authority for pricing to encourage water conservation.

> *With regard to water delivered for other than agricultural uses, the ordinance or resolution may specifically require the installation of water-saving devices that are designed to reduce water consumption. The ordinance or resolution may also encourage water conservation through rate structure design.*

Metropolitan's Board of Directors has approved many policies and rules, codified in Metropolitan's own Administrative Code, which further provide Metropolitan the authority to ensure the availability of its water during times of shortages. For example, Administrative Code Section 3107 requires that any territory annexed to Metropolitan comply with Metropolitan's water use efficiency guidelines.

The Board has also ratified various policies and rules to implement a Water Supply Allocation Plan (WSAP) to address shortage conditions. Metropolitan's WSAP provides a standardized methodology for allocating supplies during times of shortage. The WSAP is authorized pursuant to the following Board actions:

- By Minute Item 43514, dated April 13, 1999, the Board adopted the WSDM Plan.
- By Minute Item 44005, dated June 17, 2000, the General Manager has the authority to reduce Interim Agriculture Water Program deliveries up to 30 percent prior to imposing any mandatory allocation under the WSDM Plan.
- By Minute Item 47393, dated February 12, 2008, the Board adopted the WSAP.
- By Minute Item 48376, dated August 17, 2010, the Board approved adjustments to the WSAP.

- By Minute Item 48803, dated September 12, 2011, the Board approved adjustments to the WSAP.
- By Minute Item 74526, dated February 11, 2014, the Board adopted the Water Supply Alert Resolution.
- By Minute Item 49979, dated December 9, 2014, the Board approved adjustments to the WSAP.

In addition to the statutes and other legal authorities set forth above, Metropolitan is empowered to implement and enforce its shortage response actions pursuant to various resolutions. For example, on April 11, 2016, Metropolitan's Board voted to adopt Metropolitan's 2015 UWMP and authorized its submittal to the State of California as stated in Resolution 9209. Metropolitan's 2015 UWMP contains Metropolitan's December 2014 WSAP in Appendix 4. Metropolitan's 2015 UWMP also describes in Section 2.4 Metropolitan's WSAP and WSDM Plan, which guides Metropolitan's planning and operations during both shortage and surplus conditions. Similarly, on May 11, 2021, Metropolitan's Board voted to adopt Metropolitan's UWMP and WSCP as stated in Resolutions 9279 and 9281, respectively. These two Resolutions authorize Metropolitan to implement and enforce its shortage response actions contained in the WSCP, which is attached as Appendix 4 to the 2020 UWMP.

Additionally, numerous agreements allow Metropolitan to take its core supplies and shortage response actions. Core supplies and supply augmentation actions are authorized by the agreements shown in 2020 UWMP Appendix 3: Justifications for Supply Projections, which include:

Colorado River Supplies

- 1931 Seven Party Agreement dated August 18, 1931
- Metropolitan's 1930, 1931, and 1946 water delivery contracts with the Secretary of the Interior
- Consolidated Decree of the Supreme Court of the United States in *Arizona v. California*
- 2003 Quantification Settlement Agreement (QSA) and related agreements
- 2005 Settlement Agreement with Quechan Indian Tribe
- Colorado River Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead
- 1988 IID-Metropolitan Conservation and Use of Conserved Water Agreement
- 1989 Approval Agreement
- 1989 Supplemental Approval Agreement
- August 2004 Forbearance and Fallowing Program Agreement with PVID
- Landowner Agreements for Fallowing in PVID
- 2003 Delivery and Exchange Agreement between Metropolitan and Coachella Valley Water District
- 2004 Storage and Interstate Release Agreement among Metropolitan, the Colorado River Commission of Nevada, Southern Nevada Water Authority, and the United States
- 2007 Lower Colorado Water Supply Project Contract among the United States, the City of Needles, and Metropolitan

- 2007 Lower Colorado River Basin Intentionally Created Surplus Forbearance Agreement among the Arizona Department of Water Resources, PVID, IID, the City of Needles, CVWD, Metropolitan, SNWA, and the Colorado River Commission of Nevada
- 2007 California Agreement for the Creation and Delivery of Extraordinary Conservation Intentionally Created Surplus among Metropolitan, PVID, IID, CVWD, and the City of Needles
- 2007 Agreement among the United States, the Colorado River Commission of Nevada, and the SNWA for the Funding and Construction of the Lower Colorado River Drop 2 Storage Reservoir Project
- 2007 Delivery Agreement between the United States and Metropolitan
- 2008 Metropolitan Notice of Election to Participate as a Party to the Drop 2 Funding Agreement
- 2009 Agreement among the United States, Metropolitan, the Colorado River Commission of Nevada, SNWA, and the Central Arizona Water Conservation District for a Pilot Project for Operation of the Yuma Desalting Plant
- 2010 Yuma Desalting Plant Pilot Project Delivery Agreement between the United States and Metropolitan
- 2012 Agreement among the United States, Metropolitan, the Colorado River Commission of Nevada, SNWA, and the Central Arizona Water Conservation District for a Pilot Program for the Conversion of Intentionally Created Mexican Allocation to Intentionally Created Surplus
- 2012 Interim Operating Agreement for Implementation of Minute No. 319 of the International Boundary and Water Commission
- 2012 Lower Colorado River Basin Forbearance Agreement for Binational Intentionally Created Surplus
- 2012 Binational ICS Delivery Agreement
- 2013 Agreement between Metropolitan and IID Regarding Binational Intentionally Created Surplus
- 2015 Amendment 1 to the California Agreement for the Creation and Delivery of Extraordinary Conservation Intentionally Created Surplus
- 2017 Agreement among the United States, Metropolitan, the Colorado River Commission of Nevada, SNWA, IID, and the Central Arizona Water Conservation District for a Pilot Program for the Conversion of Mexico's Water Reserve to Binational ICS
- 2017 Interim Operating Agreement for Implementation of Minute No. 323
- 2017 Binational ICS Agreement
- 2017 Binational ICS Delivery Agreement
- 2019 Lower Basin Drought Contingency Plan
- December 2019 Agreement for the Implementation of a Seasonal Land Fallowing Program
- Agreement for Seasonal Fallowing in Bard Unit (Farmer Fallowing Agreements

- May 2020 First Amended Agreement for the Implementation of a Seasonal Land Fallowing Program
- Agreement Relating to Supplemental Water among The Metropolitan Water District of Southern California, the San Luis Rey Settlement Parties, and the United States
- Amended and Restated Agreement between The Metropolitan Water District of Southern California and the San Diego County Water Authority for the Exchange of Water. This October 10, 2003 agreement provides for Metropolitan delivery of Exchange Water to SDCWA in exchange for conserved Colorado River water SDCWA makes available to Metropolitan at Lake Havasu.
- Agreement Between Imperial Irrigation District And San Diego County Water Authority For Transfer Of Conserved Water. This April 9, 1998 agreement, as amended, provides for IID to conserve water for transfer to SDCWA and establishes the price SDCWA pays to IID for the conserved water.
- Allocation Agreement. This October 10, 2003 agreement among the United States, CVWD, IID, SDCWA, Metropolitan, and the San Luis Rey Settlement Parties provides for the allocation of water conserved from the All-American Canal Lining Project and the Coachella Canal Lining Project, and Metropolitan's assignment to SDCWA of it rights to both canal lining projects.
- Colorado River Water Delivery Agreement: Federal Quantification Settlement Agreement. By this October 10, 2003 agreement, among the Secretary of the Interior. CVWD, IID, SDCWA, and Metropolitan, the Secretary agreed to deliver IID-SDCWA transfer water and canal lining water allocated to SDCWA to Metropolitan's Colorado River Aqueduct Intake at Lake Havasu for diversion by Metropolitan.

State Water Project Supplies

- 1960 Contract between the State of California and The Metropolitan Water District of Southern California for a Water Supply
- Port Hueneme Water Agency Annexation: By Minute Item 41728, dated January 9, 1996, Metropolitan's Board adopted Resolution 8487 granting the concurrent annexation of Annexation No. 32 to Calleguas Municipal Water District and The Metropolitan Water District of Southern California, and fixing Metropolitan's terms and conditions for the annexation
- 1996 Sublease Agreement between the Port Hueneme Water Agency and Metropolitan
- 1967 and 1983 Water Exchange Contract and Agreements with Desert Water Agency and Coachella Valley Water District
- 1984 Advance Delivery Agreement with Desert Water Agency and Coachella Valley Water District
- The 2003 Exchange Agreement with Desert Water Agency and Coachella Valley Water District
- November 2012 Letter Agreement with Coachella Valley Water District
- 2019 Amended and Restated Agreement for Exchange and Advance Delivery with Desert Water Agency and Coachella Valley Water District
- 1997 Arvin-Edison/Metropolitan Water Management Agreement

- 1998 Turn-in/out Construction and Maintenance Agreement between DWR, Kern County Water Agency, Arvin-Edison, and Metropolitan
- 1998-2002 Water Delivery and Return Agreements with DWR, Kern County Water Agency, Arvin-Edison, and Metropolitan
- 2004 Point of Delivery Agreement with DWR, Kern County Water Agency, and Metropolitan
- 2004 Introduction of Water into the California Aqueduct with DWR, Kern County Water Agency, and Arvin-Edison
- 2007 First Amended and Restated Agreement Between Arvin-Edison Water Storage District and The Metropolitan Water District of Southern California for a Water Management Program
- 2000 Coordinated Operating Agreement between Metropolitan and San Bernardino Valley Municipal Water District
- 2001 Coordinated Operating Agreement between Metropolitan and San Bernardino Valley Municipal Water District
- 2011 Coordinated Operating, Water Storage, Exchange and Delivery Agreement among Metropolitan, Municipal Water District of Orange County, and Irvine Ranch Water District
- 2013 San Gabriel Valley MWD Exchange and Purchase Agreement
- 2019 Board Approval of the High Desert Water Bank Agreement with Antelope Valley East Kern Water Agency
- 2001 Kern Delta/Metropolitan Principles of Agreement
- 2002 Kern Delta and Metropolitan Boards of Directors Approval
- 2007 DWR-Yuba County Water Agency Purchase Agreement
- 2007 DWR-Metropolitan Yuba Dry Year Program Participation Agreement
- 2014 Amended DWR-Metropolitan Yuba Dry Year Program Participation Agreement
- 2019 Amended and Restated Agreement Among The Metropolitan Water District of Southern California, Coachella Valley Water District, and Desert Water Agency for the Exchange and Advance Delivery of Water
- 2020 Amended DWR-Metropolitan Yuba Dry Year Program Participation Agreement
- 2021 Coordinated Operating Agreement. The Coordinated Operating Agreement between Metropolitan and San Bernardino Valley District was approved by Metropolitan's Board in March 2021. The agreement will terminate on December 31, 2035 unless there is an extension of the SWP Contract.
- 2013 San Gabriel Valley MWD Exchange and Purchase Agreement. The agreement between Metropolitan and San Gabriel Valley MWD was executed in September 2013.
- 2013 Board Approval of the San Gabriel Valley MWD Exchange and Purchase Agreement. In August 2013, Metropolitan's Board authorized entering into the agreement with San Gabriel Valley MWD.

In-Region Storage and Supplies

- November 1974 Memorandum of Understanding and Agreement on Operation of Lake Skinner
- November 1994 Memorandum of Understanding on Operation of Domenigoni Valley Reservoir (now known as Diamond Valley Lake)
- Elderberry Forebay Contract for Conditions for Use
- June 2002 Division of Safety of Dams Certificate of Approval
- October 1991 Final EIR for the Eastside Reservoir Project (Diamond Valley Lake)
- 1995 amendment to Metropolitan's SWP contract to include Article 54, "Usage of Lakes Castaic and Perris"
- November 1974 Memorandum of Understanding and Agreement on Operation of Lake Skinner
- June 2002 Division of Safety of Dams Certificate of Approval
- Principles for groundwater storage adopted by the Metropolitan Board in January 2000
- Resolution for Proposition 13 Funds adopted by the Metropolitan Board in October 2000
- Agreement executed with the DWR for Interim Water Supply Construction Grant Commitment Safe Drinking Water, Clean Water, Watershed Protection and Flood Protection (Proposition 13, Chapter 9, Article 4) providing for Metropolitan to administer $45 million in state Proposition 13 grant funds for groundwater reliability programs; October 2000
- Agreement executed for Long Beach Conjunctive Use Project, July 2002, amended in July 2003, October 2005, and November 2008
- Agreement executed for Live Oak Conjunctive Use Project, October 2002
- Agreement executed for Foothill Area Groundwater Storage Project, February 2003, amended in August 2006, April 2008, and February 2009
- Agreement executed for Chino Basin Programs, June 2003, amended in May 2004, August 2004, August 2005, May 2008, March 2009, September 2009, July 2010, and January 2015
- Agreement executed for Orange County Groundwater Storage Program, June 2003, amended in July 2004, December 2005, and July 2008
- Agreement executed for Compton Conjunctive Use Program, February 2005
- Agreement executed for Long Beach Conjunctive Use Project — Expansion in Lakewood, July 2005, amended in April 2006, August 2007, November 2008, and February 2010
- Agreement executed for Upper Claremont Basin Groundwater Storage Program, September 2005, amended in April 2008
- Agreement executed for Elsinore Basin Conjunctive Use Program, December 2006, amended in May 2008

These agreements are described in more detail in Appendix 3 to Metropolitan's 2020 UWMP.

If necessary, Metropolitan shall declare a water shortage emergency in accordance with CWC Chapter 3 (commencing with Section 350) of Division 1. In addition, Metropolitan shall coordinate with any city or county within which it provides water supply services for the possible proclamation of a local emergency, as defined in Section 8558 of the Government Code.

A.4.7. Financial Consequences of and Responses for Drought Conditions

A water shortage may be created by a reduction in water supply, an increase in water demand, or a combination of both. Metropolitan's shortage response actions include supply augmentation, demand management, and operational flexibility, all of which could impact Metropolitan financially. For example, exercising the options to take water from supply augmentation programs may increase costs. Similarly, operational changes could result in higher system costs, and lower revenues from on-system hydropower generation, and an increase in conservation and outreach efforts would also increase costs. On the other hand, if core supplies from the SWP or the Colorado River were reduced, variable power costs to move water into the service area would likely decrease. Additionally, effective demand management during shortages tends to decrease Metropolitan's water sales when effective, thereby potentially reducing revenue for Metropolitan. From these various financial effects, there is a potential for expenditures exceeding revenues more than budgeted, thereby requiring unanticipated draws from reserves.

Variation in the amount of revenues is already part of Metropolitan's financial planning. Revenues vary according to regional weather and the availability of statewide water supplies. In dry years, local demands increase, and Metropolitan may receive higher than anticipated revenues due to increased sales volumes. In contrast, in wet years, demands decrease, and revenues drop due to lower sales volumes. In addition, statewide supply shortages such as those in 2009 and 2015 also affect Metropolitan's revenues. Such revenue surpluses and shortages could cause instability in water rates. To mitigate this risk, Metropolitan maintains financial reserves, with a minimum and target balance, to stabilize water rates during times of reduced water sales. The reserves hold revenues collected during times of high water sales and are used to offset the need for revenues during times of low sales. Metropolitan's practice of using reserves to buffer unexpected increases or decreases in budgeted revenue also applies to unexpected expenditure increases or decreases resulting from shortage responses.

Metropolitan uses its financial reserves to mitigate the impacts of water shortages. This policy applies to each of the six shortage levels described in this WSCP. Financial reserves create a buffer to reduce the financial impact of the water shortage. Other mitigation actions such as reducing operations and maintenance expenses, deferring capital projects, and rates/charges increases are part of Metropolitan's biennial budget and rate design cycle, are not used routinely to mitigate financial impacts of water shortage response actions.

Metropolitan's reserve policy provides for a minimum reserve requirement and target amount of unrestricted reserves at June 30 of each year. Funds in excess of the target amount are to be utilized for capital expenditures in lieu of the issuance of additional debt, or for the redemption, defeasance or purchase of outstanding bonds or commercial paper as determined by the Board. However, if the fixed charge coverage ratio (the amount necessary to cover all fixed costs) is at or above 1.2, amounts over the minimum may be expended for any lawful purpose of Metropolitan, as determined by the Board. Therefore, unrestricted reserves are intended to be available to address Metropolitan's shortage response actions, as well as the consequences of those actions, so long as its fixed charge coverage ratio is at or above 1.2.

A.4.8. WSCP Adoption and Refinement Procedures

WSCP Public Notice and Adoption

Metropolitan provided notice of the availability of the draft 2020 UWMP (including Appendix 11 which will also be a new Appendix 11 to its 2015 UWMP) and WSCP, and notice of the public hearing to consider adoption of both plans and Appendix 11 to the 2015 UWMP in accordance with CWC Sections 10621(b) and 10642, and Government Code Section 6066, and Chapter 17.5 (starting with Section 7290) of Division 7 of Title 1 of the Government Code. The public review drafts of the 2020 UWMP, Appendix 11 to the 2015 UWMP, and the WSCP were posted prominently on Metropolitan's website, mwdh2o.com, on February 1, 2021, more than 60 days in advance of the public hearing on April 12, 2021. The notice of availability of the documents was sent to Metropolitan's member agencies, as well as to cities and counties in Metropolitan's service area. In addition, a public notice advertising the public hearing in English and Spanish was published in 12 Southern California newspapers. The notification in English language newspapers was published on February 1 and 8, 2021. The notification was published on January 28-30, 2021 and February 1, 4-6, and 8, 2021 in Spanish language newspapers, satisfying the requirement for non-English language notification. Copies of: (1) the notification letter sent to the member agencies, cities and counties in Metropolitan's service area, and (2) the notice published in the newspapers are included in the 2020 UWMP Section 5. Table 5-3 in the 2020 UWMP provides a list of participating member agencies and other appropriate agencies that Metropolitan coordinated with in its regional planning, as well as the cities and counties that were notified about the preparation of its 2020 UWMP, Appendix 11 to the 2015 UWMP, and WSCP. In addition, the list of newspaper publications is included in Table 5-4.

Metropolitan held the public hearing for the draft 2020 UWMP, draft Appendix 11 to the 2015 UWMP, and draft WSCP on April 12, 2021, at the Board's Water Planning and Stewardship Committee meeting, held online due to COVID-19 concerns. On May 11, 2021, Metropolitan's Board determined that the 2020 UWMP and the WSCP are consistent with the MWD Act and accurately represent the water resources plan for Metropolitan's service area. In addition, Metropolitan's Board determined that Appendix 11 to both the 2015 UWMP and the 2020 UWMP includes all of the elements described in Delta Plan Policy WR P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (Cal. Code Regs. tit. 23, § 5003) which need to be included in a water supplier's UWMP to support a certification of consistency for a future covered action. As stated in Resolutions 9279, 9280, and 9281, the Board adopted the 2020 UWMP, Appendix 11 to the 2015 UWMP, and the WSCP and authorized their submittal to the State of California. Copies of Resolutions 9279, 9280, and 9281 are included in the 2020 UWMP Section 5, and Resolution 9281 for the WSCP is attached to this WSCP as Attachment C.

Submission and Availability of Final 2020 UWMP, Appendix 11 to 2015 UWMP, and WSCP

In fulfillment of CWC Sections 10632(c) and 10645(a) and (b), Metropolitan's final 2020 UWMP, Appendix 11 to its 2015 UWMP, and its WSCP were posted on the mwdh2o.com website in May 2021, following their adoption by the Metropolitan board. This satisfies the requirement to make the plans available for public review and to make the WSCP available to Metropolitan's customers (which are its member agencies).

In fulfillment of CWC Sections 10632(c), 10635(c) and 10644(a)(1), Metropolitan also mailed copies of the final 2020 UWMP, Appendix 11 to the 2015 UWMP, and WSCP (in electronic pdf format) to the California State Library and all cities and counties within Metropolitan's service area within 30 days of Board adoption.

In June 2021, in fulfillment of CWC Section 10621(f) and Sections 10644(a)(1), (2), and (b), Metropolitan's final 2020 UWMP, Appendix 11 to the 2015 UWMP, and WSCP were electronically submitted to the State of California through DWR's WUE data website https://wuedata.water.ca.gov/secure/.

WSCP Reevaluation and Improvement Procedures

The WSCP will be periodically re-evaluated to ensure that its shortage risk tolerance is adequate and the shortage response actions are effective and up to date based on lessons learned from implementing the WSCP. The WSCP will be revised and updated during the UWMP update cycle to incorporate updated and new information. For example, new supply augmentation actions will be added, and actions that are no longer applicable for reasons such as program expiration will be removed. However, if revisions to the WSCP are warranted before the UWMP is updated, the WSCP will be updated outside of the UWMP update cycle. In the course of preparing the Annual Assessment each year, Metropolitan staff will routinely consider the functionality the overall WSCP and will prepare recommendations for Metropolitan's Board of Directors if changes are found to be needed.

ATTACHMENTS

Attachment A – Water Surplus and Drought Management Plan

Attachment B – Water Supply Allocation Plan

Attachment C – WSCP Resolution 9281

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Attachment A

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

WATER SURPLUS AND DROUGHT MANAGEMENT PLAN

REPORT NO. 1150

AUGUST 1999

ACKNOWLEDGMENTS

The consensus reached in the Water Surplus and Drought Management Plan would not have been possible without the dedication and participation of the Rate Refinement Process Workgroup, comprises made by the General Manager, staff from Metropolitan's member agencies, Metropolitan staff, and the dedication and work of the consultants.

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WATER SURPLUS AND DROUGHT MANAGEMENT PLAN

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

TABLE OF CONTENTS

EXECUTIVE SUMMARY

INTRODUCTION

The Water Surplus and Drought Management (WSDM) Plan for the Metropolitan Water District of Southern California (Metropolitan) is a ten-year plan that will be used to direct Metropolitan's resource operations to help attain the region's 100% reliability goal. The WSDM Plan recognizes the interdependence of surplus and shortage actions and is a coordinated plan that utilizes all available resources to maximize supply reliability. The overall objective of the WSDM Plan is to ensure that shortage allocation of Metropolitan's imported water supplies is not required.

The central effort in developing the WSDM Plan was a participatory process involving Metropolitan and its member agencies. Metropolitan staff and member agency representatives coordinated the Plan's development during a series of meetings of the Rate Refinement Team.

To lay a foundation for the WSDM Plan, participants in the Rate Refinement Process developed a set of proposed WSDM Principles and Implementation Goals which were subsequently adopted by the Metropolitan Board of Directors in September 1998. These Principles and Implementation Goals outline fundamental policies for guiding surplus and shortage management and establish a basis for dealing with shortages in an equitable and efficient manner.

WSDM PRINCIPLES AND IMPLEMENTATION GOALS

Guiding Principle

- Metropolitan will encourage storage of water during periods of surplus and work jointly with its Member Agencies to minimize the impacts of water shortages on the region's retail consumers and economy during periods of shortage.

Supporting Principles

- Maintain an ongoing coordinated effort among Metropolitan and its Member Agencies to encourage efficient water use, develop cost-effective local resource programs, and inform the public on water supply and reliability issues

- Encourage local and regional storage during periods of surplus and use of storage during periods of shortage

- Manage and operate Metropolitan's regional storage and delivery system in coordination with local facilities to capture and store surplus water in local groundwater and surface reservoirs

- Arrange for secure sources of additional water from outside the region for use during periods of shortage

- Call upon sources of additional water from outside the region and water stored locally to meet the needs of consumers and protect the economy during periods of shortage

WSDM Plan Implementation Goals

- Avoid mandatory import water allocations to the extent practicable

- Equitably allocate imported water on the basis of agencies' needs

  Considerations to create an equitable allocation of imported water may include:

  - Impact on retail consumers and economy
  - Reclamation/Recycling
  - Conservation
  - Population and economic growth
  - Investment in local resources
  - Change and/or loss of local supply
  - Participation in Metropolitan's Non-firm (interruptible) programs
  - Investment in Metropolitan's facilities

- Encourage storage of surplus supplies to mitigate shortages and improve water quality

SURPLUS AND SHORTAGE ACTIONS

The region's ability to implement a long-term WSDM Plan results from the significant investments Metropolitan and its member agencies have made in a variety of resources since 1991. These additional resources include increased local conservation and water recycling, improvements in the reliability of imported supplies, increased regional storage, and increased conjunctive use groundwater programs. Together these improvements allow a comprehensive approach to water management.

The growing variety of resources available to the region is transforming Metropolitan from an agency with relatively modest storage capacity to one that will have storage sufficient to manage many shortages without impacts to its member agencies or retail customers. To attain this level of reliability, all storage programs and facilities, along with conservation, recycling, and other programs, must be managed as an integrated set of regional resources. To accomplish this, the WSDM Plan establishes the linkage between surplus and shortage resource management actions.

When imported supplies exceed projected demands for imported water within Metropolitan's service area, Metropolitan can operate available storage facilities to maximize the benefits of stored water to its member agencies. A number of factors affect Metropolitan's ability to divert surplus water into storage. Some of these factors include facility outages, system capacity, water quality (including requirements for managing total dissolved solids), and varying supply and demand patterns. The WSDM Plan provides a description of storage options available to Metropolitan and a framework for storing water in these programs and facilities when surplus supplies are available.

Except in severe or extreme shortages (defined in the Introduction) or emergencies, Metropolitan's resource management will allow shortages to be mitigated without impacting retail Municipal and Industrial (M&I) customers. A list of resource management actions and their descriptions are provided

below. This list emphasizes critical storage programs and facilities, and conservation programs that make up part of Metropolitan's response to shortages. The order in which these actions are presented does not imply the exact operational management of resources that would occur during a shortage, rather it represents a general framework and guide. In fact, several actions are likely to be taken concurrently. Many factors will dictate the exact order in which these actions will be taken during shortages. One action, however, will have an assigned prioritization: the curtailment of Full Service (firm) deliveries will be last. The following summarizes the drought actions:

- Draw on storage in the Eastside Reservoir Project
- Draw on out-of-region storage in Semitropic and Arvin-Edison
- Reduce/suspend long-term seasonal and groundwater replenishment deliveries
- Draw on contractual groundwater storage programs in the region
- Draw on State Water Project (SWP) terminal reservoir storage (per Monterey Agreement)
- Call for extraordinary drought conservation and public education
- Reduce Interim Agricultural Water Program (IAWP) deliveries
- Call on water transfer options contracts
- Purchase transfers on the spot market
- Implement the allocation of Metropolitan's imported supplies to its member agencies

For the ten-year period addressed by the WSDM Plan, 1999-2008, the majority of shortage contingencies will be managed by withdrawals from storage, groundwater management and options transfers. Shortages managed using these actions would not impact the quantity of water delivered to member agencies for consumptive uses. In fact, when coupled with other drought actions such as extraordinary conservation and reduction of agricultural deliveries, it is fully expected that an allocation of firm imported water supplies will not be necessary during the next ten years. Under this worse-case scenario, an approach to allocate Metropolitan's firm imported water supplies in a fair and equitable manner will be developed.

The overall policy objective of the allocation method will be to minimize the impacts to any one agency and the region as a whole. To meet that objective, the method of allocating firm imported supply will account for:

- Each agency's demands on Metropolitan,
- Each agency's local resources
- Each agency's total retail demands.

The WSDM Plan allocation method would address each of these supply and demand components and account for each agency's conservation and recycled water programs. A pricing structure will be coupled with the WSDM allocation method to accomplish two goals:

- Encourage conservation and water recycling
- Ensure that the regional impact of the shortage is as small as possible

To provide as much water as possible without changing wholesale prices, the allocation of all available supplies will be made at the prevailing rates for firm deliveries. In order to encourage conservation to the level of allocation, the rate for agency usage from 100-102% of its allocation will be the Full Service rate plus $175. Usage above 102% of allocated supply will be charged at three times the Full Service rate. Any substantial change in Metropolitan's water rate structure may require these rates to be revised.

During severe or extreme shortage conditions, public outreach will play a critical role in shaping consumer response. Public information campaigns will send clear signals if extraordinary drought conservation is required. An effective public information campaign requires a joint effort among Metropolitan and its member agencies. Under this Plan, the administration of the Public Information and Government Affairs program will be the responsibility of a Drought Program Officer (DPO). The DPO will be responsible for integrating the various activities in these areas, coordinating efforts with Metropolitan's Board of Directors and member agencies, and designing the region-wide messages for the general public and various target audiences. Important constituencies are residential users, industrial and institutional users, business interests, agricultural users, elected officials, officials of various agencies such as the Department of Water Resources, and the media.

INTEGRATED RESOURCES MANAGEMENT

Throughout the Integrated Resources Planning process and the development of the WSDM Plan, extensive analysis of resource management strategies focused on maximizing supply reliability while minimizing overall resource costs. Various management strategies were analyzed trader shortage scenarios based on historical hydrologic data. The WSDM Plan presents a resource management framework to guide Metropolitan's integrated approach to supply management.

The resource management framework does not dictate a scripted response to shortage or surplus. The framework recognizes the complexity and variety of conditions that require action. Supporting this framework are general rules that describe the actions to be taken in each stage of surplus or shortage. These rules depend on shortage stage, account for monthly delivery requirements, and depend on when various supplies would be available.

One of the fundamental trade-offs in dealing with supply shortages is the need to maintain flexibility while providing supply certainty to member agencies and consumers. A central focus of the WSDM Plan is the analysis of information about supplies and demands. When do various pieces of information about the supply/demand balance become more certain? When should this information impact policy-making and trigger various resource actions? The WSDM Plan addresses these questions and the actual implementation of the Plan during a shortage.

Appendix A of this report provides a ten-year simulation of projected demands and supplies showing an example of how the region can maintain 100% reliability.

INTRODUCTION

The Metropolitan Water District of Southern California (Metropolitan) provides water to a service area covering approximately 5,200 square miles. Over 16.5 million people live within the service area, which supports a $500 billion economy. Metropolitan provides supplemental supplies to twenty-seven member agencies, both retail and wholesale agencies, who in turn provide water to over three hundred cities and local agencies providing supplies at the retail level. In recent years Metropolitan supplemental deliveries have accounted for about one-half to two-thirds of the region's total water demands. With supplies from its Colorado River Aqueduct (CRA) and the State Water Project (SWP), Metropolitan delivers water for municipal and industrial (M&I) uses, agricultural uses, and augmentation of local storage.

As part of the implementation of the regional Integrated Resources Plan (IRP), Metropolitan and its member agencies have developed the Water Surplus and Drought Management (WSDM) Plan for Southern California. This ten-year plan will direct Metropolitan's resource operations to help attain the region's 100% reliability goal. Over this ten-year period, the WSDM Plan will be updated to account for changes impacting supplies from the Colorado River and California's Bay-Delta. In the past, Metropolitan has developed drought management plans that simply addressed shortage actions and primarily focused on issues of short-term conservation and allocation of imported water. The WSDM Plan recognizes the interdependence of surplus and shortage actions and is a coordinated plan that utilizes all available resources to maximize supply reliability. The overall goal of the WSDM Plan is to ensure that shortage allocation of Metropolitan's imported water supplies is no---At required.

Because it addresses both surplus and shortage contingencies, the WSDM Plans draws clear distinctions among the terms *surplus, shortage, severe shortage,* and *extreme shortage.*

***Surplus**: Supplies are sufficient to allow Metropolitan to meet Full Service demands, make deliveries to all interruptible programs (replenishment, long-term seasonal storage, and agricultural deliveries), and deliver water to regional and local facilities for storage.*

***Shortage**: Supplies are sufficient to allow Metropolitan to meet Full Service demands and make partial or full deliveries to interruptible programs, sometimes using stored water and voluntary water transfers.*

***Severe Shortage**: Supplies are insufficient and Metropolitan is required to make withdrawals from storage, call on its water transfers, and possibly call for extraordinary drought conservation and reduce deliveries under the IAWP.*

***Extreme Shortage**: Supplies are insufficient and Metropolitan is required to allocate available imported supplies.*

WSDM PRINCIPLES AND IMPLEMENTATION GOALS

The central effort in developing the WSDM Plan was a participatory process involving Metropolitan and its member agencies. Metropolitan staff and member agency representatives coordinated the Plan's development during a series of meetings of the Rate Refinement Team and the Integrated Resources Planning Workgroup. To lay a foundation for the WSDM Plan, participants in the Rate Refinement Process developed a set of "WSDM Principles and Implementation Goals."

Guiding Principle

- Metropolitan will encourage storage of water during periods of surplus and work jointly with its Member Agencies to minimize the impacts of water shortages on the region's retail consumers and economy during periods of shortage.

Supporting Principles

- Maintain an ongoing coordinated effort among Metropolitan and its Member Agencies to encourage efficient water use and cost-effective local resource programs and to inform the public on water supply and reliability issues

- Encourage local and regional storage during periods of surplus and use of storage during periods of shortage

- Manage and operate Metropolitan's regional storage and delivery system in coordination with local facilities to capture and store surplus water in local groundwater and surface reservoirs

- Arrange for secure sources of additional water from outside the region for use during periods of shortage

- Call upon sources of additional water from outside the region and water stored locally to meet the needs of consumers and protect the economy during periods of shortage

WSDM Plan Implementation Goals

• Avoid mandatory import water allocations to the extent practicable

- Equitably allocate imported water on the basis of agencies' needs

  Considerations to create an equitable allocation of imported water may include:
  - Impact on retail consumers and economy
  - Reclamation/Recycling
  - Conservation
  - Population and economic growth
  - Investment in local resources
  - Change and/or loss of local supply
  - Participation in Metropolitan's Non-firm (interruptible) programs
  - Investment in Metropolitan's facilities.

- Encourage storage of surplus supplies to mitigate shortages and improve water quality

REGIONAL RESOURCES AND DEMANDS

Southern California receives its water supplies from a variety of different sources, both local to the region and imported from outside the region. These sources are summarized below.

Local Supplies

Local supplies include groundwater pumping of local aquifers, surface reservoir production, recycled water, and supplies imported through wheeling arrangements or through the Los Angeles Aqueduct, which is owned and operated by the City of Los Angeles. Local supplies have, in the past, provided as much as 2.1 million acre-feet (maf) of water to meet the region's water demands. By far the largest component of local supplies is groundwater pumping, providing over 75% of historical local supplies.

Colorado River Supplies

The distribution and management of Colorado River water is governed by a complex body of laws, court decrees, compacts, agreements, regulations, and an international treaty collectively known as the "Law of the River." Metropolitan's entitlement is established by the fourth and fifth priorities of California's Seven Party Agreement, included in Metropolitan's 1931 and 1946 contracts with the Secretary of the Interior. These priorities provide 550,000 acre-feet (af) per year and 662,000 af per year, respectively. In addition, Metropolitan holds a surplus water contract for delivery of 180,000 af. The physical capacity of the CRA is slightly in excess of 1.3 maf per year, based on a pumping capacity of 1,800 cubic feet per second (cfs). Metropolitan's long-held objective is to maximize the availability of Colorado River water, up to the maximum capacity of the CRA, subject to environmental, contractual, legal, political, financial, and institutional constraints. A California 4.4 Plan is being developed among California parties that will help ensure that full CRA deliveries are maintained, while addressing the concerns of the other Colorado River basin states that rely on the river. The California 4.4 Plan includes core transfers (such as the IID/MWD conservation agreement and the proposed IID/SDCWA transfer), system conservation (such as the lining of the All American Canal), offstream storage (such as the Arizona groundwater storage program), dry year option transfers (such as PVID land fallowing), and river re-operations.

State Water Project

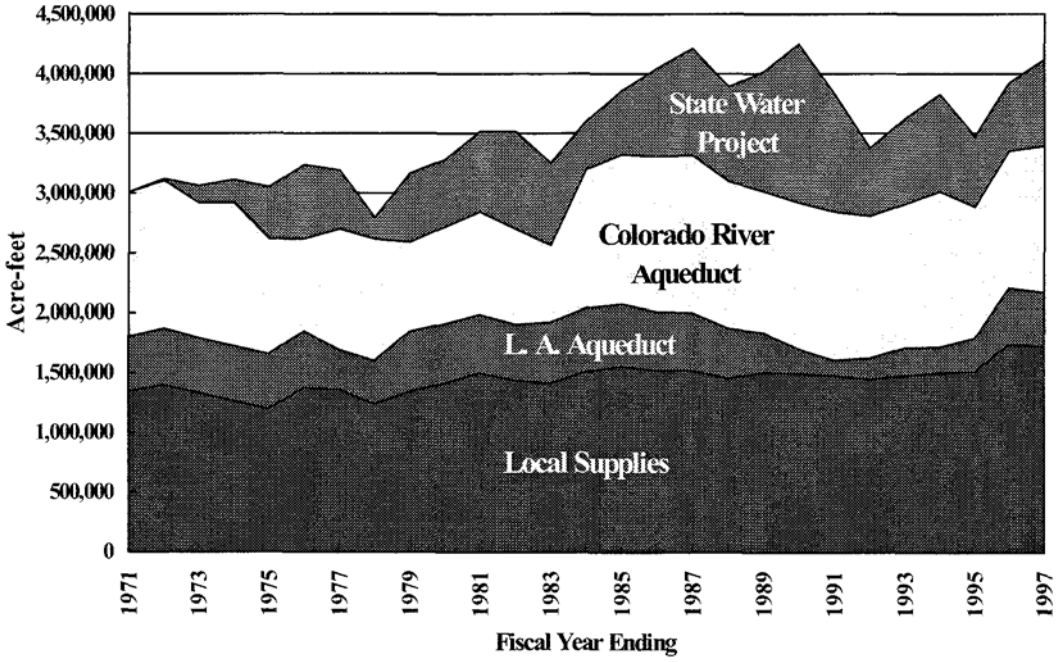
Metropolitan is one of 29 water agencies that have contracted with the State of California, through the Department of Water Resources (DWR), for water deliveries from the SWP system. Metropolitan's contracted entitlement is for 2.01 maf per year, or about 48 percent of the total contracted entitlement of 4.2 maf per year. SWP deliveries to Metropolitan are made via the SWP's California Aqueduct.

Initial SWP facilities, completed in the early 1970's, have produced average supply yields adequate to meet just over half of the total contracted entitlement. While it was intended that additional SWP facilities would be constructed as SWP contractor demands increased up to their contracted entitlements, few facilities have been constructed since that time.

The SWP obtains its supplies primarily from the Sacramento River Basin. About half of the total supply diverted from the Delta for the SWP is regulated flow from the Feather River (a tributary to the Sacramento River), while the other half is unregulated flow from runoff downstream of Sacramento River reservoirs and from other rivers that flow into the Delta. The Sacramento River watershed is subject to wide annual variations in total runoff. The Sacramento River Index (SRI), which measures runoff in the watershed, has averaged about 18 maf per year over the last 90 years. However, runoff varies widely from year to year. For example, the SRI measured 7.8 mafin 1994 and 32.5 mafin 1995.

Figure 1 shows the historical total regional supply production by type. As shown in Figure 1, water supplies were as high as 4.25 mafin 1990 and within two years dropped to 3.4 mar, a 20% decrease.

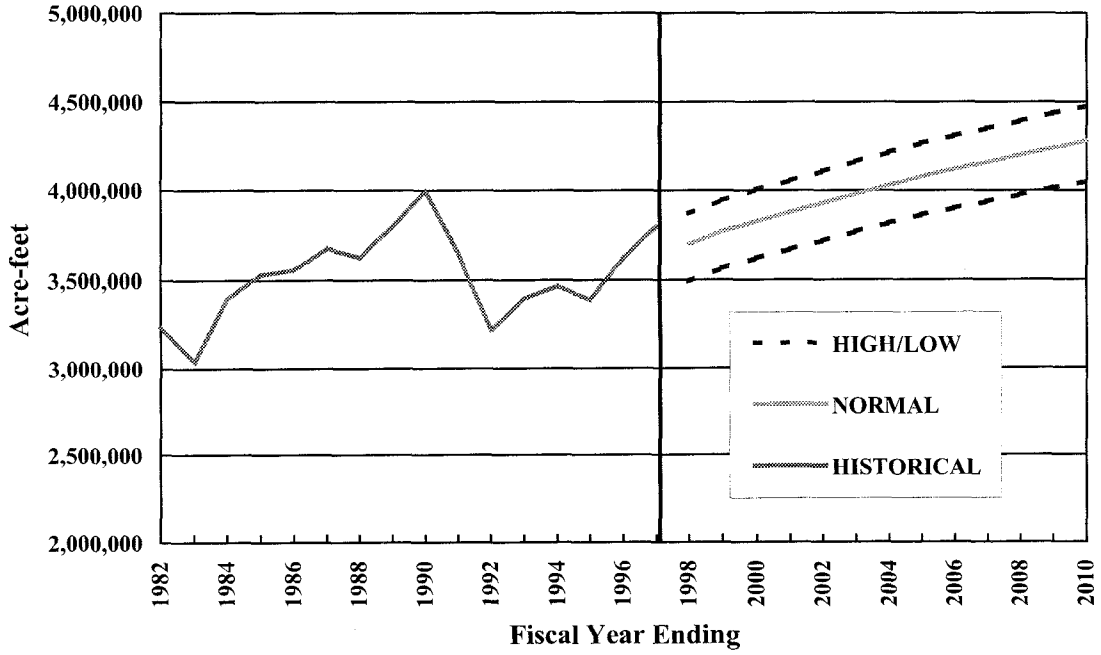
Figure 1. Historical Supply Production by Type of Supply



RETAIL DEMANDS

From 1982 through 1995, the region experienced retail water demands averaging 3.5 mar. In dry years retail demands are approximately 5 to 7% greater than normal years, while demands in wet years are about 6 to 8% below normal demands. Under normal weather conditions, assuming full implementation of conservation best management practices, total regional retail demands are projected to increase from about 3.7 mar in 1997 to almost 4.3 mar in 2010. Without conservation, demands in 2010 would be about 10 to 12% greater than projected. Increases in retail demand are driven by demographics and economics, including changes in population, housing, employment, and income. Figure 2 shows the historical and projected retail demands in Metropolitan's service area.

Figure 2. Regional Retail Water Demands



The historical variability in demands from 1982 to 1997 is mainly due to weather and the economy. In 1983, extreme wet weather caused a significant drop in retail demands. During the period from 1985 to 1990, hot and dry weather coupled with a strong economy resulted in increased demand from 3.5 maf to 4.0 maf, a 14% increase. In 1991, the 5th year of a prolonged drought, conditions forced many communities to implement mandatory supply reductions. These mandatory reductions coupled with extraordinary drought conservation caused a 10 to 15% decrease in retail demands for the region. In addition, the period between 1992 and 1995 was very wet (with the exception of 1994, which was dry), and was a period of severe economic recession. Southern California alone lost some 700,000 jobs from 1990 through 1995. The combination of wet weather, economic recession, and conservation resulted in demands decreasing by over 17%.

DEMANDS ON METROPOLITAN

For many member agencies, Metropolitan's water deliveries represent a supplemental supply. Most member agencies have local water supplies, but agencies differ in how much their supplies alone can meet their respective retail demands. Local supplies are often base-loaded (maximized subject to various constraints) and purchases from Metropolitan are used to meet remaining demands. In addition, to meeting consumptive demands, Metropolitan's deliveries are used to replenish local groundwater and surface reservoirs. To project demands on Metropolitan, projections of member agency's retail water demands and local water supplies are made. Local supplies are then subtracted from retail demands to get consumptive demands on Metropolitan. A projection of Metropolitan's long-term seasonal and replenishment deliveries are made based on safe groundwater yield and weather/hydrology.

Metropolitan forecasts its demands for three different broad categories: Full Service, Seasonal (reservoir storage and groundwater replenishment delivered for shift or long-term storage purposes and sold at a discount), and Agricultural (deliveries of water sold at a discount for agricultural use). Overall, demands on Metropolitan can vary -+ 11 to 18% from normal conditions due to weather and hydrology.

The following four figures show historical and projected demands on Metropolitan by category. Figure 3 shows Basic Water Deliveries, Figure 4 shows Seasonal Water Deliveries, Figure 5 shows Interim Agricultural Water Program (IAWP) Deliveries, and Figure 6 shows Total Water Deliveries for Metropolitan.

Figure 3. MWD Basic Water Deliveries

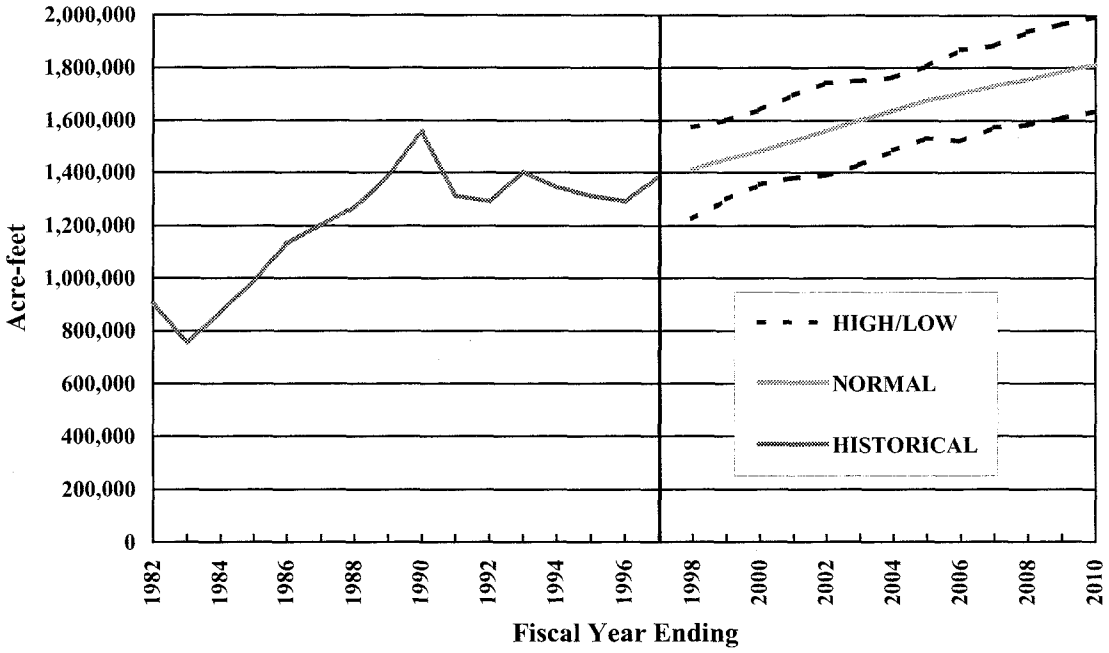


Figure 4. MWD Seasonal Water Deliveries

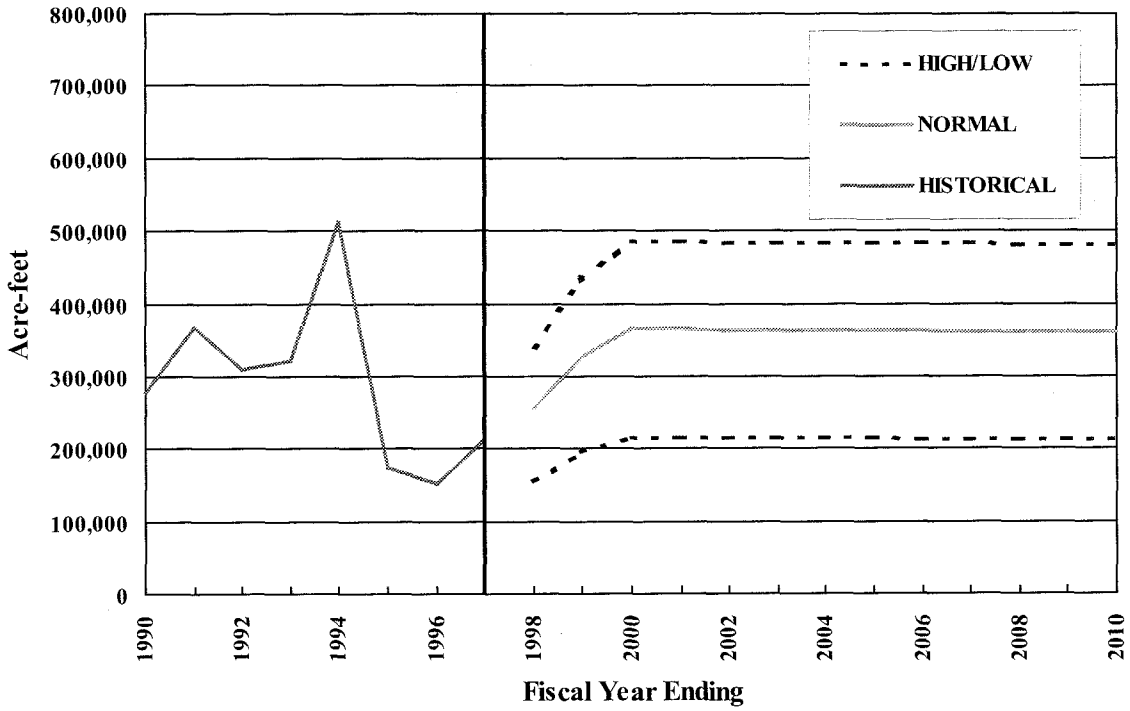


Figure 5. MWD Interim Agricultural Water Program (IAWP) Deliveries

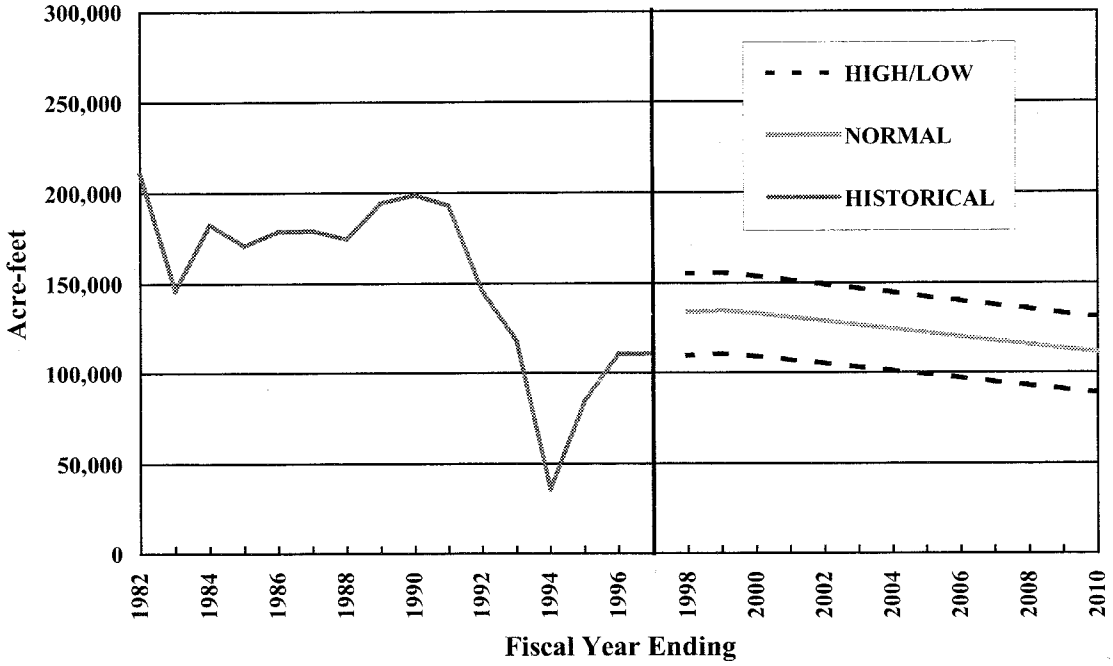
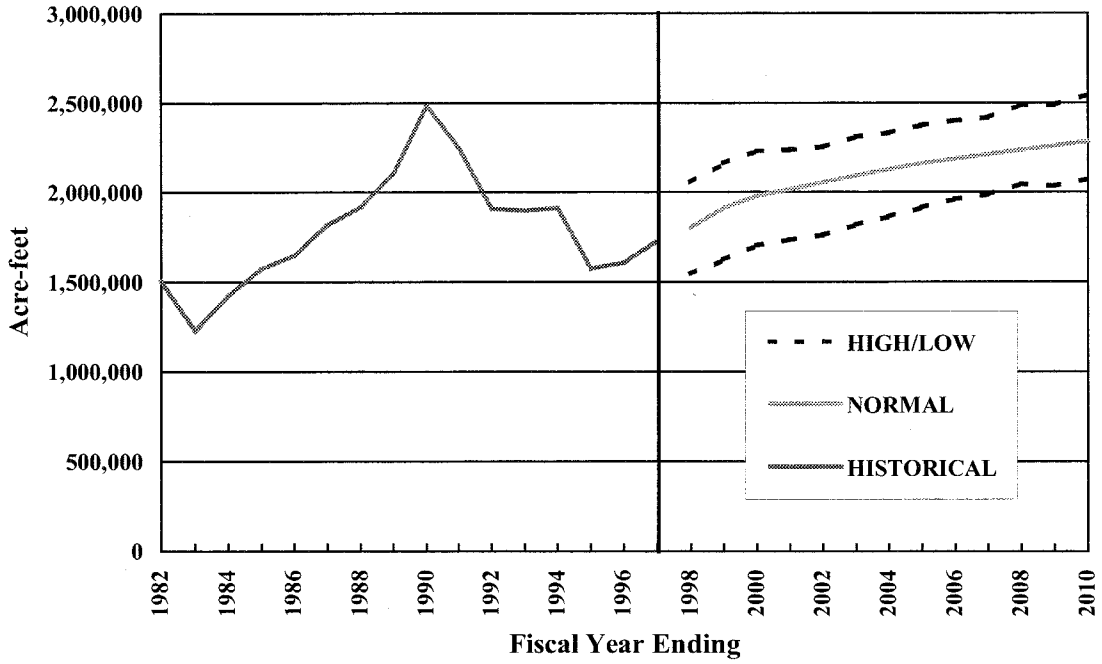


Figure 6. MWD Total Water Deliveries



INTEGRATED RESOURCES PLANNING

To ensure supply reliability under various drought conditions, Metropolitan and its member agencies developed an Integrated Resources Plan (IRP). The IRP, adopted by Metropolitan's Board of Directors in January 1996 and periodically updated, guides Metropolitan's resource and capital improvements investments. The region's ability to develop a long-term WSDM Plan results from the significant investments Metropolitan and its member agencies have made in resources since 1991. To date, these investments include:

- Local supplies: Metropolitan co-funded over 23 local projects and 200 conservation programs that will yield a total of 160,000 af per year.

- **Colorado River Aqueduct:** Metropolitan developed transfers and storage programs to help ensure a full aqueduct. The landmark Metropolitan/Imperial Irrigation District Conservation Program (IID), will result in a savings of 107,000 af per year. Storage programs in Arizona and California, combined with the IID savings, yield a total of 280,000 af of annual core, dry year options, and storage supply.

- **State Water Project:** Metropolitan and other parties negotiated the Bay-Delta Accord and the Monterey Amendment. The Bay-Delta Accord and subsequent efforts will increase the reliability of Metropolitan's entitlement deliveries. The Monterey Amendment provides access to 220,000 af of SWP storage.

- **In-Basin Storage:** Metropolitan is constructing the Eastside Reservoir Project, with 800,000 af of storage (400,000 af of which is emergency storage for use in case of facility failure as a result of earthquake or other event).

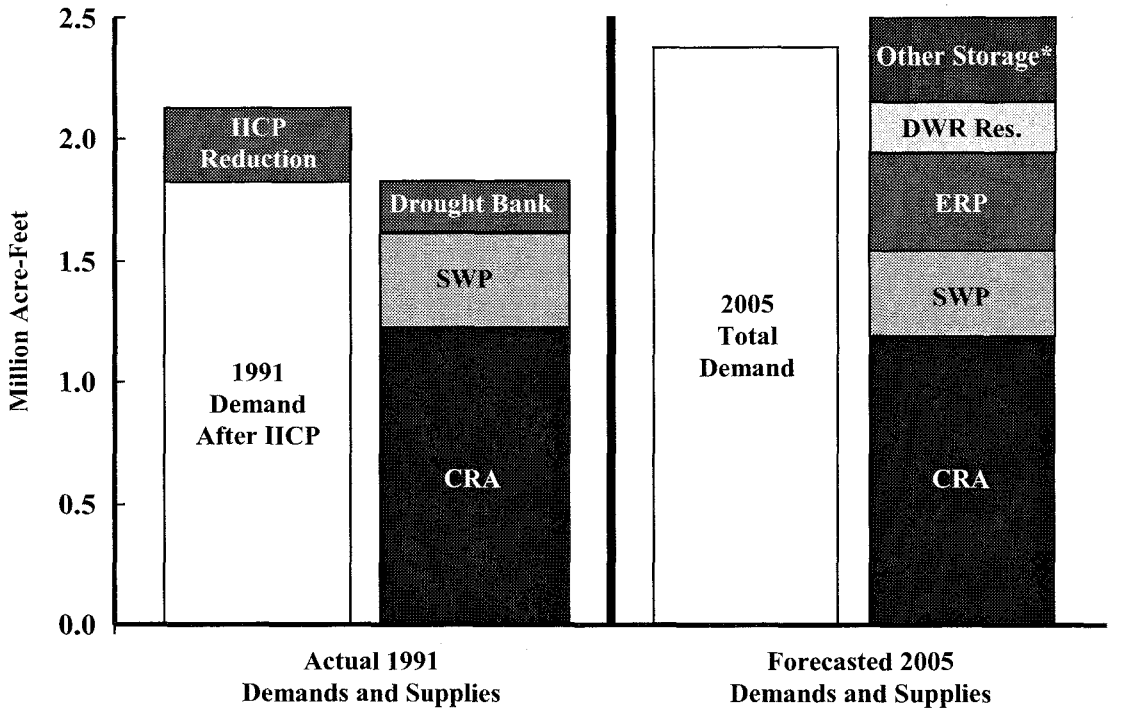
- **Groundwater Conjunctive Use Storage:** Metropolitan developed a conjunctive use storage program in the North Las Posas Basin in Ventura County with an anticipated capacity of 210,000 af and a dry-year withdrawal rate of up to 70,000 af.

- **Transfers and Storage:** Metropolitan developed the Semitropic Storage Program, with 350,000 af of storage and dry-year withdrawals averaging about 60,000 af. Metropolitan also approved the Arvin-Edison Storage and Transfer Program, with 250,000 af of storage and dry-year withdrawals averaging about 70,000 af. Metropolitan is also exploring storage and transfer programs with the Coachella Valley Water District and the Cadiz Land Company.

As a result of these investments, it is anticipated that Metropolitan and its member agencies will be 100% reliable over the next 10 years even under a repeat of the 1991 drought condition. Figure 7 compares actual Metropolitan demands and supplies during 1991 (the last year in a multiyear severe drought) and projected demands and supplies in year 2005 (assuming a repeat of 1991 conditions). In 1991, the region faced shortages that required Metropolitan to allocate water under the Incremental Interruption and Conservation Plan (IICP). The reduction in deliveries came after demands had already been reduced as a result of local conservation. In addition, water had to be purchased from the Governor's drought emergency water bank. By the year 2005 with the investments made to date,

Metropolitan's additional water supplies will be more than adequate to meet demands under a repeat of the 1991 drought event--even with increased demands due to growth.

Figure 7. Historical and Projected Metropolitan Supplies and Demands Under Drought Conditions



*** Groundwater management, Semitropic Storage Program, and Arvin-Edison Storage Program**

SURPLUS AND SHORTAGE RESOURCE ACTIONS

Metropolitan's investments in water resources, facilities, and programs has transformed it from an agency with relatively modest storage capacity to one that will have storage sufficient to manage many shortages without negative impacts to its member agencies or retail customers. To attain this level of reliability, storage programs and facilities, along with conservation, recycling, and other programs, must be managed as an integrated set of regional resources. To accomplish this, the WSDM Plan recognizes the linkage between surplus and shortage resource management actions.

SURPLUS ACTIONS

The combination of Metropolitan's regional storage facilities, such as Lake Mathews, Lake Skinner, the future Eastside Reservoir Project, and the storage capacity available to Metropolitan in Castaic Lake and Lake Perris as a result of the Monterey Amendment, allows Metropolitan great flexibility in managing its water resources. The development of storage programs both outside and within the service area provides even greater flexibility in storing surplus water. Each of the storage facilities and programs plays an important role in achieving Metropolitan's reliability goal.

When imported supplies exceed projected demands for imported water within Metropolitan's service area, Metropolitan can operate storage facilities to maximize stored water to benefit its member agencies. A number of factors affect Metropolitan's ability to divert surplus water into storage. Some of these factors include facility outages, system capacity, water quality (including requirements for managing total dissolved solids), and varying supply and demand patterns. This section provides a description of storage options available to Metropolitan and a framework for storing water in these programs and facilities when surplus supplies are available.

Storage of Colorado River Supplies

Metropolitan has participated in a number of programs to maximize the reliability of supplies from the Colorado River. The landmark Metropolitan/Imperial Irrigation District Conservation Program will result in a savings of 107,000 af per year. These supplies will increase the reliability of Metropolitan's entitlement of Colorado River water. Other programs yield shortage benefits by increasing amounts of water stored for use during shortages. Between August 1992 and July 1994, Metropolitan and the Palo Verde Irrigation District conducted a Test Land Fallowing Program. Approximately 20,000 acres of farmland in the Palo Verde Valley were not irrigated, saving 186,000 af of water which was stored in Lake Mead for later use by Metropolitan. With Arizona and Nevada water agencies, Metropolitan is participating in a Central Arizona Groundwater Storage Demonstration Program that has encouraged the storage of water. To date, 139,000 af of supplies have been stored in groundwater basins in Central Arizona. The Desert Coachella program is an exchange and storage program with agencies situated along the Colorado River Aqueduct. Metropolitan releases Colorado River water for storage in the Coachella Groundwater Basin. Metropolitan then exchanges these supplies for the

participating agencies' SWP supplies. These programs serve as models for future programs that could increase the reliability of Colorado River supplies. Metropolitan continues to explore other possible options that would increase the reliability of supplies. The California 4.4 Plan is being developed among California parties to increase storage programs for Colorado River supplies. In addition to core transfers and conservation programs, the California 4.4 Plan includes offstream storage (such as the Arizona groundwater storage program), dry year option transfers (such as PVID land fallowing), and river re-operations. These programs, in conjunction with favorable supply determinations by the Secretary of Interior, will ensure the highest possible reliability of Colorado River supplies.

In addition to the programs mentioned above, the Colorado River system itself contributes to the high reliability of Metropolitan's Colorado River supplies. Currently, the average Colorado River runoff exceeds basin-wide demands by over 1.0 maf per year. The Colorado River system also contains a great deal of reservoir storage capacity. The total storage capacity in the Colorado River Basin is approximately 60 maf, almost four times the Colorado River's average annual flow. For much of 1997, system storage levels were at 80% or more of total capacity. These factors allow the Bureau of Reclamation, operators of the Colorado River system, to store significant supplies for use during shortages.

Storage of State Water Project Supplies

Total storage capacity is a critical factor in comparing the operations of the Colorado River system with the SWP. On average, both systems have similar amounts of water available on an annual basis. The SWP's watersheds in the Sacramento River Basin have produced about 18 maf per year over the long term, as represented by the Sacramento River Index (SRI.) Long-term runoff on the Colorado River has averaged more than 16 maf annually since 1906. However, the ability to carry over unused water from a wet year for use in a dry year differs substantially between the two systems. State Water Project storage facilities have storage capacity of about 4.5 maf, while system storage in the Colorado River Basin totals nearly 60 maf. This gives the operators of the Colorado River reservoirs much more flexibility in storing unused water from a wet year for use in a subsequent dry year.

When water from the SWP cannot be put to immediate use in Metropolitan's service area, the water may be stored for future use. Provided storage capacity is available, the water may remain in either Oroville Reservoir (as SWP storage for delivery to all contractors the following year) or San Luis Reservoir (as carryover storage assigned to Metropolitan). Through the carryover storage program, as amended by the Monterey Amendment, Metropolitan can place a maximum of 200,000 af per year of allocated supplies in SWP surface reservoirs. The program also allows for carryover storage in non-project facilities, including surface reservoirs and groundwater basins. In the case of carryover storage in San Luis Reservoir, SWP supplies allocated to but unused by a contractor may, under certain conditions, be assigned as carryover if storage capacity is available at the end of the calendar year. However, carryover water stored for a contractor has lower priority than storage of SWP water and consequently "spills" first as San Luis Reservoir fills.

Also, in a wet year such as 1995, low demands may allow DWR to operate San Luis Reservoir nearly full, eliminating any possibility of contractor carryover storage into the following year. As a result, carryover storage on the SWP may not be possible, and even when possible, is subject to spilling.

Due to these carryover storage limitations, Metropolitan has invested a great deal to expand its ability to store surplus SWP supplies. Metropolitan has entered into a number of water transfer and storage agreements. The Semitropic Water Banking and Exchange program allows Metropolitan to store up to 350,000 afin the groundwater basin underlying the Semitropic Water Storage District. The storage and withdrawal capacities of the program are shared with other participants in the storage program, with Metropolitan's share equaling 35%. Dry-year withdrawals will average about 60,000 af.

Metropolitan and the Arvin-Edison Water Storage District have developed a program that allows Metropolitan to store water in the groundwater basin in the Arvin-Edison service area. The program would allow the storage and withdrawal of 250,000 af of supplies over the next 25430 years. Dry-year withdrawals will average about 70,000 af.

Storage in Regional Facilities

In addition to the storage of Colorado River and SWP supplies outside the region, Metropolitan has established a number of programs for storing supplies within the region. Metropolitan owns and operates two main surface reservoirs, Lake Mathews and Lake Skinner, which have a combined storage of about 226,000 af. Only a small portion of this capacity is available for shortages, with the balance being used to regulate flows in Metr0Politan's delivery system. The Eastside Reservoir Project, currently under construction, will have a total capacity of 800,000 af, with approximately 400,000 af of operational drought and seasonal storage and 400,000 af of emergency storage. Through the Monterey Amendment, Metropolitan obtained the fight to use up to 220,000 af of water stored in the SWP terminal reservoirs. However, withdrawals from these terminal reservoirs must be replaced within five years.

Metropolitan and its member agencies have established the cyclic storage program to increase storage in groundwater basins within the service area. Regional groundwater basins offer an economical way for Metropolitan to improve supply reliability by storing water within the service area. This makes water readily accessible in times of need, either in emergency situations or during shortages. Some limitations are imposed by the fact that such water can generally only be used through pumping from the groundwater basin by an overlying member agency or local agency. Storage in groundwater basins takes place either by direct replenishment (spreading or injection), or through in-lieu means. Spreading (or injection) is desirable because direct measurement of the amount of stored water is a relatively simple, verifiable transaction. The main disadvantage to direct spreading is that spreading can occur only under certain conditions. For example, spreading cannot occur when spreading facilities are being used to capture local storm runoff for flood control purposes, or when the amount of local runoff precludes the need

for imported water to replenish the basins. Also, spreading basins require frequent maintenance to assure maximum efficiency. These and other conditions can limit the ability to deliver water for spreading at a time when surplus supplies are available.

In-lieu replenishment allows most member agencies to participate in groundwater replenishment without needing direct access to replenishment facilities. Their wells, in effect, become their replenishment facilities. Both direct and in-lieu replenishment from 1986 through 1990 served the region well during the critical drought years from 1991 through 1993.

The overall objective of the various storage programs is to maximize the availability of imported water during times of need by storing surplus water in a strategic manner and utilizing the storage available within the region. Many factors affect the availability of storage capacity and Metropolitan's ability to move water to and from various facilities. After reviewing the full range of shortage actions available to Metropolitan, a framework for prioritizing the full range of surplus and shortage actions will be presented.

In addition to pricing incentives used to encourage local agencies to store water in groundwater basins, Metropolitan has developed a conjunctive use contractual storage program with the Calleguas MWD in the North Las Posas Basin. Metropolitan will fund the construction of wells which will be called upon to meet demands during dry years. This program will yield a dry year supply of about 70,000 af.

SHORTAGE ACTIONS

Except in severe or extreme shortages or emergencies, Metropolitan's management of available resources will allow shortages to be mitigated without negatively impacting retail M&I demands. Below is a list of drought actions that will be taken during periods of shortage. The goal of these actions is to avoid, to the extent practicable, the allocation of Metropolitan's firm supplies. The order in which these actions are presented does not imply the exact operational management of resources that would occur. In fact, several actions are likely to be taken concurrently. Many factors dictate the particular order in which actions will be taken during an actual shortage, although it is clear that the last action will be the curtailment of firm deliveries to the member agencies.

- Draw on storage in the Eastside Reservoir Project
- Draw on out-of-region storage in Semitropic and Arvin-Edison
- Reduce/suspend long-term seasonal and groundwater replenishment deliveries
- Draw on contractual groundwater storage programs in the region
- Draw on SWP terminal reservoir storage (per Monterey Agreement)
- Call for extraordinary drought conservation and public education
- Reduce IAWP deliveries
- Call on water transfer options contracts
- Purchase transfers on the spot market
- Implement an allocation of Metropolitan's imported supplies to its member agencies

Even with dedicated programs to meet the reliability goal for the region, proper management and operations of these resources is critical to ensure reliability. The prioritization of both surplus and shortage actions need to account for several important criteria. It is also important to recognize that these criteria will need to be balanced. The criteria include:

Location: Out-of-region storage is more vulnerable than in-basin-storage due to the risks of seismic events. To only maximize out-of-region storage will put reliability at risk.

Take capacity: Surface reservoirs generally have the ability to be filled and drawn down very quickly. Certain groundwater storage programs have limited take capacities--requiring several years at full take capacity to withdraw **all** available storage. Stored water will be balanced so that dry year supplies are maximized.

Cost: Programs vary with respect to their marginal operating costs. Program actions will be taken to maximize supply reliability while minimizing cost.

Flexibility: Not all storage programs and transfers offer the same flexibility to Metropolitan. Some programs can only meet specific overlying demands, while others can meet demands anywhere in the system.

DESCRIPTIONS OF RESOURCE ACTIONS

Draw on storage in the Eastside Reservoir Project: Withdrawals from the Eastside Reservoir Project would provide a flexible supply for meeting a shortage. Eastside Reservoir Project supplies can be drawn upon quickly. The amount of water drawn from the Eastside Reservoir Project before exercising other shortage actions will depend on the severity of the shortage and the overall condition of other resources available to Metropolitan.

Draw on out-of-region storage in Semitropic and Arvin-Edison programs: Out-of-region programs such as Semitropic and Arvin-Edison provide cost-effective shortage supplies. These supplies also provide flexibility, as they can be distributed as effectively as any SWP supplies coming into Metropolitan's service area. Exercising these programs relatively early in the order of actions reduces the risk of leaving supplies out-of-region. Based upon the ratio of storage capacity to take capacity, these programs will generally provide supplies over several years. This provides the rationale for calling on these programs relatively early in a shortage.

Reduce Long-Term Seasonal and Replenishment Deliveries, and call on cyclic storage accounts: Certain interruptible supply programs provide benefits during shortage. Reducing deliveries to interruptible programs established for storage purposes, while continuing expected levels of groundwater production, allows limited supplies to go toward meeting direct consumptive uses. In addition, calling on cyclic storage accounts can extend the replenishment needs for several years. Most replenishment supplies would be expected to be interruptible for a minimum of two years before agencies would be allowed to claim a local supply adjustment on such supplies. Some programs have longer interruption requirements. For example, most Groundwater Recovery Programs are governed by contracts that require supply production through a three-year interruption in service.

Draw on contractual groundwater storage programs: In-region contractual groundwater programs provide cost-effective supplies that would be drawn upon during shortages. These programs are also

limited by their take capacities and generally have several years of withdrawals in storage. For this reason, these programs might be called upon before withdrawing heavily from surface reservoir storage.

Draw on SWP terminal reservoir storage: The storage available in the SWP terminal reservoirs provides a flexible and cost-effective shortage supply. Supplies withdrawn from this program must be replaced within five years of withdrawal. For this reason, the storage in these reservoirs would be reserved for more serious shortage conditions and would be utilized after the programs and facilities listed above were used to meet the shortage.

Call for extraordinary drought conservation: Voluntary conservation programs have historically been effective in reducing water demand during drought. However, voluntary conservation programs are not without impact to the retail customer and can be perceived as a failure of water agencies to properly plan for shortages. Therefore, the call for extraordinary drought conservation will only be taken with the consent of Metropolitan's Board of Directors.

Reduce agricultural deliveries: The Interim Agricultural Water Program (IAWP) offers interruptible water to southern California's agricultural industry at discounted rates. These supplies will be interrupted as part of Metropolitan's shortage actions. Metropolitan will work with IAWP participants to provide as much advance warning of interruption as possible. The IAWP reflects current policies toward agricultural water users. The policies underlying this program are due to be reviewed during the ten-year period of the WSDM Plan. The WSDM Plan will be changed accordingly.

Call on water transfer option contracts: Transfer options programs provide cost-effective supplies when the region is faced with reducing deliveries to meet consumptive demands. These programs might also be used to increase storage levels in Metropolitan storage facilities. Replenishment of these facilities reduces the risk of leaving available supplies outside the region and helps to protect the region during extended shortages.

Purchase transfers on the spot market: During the 1987-92 drought, the Drought Water Bank proved to be one mechanism for California to reduce the overall impacts of the shortage. However, the cost of spot market supplies may cause Metropolitan to use them as a last increment of supply before the region implements reductions in M&I deliveries. It is likewise possible that availability and cost will make spot market options more favorable under certain conditions. If this occurs then spot market supplies will be sought prior to calls on option transfers. However, participation in the spot market may be restricted to those agencies that have already taken significant actions in response to the shortage.

Implement allocation plan: As the final stage in responding to shortages, Metropolitan will implement an allocation plan to deliver reduced supplies to its member agencies. The issues of allocation and the methods of allocation are outlined in the following section.

ALLOCATION OF SUPPLY FOR M&I DEMANDS

The equitable allocation of supplies is addressed by the Implementation Goals established for the WSDM Plan, with the first goal being to "avoid mandatory import water allocations to the extent practicable." The second fundamental goal is to "equitably allocate imported water on the basis of agencies' needs." Factors for consideration in establishing the equitable allocation include retail and economic impacts, recycled water production, conservation levels, growth, local supply production, and participation and investment in Metropolitan's system and programs. In the event of an extreme shortage an allocation plan will be adopted in accordance with the principles of the WSDM Plan.

INTEGRATED RESOURCE MANAGEMENT STRATEGY

Throughout the Integrated Resources Planning process and the development of the WSDM Plan, extensive analysis of resource management strategies focused on maximizing supply reliability while minimizing overall resource costs. Various management strategies were analyzed under shortage scenarios based on historical hydrologic data. Certain strategies yield high reliability but incur very high costs. This is the case for strategies that utilize relatively costly transfer programs early in a shortage while maintaining high storage levels. If a shortage is short, this results in high transfer costs and shortage storage programs that are not fully utilized. Other strategies draw more heavily on storage early in a shortage and do not use options transfer programs. Later in a shortage, the yields from these transfer programs, combined with low yields from depleted storage facilities, might not make up for continuing or deepening shortages. Overall, such approaches may be inexpensive to pursue at the wholesale level but have high costs associated with retail level impacts. The resource management framework presented results from extensive analysis of various strategies for managing available resources under a variety of surplus and shortage conditions. Although the extent to which various actions are exercised may still vary depending on specific shortage conditions, the ordering presented does reflect Metropolitan's anticipated order of actions during shortages.

RESOURCE MANAGEMENT FRAMEWORK

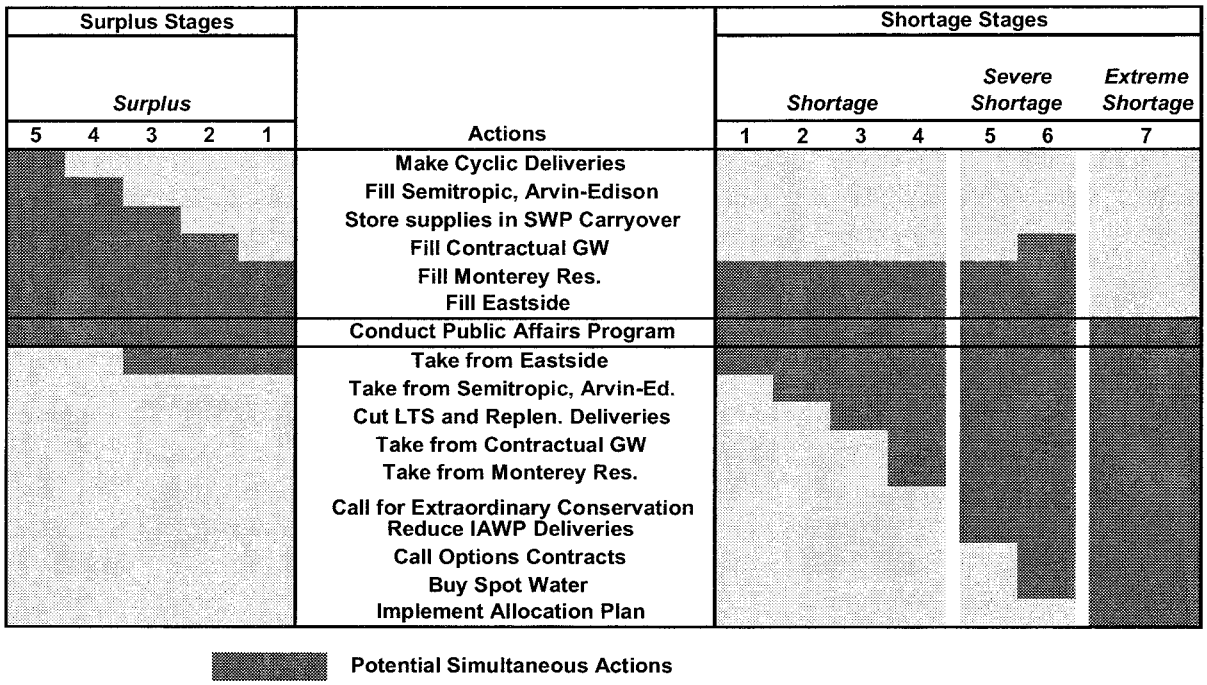
The analysis of surplus and shortage actions yields a water management framework that accounts for the degree or "stage" of surplus and shortage. These stages are defined by parameters such as storage levels and expected SWP supplies. Each stage has associated actions that could be taken as part of the response to prevailing shortage conditions. For example, Surplus Stage 1 might have as associated actions to place water in the highest-priority storage resources. Figure 8 shows the mapping between actions and stages. The darkly shaded diagonal area identifies actions that can be undertaken concurrently, while the lightly shaded areas show actions that will not be taken. For example, Metropolitan will not withdraw water from most storage resources during a surplus.

Figure 8 highlights several aspects of the WSDM Plan's approach to supply management. First and most importantly, it does not dictate a response to shortage or surplus. The framework recognizes the complexity and variety of conditions that could require various responses. Supporting this framework are general "rule curves" that dictate the extent to which particular actions are taken in various stages of surplus or shortage. For example, the rule curves indicate approximately how much water should be taken from the Eastside Reservoir Project before calling on supplies from the Semitropic or Arvin-Edison storage programs. If a shortage were greater than the desired initial withdrawal from the Eastside Reservoir Project, then Stage 2 actions would be taken. The rule curves for a particular resource would take into account shortage stage, monthly delivery requirements, and when various supplies are available.

Surplus and Shortage Stages are determined by the total amount of water that would be stored or produced by exercising the actions in that Stage. Overall storage levels in each stage are determined by the extent to which storage is increased or reduced by earlier actions. Therefore, each Stage is defined by supplies (stored or produced) and an approximate overall level of storage remaining in all resources. Up through Shortage Stage 4, the actions taken will not result in negative impacts to any consumptive uses. Shortage Stages 1 through 4 constitute shortage management without retail level impacts. The conservation efforts and reductions in IAWP deliveries in Shortage Stage 5 will result in retail impacts.

Action by the Metropolitan Board of Directors would be required before actions corresponding to Stages 5, 6, and 7.

Figure 8. Resource Stages and Actions Matrix



The Stages and Actions Matrix (Figure 8) is read from the center moving outward. Moving from the center to the left, are actions that Metropolitan will take during surplus conditions. For instance, in a Stage 3 Surplus, Metropolitan will be adding water to the Eastside Reservoir Project, the Monterey Reservoirs (if any water is due for repayment), Contractual Groundwater Programs, and carryover storage on the State Water Project. Moving from the center to the right are actions that Metropolitan will take during periods of shortage. For instance, in a Stage 3 Shortage, Metropolitan will be pulling water from the Eastside Reservoir Project, the Semitropic and Arvin Edison programs, and interrupting deliveries of Long-Term Seasonal and Replenishment program water. In addition, the Stages and Actions Matrix allows for surplus actions to be taken during shortages and vice versa, but these actions are strictly a result of prudent water management. For example, in a Stage 6 Shortage, Figure 8 shows Metropolitan potentially filling the Eastside Reservoir Project, the Monterey Reservoirs, and contractual groundwater programs while calling on spot transfers and buying spot water. Through these actions Metropolitan will be ensuring that water supply opportunities during a drought are realized--ultimately adding to the drought reserves of southern California.

Figure 8 also highlights the on-going efforts by Metropolitan and its member agencies in the conduct of public outreach and active conservation programs. Through all conditions, effective pubilc outreach and conservation programs are an integral part of Metropolitan's management of resources. In addition to ongoing conservation and water efficiency programs, Stage 5 of the Stages and Actions Matrix calls for participation of the citizens of southern California to take extraordinary conservation measures to cut water demand during droughts.

As with the listing of shortage actions earlier in the report, the Stages/Actions matrix in Figure 8 only highlights certain programs and response actions. However, unlike the discussion of actions earlier, Figure 8 is intended to convey Metropolitan's currently anticipated ordering for those actions listed. As the supply and demand outlooks, programs, and other factors continue to change, the analysis of the ordering of actions will continue during the ten-year period of the WSDM Plan.

SUPPLY CERTAINTY AND THE TIMING OF RESOURCE ACTIONS

One of the fundamental trade-offs in dealing with supply shortages is the need to maintain flexibility while providing supply certainty to member agencies and consumers. A central focus of the WSDM Plan is the analysis of information about supplies and demands. When do various pieces of information about the supply/demand balance become more certain? When should this information impact policy-making and trigger various resource actions? The WSDM Plan addresses these questions and the actual implementation of the Plan during a shortage.

Figure 9 shows a hypothetical shortage year. With respect to the supply and demand outlook, a typical shortage year will have periods of certainty and stability, and other periods of relative uncertainty and transition. Important supply components--such as the SWP, CRA, Los Angeles Aqueduct (LAA), and local supplies--are closely monitored through the early part of the year. These supplies and demands are fairly well-known through the April-September period. Storage is assessed in the post-summer period and decisions about certain programs, such as long-term (LT) seasonal deliveries could be made at this time.

Figure 9. Water Supply Outlook Throughout the Year

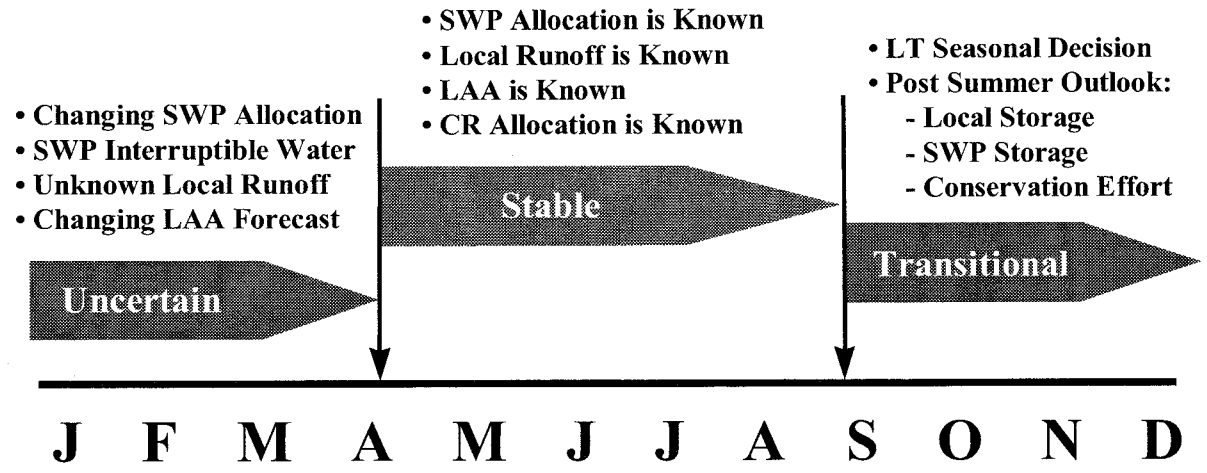
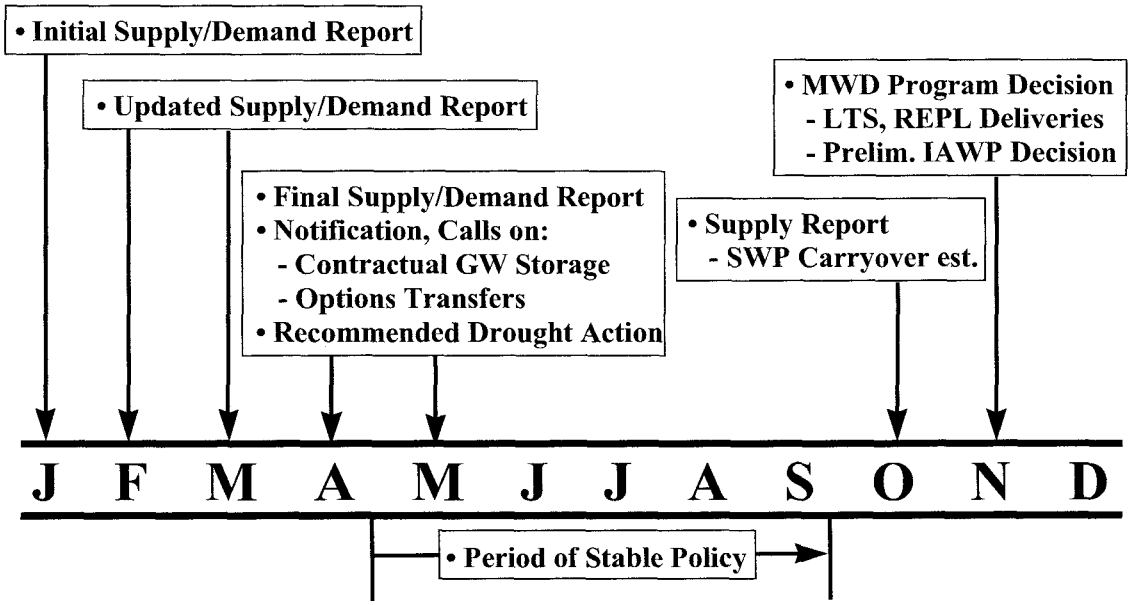


Figure 10 presents the annual schedule for actions taken in response to shortage conditions. Starting in January, an initial supply/demand report will be presented to the Metropolitan Board of Directors. SWP allocations are still only estimates in January and become more certain towards April and May. Demands for Metropolitan deliveries depend in part on how the winter hydrology develops and the condition of local supplies. These factors start to become known during the February-March period and will be reported to the Board in the Supply Report Update. By April-May, the outlook for imported supplies is known to a fairly high degree of certainty and a Final Supply Report will be produced. The May-September period will be one in which the import supply situation does not change drastically and drought policies can be implemented. Demands can be more or less than anticipated as a result of unusually hot or cool weather. At the end of summer, carryover SWP storage will be determined. October through December is a transitional period during which early assessments of available supplies for the following year will be made. During this period, Board actions would determine the management of various Metropolitan programs such as long-term seasonal (LTS) and IAWP deliveries. The following list presents major information and decision points during the year.

Month	Information/Action
January	Initial Supply/Demand Reports
February, March	Updated Supply/Demand Reports
April, May	Final Supply/Demand Report
	Notification on Contractual GW and Options Transfer Programs
	Recommended Drought Actions
May-September	Stable Policy Period
October	Supply and Carryover Storage Report
November	MWD Program Decisions - LT Seasonal, Replenishment, IAWP

Figure 10. One Year of a Hypothetical Shortage - Supply and Demand Reports and Response Actions



PUBLIC OUTREACH AND CONSERVATION

Mechanisms are already in place to implement most of the water management actions and programs that are addressed in the WSDM Plan. Under the majority of supply and demand conditions, the actions of Metropolitan's Board of Directors, the General Manager, the operational activities of Metropolitan, and its member agencies would constitute all actions necessary to mitigate the shortage. Several aspects of the WSDM Plan, however, require additional attention to the administration of programs and actions. In particular, a shortage contingency requires special programs in the areas of public and governmental affairs and conservation. Metropolitan maintains an on-going public information program to encourage efficient water use. Public outreach programs are conducted at all times under both surplus and shortage conditions (see Figure 8). The actions discussed in this section constitute special actions in times of shortage.

During shortage conditions, public outreach will play a critical role in shaping consumer response. Public information campaigns need to send clear signals if extraordinary drought conservation is to achieve needed reductions in demands. Given Metropolitan's diverse set of customers and the varying impacts that shortages can have on different consumer groups, an effective public information campaign will require a joint effort among Metropolitan and its member agencies. Under this Plan, the administration of the Public Information and Government Affairs programs will be the responsibility of a Drought Program Officer (DPO). The DPO will be responsible for integrating the various activities in these areas, coordinating efforts with Metropolitan's Board of Directors and member agencies, and designing the region-wide messages for the general public and various target audiences. Important constituencies that have been identified in the process are residential users, business interests, agricultural users, elected officials, officials of various agencies (such as the Department of Water Resources), and the media.

Many conservation programs, such as Metropolitan's ultra-low flush toilet rebate program, are driven by member agency requests. Based on history, Metropolitan expects member agency requests to increase during droughts. Metropolitan is committed to increasing overall conservation program funding to meet member agency requests during droughts and attain higher levels of savings. These programs will be implemented by Metropolitan and member and local agency conservation staff. As many of the short-term conservation objectives during a shortage would be dependent upon an effective public information program, the Drought Program Officer will also be responsible for monitoring the effectiveness of the augmented conservation programs. A monthly conservation reporting process will be implemented. Quarterly estimates of regional conservation will be developed to track the progress of various actions in mitigating the shortage.

APPENDIX A: RESOURCE AND STORAGE SIMULATION

The Water Surplus and Drought Management Plan (WSDM Plan) uses the Stages and Actions Matrix (Figure 8) as a guide for the operation of storage and transfers for the next ten years, 1999-2008**.** Metropolitan asserts that the investments that Metropolitan and its member agencies have made in water supply and storage, managed in a coordinated manner as presented in the WSDM Plan, will be sufficient to assure that retail firm water demands will be met 100% of the time through the year 2008. Metropolitan performed an extensive analysis of projected water demands, current and expected water supplies, along with hydrologic variations to support this assertion. Appendix A presents a summary of this analysis which includes statistical probabilities of actions under the WSDM Plan and two illustrative examples of how supply resources may be used in the future under worst-case drought events. Although the WSDM Plan is intended to be in effect through 2008, for the purposes of analysis the planning horizon was extended through 2010.

The WSDM Plan seeks to define the operational envelope for the Metropolitan system into the near future. Although the WSDM Plan only looks out ten years, it nonetheless involves the operation of some storage and water transfer projects that have not yet become fully operational. This makes the estimation of storage and transfers operations difficult. Compounding this problem is the lack of certainty around future demands, economic conditions, or even the weather over the next ten years. To manage these uncertainties, Metropolitan has developed a computer based simulation model called the Integrated Resources Planning Simulation Model or IRPSIM.

IRPSIM uses a modeling method known as sequentially indexed monte-carlo simulation. Simply put, the model looks at projected regional retail demand and supplies of water over the next twelve years and adjusts each, up or down, based on an assumed pattern of future weather. For instance, if Metropolitan expected the weather over the next twelve years (1999-2010) to be the same as the last twelve years (1987-1998), then IRPSIM would adjust the projected 1999 demands and supplies based on the historical 1987 hydrology, and adjust the projected 2000 demands and supplies using the historical 1988 hydrology, and so on. One obvious drawback to this approach is that Metropolitan does not know what future weather will be. Therefore, Metropolitan runs the models over and over again until all recorded hydrologies, 70 in all, have been tried. In this way, Metropolitan can look at probabilistic results of being in shortage year by year through 2010.

Although the projections of water supplies used in this analysis required certain assumptions to be made, they were based on most likely or probable outcomes. In most cases, projected water supplies represented projects that are currently operational, under construction, or in the final stages of negotiations. The following represents a summary of these assumptions:

- Local recycling and groundwater recovery: assumes currently operational projects with expected increases in supply yield as demand increases

- Conjunctive use groundwater storage: assumes Las Posas (under final stages of construction) and implementation of similar programs which are under negotiation (such as Raymond, Orange, and Chino Basins)

- Semitropic and Arvin-Edison storage: assumes use of both programs which are operational with water already stored

- Eastside Reservoir Project: assumes use of non-emergency storage from the reservoir currently under construction and an initial fill projected to start in approximately one year

- The Monterey Reservoirs: assumes use of State Water Project terminal reservoir supplies, Castaic and Perris Reservoirs, per the Monterey Amendment

- Colorado River Aqueduct: assumes a full aqueduct through the implementation of the California Plan (including lining of All American and Coachella canals, SD/IID water transfer/exchange, conjunctive use off-aqueduct storage, and river re-operations)

- State Water Project: assumes continuance of Bay-Delta Accord (with only current facilities)

One way of viewing the result of Metropolitan's WSDM Plan analyses is by summary statistics. Table A- 1 gives the probabilities of shortage actions over the next twelve years.

Table A-1. Probability of Shortage Stage[1] by Forecast Year

1999	13%	13%	11%	7%	3%	0%	O%
2000	13%	13%	11%	9%	3%	O%	0%
2001	19%	17%	13%	10%	6%	O%	0%
2002	19%	17%	13%	10%	4%	1%	0%
2003	19%	19%	14%	11%	4%	0%	0%
2004	20%	19%	16%	13%	4%	0%	0%
2005	21%	19%	17%	13%	6%	O%	O%
2006	21%	19%	19%	13%	6%	0%	0%
2007	23%	20%	19%	13%	4%	0%	0%
2008	26%	21%	19%	16%	6%	1%	0%
2009	26%	24%	19%	17%	6%	1%	0%
2010	26%	26%	19%	19%	6%	1%	O%

Table A-1 can be read in one of two ways, by column or row. The Stage 7 column indicates that there are no historical weather conditions that require allocation over the next twelve years. This is the single most important conclusion of the WSDM Plan analysis. The Stage 6 column indicates that only in a few years--2002, and 2008 through 2010--would Metropolitan need have a need for option or spot transfer water. Read by row, Table A-1 indicates that in the year 2008 there is a 21% likelihood of taking some water from the Eastside Reservoir Project, a 19% likelihood of taking water from Semitropic or Arvin-Edison storage programs, a 17% likelihood of interrupting long-term seasonal and replenishment deliveries for two years, and so on. It should be noted that these probabilities represent the best current estimates by Metropolitan, but are based entirely on historical weather conditions. Conditions that fall outside of historical ranges, either in duration or severity, are not represented by this data.

Another way to view the WSDM Plan analysis is by observing the operation of a single hydrology. Table A-2 provides an example of resource operations for the period 1999 through 2010 assuming a repeat of the 1923 through 1934 hydrology. The table provides descriptions of hydrologic conditions to aid in understanding the example.

[1] Stage 1 consists of withdrawal from the Eastside Reservoir Project. Stage 2 consists of the above plus withdrawals from the Semitropic and Arvin-Edison water storage and transfer projects. Stage 3 consists of the above plus an interruption of Long-Term Seasonal and Replenishment discount water. Stage 4 consists of the above plus withdrawal from contractual groundwater programs and the Monterey Reservoirs. Stage 5 consists of the above plus a call for extraordinary drought conservation and interruption in agricultural discount water. Stage 6 consists of the above plus calls on option contract water and purchases of water on the open market. Stage 7 consists of the above plus allocation of remaining shortages. For a full description of stages and action, see Surplus and Shortage Resource Actions section and Figure 8 above.

For instance, 1923 was considered to be a dry year in southern California (defined as less than 9 inches of rain at the Los Angeles Civic Center) and is categorized by the California Department of Water Resources (DWR) as a below normal year for State Water Project deliveries. In this example, 1923 weather increases southern California's demand for water and decreases imported State Water Project supplies. The Colorado River Aqueduct supplies are influenced by yet another hydrologic indicator, but for the next ten year Metropolitan expects the Aqueduct to be full.

Table A-2 indicates that retail water demands in 1999, assuming a 1923 hydrology, will be 3.979 million acre-feet (maf). Adding expected long-term seasonal and replenishment demands of 0.165 maf gives a regional total water demand of 4.144 maf. After subtracting local supplies of 2.192 maf, which are also adjusted for 1923 weather, Metropolitan expects to see a demand of 1.952 maf. In 1999, under a 1923 hydrology, Metropolitan expects to see 2.954 maf of supply. This is enough to meet all expected demands and put over 1.0 maf into storage.

The 1923 through 1934 hydrology is significant because it starts and ends dry with little recovery in the middle. However, even in these most adverse conditions the actions proposed by the WSDM Plan provides the region with enough water to avoid shortage allocation. Again the most important result of this example is read from the last line, which indicates that there are no remaining shortages through 2008

Table A-3 provides a second example of using the 1980 through 1991 hydrology. This hydrology contains the most significant drought in recent record, ending with a critically dry year on the State Water Project that is expected to yield a mere 0.389 maf. However, even under these conditions the WSDM Plan provides a method to avoid firm water allocation.

The analyses performed using the prioritized action of the Stages and Actions Matrix support Metropolitan's assertion that water supply reliability can be attained through the use of regional storage, interruption of discounted water supplies, and transfers. And, through the implementation of the WSDM Plan, Metropolitan does not expect to allocate firm water deliveries for at least the next ten years.

Table A-2. A Simulation of Water Supplies and Demands 1923-1934 Hydrology

Forecast Year	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Hydrology Year	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934
Hydrologic Conditions												
Southern California Year Type	Dry	Dry	Dry	Wet	Wet	Dry	Dry	Normal	Wet	Normal	Wet	Normal
Sacramento River Index D1630 Year Type	Below Normal	Critically Dry	Dry	Dry	Wet	Above Normal	Critically Dry	Dry	Critically Dry	Dry	Critically Dry	Critically Dry
Demands												
Retail Demand	3.979	4.152	4.149	4,018	4.005	**4.249**	4.237	4.223	4.280	4.280	4.407	4.500
Long-term/Replenishment Demand	0.165	0.182	0.226	0.188	0.149	0.176	0,213	0.203	0.164	0.175	0.141	0.163
Total Demand	4.144	4.334	4.375	4.205	4.154	4.425	4.450	4.426	4,443	4.455	4.548	4,663
Local Supplies												
Groundwater Production	1.529	1.545	1.537	1.288	1.299	1.575	**1.568**	1.434	1.307	1.439	1.318	1.454
L. A. Aqueduct Production	0.383	0,287	0.304	0.316	0.392	0.302	0,245	0.235	0.174	0,324	0.251	0.220
Recycling Production	0.152	0.162	0.174	0.186	0,197	0.207	0.217	0.230	0,242	0.254	0.266	0.277
Surface Production	0,128	0,089	0,076	0.116	0.154	0.147	0.108	0.094	0,133	0,136	0.151	0.145
Total Local Supply	2,192	2.084	2.091	1.905	2,043	2.231	2,139	1.993	1.856	2.153	1.986	2,097
Total MWD Demand	1.952	2.250	2,284	2,300	2.112	2.194	2.311	2.433	2.587	2.302	2.562	2.566
MWD Supply Sources												
Colorado River Aqueduct Supply	1.200	1.200	1.200	1.200	1.200	**1.200**	1.200	1.200	1.200	1.200	1.200	1.200
State Water Project Supply	1.754	0.812	0.783	1.280	1.678	1.438	0,764	1.163	0,589	0.843	0.559	0.620
MWD Cyclic Groundwater Deliveries	0.000	0.060	0.060	0.000	0.000	0,000	0.060	0,060	0.060	0.059	0.000	0.000
Eastside Reservoir	0.000	0.066	0.058	0.000	0.000	0.000	0,060	0.010	0.425	0.023	0.219	0.041
Arvin/Semitropic Groundwater Storage	0.000	0.111	0.115	0,000	0.000	0,000	0,119	0,000	0.115	0.117	0.059	0.041
Longterm Seasonal Demand Cuts	0.000	0,000	0,166	0.000	0.000	0.000	0.153	0.000	0.104	0,116	0.000	0.000
Cyclic Benefits	0.000	0.000	0.000	0.000	0.000	0.000	0,000	0,000	0,000	0,000	0.060	0.060
Contractual Groundwater Storage	0.000	0.000	0.000	0,000	0.000	0.000	0.000	0,000	0.095	0.000	0.095	0.084
DWR Reservoirs (Monterey Agreement)	0.000	0.000	0,000	0.000	0.000	0.000	0.000	0.000	0,000	0,000	0.131	0.088
Voluntary Conservation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0,000	0.000	0.206	0.210
MWD Ag Cuts	0.000	0.000	0.000	0.000	0.000	0,000	0.000	0.000	0.000	0.000	0.033	0.031
Central Valley Transfers	0.000	0.000	0,000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.193
Storage Puts	1.003	0.000	0.097	0.180	0.549	0.438	0.045	0.000	0,000	0.056	0.000	0.000
Remaining Shortage	0,000	0,000	0.000	0,000	0.000	0.000	0.000	0,000	0.000	0.000	0.000	0.000

Table A-3. A Simulation of Water Supplies and Demands 1980-1991 Hydrology

Forecast Year	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Hydrology Year	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934
Hydrologic Conditions												
Southern California Year Type	Wet	Normal	Normal	Wet	Dry	Dry	Wet	Normal	Normal	Dry	Dry	Normal
Sacramento River Index D1630 Year Type	Above Normal	Dry	Wet	Wet	Wet	Dry	Wet	Dry	Critically Dry	Dry	Critically Dry	Critically Dry
Demands												
Retail Demand	3.781	4.170	3.930	3.647	4.308	4.250	4.151	4.281	4.380	4.550	4.663	4.497
Lon£1-term/Replenishment Demand	0.105	0.141	0.171	0.101	0.136	0.187	0.183	0.201	0.191	0.219	0.224	0.214
Total Demand	3.886	4.311	4.101	3.748	4.444	4.437	4.334	4.483	4.572	4.769	4.887	4.712
Local Supplies												
Groundwater Production	1.292	**1.440**	**1.381**	1.248	1.546	1.565	1.275	1.413	1.438	1.588	1.600	1.446
L. A. Aqueduct Production	0.462	0.372	0.499	0.529	0.516	O.367	0.472	0.400	0.326	0.278	0.213	0.223
Recycling Production	0.152	0.162	0.174	0.186	0.197	0.207	0.217	0.230	0.242	0.254	0.266	0.277
Surface Production	0.225	0.175	0.154	0.194	0.195	0.151	0.115	0.116	0.115	0.081	0.068	0.081
Total Local Supply	2.131	2.149	2.208	2.156	2.455	2.290	2.081	2.159	2.122	2.200	2,146	2.027
Total MWD Demand	1.755	2.162	1.894	1.591	1.989	2.147	2.253	2.324	2.450	2.569	2.741	2.684
MWD Supply Sources												
Colorado River Aqueduct Supply	1.200	1.200	1.200	1,200	1.200	1.200	1.200	1.200	**1.200**	1.200	1.200	1.200
State Water Project Supply	1.561	1.441	1.725	1.886	1.643	1.590	1.441	1.292	0.611	1.285	0.877	0.389
MWD Cyclic Groundwater Deliveries	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.060	0.060	0.060	0.060
Eastside Reservoir	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.199	0.024	0.222	0.209
Arvin/Semitropic Groundwater Storage	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.115	0.000	0.122	0.104
Long-term Seasonal Demand Cuts	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.131	0.000	0.164	0.154
Cyclic Benefits	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Contractual Groundwater Storage	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.133	0.000	0.095	0.085
DWR Reservoirs (Monterey Agreement)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.216
Voluntary Conservation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.235
MWD Ag Cuts	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.032
Central Valley Transfers	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Storage Puts	1.006	0.260	0.344	0.240	0.200	0.200	0.388	0.168	0.000	0.000	0.000	0.000
Remaining Shortage	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Attachment B

Water Supply Allocation Plan

December 2014 Revision

Metropolitan Water District of Southern California

Inside cover: Photo courtesy of Cora Edmonds/ArtXchange for the Healing Planet

Water Supply Allocation Plan

Table of Contents

List of Tables and Figures

List of Acronyms

AF – Acre-feet
CUP – Groundwater Conjunctive Use Program
CWD – County Water District
DWP – Drought Management Plan
IAWP – Interim Agricultural Water Program Reductions and Rates
IICP – Incremental Interruption and Conservation Plan
IRP – Integrated Resources Plan
GPCD – Gallons per Capita per Day
M&I – Municipal and Industrial
MWD – Municipal Water District
RUWMP – Regional Urban Water Management Plan
SWP – State Water Project
WSAP – Water Supply Allocation Plan
WSDM – Water Surplus and Drought Management

Definitions

Extraordinary Supplies- Deliberate actions taken by member agencies to augment the total regional water supply only when Metropolitan is allocating supplies through the WSAP.

Groundwater Recovery- The extraction and treatment of groundwater making it usable for a variety of applications by removing high levels of chemicals and/or salts.

In-lieu deliveries- Metropolitan-supplied water bought to replace water that would otherwise be pumped from the groundwater basins.

Seawater Barrier- The injection of fresh water into wells along the coast to protect coastal groundwater basins from seawater intrusion. The injected fresh water acts like a wall, blocking seawater that would otherwise seep into groundwater basins as a result of pumping.

Section 1: Introduction

Calendar Year 2007 introduced a number of water supply challenges for the Metropolitan Water District of Southern California (Metropolitan) and its service area. Critically dry conditions affected all of Metropolitan's main supply sources. In addition, a ruling in the Federal Courts in August 2007 provided protective measures for the Delta Smelt in the Sacramento-San Joaquin River Delta which brought uncertainty about future pumping operations from the State Water Project. This uncertainty, along with the impacts of dry conditions, raised the possibility that Metropolitan would not have access to the supplies necessary to meet total firm demands[1] and would have to allocate shortages in supplies to the member agencies.[2]

In preparing for this possibility, Metropolitan staff worked jointly with the member agency managers and staff to develop a Water Supply Allocation Plan (WSAP). The WSAP includes the specific formulas for calculating member agency supply allocations and the key implementation elements needed for administering an allocation should a shortage be declared. The WSAP became the foundation for the urban water shortage contingency analysis required under Water Code Section 10632 and was incorporated into Metropolitan's 2010 Regional Urban Water Management Plan (RUWMP).

Section 2: Development Process

Member Agency Input

Between July 2007 and February 2008, Metropolitan staff worked cooperatively with the member agencies through a series of member agency manager meetings and workgroups to develop a formula and implementation plan to allocate supplies in case of shortage. These workgroups provided an arena for in-depth discussion of the objectives, mechanics, and policy aspects of the different parts of the WSAP. Metropolitan staff also met individually with fifteen member agencies for detailed discussions of the elements of the recommended proposal. Metropolitan introduced the elements of the proposal to many nonmember retail agencies in its service area by providing presentations and feedback to a number of member agency caucuses, working groups, and governing boards. The discussions, suggestions, and comments expressed by the member agencies during this process contributed significantly to the development of this WSAP.

Board of Directors Input

Throughout the development process Metropolitan's Board of Directors was provided with regular progress reports on the status of this WSAP, with oral reports in September, October, and December 2007, an Information Board of Directors Letter with a draft of the WSAP in November 2007, and a Board of Directors Report with staff recommendations in January 2008. Based on Water Planning and Stewardship Committee discussion of the staff recommendations and further review of the report by

[1] Firm demands are also referred to as uninterruptable demands; likewise non-firm demands are also called interruptible demands.

[2] See Appendix A: Metropolitan Member Agencies.

the member agencies, refinements were incorporated into the WSAP for final consideration and action in February 2008. The WSAP was adopted at the February 12, 2008 Board of Directors meeting.[3]

The 12-Month Review Process

When the Board adopted the WSAP in February 2008, the decision specified a formal revisit of the WSAP commencing in February 2010. The scheduled revisit was meant to ensure the opportunity for Metropolitan staff and the member agencies to re-evaluate the WSAP and recommend appropriate changes to the Board of Directors.

In April 2009, the Board voted to implement the WSAP for the first time. The WSAP was implemented at a Level 2 allocation level, and was in effect for the period of July 1, 2009, through June 30, 2010. Since implementation of the 2009/10 WSAP began in July 2009, a number of practical issues relating to the WSAP were identified by staff and the member agencies for further consideration during the 12-Month Review Process. Metropolitan staff engaged with the member agencies in a formal review of the WSAP from January through May 2010. During the review process the member agency managers participated in a series of six workshops. The focus of these workshops was to facilitate in-depth discussion on WSAP-related issues and lessons learned since the WSAP was implemented in July 2009. The proposed adjustments to the WSAP developed during the review process were adopted at the August 17, 2010 Board of Directors meeting[4].

The Three-Year Review Process

The Board action to adopt of the WSAP in February 2008 also directed staff to review the WSAP formula three years after the February 2008 adoption. February 2011 marked the three-year anniversary since the adoption of the WSAP. Similar to the 12-Month Review Process, the purpose of the Three-Year Review Process was to provide an opportunity for Metropolitan staff and the member agencies to re-evaluate the plan and recommend appropriate changes for board consideration.

Metropolitan staff met with the member agencies in a formal review of the WSAP from February through August 2011. Staff and member agency managers participated in a series of eleven workshops. Proposed adjustments to the WSAP developed during the process were adopted at the September 13, 2011 Board of Directors meeting.[5]

[3] A complete listing of member agency meetings and Board of Directors reporting activities is contained in Appendix B: Water Supply Allocation Plan Process Timeline.

[4] A complete listing of member agency meetings and Board of Directors reporting activities is contained in Appendix C: 12-Month Review Process and Results.

[5] A complete listing of member agency meetings and Board of Directors reporting activities is contained in Appendix D: Three-Year Review Process and Results.

2014 Review Process

In 2014, California was challenged with a third year of severe drought.[6] Metropolitan managed its operations through significant use of regional storage reserves. It was anticipated that end of year total dry storage reserves would approach levels similar to those when the WSAP was last implemented in 2009.

Following discussion at the June 2014 Water Planning and Stewardship Committee, Metropolitan staff convened a member agency working group to revisit the WSAP. The purpose of the working group was to collaborate with member agencies to identify potential revisions to the WSAP in preparation for mandatory supply allocations in 2015. There were eight working group meetings and three discussions at the monthly Member Agency Managers' Meetings.

The process focused on three areas of the WSAP: the Base Period, the Allocation Formula, and the Allocation enforcement mechanism. Proposed adjustments to the WSAP developed during the process were adopted at the December 9, 2014 Board of Directors meeting. [7]

[6] The Governor of California proclaimed a State of Emergency due to drought conditions on January 17, 2014 and, on April 24, 2014 issued an Executive Order proclaiming a continued State of Emergency noting drought conditions have persisted for the last three years and authorizing adoption and implementation of emergency regulations.

[7] A complete listing of member agency meetings and Board of Directors reporting activities is contained in Appendix E: 2014 Review Process and Results.

Section 3: Review of Historical Shortage Plans[8]

The WSAP incorporates key features and principles from the following historical shortage allocation plans but will supersede them as the primary and overarching decision tool for water shortage allocation.

Interruptible Water Service Program

As part of the new rate structure implemented in 1981, Metropolitan's Board of Directors adopted the Interruptible Water Service Program (Interruptible Program) which was designed to address short-term shortages of imported supplies. Under the Interruptible Program, Metropolitan delivered water for particular types of use to its member agencies at a discounted rate. In return for this discounted rate, Metropolitan reserved the right to interrupt delivery of this Interruptible Program water so that available supplies could be used to meet municipal and industrial demands.

Incremental Interruption and Conservation Plan

The ability to interrupt specific deliveries was an important element of Metropolitan's strategy for addressing shortage conditions when it adopted the Incremental Interruption and Conservation Plan (IICP) in December 1990. Reductions in IICP deliveries were used in concert with specific objectives for conservation savings to meet needs during shortages. The IICP reduced Interruptible Service deliveries in stages and provided a pricing incentive program to insure that reasonable conservation measures were implemented.

1995 Drought Management Plan

The 1995 Drought Management Plan (DMP) was a water management and allocation strategy designed to match supply and demand in the event that available imported water supplies were less than projected demands. Adopted by the Metropolitan Board of Directors in November 1994, the 1995 DMP was a short-term plan designed to provide for the 1995 calendar year only. The primary objective of the 1995 DMP was to identify methods to avoid implementation of mandatory reductions. The 1995 DMP included various phases and a step-by-step strategy for evaluating supply and demand conditions and utilizing Metropolitan's available options, with the final phase being implementation of the revised IICP.

1999 Water Surplus and Drought Management Plan

Metropolitan staff began work on the Water Surplus and Drought Management (WSDM) Plan in March 1997 as part of the Integrated Water Resources Plan (IRP), which was adopted by Metropolitan's Board of Directors in January 1996. The IRP established regional water resource targets, identifying the need for developing resource management policy to guide annual operations. The WSDM Plan defined Metropolitan's resource management policy by establishing priorities for the use of regional resources to achieve the region's reliability goal identified in the IRP. In April 1999, Metropolitan's Board of Directors adopted the WSDM Plan.

[8] A summary of the key elements in the following allocation plan is found in Appendix F: Summary of Historical Shortage Plans.

The WSDM Plan also included a set of principles and considerations for staff to address when developing specific allocation methods. The WSDM Plan stated the following guiding principle to be followed in developing any future allocation scheme:

> *"Metropolitan will encourage storage of water during periods of surplus and work jointly with its member agencies to minimize the impacts of water shortages on the region's retail consumers and economy during periods of shortage."*[9]

This principle reflects a central desire for allocation methods that are both equitable and minimize regional hardship to retail water consumers. The specific considerations postulated by the WSDM Plan to accomplish this principle include the following:[10]

- The impact on retail customers and the economy
- Allowance for population and growth
- Change and/or loss of local supply
- Reclamation/Recycling
- Conservation
- Investment in local resources
- Participation in Metropolitan's interruptible programs
- Investment in Metropolitan's facilities.

Section 4: Water Supply Allocation Formula

Based on the guiding principle and considerations described in the WSDM Plan, Metropolitan staff and the member agencies developed a specific formula for allocating water supplies in times of shortage. The formula seeks to balance the impacts of a shortage at the retail level while maintaining equity on the wholesale level, and takes into account growth, local investments, changes in supply conditions and the demand hardening[11] aspects of non-potable recycled water use and the implementation of conservation savings programs. The formula, described below, is calculated in three steps: base period calculations, allocation year calculations, and supply allocation calculations.[12] The first two steps involve standard computations, while the third section contains specific methodology developed for this WSAP.

Base Period Calculations

The first step in calculating a water supply allocation is to estimate water supply and demand using a historical base period with established water supply and delivery data. The base period for each of the different categories of demand and supply is calculated using data from the fiscal years (July through June) ending 2013 and 2014.[13]

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[9] WSDM Plan, p. 1. Emphasis added.
[10] WSDM Plan, p. 2.
[11] Demand hardening is the effect that occurs when all low-cost methods of decreasing overall water demand have been applied (e.g., low-flow toilets, water recycling) and the remaining options to further decrease demand become increasingly expensive and difficult to implement.
[12] Detailed operational elements of these objectives and a numerical example are discussed in Appendix G: Water Supply Allocation Formula Example.
[13] Exceptions to this methodology are noted in the descriptions of base period calculations.

Base Period Local Supplies: Local supplies for the base period are calculated using a two-year average of groundwater production, groundwater recovery, Los Angeles Aqueduct supply, surface water production, and other imported supplies. Non-potable recycling production is not included in this calculation due to its demand hardening effect.

Base Period Wholesale Demands: Demands on Metropolitan for the base period are calculated using a two-year average of firm purchases and in-lieu deliveries to long-term groundwater replenishment, conjunctive use, cyclic, and supplemental storage programs.

Base Period Retail Demands: Total retail-level municipal and industrial (M&I) demands for the base period are calculated by adding the Base Period Wholesale Demands and the Base Period Local Supplies. This estimates an average total demand for water from each agency.

Base Period Mandatory Conservation Credit: Metropolitan allows a consultation process that enables member agencies to describe mandatory water use restrictions and/or rationing restrictions that were in place within their service areas during the Base Period. Restrictions may vary among agencies but include restricted water uses, fines, and water budget or penalty based rate structures that are enacted by the governing body of the member agency or retail agency. Following the consultation process, Metropolitan staff will recommend adjustments based on evidence of reduced GPCD. To qualify for an adjustment, GPCD reductions would have to be observed that are beyond those expected from the agency's ongoing conservation efforts and trends.

Allocation Year Calculations

The next step in calculating the water supply allocation is estimating water needs in the allocation year. This is done by adjusting the base period estimates of retail demand for population or economic growth and changes in local supplies.

Allocation Year Retail Demands: Total retail M&I demands for the allocation year are calculated by adjusting the Base Period Retail Demands for baseline inflation and growth.

Baseline Inflation Adjustment: Baseline inflation occurs when non-potable recycling or conservation is developed after the Base Period. The development of these supplies reduces actual demands for water in the Allocation Year. Because non-potable-recycling and conservation are excluded from the WSAP formula, the actual need for water in the Allocation year is overestimated. The Baseline Inflation Adjustment removes increases in non-potable recycling and conservation annually from the Base Period forward to better reflect the true need for water in the Allocation Year.

Growth Adjustment: The growth adjustment is calculated using the estimated actual annual rate of population growth at the county level, as generated by the California Department of Finance, whenever possible. For years without complete data, the growth rate is calculated using an average of the three most recent years available. Growth will be allocated based on historical per capita water use during the Base Period, with a cap equal to Metropolitan's IRP Target for Water Use Efficiency. For

allocation years up to and including 2014, the cap will be 163 GPCD, and for allocation years 2015-2020 the cap will reduce linearly from 163 to 145 GPCD. On an appeals basis, member agencies may request that their adjustment be calculated using member agency level population growth. A weighted combination of actual population and actual employment growth rates may also be requested.

Allocation Year Local Supplies: Allocation Year Local Supplies include groundwater production, groundwater recovery, Los Angeles Aqueduct supply, surface water production, seawater desalination, and other imported supplies. Estimates of Allocation Year Local Supplies are provided by the member agencies upon implementation of a WSAP. If estimates are not provided, Metropolitan will use the sum of the Base Period Local Supplies and Base Period In-Lieu Deliveries as a default. Agencies may provide updated estimates at any time during the Allocation Year to more accurately reflect their demand for Metropolitan supplies.

Extraordinary Supplies: Under the WSAP formula, local supply production in the Allocation Year can either be designated as a "planned" supply, or as an "extraordinary" supply.[14] This is an important designation for a member agency because the two types of supplies are accounted for differently in the WSAP formula. Local supplies classified at Extraordinary Supply are only partially included (scaled depending on the WSAP Level) as local supplies. This has the effect of providing significantly more benefit to the member agency in terms of total water supply that is available to the retail customer.[15]

Allocation Year Wholesale Demands: Demands on Metropolitan for the allocation year are calculated by subtracting the Allocation Year Local Supplies from the Allocation Year Retail Demands.

Water Supply Allocation Calculations

The final step is calculating the water supply allocation for each member agency based on the allocation year water needs identified in Step 2. The following table displays the elements that form the basis for calculating the supply allocation. Each element and its application in the allocation formula are discussed below.

Table 1: Shortage Allocation Index

(a) Regional Shortage Level	(b) Wholesale Minimum Percentage	(c) Maximum Retail Impact Adjustment Percentage
1	92.5%	2.5%
2	85.0%	5.0%
3	77.5%	7.5%
4	70.0%	10.0%

[14] Appendix H: Board Policy Principles on Determining the Status of Extraordinary Supply lists the key Board principles used in determining if a supply qualifies as an Extraordinary Supply.

[15] See Appendix G: Water Supply Allocation Formula Example for specific allocation formulae.

5	62.5%	12.5%
6	55.0%	15.0%
7	47.5%	17.5%
8	40.0%	20.0%
9	32.5%	22.5%
10	25.0%	25.0%

Regional Shortage Level: The WSAP formula allocates shortages of Metropolitan supplies over ten levels.

Wholesale Minimum Allocation: The Wholesale Minimum Allocation ensures a minimum level of Metropolitan supplied wholesale water service to each member agency.

Maximum Retail Impact Adjustment: The purpose of this adjustment is to ensure that agencies with a high level of dependence on Metropolitan do not experience disparate shortages at the retail level compared to other agencies when faced with a reduction in wholesale water supplies. The Maximum Retail Impact Percentage is prorated on a linear scale based on each member agency's dependence on Metropolitan at the retail level. This percentage is then multiplied by the agency's Allocation Year Wholesale Demand to determine an additional allocation.

Conservation Demand Hardening Credit: The Conservation Demand Hardening Credit addresses the increased difficulty in achieving additional water savings at the retail level that comes as a result of successful implementation of water conserving devices and conservation savings programs. To estimate conservation savings, each member agency will establish a historical baseline Gallons Per Person Per Day (GPCD) calculated in a manner consistent with California Senate Bill SBx7-7.[16] Reductions from the baseline GPCD to the Allocation Year are used to calculate the equivalent conservation savings in acre-feet. The Conservation Demand Hardening Credit is based on an initial 10 percent of the GPCD-based Conservation savings plus an additional 5 percent for each level of Regional Shortage set by the Board during implementation of the WSAP. The credit will also be adjusted for:

- The overall percentage reduction in retail water demand
- The member agency's dependence on Metropolitan

The credit is calculated using the following formula:

Conservation Demand Harding Credit = Conservation Savings x (10% + Regional Shortage Level Percentage) x (1 +((Baseline GPCD – Allocation Year GPCD)/Baseline GCPD)) x Dependence on MWD Percentage

[16] California Department of Water Resources, February 2011, "Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use. Available at: http://www.water.ca.gov/wateruseefficiency/sb7/docs/MethodologiesCalculatingBaseline_Final_03_01_2011.pdf

This provides a base demand hardening credit equal to 10 percent of conservation savings and increases the credit as deeper shortages occur, which is when conservation demand hardening has a bigger impact on the retail consumer. The credit also increases based on the percentage of an agency's demand that was reduced through conservation. This accounts for increased hardening that occurs as increasing amounts of conservation are implemented. Lastly, the credit is scaled to the member agency's dependence on Metropolitan to ensure that credits are being applied to the proportion of water demand that is being affected by reductions in Metropolitan supply.

Minimum Per-Capita Water Use Credit: This adjustment creates a minimum per capita water use threshold. Member agencies' retail-level water use is compared to two different thresholds. The proposed minimum thresholds are based upon compliance guidelines established under Senate Bill X7-7.

- 100 GPCD total water use
- 55 GPCD residential water use

Agencies that fall below either threshold under the WSAP will receive additional allocation from Metropolitan to bring them up to the minimum GPCD water use level. If an agency qualifies under both thresholds, the one resulting in the maximum allocation adjustment will be given.[17] To qualify for this credit, member agencies must provide documentation of the total agency level population and the percent of retail level demands that are residential; no appeal is necessary.

Total WSAP Allocation: The allocation to an agency for its M&I retail demand is the sum of the Wholesale Minimum Allocation, the Retail Impact Adjustment, the Conservation Demand Hardening Credit, and the Minimum Per-Capita Water Use Credit.[18]

Total Metropolitan Supply Allocations: In addition to the WSAP Allocation described above, agencies may also receive separate allocations of supplies for and seawater barrier and groundwater replenishment demands. Allocations of supplies to meet seawater barrier demands are to be determined by the Board of Directors independently but in conjunction with the WSAP. Separating the seawater barrier allocation from the WSAP allocation allows the Board to consider actual barrier requirements in the Allocation Year and address the demand hardening issues associated with cutting seawater barrier deliveries. According to the principles outlined for allocating seawater barrier demands, allocations should be no deeper than the WSAP Wholesale Minimum Percentage implemented at that time.

The WSAP also provides a limited allocation for drought-impacted groundwater basins based on the following framework:[19]

[17] See Appendix J: Per Capita Water Use Minimum Example for specific minimum per-capita water use credit formulae and example.
[18] See Appendix G: Water Supply Allocation Formula Example for specific allocation formulae.
[19] See Appendix L: Groundwater Replenishment Allocation for more information.

1. Metropolitan staff will hold a consultation with the requesting member agency and the appropriate groundwater basin manager to document whether the basin is in one of the following conditions:
    a. Groundwater basin overdraft conditions that will result in water levels being outside normal operating ranges during the WSAP allocation period; or
    b. Violations of groundwater basin water quality and/or regulatory parameters that would occur without imported deliveries
2. An allocation is provided based on the verified need for groundwater replenishment. The allocation would start with a member agency's ten-year average purchases of imported groundwater replenishment supplies (excluding years in which deliveries were curtailed). The amount would then be reduced by the declared WSAP Regional Shortage Level.

Section 5: WSAP Implementation

The WSAP will take effect if a regional shortage is declared by the Board of Directors. The following implementation elements are necessary for administering the WSAP during a time of shortage. These elements cover the processes needed to declare a regional shortage level as well as provide information pertaining to the allocation surcharge.

Allocation Period

The allocation period covers twelve consecutive months, from July of a given year through the following June. This period was selected to minimize the impacts of varying State Water Project (SWP) allocations and to provide member agencies with sufficient time to implement their outreach strategies and rate modifications.

Setting the Regional Shortage Level

Metropolitan staff is responsible for recommending a Regional Shortage Level for the Board of Directors' consideration. The recommendation shall be based on water supply availability, and the implementation of Metropolitan's water management actions as outlined in the WSDM Plan. Metropolitan staff will keep the Board of Directors apprised to the status of water supply conditions and management actions through monthly reports to the Water Planning and Stewardship Committee. To further facilitate staff in the development of a recommended regional shortage level, member agency requests for local supply adjustments shall be submitted by April 1st.

Metropolitan's Board of Directors, through the Water Planning and Stewardship Committee, is responsible for approving the final Regional Shortage Level at its April meeting. By the April meeting, the majority of the winter snowfall accumulation period will have passed and will allow staff to make an allocation based on more stable water supply estimates. Barring unforeseen large-scale circumstances, the Regional Shortage Level will be set for the entire allocation period, which will provide the member agencies an established water supply level for their planning.

Exit Strategy

While the Board ultimately has discretion to implement or lift and allocation at any point of time during the year; the WSAP includes a two-part exit strategy that is meant to streamline the WSAP implementation decision making process.

- If the Board decides to implement the WSAP, then any current WSAP allocation would remain in place until the end of the Allocation Year.
- If the Board decides not to implement the WSAP, then any current WSAP allocation would be terminated concurrent with the Board decision.

Allocation Appeals Process

An appeals process is necessary for the administration of any changes or corrections to an agency's allocation. Metropolitan's General Manager will designate, subsequent to a declaration of an allocation by the Board of Directors, an Appeals Liaison as the official point of contact for all information and inquiries regarding appeals. All member agency General Managers will be notified in writing of the name and contact information of the Appeals Liaison. Only appeals that are made through the Appeals Liaison and in accordance with the provisions outlined in Appendix N: Allocation Appeals Process will be evaluated. Basis for appeals claims can include but are not limited to:

- Adjusting erroneous historical data used in base period calculations
- Adjusting for population growth rates
- Determining if a local supply qualifies as Extraordinary Supply

Additional details and a checklist for the appeals process are available in Appendix N: Allocation Appeals Process and Appendix O: Appeals Submittal Checklist.

Allocation Surcharge

Member agency allocations are supported by an Allocation Surcharge. The Allocation Surcharge is charged to water use above the Member Agency allocation and is charged in addition to Metropolitan's standard rates for water service. Allocation Surcharges will only be assessed to the extent that an agency's total annual usage exceeds its total annual allocation. Any revenues collected through the Allocation Surcharge will be applied towards Metropolitan's Water Management Fund, which is used to in part to fund expenditures in dry-year conservation. No billing or assessment of allocation surcharges rates will take place until the end of the twelve-month allocation period.

Allocation Surcharge: The application of the Allocation Surcharge structure is a two tier structure that provides a lower level of Allocation Surcharge for minor overuse of allocations and a higher level of Allocation Surcharge for major overuse of allocations. The structure and applicable Allocation Surcharges are listed in Table 2.

Table 2: Allocation Surcharge			
Water Use	**Base Water Rate[20]**	**Allocation Surcharge[21]**	**Total Rate**
100% of Allocation	Tier 1	0	Tier 1
Between 100% and 115%	Tier 1	$1,480	Tier 1 + ($1,480)
Greater than 115%	Tier 1	$2,960	Tier 1 + ($2,960)

Qualifying Income-Based Rate Allocation Surcharge Adjustment:[22] Any Allocation Surcharges incurred by a member agency under the WSAP will be adjusted to reflect the extent to which retail customers within a member agency's service area are served under a "lifeline" or similar qualified discounted rate program based on income or ability to pay ("Income-Based Rate").

Any member agency who is assessed Allocation Surcharges under the WSAP may submit an acre-foot equivalent of water used by retail customers served under a qualifying Income-Based Rate.[23] This amount of water use would be multiplied by the percentage of retail-level reduction in allocation year demand necessary for that member agency to avoid exceeding its WSAP allocation. The monetary amounts resulting from these acre feet are subtracted from the total monetary amounts incurred by an agency for exceeding its allocation. In the case that the monetary amounts associated with the Income-Based Rate are greater than the total Allocation Surcharges an agency incurs, no Allocation Surcharges will be incurred. The end result of this adjustment is that the member agency will not be subject to Allocation Surcharges for the use of water by their retail customers served under a qualifying Income-Based Rate.

Growth Rate Allocation Surcharge Adjustment": In recognition of member agency differences in geography and climate, a Growth Rate Allocation Surcharge Adjustment will be given to any agency that exceeds its WSAP Allocation. The Allocation Surcharge reduction will be based on the difference in acre-feet between the Growth Adjustment applied at Metropolitan's IRP planning goal rate, and the greater of the following:

- The IRP planning goal rate adjusted for the member agency's ETo, or
- The member agency's certified and documented 20x2020 targeted GPCD

If both of these alternatives result in a lower growth adjustment than the IRP planning goal, no Allocation Surcharge reduction will be made.

[20] The base water rate shall be the applicable water rate for the water being purchased. In most cases, it will be the Tier 1 rate (plus Treatment Surcharge for treated water deliveries). However, it is possible that the water being purchased would be in the amount that would put an agency beyond its Tier 1 limit. In that case, the base water rate will be the Tier 2 rate (plus Treatment Surcharge for treated water deliveries).

[21] Allocation Surcharge is applied to water use in excess of an agency's WSAP allocation.

[22] See Appendix K: Qualifying Income-Based Rate Allocation Surcharge Adjustment Example for specific penalty adjustment formulae and example.

[23] Appropriate documentation and certification will be required.

Tracking and Reporting

Subsequent to a declared regional shortage by the Board of Directors, Metropolitan staff will produce monthly reports of each member agency's water use compared to its allocations based on monthly delivery patterns to be submitted by the member agency. In order to produce these reports, member agencies are requested to submit their local supply use on a monthly basis and certify end of allocation year local supply use. These reports and comparisons are to be used for the purposes of tracking and communicating potential underage/overage of an agency's annual allocations.

Key Dates for Water Supply Allocation Implementation

The timeline for implementation of an allocation is shown in Table 3. A brief description of this timeline follows:

January to March: Water Surplus and Drought Management reporting occurs at Metropolitan's Water Planning and Stewardship Committee meetings. These reports will provide updated information on storage reserve levels and projected supply and demand conditions.

April: Member agencies report their projected local supplies for the coming allocation year. This information is incorporated in staff analysis of storage reserves and projected supply and demand conditions in order to provide an allocation recommendation to the Board. Metropolitan's Board will consider whether an allocation is needed. A declaration of an allocation will include the level of allocation to be in effect for the allocation year. Likewise, member agencies will report their projected demands and local supplies needed to meet seawater barrier and groundwater replenishment requirements for the allocation year. Metropolitan's Board will consider whether allocations for seawater barrier demands and groundwater replenishment demands are needed independently from the WSAP allocation decision.**July 1st**: If the Board declared an allocation in April, then it will be effective starting July 1st. The allocation level will be held through June 30th, barring unforeseen circumstances. Member agencies will now be requested to submit their local supply use on a monthly basis and certify end of allocation year local supply use. Local production data must be reported to Metropolitan by the end of the month following the month of use (use in July must be reported by the end of August). This information will be combined with Metropolitan sales information in order to track retail water use throughout Metropolitan's service area. Each month Metropolitan will report on member agency water sales compared to their allocation amounts.

June 30th: The allocation year is complete.

July: Member agency local supplies must be certified for the month of June, the last month of the previous allocation year.

August: Metropolitan will calculate each member agency's total potable water use based on local supply certifications and actual sales data for the allocation year of July through June. Allocation surcharges will be assessed for usage above a given member agency's final adjusted allocation (reflecting the actual local supply and imported water use that occurred in the allocation year).

Table 3: Board Adopted Allocation Timeline					
Year	**Month**	**Year 1 Board Decision**	**Year 1 Allocation Year**	**Year 2 Board Decision**	**Year 2 Allocation Year**
Year 1	January				
	February				
	March				
	April	Declaration *			
	May				
	June				
	July		**Effective Period** Continuous Tracking of Member Agency Local Supply and Imported Water Use		
	August				
	September				
	October				
	November				
	December				
Year 2	January				
	February				
	March				
	April			Declaration *	
	May				
	June				
	July				**Effective Period** Continuous Tracking of Member Agency Local Supply and Imported Water Use
	August		Assess		
	September				
	October				
	November				
	December				
Year 3	January				
	February				
	March				
	April				
	May				
	June				

*Member agency projections of local supplies are due on April 1st to assist Metropolitan staff in determining the need for an allocation in the coming allocation year.

Appendix A: Metropolitan Member Agencies

Table 4: Member Agencies		
City of Anaheim	City of Glendale	City of San Marino
City of Beverly Hills	Inland Empire Utilities Agency	City of Santa Ana
City of Burbank	Las Virgenes MWD	City of Santa Monica
Calleguas MWD	City of Long Beach	Three Valleys MWD
Central Basin MWD	City of Los Angeles	City of Torrance
City of Compton	MWD of Orange County	Upper San Gabriel MWD
Eastern MWD	City of Pasadena	West Basin MWD
Foothill MWD	San Diego CWA	Western MWD
City of Fullerton	City of San Fernando	

Source: http://mwdh2o.com/WhoWeAre/Member-Agencies/

Appendix B: Water Supply Allocation Plan Process Timeline

July 2007

- City of Long Beach Water Department staff briefing
- Member Agency Managers/Member Agency Workgroup meeting
- Northern Managers Group meeting
    - Foothill MWD, City of Pasadena, City of Long Beach, Calleguas MWD, City of Los Angeles, West Basin MWD, City of Burbank, Three Valleys MWD, City of Glendale, Upper San Gabriel MWD

August 2007

- Central Basin MWD staff briefing
- Eastern MWD staff briefing
- San Diego CWA staff briefing
- Member Agency Managers/Member Agency Workgroup meeting
- Western MWD staff briefing
- City of Beverly Hills staff briefing

September 2007

- Member Agency Subgroup meetings
    - MWD of Orange County, San Diego CWA, West Basin MWD, Central Basin MWD
- MWD of Orange County staff briefing
- Member Agency Workgroup meeting
- Member Agency Workgroup meeting
- MWD Board of Directors Oral Report

October 2007

- Inland Empire Utilities Agency staff briefing
- Central Basin MWD Caucus Meeting (included sub-agencies)
- Three Valleys MWD staff briefing
- MWD of Orange County staff briefing
- West Basin MWD staff briefing
- MWD Board of Directors Oral Report

November 2007

- West Basin MWD Caucus Meeting (included sub-agencies)
- West Basin Water Users Association presentation
- Walnut Valley MWD staff briefing (sub-agency of Three Valleys MWD)
- Foothill MWD Managers Meeting (included sub-agencies)
- Central Basin MWD staff briefing
- City of Claremont City Council (sub-agency of Three Valleys MWD)
- MWD Board of Directors Information Letter with Draft Proposal

December 2007

- Northern Managers Group Meeting
- California Department of Public Health staff briefing
- City of Long Beach Water Department staff briefing
- Santa Ana River Watershed Project Authority presentation
- Foothill MWD Managers Meeting (included sub-agencies)
- MWD Board of Directors Oral Report

January 2008

- Northern Managers Group Meeting
- Water Replenishment District Board of Directors presentation
- Three Valleys MWD staff briefing
- Member Agency Conservation Coordinator's Group presentation
- Member Agency Managers/Member Agency Workgroup meeting
- City of Chino Hills presentation (sub-agency of IEUA)
- Member Agency Workgroup meeting
- Hemet/San Jacinto Exchange Club presentation
- MWD Board of Directors Report with Staff Recommended Water Supply Allocation Plan

February 2008

- MWD of Orange County and Irvine Ranch WD staff briefing
- MWD Board of Directors Action Item
- San Gabriel Valley Water Association Meeting
- Orange County Water Policy Meeting
- SCAG Water Policy Task Force Meeting

Appendix C: 12-Month Review Process and Results

January 2010

- WSAP 12-Month Review Process workshop #1
    - Focused discussion of WSAP issues identified by Metropolitan staff and by member agencies since the July 2009 implementation began.

February 2010

- WSAP 12-Month Review Process workshop #2
    - Continuation of focused discussion
- WSAP 12-Month Review Process workshop #3
    - Continuation of focused discussion

March 2010

- WSAP 12-Month Review Process workshop #4
    - Continuation of focused discussion
- MWD Board of Directors information item
    - Review of potential modifications to the WSAP definition of Extraordinary Supply

April 2010

- WSAP 12-Month Review Process workshop #5
    - Recap of identified issues and discussion of Metropolitan staff proposals for adjustments to the WSAP
- Member Agency Managers Meeting
    - Update on the 12-Month Review Process
- WSAP 12-Month Review Process workshop #6
    - Discussion of WSAP issues related to groundwater replenishment
- Member Agency Managers conference call
    - Clarification of WSAP definition for Extraordinary Supply

May 2010

- Member Agency Managers Meeting
    - Discussion of proposed Extraordinary Supply policy principles and WSAP Local Supply certification process.
- Member Agency Managers conference call
    - Discussion of proposed Extraordinary Supply policy principles

June 2010

- MWD Board of Directors action item

July 2010

- MWD Board of Directors information item
    - Review of proposed adjustments to the WSAP developed in the 12-Month Review Process

August 2010

- MWD Board of Directors action item

Resulting Changes

- Removed references to Gains and Losses of Local Supply
    - Removed references in the WSAP to "gains and losses of local supplies" in order to better facilitate the accounting of historical base year and allocation year local supplies. This change did not affect the WSAP formula or allocations.
- Removed references to the Regional Shortage Percentage
    - Removed references to the "Regional Shortage Percentage" in the WSAP to reduce unintended confusion between calculation factors and shortage amounts. This change did not affect the WSAP formula or allocations.
- Included the Retail Impact Adjustment in all shortage levels
    - Included the Retail Impact Adjustment for Regional Shortage Levels 1 and 2. This change results in additional allocations to Metropolitan-dependent agencies under Level 1 and Level 2 regional shortages.
- Revised the accounting of Extraordinary Supplies
    - Revised the methodology for accounting of Extraordinary Supply in the WSAP formula by:
        - Removing the Base Period Local Supply threshold provision,
        - Removing the sliding-scale sharing mechanism from the formula, and
        - Including the full amount of the Extraordinary Supply in the calculation of the Retail Impact Adjustment.
- Included a Minimum Per Capita Water Use Threshold
    - Developed a minimum water use credit based on two GPCD water use thresholds. Member agencies would receive additional Metropolitan allocation for an acre-foot equivalent of GPCD below the minimum threshold. Member agency water use, on a gallon per capita per day (GPCD) basis, is compared to the following minimum thresholds established under Senate Bill X7-7 (Water Conservation Act of 2009)
        - 100 GPCD total use or
        - 55 GPCD residential indoor use
- Excluded Seawater Barrier from the WSAP Formula
    - Excluded seawater barrier supplies from the WSAP Base Period and Allocation Year local supply calculations. This allows the Board to determine allocations for seawater barrier demands separately from the WSAP.

Appendix D: Three-Year Review Process and Results

February 2011

- WSAP 3-Year Review Process workshop #1
    - Review of the existing WSAP policy formula; review of the process timeline; and focused discussion of WSAP issues identified by Metropolitan staff and by member agencies since the WSAP's adoption in February 2008

March 2011

- WSAP 3-Year Review Process workshop #2
    - Discussion of issues related to local supplies and baseline inflation due to adjustments for recycling in the WSAP formula
- WSAP 3-Year Review Process workshop #3
    - Continuation of prior workshop

April 2011

- WSAP 3-Year Review Process workshop #4
    - Discussion of issues and alternatives related to base period selection and baseline inflation in the WSAP formula
- WSAP 3-Year Review Process workshop #5
    - Discussion of recommendations to address baseline inflation in the WSAP formula

May 2011

- WSAP 3-Year Review Process workshop #6
    - Discussion of issues and alternatives for the growth adjustment methodology in the WSAP formula
- WSAP 3-Year Review Process workshop #7
    - Continuation of prior workshop

June 2011

- WSAP 3-Year Review Process workshop #8
    - Continuation of prior workshop, discussion of WSAP implementation exit strategy
- WSAP 3-Year Review Process workshop #9
    - Continuation of exit strategy discussion, discussion of baseline inflation due to conservation and related conservation demand hardening issues

July 2011

- WSAP 3-Year Review Process workshop #9
    - Continued discussion of baseline inflation and conservation issues, and discussion of sharing allocations between agencies with common local resources

August 2011

- WSAP 3-Year Review Process workshop #10
    - Discussion of WSAP Allocation Year timing vs. Tier 1-Tier 2 rate cycle timing, discussion of approaches for encouraging completion of WSAP local supply certifications
- Review WSAP at Member Agency Managers Meeting
    - Discussion of proposed WSAP adjustments to address baseline inflation issues, revise the growth adjustment methodology, and establish a WSAP exit strategy

September 2011

- MWD Board of Directors action item

Resulting Changes

- Baseline Inflation Adjustment
    - Removed non-potable recycling and conservation from the WSAP baseline
        - Increases in recycling and conservation will be subtracted annually from the Base Period forward
        - The annual population growth rate will be applied after deducting the annual increases in recycling and conservation
        - If an agency ends up in allocation penalty, a penalty reduction will be applied in an amount equal to the Code-Based and rate Structure conservation savings that were removed from the WSAP baseline
- Changed the Growth Adjustment methodology
    - Growth will be allocated at historical per capita rate capped at the 2010 Integrated Water Resource Plan (IRP) Target for Water Use Efficiency
        - For years up to and including 2014, the cap will be 163 GPCD
        - For years 2015-2020, the cap will reduce linearly from 163 to 145 GPCD
    - If an agency exceeds its allocation, a penalty reduction will be applied based on either:
        - The differential Evapotranspiration (ETo) of its service area compared to the MWD average, or
        - Certified and documented 20 x 2020 targeted GPCD
- Exit Strategy
    - Clarified the course of action for an existing WSAP allocation when Metropolitan's Board makes a declaration decision for the following WSAP year
        - If there is an allocation for the next year, then the current allocation stays in place
        - If there is no allocation for the next year, then the current allocation is lifted concurrent with the April decision

Appendix E: 2014 Review Process and Results

July 2014

- WSAP Workgroup Meeting #1
  - First meeting of the 2014 WSAP Review process; review of the existing WSAP policy and formula; review of the process timeline; began discussion of issues related to base period selection
- WSAP Workgroup Meeting #2
  - Discussion of base period selection

August 2014

- WSAP Workgroup Meeting #3
  - Continuation of prior workshop discussion; comparison of base period alternatives

September 2014

- WSAP Workgroup Meeting #4
  - Discussion of a base period proposal; discussion of replenishment issues in the WSAP; discussion of 2015 water supply scenarios
- Review WSAP at Member Agency Managers Meeting
  - Review of WSAP workgroup process; discussion on issues related to base period, demand hardening, and local resources development
- WSAP Workgroup Meeting #5
  - Review of base period recommendation; discussion of issues regarding agencies in mandatory conservation during a base period; discussion on replenishment in the WSAP

October 2014

- WSAP Workgroup Meeting #6
  - Continuation of prior workshop discussion; discussion of alternative methods for conservation demand hardening credit; discussion of new and existing local supplies
- Review WSAP at Member Agency Managers Meeting
  - Review of WSAP workgroup process; discussion of issues related to base period and demand hardening

November 2014

- WSAP Workgroup Meeting #7
  - Review and discussion of issues and potential methods for base period selection and adjustment, replenishment allocation, and conservation demand hardening credit; review of estimated effects of potential WSAP changes at the regional level
- WSAP Workgroup Meeting #8
  - Review of proposed recommendations for the WSAP based on workgroup discussion
- Review WSAP at Member Agency Managers Meeting
  - Review of proposed recommendations for the WSAP based on workgroup discussion

Resulting Changes

- Base Period Update to FY2013 and FY2014
    - Changed the WSAP Base Period from calendar years 2004-2006 to fiscal years ending July 2013 and 2014
    - Mandatory Conservation Adjustment
        - Agencies with mandatory conservation in effect during the base period (FY 2013 and/or FY 2014) may qualify for a demand hardening adjustment, adjustment is subject to a consultation process that includes consideration historical demand and GPCD information

- Modify Conservation Demand Hardening Credit
    - Replaced device calculation-based estimates of conservation savings with a GPCD-based method
        - Conservation savings are calculated by comparing GPCD from a historical baseline to the Allocation Year; the difference is converted to acre-feet using the Allocation Year population.
            - Baseline GCPD is 10-year average ending between 2004 and 2010, with gross water, using gross water use minus non-potable recycled water production and documented historical population
    - Replaced formula for calculating the credit for each Regional Shortage Level
    - Conservation Demand hardening credit will be based on an initial 10 percent of GPCD-based conservation savings plus an additional 5 percent for each level of Regional Shortage; the credit will also be adjusted for the overall percentage reduction in retail water demand and the member agency's dependence on Metropolitan.
- Allocation Surcharge
    - Replaced the WSAP Penalty Rate with an Allocation Surcharge based on the estimated cost of Turf Replacement conservation programs

Appendix F: Summary of Historical Shortage Plans

These five elements incorporated into the WSAP have, in four out of five instances, been used in previous shortage plans. Both the IICP and the 1995 DMP used a historical base period calculation, adjusted for growth, made local supply adjustments, and used conservation hardening credits in their formulations. The retail impact adjustment is the only feature of the WSAP that has not been used historically.

Table 5: Historical Shortage Plan Overview

Plan Element	1991 IICP	1995 DMP	WSAP
Historical Base Period	√	√	√
Growth Adjustment	√	√	√
Local Supply Adjustment	√	√	√
Conservation Hardening Credit	√	√	√
Retail Impact Adjustment			√

Appendix G: Water Supply Allocation Formula Example

The following example gives a step-by-step description of how the formula would be used to calculate an allocation of Metropolitan supplies for a hypothetical member agency. All numbers are hypothetical for the purpose of the example and do not reflect any specific member agency.

Step 1: Calculate Base Period Retail Demand

Base Period Local Supplies: Calculated using a two-year average of groundwater (gw), groundwater recovery (gwr), Los Angeles Aqueduct supply (laa), surface water (sw), seawater desalination (sd), and other non-Metropolitan imported supplies (os). For the purpose of this example, assume that the two year average is 59,000 af.

$$[(gw1+gwr1+laa1+sw1+sd1+os1) + (gw2+gwr2+laa2+sw2+sd2+os2)] \div 2 = 59{,}000 \text{ af}$$

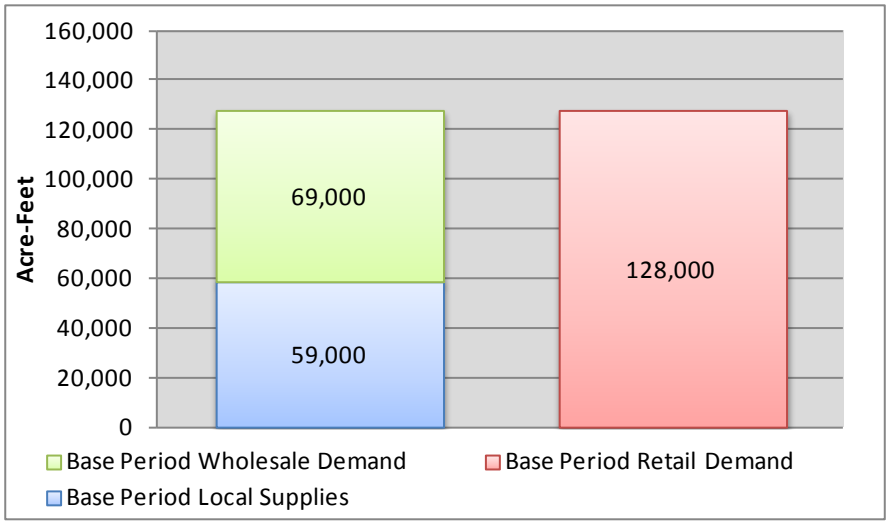
Base Period Wholesale Demands: Calculated using the same two-year time period as the Base Period Local Supplies. The Base Period Wholesale Demands include firm purchases (fp) and in-lieu deliveries to long-term groundwater replenishment (il), conjunctive use (cup), cyclic (cyc), and supplemental storage programs (ss). For the purpose of this example, assume that the two year average is 69,000 af.

$$[(fp^1{+}{+}il^1{+}cup^1{+}cyc^1{+}ss^1) + (fp^2{+}il^2{+}cup^2{+}cyc^2{+}ss^2)] \div 2 = 69{,}000 \text{ af}$$

Base Period Retail Demands: Calculated as the sum of the Base Period Local Supplies and Base Period Wholesale Demand.

$$59{,}000 + 69{,}000 = 128{,}000 \text{ af}$$

Figure 1: Base Period Retail Demand Calculation



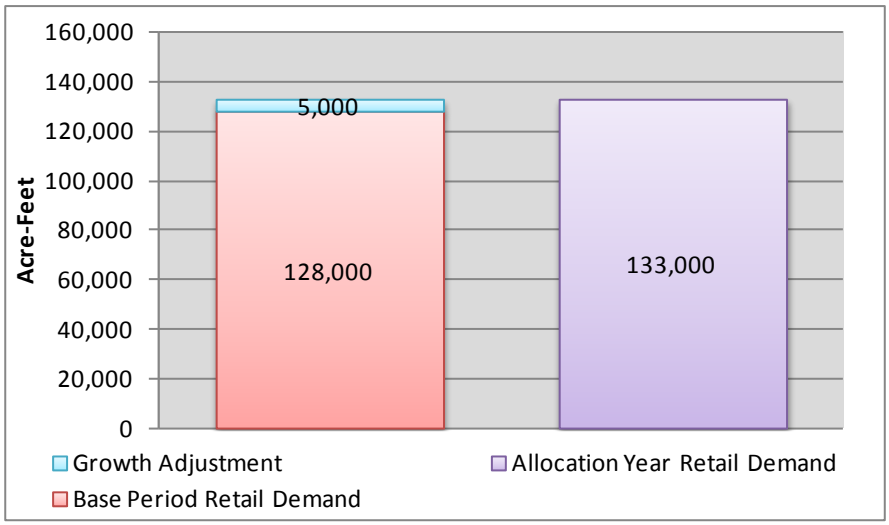
Calculate Adjustment for Base Period Mandatory Rationing (if applicable): The hypothetical agency used in this example is assumed not to qualify for the Base Period Mandatory Rationing Adjustment. A detailed discussion of the adjustment methodology can be found in Appendix I: Base Period Rationing Adjustment Example.

Step 2: Calculate Allocation Year Retail Demand

Allocation Year Retail Demand: Calculated by adjusting the Base Period Retail Demand for any baseline inflation and growth that occurred since the Base Period.

128,000 af + 5,000 af (net adjustment to retail demand) = 133,000 af

Figure 2: Allocation Year Retail Demand Calculation



Step 3: Calculate Allocation Year Wholesale Demand

Allocation Year Local Supplies: Estimates of Allocation Year Local Supplies are provided by the member agencies upon implementation of a WSAP. If estimates are not provided, Metropolitan will use the sum of the Base Period Local Supplies and Base Period In-Lieu Deliveries as a default. Agencies may provide updated estimates at any time during the Allocation Year to more accurately reflect their demand for Metropolitan supplies. For this example assume that the Allocation Year Local Supplies total 65,000 acre-feet.

Allocation Year Local Supplies = 65,000 af

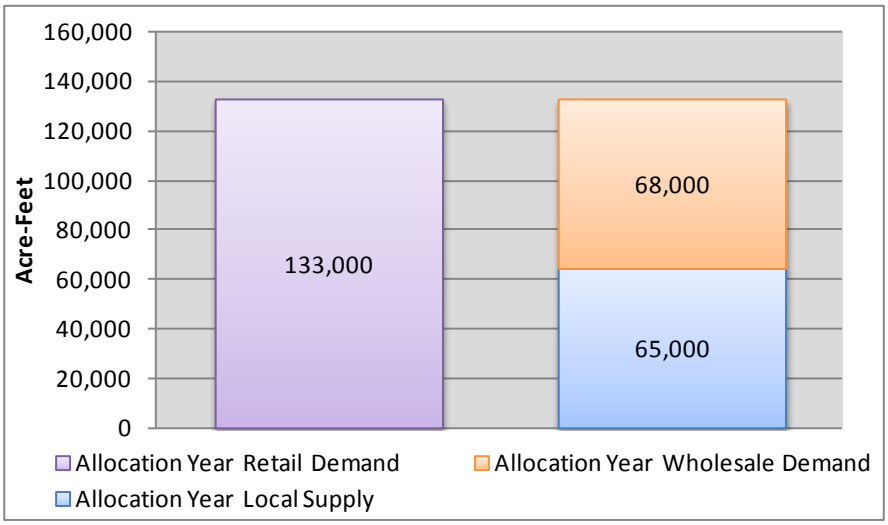
For this example assume also that this agency has an additional 5,000 acre-feet of supplies that meet the determinations for Extraordinary Supply. These supplies are withheld from the allocation formula except for in calculating the Retail Impact Adjustment Allocation.

Extraordinary Local Supplies = 5,000 af

Allocation Year Wholesale Demands: Calculated by subtracting the Allocation Year Local Supplies (65,000 af) from the Allocation Year Retail Demands (133,000 af).

133,000 af - 65,000 af = 68,000 af

Figure 3: Allocation Year Wholesale Demand Calculation



Step 4: Calculate the Wholesale Minimum Allocation

Wholesale Minimum Percentage: Calculate from Table 1 for Regional Shortage Level 4.

Table 1: Shortage Allocation Index		
(a) Regional Shortage Level	(b) Wholesale Minimum Percentage	(c) Maximum Retail Impact Adjustment Percentage
4	70.0%	10.0%

Wholesale Minimum Allocation: Calculated by multiplying the agency's Allocation Year Wholesale Demand (68,000 af) by the Wholesale Minimum Percentage (70%) from the Table 1 for Regional Shortage Level 4.

68,000 af * 70% = 47,600 af

Step 5: Calculate the Retail Impact Adjustment Allocation

Maximum Retail Impact Adjustment Percentage: Calculate from Table 1 for Regional Shortage Level 4.

Retail Impact Adjustment Allocation: Calculated first by determining the agency's dependence on Metropolitan by dividing the Allocation Year Wholesale Demand (68,000 af) minus the Extraordinary Supply (5,000 af) by the Allocation Year Retail Demand (133,000 af) and multiplying by 100.

[(68,000 af - 5,000 af)/ 133,000 af] * 100 = 47%

Next, this percentage dependence on Metropolitan (47%) is multiplied by the Maximum Retail Impact Percentage for Shortage Level 4 (10%).

47% * 10% = 4.7%

This percentage is now multiplied by the Allocation Year Wholesale Demand (68,000 af) for the Retail Impact Adjustment Allocation.

68,000 af * 4.7% = 3,221 af

Step 7: Calculate the Conservation Demand Hardening Adjustment

Calculate Baseline GPCD: To estimate conservation savings, each member agency will establish a historical baseline GPCD calculated in a manner consistent with California Senate Bill SBx7-7, using a 10 or 15-year average ending between 2004 and 2010, using gross water use minus non-potable recycle water production and documented historical population. For this example assume that the Baseline GPCD is 154 GPCD

Baseline GPCD = 154 GPCD

Calculate Allocation Year GPCD: Next, calculate the allocation year GPCD by converting the Allocation Year Retail Demand to GPCD and dividing by the Allocation Year Population from the WSAP. For this example the Allocation Year Retail Demand is 133,000 AF (see Step 2 above) and assume the Allocation Year Population is 905,000 persons. The resulting GPCD is 131 GPCD.

Allocation Year GPCD = 133,000 af/year * 325,851 gallons/af ÷ 365 days/year ÷ 905,000 persons = 131 GPCD

Calculate Reduction in GPCD: Subtract Allocation Year GPCD from Baseline GPCD to determine the GPCD Reduction.

GPCD Reduction = 154 GPCD – 131 GPCD = 23 GPCD

Calculate Conservation Savings: Convert the GPCD Reduction to the equivalent annual conservation savings in acre-feet, using the Allocation Year Population.

$$\text{Conservation Savings} = \frac{(\text{GPCD Reduction}) \times 365 \text{ days/yr} \times \text{Population})}{325{,}851 \text{ gallons/af}}$$

Conservation Savings = 23 x 365 x 905,000 ÷ 325,851 = 23,316 af

Multiply by Regional Shortage Level Percentage: Multiply the Conservation Savings by 10 percent plus an additional 5 percent for each level of Regional Shortage (see Step 4 above). This example assumes a Regional Shortage Level of 4. This scales the hardening credit by the level of regional shortage, thereby increasing the credit as deeper shortages occur when demand hardening has a larger impact on the retail consumer.

23,316 af x (10% + (4 x 5%) = 6,995 af

Multiply by Conservation Savings Percentage: Next, multiply by the percentage of an agency's demand that was reduced through conservation. This scales the hardening by the total percentage reduction to recognize that increased hardening occurs as increasing amounts of conservation are implemented.

Conservation Savings Percentage = 1 + ((Baseline GPCD – Allocation Year GPCD)/Baseline GPCD)

Conservation Savings Percentage = 1+ ((154 GPCD – 131 GPCD)/154 GPCD) = 115%

6,995 af x 115% = 8,044 af

Multiply by Dependence on MWD: Next, multiply by the agency's percentage dependence on MWD as shown in Step 5 above. This scales the credit to the member agency's dependence on MWD to ensure that credits are being applied to the proportion of water demand that is being affected by reductions in MWD's supply. For this example, dependence on MWD is 47%.

8.044 af x 47% = 3,781 af

Summary: The Conservation Demand Hardening Adjustment calculation is summarized by the following formula:

Conservation Demand Hardening Adjustment = Conservation Savings x (10% + Regional Shortage Level %) x (1+Conservation%) x Dependence on MWD %

Conservation Demand Hardening Adjustment = 23,316 af x (10% + (4 x 5%)) x (115%) x (47%) = 3,781 af

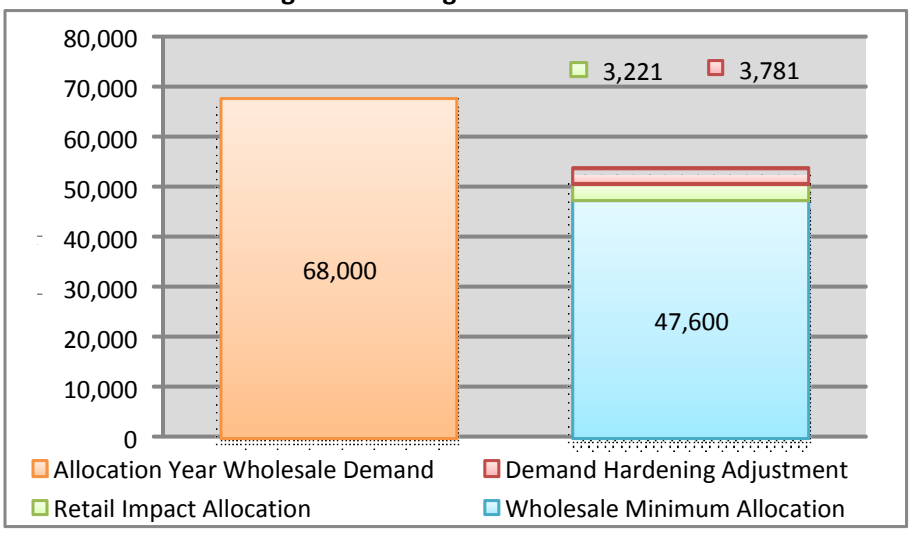
Step 8: Calculate the Low Per-Capita Adjustment Allocation: The hypothetical agency used in this example is assumed not to qualify for the Low Per-Capita Adjustment. A detailed discussion and example of the Low Per-Capita Adjustment calculation can be found in Appendix J: Per Capita Water Use Minimum Example.

Step 9: Calculate the total WSAP Allocation

WSAP Allocation: Calculated by adding the Wholesale Minimum Allocation (47,600 af), the Maximum Retail Impact Adjustment (3,221 af), the Demand Hardening Adjustment (3,781 af), and the Low Per-Capita Adjustment (0 af).

47,600 af + 3,221 af + 3,781 af + 0 af = 54,602 af

Figure 4: WSAP Allocation Regional Shortage Level 4



Step 10: Calculate total retail level reliability

Retail level reliability: Calculated by adding the WSAP Allocation (54,602 af), the Allocation Year Local Supply (65,000 af) and the Extraordinary Local Supply (5,000 af) and dividing by the Allocation Year Retail Demand (133,000 af).

(54,602 af + 65,000 af + 5,000 af) ÷ 133,000 af = 93.7%

Total Metropolitan Supply Allocations: In addition to the WSAP Allocation described above, agencies may also receive separate allocations of supplies for groundwater replenishment and seawater barrier demands. More information on the groundwater replenishment allocation is located in Appendix L: Groundwater Replenishment Allocation.

Appendix H: Board Policy Principles on Determining the Status of Extraordinary Supply

At the June 8, 2010 Water Planning and Stewardship Committee meeting Metropolitan's Board of Directors adopted the following policy principles to guide staff in determining the Extraordinary Supply status of future member agency supply programs.

No Negative Impacts to Other Member Agencies

A potential Extraordinary Supply for a member agency should not decrease the amount of Metropolitan water supply that would be available to the other member agencies in a WSAP. Programs that utilize Metropolitan supplies as a primary or in-lieu source or as a means of payback or future replenishment may have the effect of decreasing supplies, available to other agencies, if designated as Extraordinary Supply.

Provides Supply in Addition to Existing Regional Supplies

A potential Extraordinary Supply should provide a water supply that increases the overall water supplies that are available to the region in a WSAP. A program that is designed to move existing regional supplies from year to year would not qualify.

Specifically Designed Program or Supply Action

A potential Extraordinary Supply must be intentionally created and operated to provide additional supply yield. Normal variations in existing and planned local supply programs would not qualify.

Intended for Consumptive Use in a WSAP

A potential Extraordinary Supply should be designed with the primary intention to deliver water supply to a member agency only at a time when Metropolitan is allocating supplies. Programs designed to deliver water on a regular basis would not qualify. Exceptions for reasonable use of a supply program for emergency or other extenuating local circumstances should be considered.

Fully Documented Resource Management Actions

A potential Extraordinary Supply should have a full description as to the source, transmission, distribution, storage, and delivery of the water supply.

These principles are intended to identify deliberate actions taken by member agencies to augment supplies only when Metropolitan is allocating supplies through the WSAP. Production from existing local supplies, programs that are operated on an ongoing basis, and incidental increases in water supply would not qualify as Extraordinary Supply. The intent of the Extraordinary Supply designation is to recognize programs and actions that are additive to the total regional water supply as the region continues to confront the water supply challenges from drought and regulatory conditions. To that end, any supply actions taken after the initial implementation of the WSAP in July 2009 that utilize Metropolitan supplies either as a primary source, or to refill or replenish an incurred obligation or deficit at a future date would not qualify as Extraordinary Supply.

Appendix I: Base Period Mandatory Rationing Adjustment

Agencies that were under mandatory water use restrictions during the Base Period may have water use that is lower due to the mandatory actions already taken. Without adjusting for this, those agencies could be required to enforce even higher levels of restrictions under an allocation than those agencies that had not started mandatory restrictions.

To qualify for a Base Period Mandatory Rationing Adjustment, the member agency must provide Metropolitan staff with the following information:

- Time period when the mandatory conservation was in effect; it must be in effect during the Base Period
- A statement, with documentation, of how drought restrictions comply with the following Mandatory Conservation qualifications:
    - Governing Body-authorized or enacted
    - Includes mandatory demand reduction actions, restrictions or usage limitations including penalty-backed water budgets
    - Enforced by assessing penalties, fines, or rates based upon violating restrictions or exceeding usage limitations
- If the agency in question is a retail subagency, then the retailer's base period water demands during the Base Period in order to determine proportion to the member agency's total demand
- Historical data to construct GPCD base and trend for the consultation

Calculating the Base Period Rationing Adjustment involves following steps:

- Use the Baseline GPCD 10 or 15-year period selected by member agency for the Conservation Demand Hardening Adjustment calculation.
- Interpolate from the GPCD value of the midpoint of the Baseline GPCD period to the average GPCD of the two years preceding the agency's mandatory conservation
- Extrapolate to the WSAP Base Period (FY2013 and FY2014)
- Calculate the difference between estimated and observed GPCD for FY2013 and FY2014
- Convert to Acre-Feet and add to the member agency's Base Period Retail Demands

Appendix J: Per-Capita Water Use Minimum Example

This adjustment creates a minimum per capita water use threshold. Member agencies' retail-level water use under the WSAP is compared to two different thresholds. The minimum water use levels are based on compliance guidelines for total and residential water use established under Senate Bill X7-7.

Total Retail Level Use: 100 GPCD
Residential Retail Level Use: 55 GPCD

Agencies that fall below either threshold under the WSAP would receive additional allocation from Metropolitan to bring them up to the minimum GPCD water use level. To qualify for this credit, member agencies must provide documentation of the total agency level population and the percent of retail level demands that are residential; no appeal is necessary.

The following example gives a step-by-step description of how the Low Per-Capita Water Use Adjustment would be calculated for a hypothetical member agency. All numbers are hypothetical for the purpose of the example and do not reflect any specific member agency. This example was calculated using the following assumptions:

Allocation Year Retail Demand: 50,000 acre-feet
Allocation Year Local Supplies: 25,000 acre-feet;
Allocation Year Wholesale Demand: 25,000 acre-feet
Base Period Conservation: 5,000 acre-feet
Agency Population: 375,000
Percent of Retail Demands that are Residential: 60%

Step 1: Calculate Total Retail-Level Allocation Year Supplies

Table 6 shows the Allocation Year Local Supply, WSAP Allocation, and the total Allocation Year Supplies for the example agency at each Regional Shortage Level. The WSAP Allocation was calculated using the methodology detailed in Appendix G: Water Supply Allocation Formula Example and the assumptions listed above.

Table 6: Total Retail Level Allocation Year Supplies			
Regional Shortage Level	**Allocation Year Local Supply**	**WSAP Allocation**	**Total Allocation Year Supply**
1	25,000	23,594	48,594
2	25,000	22,188	47,188
3	25,000	20,781	45,781
4	25,000	19,375	44,375
5	25,000	17,969	42,969
6	25,000	16,563	41,563
7	25,000	15,156	40,156
8	25,000	13,750	38,750
9	25,000	12,344	37,344
10	25,000	10,938	35,938

Step 2: Calculate the Equivalent Total and Residential GPCD

The next step is to calculate the equivalent water use in gallons per capita per day (GPCD) for the Total Allocation Year Supply. The following equation shows the GPCD calculation under Regional Shortage Level 10.

35,938 af * 325,851 gallons ÷ 375,000 people ÷ 365 days = 85.6 GPCD

The residential per-capita water use is calculated in the same manner. Based on the assumption that 60% of the agency demands are residential, the following equation shows the residential GPCD calculation under Regional Shortage Level 10.

35,938 af * 60% * 325,851 gallons ÷ 375,000 people ÷ 365 days = 51.3 GPCD

Step 3: Compare the Total and Residential GPCD to the Minimum Water Use Thresholds

The next step is to compare the total GPCD water use to the 100 GPCD total water use threshold. In a Regional Shortage Level 10, the WSAP results in an allocation that is 14.4 GPCD below the minimum threshold.

100 GPCD – 85.6 GPCD = 14.4 GPCD

Likewise the residential GPCD water use is compared to the 55 GPCD residential water use threshold.

55 GPCD – 51.3 GPCD = 3.7 GPCD

Step 4: Determine the Allocation Adjustment in Acre-Feet

The final step is to calculate the acre-foot equivalent of the GPCD that fell below the minimum threshold. In a Regional Shortage Level 10, the adjustment provides 6,068 acre-feet of additional allocation to the agency; the results for Shortage Levels 1-10 are shown in Table 7.

14.4 GPCD ÷ 325,851 gallons * 375,000 people * 365 days = 6,068 acre-feet

Table 7: Total Per-Capita Water Use Adjustment				
Regional Shortage Level	**Allocation Year Supply**	**Equivalent GPCD**	**GPCD Below Threshold**	**Allocation Adjustment**
1	48,594	115.7	0	0
2	47,188	112.3	0	0
3	45,781	109.0	0	0
4	44,375	105.6	0	0
5	42,969	102.3	0	0
6	41,563	98.9	1.1	443
7	40,156	95.6	4.4	1,849
8	38,750	92.3	7.7	3,255
9	37,344	88.9	11.1	4,662
10	35,938	85.6	14.4	6,068

Again, this step is repeated for the residential water use. In a Regional Shortage Level 10, the adjustment provides 1,540 acre-feet of additional allocation to the agency; the residential water use results for Regional Shortage Levels 1-10 are shown in Table 8.

3.7 GPCD ÷ 325,851 gallons * 375,000 people * 365 days = 1,540 acre-feet

Table 8: Residential Per-Capita Water Use Adjustment				
Regional Shortage Level	**Allocation Year Supply**	**Equivalent GPCD**	**GPCD Below Threshold**	**Allocation Adjustment**
1	29,156	69.4	0	0
2	28,313	67.4	0	0
3	27,469	65.4	0	0
4	26,625	63.4	0	0
5	25,781	61.4	0	0
6	24,938	59.4	0	0
7	24,094	57.4	0	0
8	23,250	55.4	0	0
9	22,406	53.3	1.7	697
10	21,563	51.3	3.7	1,540

Agencies that fall below either threshold under the WSAP would receive additional allocation from Metropolitan to bring them up to the minimum GPCD water use level. If an agency qualifies under both thresholds, the one resulting in the maximum allocation adjustment would be given. Under this example the agency would receive 6,068 acre-feet of additional allocation in a Regional Shortage Level 10.

Appendix K: Qualifying Income-Based Rate Allocation Surcharge Adjustment Example

The following example provides a step by step description of how the qualifying income-based rate allocation surcharge adjustment is calculated. To qualify for this adjustment, member agencies must provide documentation showing the amount of retail demands that are covered by a qualifying income-based rate; no appeal is necessary.

The following list summarizes the allocation year demands, local supplies, and allocation as calculated in Appendix G: Water Supply Allocation Formula Example for a hypothetical agency under a Level 4 Regional Shortage. For detailed instructions on how to calculate these figures, reference Appendix G: Water Supply Allocation Formula Example.

Allocation Year Retail Demand: 133,000 acre-feet
Allocation Year Local Supplies: 68,000 acre-feet;
Level 4 WSAP Allocation: 52,735 acre-feet

Step 1: Allocation Surcharge Calculation

(a) **Water Use above Allocation:** The first step in calculating the income-based rate Allocation Surcharge adjustment is to calculate the agency's total Allocation Surcharge under the WSAP. If the agency did not incur any Allocation Surcharge from the allocation year, the income-based rate allocation surcharge adjustment would not apply. For the purpose of this example, the agency used 61,000 acre-feet of MWD supplies in the allocation year. This represents 8,265 acre-feet of use above the water supply allocation.

WSAP Allocation	52,735 af
Actual MWD Water Use	61,000 af
Use Above WSAP Allocation	8,265 af

(b) **Total Allocation Surcharge:** In this example the agency used 115.7% of its water supply allocation. 7,910 of the 8,265 acre-feet of use above the allocation would be assessed the Allocation Surcharge at an amount of $1,480 per acre-foot and 354 of the 8,265 acre-feet of use above the allocation would be assessed the Allocation Surcharge at an amount of $2,960.

Between 100% and 115% of Allocation	7,910 af	$1,480/af	$11,706,800
Greater than 115% of Allocation	354 af	$2,960/af	$1,047,840
Total	8,265 af		$12,754,640

Step 2: Effective Income-Based Rate Cutback

(a) **Calculate Retail Cutback:** The second step in calculating the income-based rate allocation surcharge adjustment is to calculate the amount of supply cutback that would have been expected from qualifying income-based rate customers under the WSAP. Using the water supply allocation that was calculated above, the total retail level impact on the agency can be

determined. In this example the agency receives a retail level cutback of 15,265 acre-feet, or 11.5% of their retail level demand.

WSAP Allocation + Allocation Year Local Supplies	117,735 af
Allocation Year Retail Demand	133,000 af
Effective Cutback	**15,265 af (11.5%)**

(b) Income-based Rate Customer Retail Cutback: To calculate the effective income-based rate cutback, the amount of demand covered by a qualifying income-based rate is multiplied by the effective retail level cutback. For this example assume that the agency has 10,000 acre-feet of qualifying demands.

Qualifying Income-Based Rate Demand	10,000 af
Effective Cutback Percentage	11.5%
Effective Income-Based Rate Cutback	**1,148 af**

(c) Income-based Rate Cutback Allocation Surcharge: Once the effective cutback has been calculated, the amount of Allocation Surcharge that is associated with qualifying income-based rate customers can be determined.

Between 100% and 115% of Allocation	794 af	$1,480/af	$1,175,120
Greater than 115% of Allocation	354 af	$2,960/af	$1,047,840
Total	**1,148 af**		**$2,222,960**

(d) Adjusted Allocation Surcharge Calculation: Finally, the Allocation Surcharge attributable to qualifying income-based rate customers is subtracted from the total Allocation Surcharge that was calculated above to determine the qualifying income-based rate adjusted allocation surcharge. In the case that the monetary amounts associated with the Income-Based Rate are greater than the total amounts an agency incurs, no Allocation Surcharge will be incurred.

Total Allocation Surcharge	$12,754,640
Qualifying Income-Based Rate Allocation Surcharge	$2,222,960
Qualifying Income-Based Rate Adjusted Allocation	**$10,531,680**

Appendix L: Groundwater Replenishment Allocation

Groundwater basins help provide vital local supplies that can buffer the region from short-term drought impacts. Longer droughts can result in reductions to the many sources of water that replenish groundwater basins, resulting in lower basin levels and potential impacts to the overlying consumptive demands. Limited imported deliveries under these conditions may help avoid impacts to the basins that may be drawn out of their normal operating range or subject to water quality or regulatory impacts. To this end, Metropolitan provides a limited allocation for drought impacted groundwater basins based on the following framework:

a) Staff hold a consultation with qualifying member agencies who have taken groundwater replenishment deliveries since 2010 and the appropriate groundwater basin managers to document whether their basins are in one of the following conditions:
    i. Groundwater basin overdraft conditions that will result in water levels being outside normal operating ranges during the WSAP allocation period; or
    ii. Violations of groundwater basin water quality and/or regulatory parameters that would occur without imported deliveries.

b) Provide an allocation based on the verified need for groundwater replenishment. The allocation would start with a member agency's ten-year average purchases of imported groundwater replenishment supplies (excluding years in which deliveries were curtailed). The amount would then be reduced by the declared WSAP Regional Shortage Level (5 percent for each Regional Shortage Level).

c) Any allocation provided under this provision for drought impacted groundwater basins is intended to help support and maintain groundwater production for consumptive use. As such, a member agency receiving an allocation under this provision will be expected to maintain groundwater production levels equivalent to the average pumping in the Base Period. Any adjustments to a member agency's M&I allocation due to lower groundwater production would be reduced by deliveries made under this provision.

d) Agencies for which this allocation does not provide sufficient supplies for the needs of the groundwater basin may use the WSAP Appeals Process to request additional supply (subject to Board approval). The appeal should include a Groundwater Management Plan that documents the need for additional supplies according to the following tenets:
    i. Maintenance of groundwater production levels;
    ii. Maintenance of, or reducing the further decline of, groundwater levels;
    iii. Maintenance of key water quality factors/indicators;
    iv. Avoidance of permanent impacts to groundwater infrastructure or geologic features; and
    v. Consideration of severe and/or inequitable financial impacts.

Final amounts and allocations will be determined following the consultations with groundwater basin managers and member agencies.

Appendix M: Water Rates, Charges, and Definitions

Table 9: Water Rates and Charges Dollars per acre-foot (except where noted)			
Rate	**Effective 1/1/2014**	**Effective 1/1/2015**	**Effective 1/1/2016**
Tier 1 Supply Rate	$148	$158	$156
Tier 2 Supply Rate	$290	$290	$290
System Access Rate	$243	$257	$259
Water Stewardship Rate	$41	$41	$41
System Power Rate	161	$126	$138
Tier 1	$593	$582	$594
Tier 2	$735	$714	$728
Treatment Surcharge	$297	$341	$348
Full Service Treated Volumetric Cost			
Tier 1	$890	$923	$942
Tier 2	$1,032	$1,055	$1,076
Readiness-to-Serve Charge (millions of dollars)	$166	$158	$153
Capacity Charge (dollars per cubic foot second)	$8,600	$11,100	$10,900

Definitions:

(1) **Tier 1 Supply Rate -** recovers the cost of maintaining a reliable amount of supply.

(2) **Tier 2 Supply Rate** - set at Metropolitan's cost of developing additional supply to encourage efficient use of local resources**.**

(3) **System Access Rate** – recovers a portion of the costs associated with the delivery of supplies.

(4) **System Power Rate** – recovers Metropolitan's power costs for pumping supplies to Southern California.

(5) **Water Stewardship Rate** – recovers the cost of Metropolitan's financial commitment to conservation, water recycling, groundwater clean-up and other local resource management programs.

(6) **Treatment Surcharge** – recovers the costs of treating imported water.

(7) **Readiness-to-Serve Charge -** a fixed charge that recovers the cost of the portion of system capacity that is on standby to provide emergency service and operational flexibility.

(8) **Capacity Charge** – the capacity charge recovers the cost of providing peak capacity within the distribution system.

Source: http://www.mwdh2o.com/WhoWeAre/Management/Financial-Information

Appendix N: Allocation Appeals Process

Step 1: Appeals Submittal

All appeals shall be submitted to the Appeals Liaison in the form of a written letter signed by the member agency General Manager. Each appeal must be submitted as a separate request, submittals with more than one appeal will not be considered. The appeal request is to include:

- A designated member agency staff person to serve as point of contact.
- The type of appeal (erroneous baseline data, loss of local supply, etc.).
- The quantity (in acre-feet) of the appeal.
- A justification for the appeal which includes supporting documentation.

A minimum of 60 days are required to coordinate the appeals process with Metropolitan's Board process.

Step 2: Notification of Response and Start of Appeals Process

The Appeals Liaison will phone the designated member agency staff contact within 3 business days of receiving the appeal to provide an initial receipt notification, and schedule an appeals conference. Subsequent to the phone call, the Liaison will send an e-mail to the Agency General Manager and designated staff contact documenting the conversation. An official notification letter confirming both receipt of the appeal submittal, and the date of the appeals conference, will be mailed within 2 business days following the phone contact

Step 3: Appeals Conference

All practical efforts will be made to hold an appeals conference between Metropolitan staff and member agency staff at Metropolitan's Union Station Headquarters within 15 business days of receiving the appeal submittal. The appeals conference will serve as a forum to review the submittal materials and ensure that there is consensus understanding as to the spirit of the appeal. Metropolitan staff will provide an initial determination of the size of the appeal (small or large) and review the corresponding steps and timeline for completing the appeals process.

Steps 4-7 of the appeals process differ depending upon the size of the appeal

Small Appeals

Small appeals are defined as those that would change an agency's allocation by less than 10 percent, or are less than 5,000 acre-feet in quantity. Small appeals are evaluated and approved or denied by Metropolitan staff.

Step 4: Preliminary Decision

Metropolitan staff will provide a preliminary notice of decision to the member agency within 10 business days of the appeals conference. The preliminary decision timeline may be extended to accommodate requests for additional information, data, and documentation. The Appeals Liaison will mail a written letter to the member agency staff contact and General Manager, stating the preliminary decision and the rationale for approving or denying the appeal.

Step 5: Clarification Conference

Following the preliminary decision the Appeals Liaison will schedule a clarification conference. The member agency may choose to decline the clarification conference if they are satisfied with the preliminary decision. Declining the clarification conference serves as acceptance of the preliminary decision, and the decision becomes final upon approval by Metropolitan's executive staff.

Step 6: Final Decision

Metropolitan staff will provide a final notice of decision to the member agency within 10 business days of the clarification conference, pending review by Metropolitan's executive staff. The Appeals Liaison will mail a written letter to the member agency staff contact and General Manager, stating the final decision and the rationale for the decision. A copy of the letter will also be provided to Metropolitan executive staff.

Step 6a: Board Resolution of Small Appeal Claims

Member agencies may request to forward appeals that are denied by Metropolitan staff to the Board of Directors through the Water Planning and Stewardship Committee for final resolution. The request for Board resolution shall be submitted to the Appeals Liaison in the form of a written letter signed by the member agency General Manager. This request will be administered according to Steps 6 and 7 of the large appeals process.

Step 7: Board Notification

Metropolitan staff will provide a report to the Board of Directors, through the Water Planning and Stewardship Committee, on all submitted appeals including the basis for determination of the outcome of the appeal.

Large Appeals

Large appeals are defined as those that would change an agency's allocation by more than 10 percent, and are larger than 5,000 acre-feet. Large appeals are evaluated and approved or denied by the Board of Directors.

Step 4: Preliminary Recommendation

Metropolitan staff will provide a preliminary notice of recommendation to the member agency within 10 business days of the appeals conference. The preliminary decision timeline may be extended to accommodate requests for additional information, data, and documentation. The Appeals Liaison will mail a written letter to the member agency staff contact and General Manager, stating the preliminary recommendation and the rationale for the recommendation. A copy of the draft recommendation will also be provided to Metropolitan executive staff.

Step 5: Clarification Conference

Following the preliminary recommendation the Appeals Liaison will schedule a clarification conference. The member agency may choose to decline the clarification conference if the satisfied with preliminary recommendation. Declining the clarification conference signifies acceptance of the preliminary recommendation, and the recommendation becomes final upon approval by Metropolitan's executive staff.

Step 6: Final recommendation

Metropolitan staff will provide a final notice of recommendation to the member agency within 10 business days of the clarification conference, pending review by Metropolitan executive staff. The Appeals Liaison will mail a written letter to the member agency staff contact and General Manager, stating the final recommendation and the rationale for the recommendation. A copy of the final recommendation will also be provided for Metropolitan executive review.

Step 7: Board Action

Metropolitan staff shall refer the appeal to the Board of Directors through the Water Planning and Stewardship Committee for approval.

Appendix O: Appeals Submittal Checklist

Appeal Submittal

- ☐ Written letter (E-mail or other electronic formats will not be accepted)
- ☐ Signed by the Agency General Manager

Mailed to the appointed Metropolitan Appeals Liaison

Contact Information

- ☐ Designated staff contact
  - o Name
  - o Address
  - o Phone Number
  - o E-mail Address
- ☐ General Manager
  - o Name
  - o Address
  - o Phone Number
  - o E-mail Address

Type of Appeal

- ☐ State the type of appeal
  - o Erroneous historical data used in base period calculations
    - Metropolitan Deliveries
    - Local Production
    - Growth adjustment
    - Conservation savings
  - o Exclusion of physically isolated areas
  - o Extraordinary supply designation
  - o Groundwater Replenishment Allocation
  - o Base Period Mandatory Rationing Adjustment
  - o Other

Quantity of Appeal

- ☐ State the quantity in acre-feet of the appeal

Justification and Supporting Documentation

- ☐ State the rationale for the appeal
- ☐ Provide verifiable documentation to support the stated rationale
  - o Examples of verifiable documentation Include, but are not limited to:
    - Billing Statements
    - Invoices for conservation device installations
    - Basin Groundwater/Watermaster Reports
    - California Department of Finance economic or population data
    - California Department of Public Health reports

Attachment C

Resolution Adopting the Water Shortage Contingency Plan

Resolution 9281

RESOLUTION
OF THE BOARD OF DIRECTORS
OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
ADOPTING THE WATER SHORTAGE CONTINGENCY PLAN

WHEREAS, the Urban Water Management Planning Act requires urban water suppliers providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually to prepare and adopt, in accordance with prescribed requirements, a water shortage contingency plan;

WHEREAS, the Urban Water Management Planning Act specifies the requirements and procedures for adopting such Water Shortage Contingency Plans;

WHEREAS, the Urban Water Management Planning Act requires urban water suppliers to conduct an annual water supply and demand assessment (Annual Assessment) each year and to include in their water shortage contingency plans the procedures they use to conduct the Annual Assessment;

WHEREAS, the procedures used to conduct an Annual Assessment include, but are not limited to, the written decision-making process that an urban water supplier will use each year to determine its water supply reliability;

WHEREAS, The Metropolitan Water District of Southern California's (Metropolitan's) water shortage contingency plan provides that by June of each year, Metropolitan staff will present a completed Annual Assessment for approval by Metropolitan's Board of Directors or by the Board's authorized designee with expressly delegated authority for approval of Annual Assessment determinations;

and

WHEREAS, the Board of Directors of The Metropolitan Water District of Southern California has duly reviewed, discussed, and considered such Water Shortage Contingency Plan and has determined the Water Shortage Contingency Plan to be consistent with the Urban Water Management Planning Act and to be an accurate representation of the planned actions during shortage conditions for The Metropolitan Water District of Southern California.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of The Metropolitan Water District of Southern California that, on May 11, 2021, this District hereby adopts this Water Shortage Contingency Plan for submittal to the State of California and expressly authorizes the General Manager of The Metropolitan Water District of Southern California to approve the Annual Assessment each year.

I HEREBY CERTIFY that the foregoing is a full, true and correct copy of a resolution adopted by the Board of Directors of The Metropolitan Water District of Southern California, at its meeting held on May 11, 2021.

Judy Abdo

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

B

Attachment B: West Basin 2015 Drought Rationing Plan

West Basin
Municipal Water District

Drought Rationing Plan
Allocation Year 2015

Adopted March 23, 2015
Declared April 27, 2015
Effective July 1, 2015

1. Introduction

West Basin Municipal Water District is a member public agency of the Metropolitan Water District of Southern California (MWD), and is responsible for the wholesale delivery of potable imported water by Metropolitan to eight retail water agencies and one groundwater replenishment agency, which collectively serve about 900,000 people within the West Basin service area.

West Basin is pursuing a water reliability strategy of increasing local control over its water supplies within its service territory by increasing water conservation and water recycling, expanding education programs and introducing ocean desalination to the water supply portfolio by the year 2022. Today, however, our region still relies on water from Northern California and the Colorado River for nearly two-thirds of our supply. This reliance on hydrologically-dependent supplies leaves our region vulnerable to drought and the long-term impacts of changing climate patterns.

Drought periods in Southern California are happening more frequently and with greater severity. When MWD does not have access to the supplies necessary to meet total demands and has to allocate shortages in supplies to West Basin and its other member agencies, it enacts the Water Supply Allocation Plan as a demand management tool to extend the availability of storage reserves.

On March 23, 2015, the West Basin Board adopted an update to the "Water Shortage Allocation Plan" and changed the name to Drought Rationing Plan (Plan). When MWD implements the WSAP, the Drought Rationing Plan is necessary for two primary reasons: 1) to help achieve MWD's (and the Governor's) conservation goal; and 2) equitably recover any financial penalties from our customer agencies should West Basin fall short of the goal. The Plan includes a "regional penalty assessment" policy that only assesses financial penalties to West Basin's customer agencies if West Basin itself incurs penalties.

The current drought (2012 to present) has been unprecedented in terms of increasing average temperatures and the scarcity of snowpack in the Sierra Nevada. In 2014, MWD was forced to withdraw almost one-half of the available balance of the region's collective stored water. Without a significant decrease in demand in 2015, MWD was projecting that another one-half of the remaining balance would need to be withdrawn. Governor Brown's April 1, 2015 Executive Order required a statewide reduction in water use by 25% compared to 2013 and added urgency to MWD's consideration of implementing the WSAP. Also in April 2015, the MWD Board of Directors approved enacting the WSAP at a Level 3, which targets a 15% reduction in demand (5% for each Level).

2. Metropolitan Water District's *Water Supply Allocation Plan*

Metropolitan's Board of Directors approved the first Water Supply Allocation Plan in February 2008 and updated its WSAP in December 2014. It is based on a guiding

principle developed over fifteen years prior as part of the Water Surplus and Drought Management (WSDM) Plan. The guiding principle states:

> "Metropolitan will encourage storage of water during periods of surplus and work jointly with its member agencies to minimize the impacts of water shortages on the region's retail consumers and economy during periods of shortage."

Fairness in allocation and minimizing regional hardship to retail water consumers remained central themes in the development of a specific formula for allocating shortages across southern California. The formula uses different adjustments and credits to balance impacts of shortage at the retail level, where local supplies can vary dramatically, and provide equity on the wholesale level among member agencies. It also attempts to take into account; growth in demand, local investments, changes in local supply conditions, the reduction in potable water demand from recycled water, and the implementation of water conservation programs.

The WSAP was updated for the current period to reflect minimal changes in the formula and to address issues that arose as a result of the prior allocation. These changes are described below.

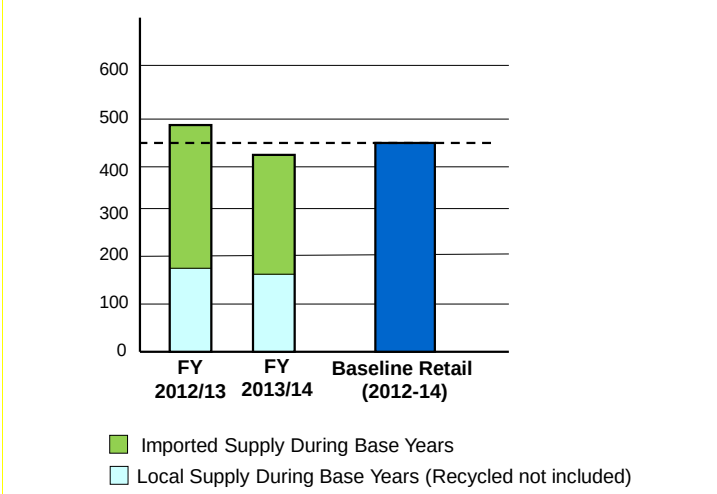
3. West Basin's Shortage Allocation Methodology

Based closely on Metropolitan's methodology, West Basin's Plan model has five basic components in determining each customer agency's share of West Basin's allocation from Metropolitan, briefly described as follows.

A. Establishing Baseline Water Use

In order to project a customer agency's retail demand and imported supply needs for the year in which an allocation occurs, it is necessary to first establish a historical base period for water supply and delivery data. The base period for *local supplies* (groundwater production and recovery) and *imported water demand* (full-service, seawater barrier, seasonal shift and in-lieu groundwater replenishment) are calculated using data from the previous two non-shortage fiscal years, 2012-2013 and 2013-2014. The sum of *local supplies* and *imported water demand* provides an estimate of the average *retail demand* for each customer agency over the base period. Non-potable recycled water is not included in this calculation due to its demand-hardening effect. Figure 1 provides an example of how the baseline water use is established.

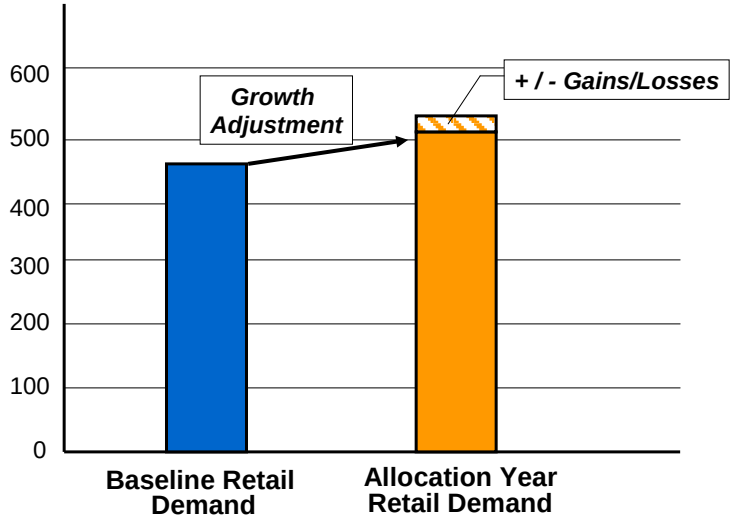
Figure 1. Example of Baseline Calculation



B. Establishing Allocation Year Information

Base period *retail demand* is adjusted forward for growth using a factor that is based on the population increase from the base period to the year of allocation (a 2015 allocation is one year after the end of the base period). As Figure 2 shows, gains or losses are also added to the base period *local supplies* to more accurately estimate actual supplies in the allocation year. Gains in *local supplies* must be increases that are planned and scheduled, such as groundwater production that does not mine a basin, or a new brackish water treatment facility. Losses of *local supplies* due to hydrology or water quality are subtracted from the base period.

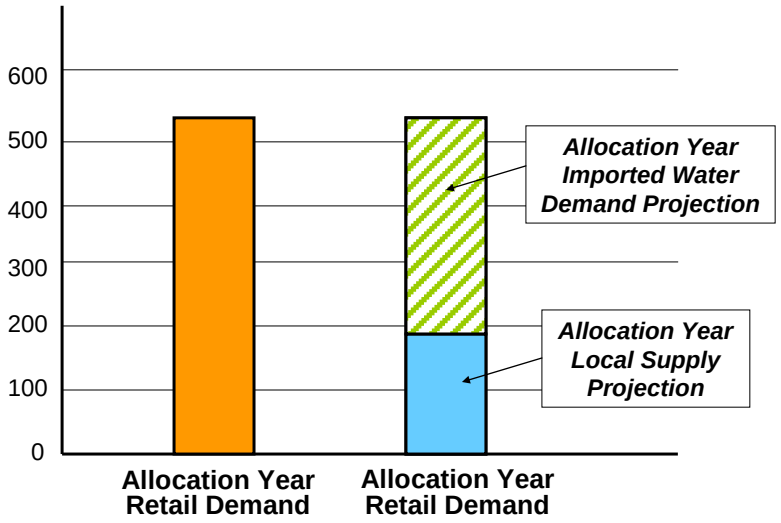
Figure 2. Example of Allocation Year Adjustments



C. Calculating Initial Minimum Allocation

After adjustments are made to *local supplies* to reflect allocation year conditions, and subtracted from *retail demand,* which has been adjusted for growth to the allocation year, the result is an agency's estimated need for imported water from West Basin.

Figure 3. Example of Allocation Year Imported Water Demand Projection



As shown in Figure 4, the projected imported water demand is what is allocated according to the declared regional shortage level (Level 3 for the 2015 Allocation). The following concepts help explain the allocation further:

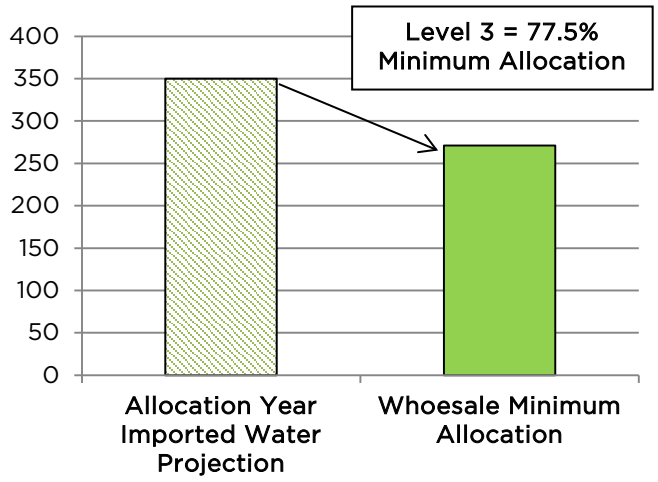
- **Regional Shortage Levels:** each level from one to ten represents a five percent increment of Regional Shortage Percentage from 5 to 50 percent.

- **Regional Shortage Percentage:** the percentage difference between available supplies and allocation year demands, in 5 percent increments from 5 to 50 percent.

- **Wholesale Minimum Allocation:** ensures that customer agencies will not experience shortages on the wholesale level (from West Basin) that are greater than one-and-a-half times the Regional Shortage Percentage, according to the following table:

Regional Shortage Level	Regional Shortage Percentage	Wholesale Minimum Allocation	Retail Impact Adjustment
1	5%	7.5%	2.5%
2	10%	15.0%	5.0%
3	15%	22.5%	7.5%
4	20%	30.0%	10.0%
5	25%	37.5%	12.5%
6	30%	45.0%	15.0%
7	35%	52.5%	17.5%
8	40%	60.0%	20.0%
9	45%	67.5%	22.5%
10	50%	75.0%	25.0%

Figure 4. Example of Initial Minimum Allocation



D. Minimum Allocation Adjustments and Credits

Unequal impacts of across-the-board allocation at the retail level can be dramatic depending primarily on the amount of local supplies, if any, held by each customer agency. That is why the allocation methodology assigns additional water supplies based on the following adjustments and credits:

- **Retail Impact Adjustment:** Used in Regional Shortage Level 3 and above to ensure that customer agencies with a high level of dependence on imported water do not experience disparate shortages at the retail level compared to other agencies. Agencies that are 100% dependent on imported water, for example,

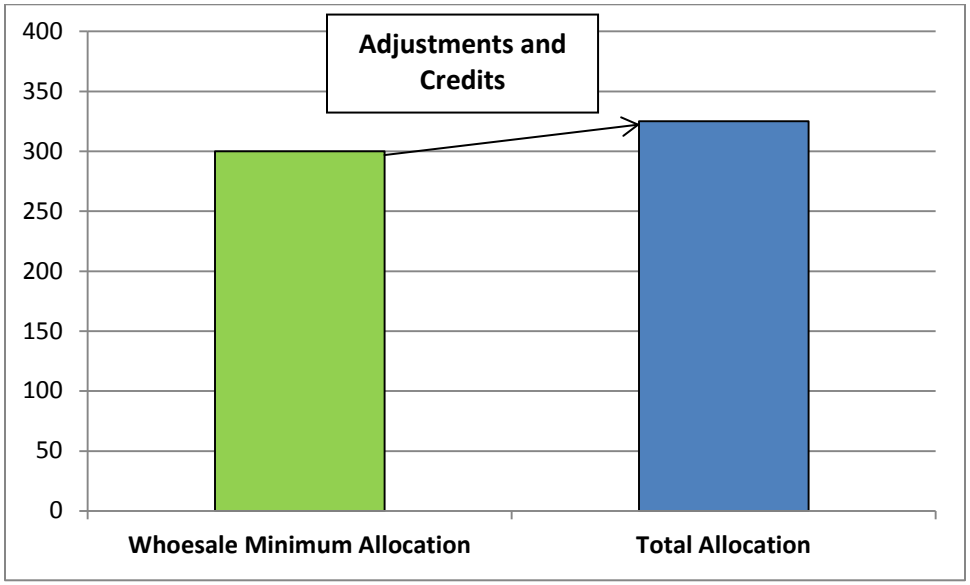
are allocated at the Regional Shortage Percentage instead of the Wholesale Minimum Allocation.

- **Conservation Demand Hardening:** Based on each customer agency's gallons per capita per day (GPCD) from a 10-year selected period's highest average, ending in years between 2004 and 2010, as compared to the 2015 GPCD. The difference in GPCD was converted to acre-feet and the regional shortage percentage and GPCD percent reduction was applied for a resulting amount of additional water given back to the agency for conservation efforts. This is consistent with requirements for SBx7-7 "20x2020" reporting. The calculation for the credit is:

$$\text{Credit} = \text{Conservation} \times (10\% + \text{RSL}\%) \times (1 + \text{Conservation}\%) \times \text{Dependence on MWD}\%$$

RSL = Regional Shortage Level

Figure 5. Example of Adjustments to Minimum Allocation at Level 3



E. Total Allocation

The total amount of imported water a customer agency will receive from West Basin at any given Regional Shortage Level, factoring in local supplies, wholesale minimum allocation, retail impact adjustment, and conservation.

4. Plan Implementation

A. Declaration of Regional Shortage

On April 14, 2015, Metropolitan's Board of Directors declared a regional drought within their service territory, and triggered the implementation of their Water Supply Allocation Plan at a Regional Shortage Level 3, seeking at minimum a 15% reduction in regional water use. In order to pass through rationing down to the retail level, and assign any penalties to its customer agencies that West Basin may incur from exceeding its allocation from Metropolitan, the West Basin Board of Directors also approved implementing their Drought Allocation Plan at Level 3 on April 27, 2015.

B. Key Dates for Implementation

The generic allocation calendar below demonstrates that declarations of regional drought are typically made in April when hydrologic conditions statewide are sufficiently understood. To allow time for retail level agencies to adequately prepare their operations and customers for allocation conditions, the allocation effective period begins July 1 and runs 12 consecutive months through June 30 of the following year. Final accounting of customer agency imported water use and assessment of penalties, if applicable, occurs after the end of the allocation period, beginning in August of that year.

Figure 6. Allocation Timeline

Year	Month	Year 1 Board Allocation Decision	Year 1 Allocation Year	Year 2 Board Allocation Decision	Year 2 Allocation Year
YEAR 1	January				
	February				
	March				
	April	**Declaration**			
	May				
	June				
	July		**Effective Period** Continuous Tracking Of Member Agency Local Supply and Imported Water Use		
	August				
	September				
	October				
	November				
	December				
YEAR 2	January				
	February				
	March				
	April			**Declaration**	
	May				
	June				
	July				**Effective Period** Continuous Tracking Of Member Agency Local Supply and Imported Water Use
	August		**Assess and Collect Penalties**		
	September				
	October				
	November				
	December				
YEAR 3	January				
	February				
	March				
	April				
	May				
	June				

C. Allocation Adjustments

As a member agency of Metropolitan, West Basin is provided the opportunity to request changes to its allocation through an appeals process. Likewise, customer agencies of West Basin are provided the opportunity to appeal to their individual allocations from West Basin based on new or corrected information. Grounds for requesting a change can include, but are not limited to:

- Errors in historical data used in base period calculations
- Unforeseen losses or gains in local supplies
- Extraordinary increases in local supplies
- Adjustments in credits for conservation

In some cases, West Basin has no flexibility to change a customer agency's allocation unless it results in a change to West Basin's total allocation with Metropolitan. West Basin staff will, however, work with customer agencies to determine whether appeals to Metropolitan are warranted, and if so, to prepare an appeal for review by Metropolitan.

D. Tracking and Reporting

Subsequent to the implementation of its Plan, West Basin will produce monthly reports of each customer agency's imported water use compared to its allocations based on monthly delivery patterns (historical averages) for the purposes of tracking and communicating potential underage/overage of an agency's annual allocation.

E. Allocation Penalty Rates and Billing

Allocation Penalty Rates

West Basin will enforce customer agency allocations through a penalty rate structure similar to what West Basin is subject to in Metropolitan's WSAP. Penalties will only be assessed to a West Basin retail customer agency if a retail customer agency exceeded its allocation under the Drought Rationing Plan AND West Basin exceeded its allocation with MWD under the Water Supply Allocation Plan. In such a case, West Basin's total penalty will be assessed to each retail customer agency that exceeded its Drought Rationing Plan allocation on a pro-rata basis. No billing or assessment of penalty rates will take place until the end of the twelve-month allocation period. Penalty rates are in addition to the base rate of the water purchased.

Table 1 demonstrates that the penalty rate structure is an ascending block structure that provides a lower penalty for minor overuse of allocations and a higher penalty for major overuse of allocations.

Table 1. West Basin Allocation Penalty Rates

Usage Above Allocation	Penalty Rate
100% - 115%	$1,480/AF
Above 115%	$2,960 AF (2 x $1,480/AF)

- Based on turf removal costs
- Turf removal saves ~44 gallons per year per square foot for 10 years
- $2/sq. ft. program = $1,480 AF
- $4/sq. ft. program = $2,960 AF

Use of Penalty Revenues

According to the Drought Allocation Plan policy adopted by the West Basin Board of Directors, any penalty funds collected by West Basin from customer agencies will be applied to any penalty owed to Metropolitan.

West Basin Billing

During the allocation period, customer agency water bills from West Basin will remain the same. Only at the end of the twelve-month allocation period will West Basin calculate each customer agency's potable water use (imported plus local supply) based on the local supply certification and the West Basin allocation model, and determine which agencies exceeded their annual allocation. West Basin will then apply the penalty rate structure discussed above to usage in excess of the annual allocation.

In recognition that penalties can be potentially significant to a customer agency, West Basin will allow payment of the total penalty for a customer agency to be spread evenly over three consecutive monthly billing periods, beginning in August following the allocation period.

5. Water Reliability 2020

West Basin is planning and investing in its WR 2020 program to reduce its dependence on imported water to mitigate future water shortages and allocation impacts on West Basin's customers.

6. West Basin Contact Information

For questions directly related to West Basin's Drought Allocation Plan, please contact the following staff:

Leighanne Kirk
Senior Water Resources Analyst
leighannek@westbasin.org
310-660-6225

Fernando Paludi
Associate General Manager
fernandop@westbasin.org
310-660-6214

C

Attachment C: Drought Outreach Information and Materials

17140 S. Avalon Blvd., Suite 210, Carson CA 90746 310-217-2411 www.westbasin.org

West Basin Drought Outreach Plan

Problem

There will be confusion among our political leaders and public customers about the drought and the severe impact in Northern California (restrictions, allocations and cut offs) and the lack of any restrictions or allocations in Southern California. This situation provides a great opportunity to tell the reliability and conservation stories as well as the benefits of West Basin's investment in local, reliable and drought-proof water supplies in the past and today. This plan will address this issue and provide guidance on how to communicate this important story to our stakeholders.

Situation Analysis

California is entering its third dry year. Southern California's two main sources of imported water –the Colorado River and Northern California – continue to face dry conditions.

2013 was the driest year on record for the State of California.

Northern California reservoirs are low and dry conditions persist throughout the State.

Many Northern California cities, including Sacramento, are instituting mandatory conservation measures and rationing.

Last year's snowpack was 17% of normal and this year's snowpack is currently at 20% of water content or 7% of average.

State reservoirs that buffer the State from low rainfall are getting precariously low.

The State Department of Water Resource's initial allocation was only 5% to contractors of state water supply in early 2014.

We still have a decline in State water reliability due to pumping restrictions at the Delta.

In 2013, Metropolitan Water District of Southern California (Met) lost nearly 300,000 acre feet of water that could be in storage, and that is enough water for 600,000 families. The Bay Delta Conservation Plan or BDCP will stabilize the Delta ecosystem and our future water deliveries.

Met has made significant investments in storage and infrastructure that are helping us today, including the large Diamond Valley Reservoir in Hemet, CA.

The Colorado River is in its 14th year of drought. Both of the major Colorado River reservoirs, Lake Mead and Powell, are less than 50% full. Along the Colorado River, a 2012 study identified a potential shortfall of up to 3.2 million acre feet of water in the Colorado River basin by 2060 due to increasing demands. Climate change studies also predict water shortages on the Colorado River due to changing weather patterns.

Met has reached an era of limits on the amount of water the district can import from Northern California and the Colorado River so they are exploring all options to expand local water resources.

Over the last couple of decades, Southern California water agencies, led by Met, have spent over $5 billion on local water projects, storage, water efficiency programs and other infrastructure. The result of this proactive investment is the fact that Met, West Basin and many other Southern California water agencies are not imposing water restrictions or allocating water. At the same time, all agencies are encouraging continued voluntary and heightened water efficiency and conservation where possible. Met is calling for increased voluntary conservation.

On 17 January, Governor Brown declared a drought State of Emergency and said; *"We can't make it rain, but we can be much better prepared for the terrible consequences that California's drought now threatens, including dramatically less water for our farms and communities and increased fires in both urban and rural areas," said Governor Brown. "I've declared this emergency and I'm calling all Californians to conserve water in every possible way."*

After sustaining previous droughts (1987-1992, 2000-2002, and 2007-2009), West Basin has pursued new programs and projects to maximize existing water supplies, and educate residents about the importance of water use efficiency.

These programs have included 1) water recycling projects, to replace the use of potable water, with treated recycled water; 2) water conservation initiatives including low flow toilet and shower head giveaways, rebate programs for grass turf removal, kitchen retrofit projects and ocean friendly garden installations; 3) administrative programs intended to reward customers who reduce their water usage (i.e. tiered rate structures); 4) a groundwater cleanup program: most recently researching ocean water desalination: and ongoing water efficiency programs for youth and adult audiences.

Accordingly, West Basin began planning for such dry conditions in the early 1990's with the construction of the Edward C. Little Water Recycling Facility. Since then, we have expanded our facility four times, have become a leader in water use efficiency and conservation (on track to reach our state mandated 20% reduction by 2020 or before), and are currently exploring the responsible use of ocean water desalination to augment our future water supply portfolio.

West Basin has initiated a goal program called Water Reliability 2020 designed to reduce West Basin's dependence on imported water from 66% then to 33% by 2020. This would be accomplished by doubling the recycling and conservation programs and adding 10% of the District's future water supplies from ocean water desalination. To date, more than 10,000 residents have signed on to support West Basin's Water Reliability 2020 Program.

Metropolitan Water District of Southern California and other Southern California water agencies are also developing questions and answers to support the current drought situation. These answers lie in how past investments in local water projects, storage and other water efficiency projects has allowed these agencies to deliver water during this dry period without restrictions or allocations.

Below are talking points for West Basin's Board of Directors and staff to explain how our investment in local supplies is now providing great benefit to our customers*. (FYI> Metropolitan Water District of Southern California's current talking points are also attached).*

Goal

The goal of this drought outreach plan is to inform key constituents and/or stakeholders of the fact that their support of our water reliability efforts is paying off. Due to this investment, West Basin is not issuing water restrictions or allocations during the current drought. Another goal of this plan is to use the current situation to encourage maximum voluntary conservation and water efficiency.

Strategy

Use the current drought environment to remind customers that West Basin's Water Reliability Program is doing exactly was it was designed to: (1) Provide reliable water even during times of drought and water shortages and (2) also encourage conservation and water efficiency.

Target Audiences

The target audiences for this communications plan include: West Basin's 17 cities and primary eight customers, recycled water customers, local state and federal elected officials, staff, media, SBESC, Chambers, and subscribers to our e-newsletter.

Proposed Talking Points and Tactics to Support the Plan

Drought Talking Points

1. We are not rationing water during the current drought because of West Basin's investment in its Water Reliability 2020 program and Metropolitan Water District of Southern California's (MWD) similar investment in storage and other water supply programs.

2. We will continue to expand our recycling and investigate ocean-water desalination, but we need your help now with water efficiency and conservation programs.

3. Now is the time to be most efficient with the water we have available and protect our current water in storage. Now is also the time to take advantage of West Basin's free water conservation and efficiency programs.

4. Over the past twenty years, all of Southern California, through MWD, has invested more than $5 billion in storage, infrastructure and local water supply improvements to sustain the area during extremely dry periods.

5. Locally, West Basin has invested over $600 million in water recycling and conservation programs to provide reliable, drought-proof water supplies for its 17 cities and nearly 1 million customers.

Channels of Communication and Tactics

1. Send out a special drought-related e-newsletter explaining how West Basin's investment in a locally-controlled and reliable water portfolio is paying great dividends and is why we are not rationing water.

2. Send letters from Board members to the cities they represent explaining the positive story of our proactive investment in reliable water supplies and as a result there will be no water rationing.

3. At the time of the next measurement of the snowpack, probably in February, consider holding a press conference at the Edward C. Little plant with one of our local State elected representatives.

4. Use the South Bay Environmental Service Center to help us reach city officials and businesses with redistribution of our e-newsletter article.

5. Mention of West Basin's reliability efforts and the reasons we are not rationing water at our OFG's, landscape classes, special events and Water 101 classes.

6. Consider issuing a drought press release/solicit coverage of ECL facility.

7. Revamp front page of web site to note drought and add tips for water efficiency.

8. Do an end of year Annual Report newspaper advertisement to: thank our customers, note our achievements and highlight the drought and the need to conserve.

Measurement

Plan will be considered successful if we reach all of our key audiences with our drought reliability and conservation messages.

Attachment:

Metropolitan Water District of Southern California's current drought talking points

D

Attachment D: Public Notices

17140 S. Avalon Blvd.
Carson, CA 90746

310-217-2411
www.westbasin.org

April 7, 2021

Notice of Public Hearing on the West Basin Municipal Water District Draft 2020 Urban Water Management Plan, Draft 2021 Water Shortage Contingency Plan, and Draft Appendix I to the 2015 UWMP

Dear Valued Customers and Stakeholders,

The West Basin Municipal Water District (West Basin) is in the process of preparing its 2020 Urban Water Management Plan (UWMP) and 2021 Water Shortage Contingency Plan (WSCP) in compliance with the Urban Water Management Planning Act. In addition, West Basin is preparing an appendix to both the 2015 UWMP and 2020 UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduced Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The 2015 UWMP is being amended only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the 2021 WSCP.

West Basin is required to notify its retailers as well as cities and counties within its service area that it is preparing its 2020 UWMP, 2021 WSCP, and Appendix I of the 2015 UWMP updates at least 60 days prior to holding a public hearing. The public hearing is scheduled as part of a West Basin Board meeting on **June 10, 2021 at 10:00 a.m. This meeting will be available virtually, and will be properly noticed on the West Basin website (www.westbasin.org).**

This letter serves as West Basin's official public hearing notice and intent to adopt the 2020 UWMP, 2021 WSCP, and Appendix I of the 2015 UWMP before the July 1, 2021 deadline. A copy of West Basin's draft 2020 UWMP and WSCP will be available for review on the West Basin's website (www.westbasin.org) by May 27, 2021. West Basin will distribute a public draft review notification on or before May 25, 2021 with information on how to access the draft documents. Until that time, if you have any questions, comments, or input, please contact E.J. Caldwell, Water Policy & Resources Development Manager, via email at edwardc@westbasin.org or by phone at (310) 660-6286.

Sincerely,

Patrick Sheilds
General Manager
West Basin Municipal Water District

From:	E.J. Caldwell
To:	cbilezerian@torranceca.gov
Cc:	CSCHAICH@TorranceCA.gov; Patrick Sheilds; Julie Frazier-Mathews; Rob Morrow; Matthew Veeh
Subject:	FW: Notice of Public Hearing for West Basin MWD"s 2020 Urban Water Management Plan
Date:	Thursday, April 8, 2021 4:59:03 PM
Attachments:	Notice Public Hearing West Basin MWD 2020 UWMP.pdf
Importance:	High

Dear Craig,

On behalf of West Basin Municipal Water District, I want to thank the City of Torrance, you, and your staff for your continued support for West Basin's planning activities. As required by the Urban Water Management Planning Act, West Basin is in the process of preparing its 2020 Urban Water Management Plan (UWMP) and 2021 Water Shortage Contingency Plan (WSCP). In addition, WBMWD is preparing an appendix to both the 2015 UWMP and 2020 UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduced Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The 2015 UWMP is being amended only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the 2021 WSCP.

Through this effort, your staff has provided great assistance, and we look forward to your continued participation. Attached, please find the Notice of Public Hearing for the West Basin Municipal Water District 2020 Urban Water Management Plan. **The public hearing is scheduled as part of a WBMWD Board meeting on June 10, 2021 at 10:00 a.m.** This meeting will be available virtually, and will be properly noticed on the West Basin website (www.westbasin.org).

If you or your staff have any questions, please feel free to give me a call.

Sincerely,

E.J. Caldwell, Esq.
Water Policy & Resources Development Manager
310.660.6286 Office
213.500.0379 Mobile
edwardc@westbasin.org

From:	E.J. Caldwell
To:	GregG@rollinghillsestatesca.gov
Cc:	sarahh@rollinghillsestatesca.gov; alexad@rollinghillsestatesca.gov; Patrick Sheilds; Julie Frazier-Mathews; Matthew Veeh; Rob Morrow
Subject:	FW: Notice of Public Hearing for West Basin MWD"s 2020 Urban Water Management Plan
Date:	Thursday, April 8, 2021 4:38:03 PM
Attachments:	Notice Public Hearing West Basin MWD 2020 UWMP.pdf
Importance:	High

Dear Mr. Grammer,

On behalf of West Basin Municipal Water District, I want to thank the City of Rolling Hills Estates for your continued support for West Basin's planning activities. As required by the Urban Water Management Planning Act, West Basin is in the process of preparing its 2020 Urban Water Management Plan (UWMP) and 2021 Water Shortage Contingency Plan (WSCP). In addition, WBMWD is preparing an appendix to both the 2015 UWMP and 2020 UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduced Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The 2015 UWMP is being amended only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the 2021 WSCP.

Through this effort, we look forward to your participation. Attached, please find the Notice of Public Hearing for the West Basin Municipal Water District 2020 Urban Water Management Plan. **The public hearing is scheduled as part of a WBMWD Board meeting on June 10, 2021 at 10:00 a.m.** This meeting will be available virtually, and will be properly noticed on the West Basin website (www.westbasin.org).

If you or your staff have any questions, please feel free to give me a call.

Sincerely,

E.J. Caldwell, Esq.
Water Policy & Resources Development Manager
310.660.6286 Office
213.500.0379 Mobile
edwardc@westbasin.org

From:	E.J. Caldwell
To:	aram@rpvca.gov
Cc:	kbanales@rpvca.gov; citymanager@rpvca.gov; Patrick Sheilds; Julie Frazier-Mathews; Rob Morrow; Matthew Veeh
Subject:	FW: Notice of Public Hearing for West Basin MWD"s 2020 Urban Water Management Plan
Date:	Thursday, April 8, 2021 4:26:55 PM
Attachments:	Notice Public Hearing West Basin MWD 2020 UWMP.pdf
Importance:	High

Dear Mr. Mihranian,

On behalf of West Basin Municipal Water District, I want to thank the City of Rancho Palos Verdes for your continued support for West Basin's planning activities. As required by the Urban Water Management Planning Act, West Basin is in the process of preparing its 2020 Urban Water Management Plan (UWMP) and 2021 Water Shortage Contingency Plan (WSCP). In addition, WBMWD is preparing an appendix to both the 2015 UWMP and 2020 UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduced Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The 2015 UWMP is being amended only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the 2021 WSCP.

Through this effort, we look forward to your participation. Attached, please find the Notice of Public Hearing for the West Basin Municipal Water District 2020 Urban Water Management Plan. **The public hearing is scheduled as part of a WBMWD Board meeting on June 10, 2021 at 10:00 a.m.** This meeting will be available virtually, and will be properly noticed on the West Basin website (www.westbasin.org).

If you or your staff have any questions, please feel free to give me a call.

Sincerely,

E.J. Caldwell, Esq.
Water Policy & Resources Development Manager
310.660.6286 Office
213.500.0379 Mobile
edwardc@westbasin.org

From:	E.J. Caldwell
To:	citymanager.web@cityofgardena.org
Cc:	Patrick Sheilds; Julie Frazier-Mathews; Rob Morrow; Matthew Veeh; nsweeney@cityofgardena.org; rdesantiago@cityofgardena.org
Subject:	FW: Notice of Public Hearing for West Basin MWD"s 2020 Urban Water Management Plan
Date:	Thursday, April 8, 2021 4:00:56 PM
Attachments:	Notice Public Hearing West Basin MWD 2020 UWMP.pdf
Importance:	High

Dear Mr. Osorio,
On behalf of West Basin Municipal Water District, I want to thank the City of Gardena for your continued support for West Basin's planning activities. As required by the Urban Water Management Planning Act, West Basin is in the process of preparing its 2020 Urban Water Management Plan (UWMP) and 2021 Water Shortage Contingency Plan (WSCP). In addition, WBMWD is preparing an appendix to both the 2015 UWMP and 2020 UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduced Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The 2015 UWMP is being amended only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the 2021 WSCP.

Through this effort, we look forward to your participation. Attached, please find the Notice of Public Hearing for the West Basin Municipal Water District 2020 Urban Water Management Plan. **The public hearing is scheduled as part of a WBMWD Board meeting on June 10, 2021 at 10:00 a.m.** This meeting will be available virtually, and will be properly noticed on the West Basin website (www.westbasin.org).

If you or your staff have any questions, please feel free to give me a call.

Sincerely,

E.J. Caldwell, Esq.
Water Policy & Resources Development Manager
310.660.6286 Office
213.500.0379 Mobile
edwardc@westbasin.org

From:	E.J. Caldwell
To:	ccarrillo@mwdh2o.com; Polyzos,Demetri J
Cc:	Rob Morrow; Matthew Veeh
Subject:	FW: Notice of Public Hearing for West Basin MWD"s 2020 Urban Water Management Plan
Date:	Thursday, April 8, 2021 5:15:16 PM
Attachments:	Notice Public Hearing West Basin MWD 2020 UWMP.pdf
Importance:	High

Dear Demetri and Carlos,
On behalf of West Basin Municipal Water District, I want to thank you and the MWD for your continued support for West Basin's planning activities. As required by the Urban Water Management Planning Act, West Basin is in the process of preparing its 2020 Urban Water Management Plan (UWMP) and 2021 Water Shortage Contingency Plan (WSCP). In addition, WBMWD is preparing an appendix to both the 2015 UWMP and 2020 UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduced Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The 2015 UWMP is being amended only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the 2021 WSCP.

Through this effort, you have been very helpful, and we look forward to your continued participation. Attached, please find the Notice of Public Hearing for the West Basin Municipal Water District 2020 Urban Water Management Plan. **The public hearing is scheduled as part of a WBMWD Board meeting on June 10, 2021 at 10:00 a.m.** This meeting will be available virtually, and will be properly noticed on the West Basin website (www.westbasin.org).

If you or your staff have any questions, please feel free to give me a call.

Sincerely,

E.J. Caldwell, Esq.
Water Policy & Resources Development Manager
310.660.6286 Office
213.500.0379 Mobile
edwardc@westbasin.org

From:	E.J. Caldwell
To:	info@surfrider-southbay.org
Cc:	craig@surfrider-southbay.org; Patrick Sheilds; Julie Frazier-Mathews; Rob Morrow; Matthew Veeh
Subject:	Notice of Public Hearing for West Basin MWD"s 2020 Urban Water Management Plan
Date:	Thursday, April 8, 2021 5:02:49 PM
Attachments:	Notice Public Hearing West Basin MWD 2020 UWMP.pdf
Importance:	High

Dear Craig,

On behalf of West Basin Municipal Water District, I want to thank you and Surfrider for your continued support for West Basin's planning activities. As required by the Urban Water Management Planning Act, West Basin is in the process of preparing its 2020 Urban Water Management Plan (UWMP) and 2021 Water Shortage Contingency Plan (WSCP). In addition, WBMWD is preparing an appendix to both the 2015 UWMP and 2020 UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduced Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The 2015 UWMP is being amended only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the 2021 WSCP.

Through this effort, we look forward to your continued participation. Attached, please find the Notice of Public Hearing for the West Basin Municipal Water District 2020 Urban Water Management Plan. **The public hearing is scheduled as part of a WBMWD Board meeting on June 10, 2021 at 10:00 a.m.** This meeting will be available virtually, and will be properly noticed on the West Basin website (www.westbasin.org).

If you or your staff have any questions, please feel free to give me a call.

Sincerely,

E.J. Caldwell, Esq.
Water Policy & Resources Development Manager
310.660.6286 Office
213.500.0379 Mobile
edwardc@westbasin.org

From:	E.J. Caldwell
To:	citymanager@weho.org; parevalo@weho.org
Cc:	jrocco@weho.org; Patrick Sheilds; Julie Frazier-Mathews; Matthew Veeh; Rob Morrow
Subject:	Notice of Public Hearing for West Basin MWD"s 2020 Urban Water Management Plan
Date:	Thursday, April 8, 2021 4:49:37 PM
Attachments:	Notice Public Hearing West Basin MWD 2020 UWMP.pdf
Importance:	High

Dear Mr. Arevalo,

On behalf of West Basin Municipal Water District, I want to thank the City of West Hollywood for your continued support for West Basin's planning activities. As required by the Urban Water Management Planning Act, West Basin is in the process of preparing its 2020 Urban Water Management Plan (UWMP) and 2021 Water Shortage Contingency Plan (WSCP). In addition, WBMWD is preparing an appendix to both the 2015 UWMP and 2020 UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduced Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The 2015 UWMP is being amended only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the 2021 WSCP.

Through this effort, we look forward to your continued participation. Attached, please find the Notice of Public Hearing for the West Basin Municipal Water District 2020 Urban Water Management Plan. **The public hearing is scheduled as part of a WBMWD Board meeting on June 10, 2021 at 10:00 a.m.** This meeting will be available virtually, and will be properly noticed on the West Basin website (www.westbasin.org).

If you or your staff have any questions, please feel free to give me a call.

Sincerely,

E.J. Caldwell, Esq.
Water Policy & Resources Development Manager
310.660.6286 Office
213.500.0379 Mobile
edwardc@westbasin.org

From:	E.J. Caldwell
To:	ejeng@cityofrh.net
Cc:	cviramontes@cityofrh.net; Patrick Sheilds; Julie Frazier-Mathews; Rob Morrow; Matthew Veeh
Subject:	Notice of Public Hearing for West Basin MWD"s 2020 Urban Water Management Plan
Date:	Thursday, April 8, 2021 4:33:05 PM
Attachments:	Notice Public Hearing West Basin MWD 2020 UWMP.pdf
Importance:	High

Dear Ms. Jeng,

On behalf of West Basin Municipal Water District, I want to thank the City of Rolling Hills for your continued support for West Basin's planning activities. As required by the Urban Water Management Planning Act, West Basin is in the process of preparing its 2020 Urban Water Management Plan (UWMP) and 2021 Water Shortage Contingency Plan (WSCP). In addition, WBMWD is preparing an appendix to both the 2015 UWMP and 2020 UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduced Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The 2015 UWMP is being amended only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the 2021 WSCP.

Through this effort, we look forward to your participation. Attached, please find the Notice of Public Hearing for the West Basin Municipal Water District 2020 Urban Water Management Plan. **The public hearing is scheduled as part of a WBMWD Board meeting on June 10, 2021 at 10:00 a.m.** This meeting will be available virtually, and will be properly noticed on the West Basin website (www.westbasin.org).

If you or your staff have any questions, please feel free to give me a call.

Sincerely,

E.J. Caldwell, Esq.
Water Policy & Resources Development Manager
310.660.6286 Office
213.500.0379 Mobile
edwardc@westbasin.org

From:	E.J. Caldwell
To:	joe.hoefgen@redondo.org
Cc:	ted.semaan@redondo.org; Patrick Sheilds; Julie Frazier-Mathews; Rob Morrow; Matthew Veeh
Subject:	Notice of Public Hearing for West Basin MWD"s 2020 Urban Water Management Plan
Date:	Thursday, April 8, 2021 4:29:31 PM
Attachments:	Notice Public Hearing West Basin MWD 2020 UWMP.pdf
Importance:	High

Dear Joe,
On behalf of West Basin Municipal Water District, I want to thank the City of Redondo Beach for your continued support for West Basin's planning activities. As required by the Urban Water Management Planning Act, West Basin is in the process of preparing its 2020 Urban Water Management Plan (UWMP) and 2021 Water Shortage Contingency Plan (WSCP). In addition, WBMWD is preparing an appendix to both the 2015 UWMP and 2020 UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduced Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The 2015 UWMP is being amended only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the 2021 WSCP.

Through this effort, we look forward to your participation. Attached, please find the Notice of Public Hearing for the West Basin Municipal Water District 2020 Urban Water Management Plan. **The public hearing is scheduled as part of a WBMWD Board meeting on June 10, 2021 at 10:00 a.m.** This meeting will be available virtually, and will be properly noticed on the West Basin website (www.westbasin.org).

If you or your staff have any questions, please feel free to give me a call.

Sincerely,

E.J. Caldwell, Esq.
Water Policy & Resources Development Manager
310.660.6286 Office
213.500.0379 Mobile
edwardc@westbasin.org

From:	E.J. Caldwell
To:	citymanager@pvestates.org; Lguglielmo@Pvestates.Org
Cc:	Ccowley@Pvestates.Org; Patrick Sheilds; Julie Frazier-Mathews; Rob Morrow; Matthew Veeh
Subject:	Notice of Public Hearing for West Basin MWD"s 2020 Urban Water Management Plan
Date:	Thursday, April 8, 2021 4:23:26 PM
Attachments:	Notice Public Hearing West Basin MWD 2020 UWMP.pdf
Importance:	High

Dear Ms. Guglielmo,

On behalf of West Basin Municipal Water District, I want to thank the City of Palos Verdes Estates for your continued support for West Basin's planning activities. As required by the Urban Water Management Planning Act, West Basin is in the process of preparing its 2020 Urban Water Management Plan (UWMP) and 2021 Water Shortage Contingency Plan (WSCP). In addition, WBMWD is preparing an appendix to both the 2015 UWMP and 2020 UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduced Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The 2015 UWMP is being amended only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the 2021 WSCP.

Through this effort, we look forward to your participation. Attached, please find the Notice of Public Hearing for the West Basin Municipal Water District 2020 Urban Water Management Plan. **The public hearing is scheduled as part of a WBMWD Board meeting on June 10, 2021 at 10:00 a.m.** This meeting will be available virtually, and will be properly noticed on the West Basin website (www.westbasin.org).

If you or your staff have any questions, please feel free to give me a call.

Sincerely,

E.J. Caldwell, Esq.
Water Policy & Resources Development Manager
310.660.6286 Office
213.500.0379 Mobile
edwardc@westbasin.org

From:	E.J. Caldwell
To:	rfeldman@malibucity.org
Cc:	RDuboux@malibucity.org; Patrick Sheilds; Julie Frazier-Mathews; Rob Morrow; Matthew Veeh
Subject:	Notice of Public Hearing for West Basin MWD"s 2020 Urban Water Management Plan
Date:	Thursday, April 8, 2021 4:19:26 PM
Attachments:	Notice Public Hearing West Basin MWD 2020 UWMP.pdf
Importance:	High

Dear Ms. Feldman,
On behalf of West Basin Municipal Water District, I want to thank the City of Malibu for your continued support for West Basin's planning activities. As required by the Urban Water Management Planning Act, West Basin is in the process of preparing its 2020 Urban Water Management Plan (UWMP) and 2021 Water Shortage Contingency Plan (WSCP). In addition, WBMWD is preparing an appendix to both the 2015 UWMP and 2020 UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduced Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The 2015 UWMP is being amended only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the 2021 WSCP.

Through this effort, we look forward to your participation. Attached, please find the Notice of Public Hearing for the West Basin Municipal Water District 2020 Urban Water Management Plan. **The public hearing is scheduled as part of a WBMWD Board meeting on June 10, 2021 at 10:00 a.m.** This meeting will be available virtually, and will be properly noticed on the West Basin website (www.westbasin.org).

If you or your staff have any questions, please feel free to give me a call.

Sincerely,

E.J. Caldwell, Esq.
Water Policy & Resources Development Manager
310.660.6286 Office
213.500.0379 Mobile
edwardc@westbasin.org

From:	E.J. Caldwell
To:	KChun@lawndalecity.org; dparsley@lawndalecity.org
Cc:	Patrick Sheilds; Julie Frazier-Mathews; Rob Morrow; Matthew Veeh
Subject:	Notice of Public Hearing for West Basin MWD"s 2020 Urban Water Management Plan
Date:	Thursday, April 8, 2021 4:16:43 PM
Attachments:	Notice Public Hearing West Basin MWD 2020 UWMP.pdf
Importance:	High

Dear Mr. Chun,

On behalf of West Basin Municipal Water District, I want to thank the City of Lawndale for your continued support for West Basin's planning activities. As required by the Urban Water Management Planning Act, West Basin is in the process of preparing its 2020 Urban Water Management Plan (UWMP) and 2021 Water Shortage Contingency Plan (WSCP). In addition, WBMWD is preparing an appendix to both the 2015 UWMP and 2020 UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduced Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The 2015 UWMP is being amended only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the 2021 WSCP.

Through this effort, we look forward to your participation. Attached, please find the Notice of Public Hearing for the West Basin Municipal Water District 2020 Urban Water Management Plan. **The public hearing is scheduled as part of a WBMWD Board meeting on June 10, 2021 at 10:00 a.m.** This meeting will be available virtually, and will be properly noticed on the West Basin website (www.westbasin.org).

If you or your staff have any questions, please feel free to give me a call.

Sincerely,

E.J. Caldwell, Esq.
Water Policy & Resources Development Manager
310.660.6286 Office
213.500.0379 Mobile
edwardc@westbasin.org

From:	E.J. Caldwell
To:	suja@hermosabch.org
Cc:	Patrick Sheilds; Julie Frazier-Mathews; Rob Morrow; Matthew Veeh
Subject:	Notice of Public Hearing for West Basin MWD"s 2020 Urban Water Management Plan
Date:	Thursday, April 8, 2021 4:09:41 PM
Attachments:	Notice Public Hearing West Basin MWD 2020 UWMP.pdf
Importance:	High

Dear Suja,
On behalf of West Basin Municipal Water District, I want to thank the City of Hermosa Beach for your continued support for West Basin's planning activities. As required by the Urban Water Management Planning Act, West Basin is in the process of preparing its 2020 Urban Water Management Plan (UWMP) and 2021 Water Shortage Contingency Plan (WSCP). In addition, WBMWD is preparing an appendix to both the 2015 UWMP and 2020 UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduced Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The 2015 UWMP is being amended only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the 2021 WSCP.

Through this effort, we look forward to your participation. Attached, please find the Notice of Public Hearing for the West Basin Municipal Water District 2020 Urban Water Management Plan. **The public hearing is scheduled as part of a WBMWD Board meeting on June 10, 2021 at 10:00 a.m.** This meeting will be available virtually, and will be properly noticed on the West Basin website (www.westbasin.org).

If you or your staff have any questions, please feel free to give me a call.

Sincerely,

E.J. Caldwell, Esq.
Water Policy & Resources Development Manager
310.660.6286 Office
213.500.0379 Mobile
edwardc@westbasin.org

From:	E.J. Caldwell
To:	elee@cityofhawthorne.org
Cc:	Iriarte, Gerardo; Norris, Von; Patrick Sheilds; Julie Frazier-Mathews; Rob Morrow; Matthew Veeh
Subject:	Notice of Public Hearing for West Basin MWD"s 2020 Urban Water Management Plan
Date:	Thursday, April 8, 2021 4:07:23 PM
Attachments:	Notice Public Hearing West Basin MWD 2020 UWMP.pdf
Importance:	High

Dear Mr. Lee,

On behalf of West Basin Municipal Water District, I want to thank the City of Culver City for your continued support for West Basin's planning activities. As required by the Urban Water Management Planning Act, West Basin is in the process of preparing its 2020 Urban Water Management Plan (UWMP) and 2021 Water Shortage Contingency Plan (WSCP). In addition, WBMWD is preparing an appendix to both the 2015 UWMP and 2020 UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduced Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The 2015 UWMP is being amended only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the 2021 WSCP.

Through this effort, we look forward to your participation. Attached, please find the Notice of Public Hearing for the West Basin Municipal Water District 2020 Urban Water Management Plan. **The public hearing is scheduled as part of a WBMWD Board meeting on June 10, 2021 at 10:00 a.m.** This meeting will be available virtually, and will be properly noticed on the West Basin website (www.westbasin.org).

If you or your staff have any questions, please feel free to give me a call.

Sincerely,

E.J. Caldwell, Esq.
Water Policy & Resources Development Manager
310.660.6286 Office
213.500.0379 Mobile
edwardc@westbasin.org

From:	E.J. Caldwell
To:	john.nachbar@culvercity.org
Cc:	Patrick Sheilds; Julie Frazier-Mathews; Matthew Veeh; Rob Morrow
Subject:	Notice of Public Hearing for West Basin MWD"s 2020 Urban Water Management Plan
Date:	Thursday, April 8, 2021 3:55:17 PM
Attachments:	Notice Public Hearing West Basin MWD 2020 UWMP.pdf
Importance:	High

Dear Mr. Nachbar,

On behalf of West Basin Municipal Water District, I want to thank the City of Culver City for your continued support for West Basin's planning activities. As required by the Urban Water Management Planning Act, West Basin is in the process of preparing its 2020 Urban Water Management Plan (UWMP) and 2021 Water Shortage Contingency Plan (WSCP). In addition, WBMWD is preparing an appendix to both the 2015 UWMP and 2020 UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduced Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The 2015 UWMP is being amended only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the 2021 WSCP.

Through this effort, we look forward to your participation. Attached, please find the Notice of Public Hearing for the West Basin Municipal Water District 2020 Urban Water Management Plan. **The public hearing is scheduled as part of a WBMWD Board meeting on June 10, 2021 at 10:00 a.m.** This meeting will be available virtually, and will be properly noticed on the West Basin website (www.westbasin.org).

If you or your staff have any questions, please feel free to give me a call.

Sincerely,

E.J. Caldwell, Esq.
Water Policy & Resources Development Manager
310.660.6286 Office
213.500.0379 Mobile
edwardc@westbasin.org

From:	E.J. Caldwell
To:	SLLanders@carsonca.gov
Cc:	Patrick Sheilds; Julie Frazier-Mathews; Rob Morrow; Matthew Veeh
Subject:	Notice of Public Hearing for West Basin MWD"s 2020 Urban Water Management Plan
Date:	Thursday, April 8, 2021 3:53:48 PM
Attachments:	Notice Public Hearing West Basin MWD 2020 UWMP.pdf
Importance:	High

Dear Ms. Landers,
On behalf of West Basin Municipal Water District, I want to thank the City of Carson for your continued support for West Basin's planning activities. As required by the Urban Water Management Planning Act, West Basin is in the process of preparing its 2020 Urban Water Management Plan (UWMP) and 2021 Water Shortage Contingency Plan (WSCP). In addition, WBMWD is preparing an appendix to both the 2015 UWMP and 2020 UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduced Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The 2015 UWMP is being amended only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the 2021 WSCP.

Through this effort, we look forward to your participation. Attached, please find the Notice of Public Hearing for the West Basin Municipal Water District 2020 Urban Water Management Plan. **The public hearing is scheduled as part of a WBMWD Board meeting on June 10, 2021 at 10:00 a.m.** This meeting will be available virtually, and will be properly noticed on the West Basin website (www.westbasin.org).

If you or your staff have any questions, please feel free to give me a call.

Sincerely,

E.J. Caldwell, Esq.
Water Policy & Resources Development Manager
310.660.6286 Office
213.500.0379 Mobile
edwardc@westbasin.org

From:	E.J. Caldwell
To:	rbeste@wrd.org
Cc:	Patrick Sheilds; Julie Frazier-Mathews; Rob Morrow; Matthew Veeh
Subject:	Notice of Public Hearing for West Basin MWD"s 2020 Urban Water Management Plan
Date:	Thursday, April 8, 2021 3:23:25 PM
Attachments:	Notice Public Hearing West Basin MWD 2020 UWMP.pdf
Importance:	High

Dear Rob,

On behalf of West Basin Municipal Water District, I want to thank you and your staff for your continued support for West Basin's planning activities. As required by the Urban Water Management Planning Act, West Basin is in the process of preparing its 2020 Urban Water Management Plan (UWMP) and 2021 Water Shortage Contingency Plan (WSCP). In addition, WBMWD is preparing an appendix to both the 2015 UWMP and 2020 UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduced Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The 2015 UWMP is being amended only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the 2021 WSCP.

Through this effort, your team has provided great assistance, and we look forward to your continued participation. Attached, please find the Notice of Public Hearing for the West Basin Municipal Water District 2020 Urban Water Management Plan. **The public hearing is scheduled as part of a WBMWD Board meeting on June 10, 2021 at 10:00 a.m.** This meeting will be available virtually, and will be properly noticed on the West Basin website (www.westbasin.org).

If you or your staff have any questions, please feel free to give me a call.

Sincerely,

E.J. Caldwell, Esq.
Water Policy & Resources Development Manager
310.660.6286 Office
213.500.0379 Mobile
edwardc@westbasin.org

From:	E.J. Caldwell
To:	Russ Bryden; drydman@dpw.lacounty.gov; eballesteros@dpw.lacounty.gov; KESKRIDGE@dpw.lacounty.gov
Cc:	Patrick Sheilds; Julie Frazier-Mathews; Rob Morrow; Matthew Veeh
Subject:	Notice of Public Hearing for West Basin MWD"s 2020 Urban Water Management Plan
Date:	Thursday, April 8, 2021 3:21:15 PM
Attachments:	Notice Public Hearing West Basin MWD 2020 UWMP.pdf
Importance:	High

Dear Russ,

On behalf of West Basin Municipal Water District, I want to thank you and your staff for your continued support for West Basin's planning activities. As required by the Urban Water Management Planning Act, West Basin is in the process of preparing its 2020 Urban Water Management Plan (UWMP) and 2021 Water Shortage Contingency Plan (WSCP). In addition, WBMWD is preparing an appendix to both the 2015 UWMP and 2020 UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduced Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The 2015 UWMP is being amended only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the 2021 WSCP.

Through this effort, your team has provided great assistance, and we look forward to your continued participation. Attached, please find the Notice of Public Hearing for the West Basin Municipal Water District 2020 Urban Water Management Plan. **The public hearing is scheduled as part of a WBMWD Board meeting on June 10, 2021 at 10:00 a.m.** This meeting will be available virtually, and will be properly noticed on the West Basin website (www.westbasin.org).

If you or your staff have any questions, please feel free to give me a call.

Sincerely,

E.J. Caldwell, Esq.
Water Policy & Resources Development Manager
310.660.6286 Office
213.500.0379 Mobile
edwardc@westbasin.org

From:	E.J. Caldwell
To:	Knutting@gswater.com; ccpak@gswater.com; ALCHAVEZ@gswater.com
Cc:	Greg Young; Jim Crowley; Gwyn-Mohr Tully; Patrick Sheilds; Julie Frazier-Mathews; Rob Morrow; Matthew Veeh
Subject:	Notice of Public Hearing for West Basin MWD"s 2020 Urban Water Management Plan
Date:	Thursday, April 8, 2021 3:11:59 PM
Attachments:	Notice Public Hearing West Basin MWD 2020 UWMP.pdf
Importance:	High

Dear Kate,

On behalf of West Basin Municipal Water District, I want to thank Golden State Water, you, and your staff for your continued support for West Basin's planning activities. As required by the Urban Water Management Planning Act, West Basin is in the process of preparing its 2020 Urban Water Management Plan (UWMP) and 2021 Water Shortage Contingency Plan (WSCP). In addition, WBMWD is preparing an appendix to both the 2015 UWMP and 2020 UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduced Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The 2015 UWMP is being amended only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the 2021 WSCP.

Through this effort, your team has provided great assistance, and we look forward to your continued participation. Attached, please find the Notice of Public Hearing for the West Basin Municipal Water District 2020 Urban Water Management Plan. **The public hearing is scheduled as part of a WBMWD Board meeting on June 10, 2021 at 10:00 a.m.** This meeting will be available virtually, and will be properly noticed on the West Basin website (www.westbasin.org).

If you or your staff have any questions, please feel free to give me a call.

Sincerely,

E.J. Caldwell, Esq.
Water Policy & Resources Development Manager
310.660.6286 Office
213.500.0379 Mobile
edwardc@westbasin.org

From:	E.J. Caldwell
To:	c.dillon@lomitacity.com; m.andersen@lomitacity.com; philw@westaeng.com; jakec@westaeng.com
Cc:	Patrick Sheilds; Julie Frazier-Mathews; Matthew Veeh; Rob Morrow
Subject:	Notice of Public Hearing for West Basin MWD"s 2020 Urban Water Management Plan
Date:	Thursday, April 8, 2021 2:59:29 PM
Attachments:	Notice Public Hearing West Basin MWD 2020 UWMP.pdf
Importance:	High

Dear Carla,
On behalf of West Basin Municipal Water District, I want to thank the City of Lomita, you, and your staff for your continued support for West Basin's planning activities. As required by the Urban Water Management Planning Act, West Basin is in the process of preparing its 2020 Urban Water Management Plan (UWMP) and 2021 Water Shortage Contingency Plan (WSCP). In addition, WBMWD is preparing an appendix to both the 2015 UWMP and 2020 UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduced Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The 2015 UWMP is being amended only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the 2021 WSCP.

Through this effort, your staff has provided great assistance, and we look forward to your continued participation. Attached, please find the Notice of Public Hearing for the West Basin Municipal Water District 2020 Urban Water Management Plan. **The public hearing is scheduled as part of a WBMWD Board meeting on June 10, 2021 at 10:00 a.m.** This meeting will be available virtually, and will be properly noticed on the West Basin website (www.westbasin.org).

If you or your staff have any questions, please feel free to give me a call.

Sincerely,

E.J. Caldwell, Esq.
Water Policy & Resources Development Manager
310.660.6286 Office
213.500.0379 Mobile
edwardc@westbasin.org

From:	E.J. Caldwell
To:	LAtwell@Cityofinglewood.org; Thomas Lee; Herda, Anthony
Cc:	Patrick Sheilds; Julie Frazier-Mathews; Rob Morrow; Matthew Veeh
Subject:	Notice of Public Hearing for West Basin MWD"s 2020 Urban Water Management Plan
Date:	Thursday, April 8, 2021 2:49:12 PM
Attachments:	Notice Public Hearing West Basin MWD 2020 UWMP.pdf
Importance:	High

Dear Mr. Atwell,

On behalf of West Basin Municipal Water District, I want to thank the City of Inglewood, you, and your staff for your continued support for West Basin's planning activities. As required by the Urban Water Management Planning Act, West Basin is in the process of preparing its 2020 Urban Water Management Plan (UWMP) and 2021 Water Shortage Contingency Plan (WSCP). In addition, WBMWD is preparing an appendix to both the 2015 UWMP and 2020 UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduced Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The 2015 UWMP is being amended only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the 2021 WSCP.

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If you or your staff have any questions, please feel free to give me a call.

Sincerely,

E.J. Caldwell, Esq.
Water Policy & Resources Development Manager
310.660.6286 Office
213.500.0379 Mobile
edwardc@westbasin.org

From:	E.J. Caldwell
To:	smitnick@elsegundo.org
Cc:	aesparza@elsegundo.org; mwatkins@elsegundo.org; Patrick Sheilds; Julie Frazier-Mathews; Matthew Veeh; Rob Morrow
Subject:	Notice of Public Hearing for West Basin MWD"s 2020 Urban Water Management Plan
Date:	Thursday, April 8, 2021 2:39:38 PM
Attachments:	Notice Public Hearing West Basin MWD 2020 UWMP.pdf
Importance:	High

Dear Mr. Mitnick,

On behalf of West Basin Municipal Water District, I want to thank the City of El Segundo, you, and your staff for your ongoing support for West Basin's planning activities. As required by the Urban Water Management Planning Act, West Basin is in the process of preparing its 2020 Urban Water Management Plan (UWMP) and 2021 Water Shortage Contingency Plan (WSCP). In addition, WBMWD is preparing an appendix to both the 2015 UWMP and 2020 UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduced Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The 2015 UWMP is being amended only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the 2021 WSCP.

Through this effort, your staff has provided great assistance, and we look forward to your continued participation. Attached, please find the Notice of Public Hearing for the West Basin Municipal Water District 2020 Urban Water Management Plan. **The public hearing is scheduled as part of a WBMWD Board meeting on June 10, 2021 at 10:00 a.m.** This meeting will be available virtually, and will be properly noticed on the West Basin website (www.westbasin.org).

If you or your staff have any questions, please feel free to give me a call.

Sincerely,

E.J. Caldwell, Esq.
Water Policy & Resources Development Manager
310.660.6286 Office
213.500.0379 Mobile
edwardc@westbasin.org

From:	E.J. Caldwell
To:	mhurley@calwater.com; mbolzowski@calwater.org; rsorensen@calwater.com; scordone@calwater.com; darmendariz@calwater.com
Cc:	Patrick Sheilds; Julie Frazier-Mathews; Matthew Veeh; Rob Morrow
Subject:	Notice of Public Hearing for West Basin MWD"s 2020 Urban Water Management Plan
Date:	Thursday, April 8, 2021 2:25:39 PM
Attachments:	Notice Public Hearing West Basin MWD 2020 UWMP.pdf
Importance:	High

Dear Dan and Michael,
On behalf of West Basin Municipal Water District, I want to thank California Water Service for your ongoing support for West Basin's planning activities. As required by the Urban Water Management Planning Act, West Basin is in the process of preparing its 2020 Urban Water Management Plan (UWMP) and 2021 Water Shortage Contingency Plan (WSCP). In addition, WBMWD is preparing an appendix to both the 2015 UWMP and 2020 UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduced Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The 2015 UWMP is being amended only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the 2021 WSCP.

Through this effort, your team has provided great assistance, and we look forward to your continued participation. Attached, please find the Notice of Public Hearing for the West Basin Municipal Water District 2020 Urban Water Management Plan. **The public hearing is scheduled as part of a WBMWD Board meeting on June 10, 2021 at 10:00 a.m.** This meeting will be available virtually, and will be properly noticed on the West Basin website (www.westbasin.org).

If you or your staff have any questions, please feel free to give me a call.

Sincerely,

E.J. Caldwell, Esq.
Water Policy & Resources Development Manager
310.660.6286 Office
213.500.0379 Mobile
edwardc@westbasin.org

From:	E.J. Caldwell
To:	geoff.williamson@amwater.com; nina.miller; garry.hofer@amwater.com
Cc:	Patrick Sheilds; Julie Frazier-Mathews; Matthew Veeh; Rob Morrow
Subject:	Notice of Public Hearing for West Basin MWD"s 2020 Urban Water Management Plan
Date:	Thursday, April 8, 2021 2:22:20 PM
Attachments:	Notice Public Hearing West Basin MWD 2020 UWMP.pdf
Importance:	High

Dear Garry Hofer,

On behalf of West Basin Municipal Water District, I want to thank you and your staff for your ongoing support for West Basin's planning activities. As required by the Urban Water Management Planning Act, West Basin is in the process of preparing its 2020 Urban Water Management Plan (UWMP) and 2021 Water Shortage Contingency Plan (WSCP). In addition, WBMWD is preparing an appendix to both the 2015 UWMP and 2020 UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduced Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The 2015 UWMP is being amended only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the 2021 WSCP.

Through this effort, your staff has provided great assistance, and we look forward to your continued participation. Attached, please find the Notice of Public Hearing for the West Basin Municipal Water District 2020 Urban Water Management Plan. **The public hearing is scheduled as part of a WBMWD Board meeting on June 10, 2021 at 10:00 a.m.** This meeting will be available virtually, and will be properly noticed on the West Basin website (www.westbasin.org).

If you or your staff have any questions, please feel free to give me a call.

Sincerely,

E.J. Caldwell, Esq.
Water Policy & Resources Development Manager
310.660.6286 Office
213.500.0379 Mobile
edwardc@westbasin.org

From:	E.J. Caldwell
To:	bmoe@citymb.info
Cc:	sigoe@citymb.info; Patrick Sheilds; Julie Frazier-Mathews; Matthew Veeh; Rob Morrow
Subject:	Notice of Public Hearing for West Basin MWD"s 2020 Urban Water Management Plan
Date:	Thursday, April 8, 2021 2:17:43 PM
Attachments:	Notice Public Hearing West Basin MWD 2020 UWMP.pdf
Importance:	High

Dear Bruce Moe,

On behalf of West Basin Municipal Water District, I want to thank the City of Manhattan Beach, you, and your staff for your ongoing support for West Basin's planning activities. As required by the Urban Water Management Planning Act, West Basin is in the process of preparing its 2020 Urban Water Management Plan (UWMP) and 2021 Water Shortage Contingency Plan (WSCP). In addition, WBMWD is preparing an appendix to both the 2015 UWMP and 2020 UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduced Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The 2015 UWMP is being amended only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the 2021 WSCP.

Through this effort, your staff has provided great assistance, and we look forward to your continued participation. Attached, please find the Notice of Public Hearing for the West Basin Municipal Water District 2020 Urban Water Management Plan. **The public hearing is scheduled as part of a WBMWD Board meeting on June 10, 2021 at 10:00 a.m.** This meeting will be available virtually, and will be properly noticed on the West Basin website (www.westbasin.org).

If you or your staff have any questions, please feel free to give me a call.

Sincerely,

E.J. Caldwell, Esq.
Water Policy & Resources Development Manager
310.660.6286 Office
213.500.0379 Mobile
edwardc@westbasin.org

From:	E.J. Caldwell
To:	Kelly Clark; bruce@lawaterkeeper.org
Cc:	Patrick Sheilds; Julie Frazier-Mathews; Rob Morrow; Matthew Veeh
Subject:	Notice of Public Hearing for West Basin MWD"s 2020 Urban Water Management Plan
Date:	Thursday, April 8, 2021 5:07:02 PM
Attachments:	Notice Public Hearing West Basin MWD 2020 UWMP.pdf
Importance:	High

Dear Kelly,

On behalf of West Basin Municipal Water District, I want to thank you for your interest in West Basin's planning activities. As required by the Urban Water Management Planning Act, West Basin is in the process of preparing its 2020 Urban Water Management Plan (UWMP) and 2021 Water Shortage Contingency Plan (WSCP). In addition, WBMWD is preparing an appendix to both the 2015 UWMP and 2020 UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduced Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The 2015 UWMP is being amended only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the 2021 WSCP.

Through this effort, we look forward to your continued participation. Attached, please find the Notice of Public Hearing for the West Basin Municipal Water District 2020 Urban Water Management Plan. **The public hearing is scheduled as part of a WBMWD Board meeting on June 10, 2021 at 10:00 a.m.** This meeting will be available virtually, and will be properly noticed on the West Basin website (www.westbasin.org).

If you or your staff have any questions, please feel free to give me a call.

Sincerely,

E.J. Caldwell, Esq.
Water Policy & Resources Development Manager
310.660.6286 Office
213.500.0379 Mobile
edwardc@westbasin.org

From: E.J. Caldwell
To: elee@cityofhawthorne.org
Cc: Iriarte, Gerardo; Norris, Von; Patrick Sheilds; Julie Frazier-Mathews; Rob Morrow; Matthew Veeh
Subject: RE: Notice of Public Hearing for West Basin MWD"s 2020 Urban Water Management Plan
Date: Thursday, April 8, 2021 4:13:19 PM
Importance: High

Dear Mr. Lee,
I apologize for the error in the previous message sent moments ago. Please know that we are very grateful for all the support we receive from the City of Hawthorne! As noted, per the Urban Water Management Planning Act, West Basin is in the process of preparing its 2020 Urban Water Management Plan (UWMP) and 2021 Water Shortage Contingency Plan (WSCP). In addition, WBMWD is preparing an appendix to both the 2015 UWMP and 2020 UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduced Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The 2015 UWMP is being amended only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the 2021 WSCP.

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If you or your staff have any questions, please feel free to give me a call.

Sincerely,

E.J. Caldwell, Esq.
Water Policy & Resources Development Manager
310.660.6286 Office
213.500.0379 Mobile
edwardc@westbasin.org

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MICHAEL CALABRIA
WEST BASIN MWD
17140 S AVALON BLVD
CARSON, CA 90746

COPY OF NOTICE

Notice Type: HRG NOTICE OF HEARING

Ad Description
DRAFT 2020 URBAN WATER MANAGEMENT PLAN DRAFT WATER SHORTAGE CONTINGENCY PLAN AND DRAFT APPENDIX 1 TO 2015

To the right is a copy of the notice you sent to us for publication in the LOS ANGELES SENTINEL. Please read this notice carefully and call us with any corrections. The Proof of Publication will be filed with the County Clerk, if required, and mailed to you after the last date below. Publication date(s) for this notice is (are):

05/27/2021 , 06/03/2021

The charge(s) for this order is as follows. An invoice will be sent after the last date of publication. If you prepaid this order in full, you will not receive an invoice.

Publication	$988.32
Total	$988.32

CNS# 3473202

Notice of Public Hearing
DRAFT 2020 URBAN WATER MANAGEMENT PLAN, DRAFT WATER SHORTAGE CONTINGENCY PLAN, AND DRAFT APPENDIX I TO 2015 URBAN WATER MANAGEMENT PLAN

The West Basin Municipal Water District (West Basin) Board of Directors will hold a public hearing on **Thursday, June 10, 2021 at 10:00 AM**, to receive comments on the District's draft 2020 Urban Water Management Plan (UWMP), draft Water Shortage Contingency Plan (WSCP), and draft Appendix I as an addendum to its 2015 UWMP.

The public hearing will be conducted during a West Basin Special Board meeting. Pursuant to the Governor's Executive Orders of March 12, 2020, and March 19, 2020, this meeting will be hosted by teleconference, with no physical meeting location being provided. Meeting details are provided herein:

West Basin Board of Directors: Special Board Meeting
Thursday, June 10, 2021 at 10:00 AM
Teleconference Participation Only (GoToMeeting and Phone-In Number)

The public hearing will be live streamed through GoToMeeting and will also be recorded. The meeting may be accessed using the following link on the West Basin website: http://wbmwdca.iqm2.com/Citizens/Default.aspx (Please check this website for additional details including final agenda and agenda packet).

The 2020 UWMP assesses West Basin's water resources portfolio, demands, and planning strategies over the next 25 years, as a requirement set forth by the California Department of Water Resources. The draft 2020 UWMP complies with state law requiring urban water suppliers to prepare and update urban water management plans every five years.

The draft WSCP describes how West Basin is prepared to respond to a variety of water shortage conditions. West Basin's draft WSCP satisfies the requirements of the California Water Code.

The draft Appendix I to the 2015 UWMP and draft Appendix D to the 2020 UWMP includes all of the elements described in Delta Plan Policy WR P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (Cal. Code Regs. tit. 23, § 5003) which need to be included in a water supplier's UWMP to support a certification of consistency for a future covered action.

Final drafts of the 2020 UWMP, WSCP, and Appendix I to the 2015 UWMP may be viewed on the West Basin website at www.westbasin.org. Public input is welcomed and will be considered prior to finalizing the 2020 UWMP, WSCP, and Appendix I to the 2015 UWMP. **All written comments must be received by 5:00 PM PDT on June 9, 2021.**

For more information, or to provide comments on the draft 2020 UWMP, draft WSCP, and draft Appendix I to the 2015 UWMP, please contact E.J. Caldwell, Manager of Water Policy and Resources Development at edwardc@westbasin.org.
5/27, 6/3/21
CNS-3473202#
LOS ANGELES SENTINEL

A0000005723913

Aviso de Audiencia Pública

BORRADOR DEL PLAN DE GESTIÓN DE AGUAS URBANAS 2020, BORRADOR DEL PLAN DE CONTINGENCIA POR ESCASEZ DEL AGUA, Y BORRADOR DEL APÉNDICE I PARA EL PLAN DE GESTIÓN DE AGUAS URBANAS 2015

La Junta de Directores de West Basin Municipal Water District (West Basin) llevará a cabo una audiencia pública el **jueves 10 de junio de 2021 a las 10:00 AM,** para recibir comentarios sobre el borrador del Plan de Gestión del Agua Urbana (UWMP, por sus siglas en inglés) del Distrito, el borrador del Plan de Contingencia por Escasez de Agua (WSCP, por sus siglas en inglés) y el borrador del Apéndice I como un adendum a sus UWMP de 2015.

La audiencia pública se llevará a cabo durante una reunión Especial de la Junta de West Basin. De conformidad con las Órdenes Ejecutivas del Gobernador del 12 de marzo de 2020, esta reunión será presentada por teleconferencia, sin que se proporcione una ubicación física para la reunión. Aquí se proporcionan los detalles de la reunión:

Junta de Directores de West Basin: Reunión Especial de la Junta
Jueves 10 de junio de 2021 a las 10:00 AM
Solo Participación en Teleconferencia (GoToMeeting y Número con Llamadas)

La audiencia pública será transmitida en vivo a través de GoToMeeting y también será grabada. Se puede acceder a la reunión utilizando el siguiente enlace en el sitio web de West Basin: http://wbmwdca.iqm2.com/Citizens/Default.aspx (Consulte este sitio web para detalles adicionales, incluyendo la agenda final y el paquete de la agenda).

El UWMP de 2020 evalúa la cartera de recursos hídricos de West Basin, y las estrategias de planificación durante los próximos 25 años, como un requisito establecido por el Departamento de Recursos Hídricos de California. El borrador del UWMP de 2020 cumple con la ley estatal que requiere que los proveedores de agua urbana preparen y actualicen los planes de gestión de agua urbana cada cinco años.

El borrador WSCP describe cómo el West Basin está preparada para responder a una variedad de condiciones de escasez de agua. El borrador WSCP de West Basin satisface los requisitos del Código de Aguas de California.

El borrador del Apéndice I al UWMP de 2015 y el borrador del Apéndice D al UWMP de 2020 incluye todos los elementos descritos en la Política del Plan Delta WR P1, Reducir la Dependencia Delta a Través de la Autosuficiencia Regional Mejorada del Agua (Código de Regs. De Cal. tit. 23, § 5003) que deben ser incluidos en un UWMP del proveedor de agua para respaldar una certificación de consistencia para una futura acción cubierta.

Los borradores finales del UWMP de 2020, WSCP, y el Apéndice I al UWMP de 2015 pueden ser vistos en el sitio web de Basin West en www.westbasin.org. Las aportaciones del público son bienvenidas y serán consideradas antes de finalizar el UWMP de 2020, WSCP, y el Apéndice I al UWMP de 2015. **Todos los comentarios escritos deben ser recibidos antes de las 5:00 PM PDT del 9 de junio de 2021.**

Para obtener más información, o para proporcionar comentarios sobre el borrador UWMP de 2020, el borrador WSCP, y el borrador del Apéndice I al UWMP de 2015, comuníquese con E.J. Caldwell, Gerente de Desarrollo de Recursos y Políticas del Agua en edwardc@westbasin.org.

Notice of Public Hearing

DRAFT 2020 URBAN WATER MANAGEMENT PLAN, DRAFT WATER SHORTAGE CONTINGENCY PLAN, AND DRAFT APPENDIX I TO 2015 URBAN WATER MANAGEMENT PLAN

The West Basin Municipal Water District (West Basin) Board of Directors will hold a public hearing on **Thursday, June 10, 2021 at 10:00 AM**, to receive comments on the District's draft 2020 Urban Water Management Plan (UWMP), draft Water Shortage Contingency Plan (WSCP), and draft Appendix I as an addendum to its 2015 UWMP.

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The public hearing will be live streamed through GoToMeeting and will also be recorded. The meeting may be accessed using the following link on the West Basin website: http://wbmwdca.iqm2.com/Citizens/Default.aspx (Please check this website for additional details including final agenda and agenda packet).

The 2020 UWMP assesses West Basin's water resources portfolio, demands, and planning strategies over the next 25 years, as a requirement set forth by the California Department of Water Resources. The draft 2020 UWMP complies with state law requiring urban water suppliers to prepare and update urban water management plans every five years.

The draft WSCP describes how West Basin is prepared to respond to a variety of water shortage conditions. West Basin's draft WSCP satisfies the requirements of the California Water Code.

The draft Appendix I to the 2015 UWMP and draft Appendix D to the 2020 UWMP includes all of the elements described in Delta Plan Policy WR P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (Cal. Code Regs. tit. 23, § 5003) which need to be included in a water supplier's UWMP to support a certification of consistency for a future covered action.

Final drafts of the 2020 UWMP, WSCP, and Appendix I to the 2015 UWMP may be viewed on the West Basin website at www.westbasin.org. Public input is welcomed and will be considered prior to finalizing the 2020 UWMP, WSCP, and Appendix I to the 2015 UWMP. **All written comments must be received by 5:00 PM PDT on June 9, 2021**.

For more information, or to provide comments on the draft 2020 UWMP, draft WSCP, and draft Appendix I to the 2015 UWMP, please contact E.J. Caldwell, Manager of Water Policy and Resources Development at edwardc@westbasin.org.

Gardena Valley News 5/27,6/3/21-105922

Advertising Order Confirmation

AdTaxi | Press-Telegram • The Beach Reporter
Daily Breeze • Palos Verdes Peninsula News

Ad Order Number	*Customer*	*Payor Customer*	*PO Number*
0011461578	WEST BASIN MUNICIPAL WATER DI	WEST BASIN MUNICIPAL WATER DI	
Sales Representative	*Customer Account*	*Payor Account*	*Ordered By*
Pauline Fernandez	5041168	5041168	MichaelC@westbasin.org
Order Taker	*Customer Address*	*Payor Address*	*Customer Fax*
Pauline Fernandez	17140 S AVALON BLVD STE 210 CARSON, CA 90746-1218	17140 S AVALON BLVD STE 210 CARSON, CA 90746-1218	
Order Source	*Customer Phone*	*Payor Phone*	*Customer EMail*
Select Source	310-660-6224	310-660-6224	

Current Queue	*Invoice Text*
Quote	MichaelC@westbasin.org

Tear Sheets	*Affidavits*	*Blind Box*	*Materials*	*Promo Type*	*Special Pricing*
0	0				

Ad Number	Ad Size	Color	Production Color	Ad Attributes	Production Method	Production Notes
0011461578-01	4 X 83 Li				AdBooker	

External Ad Number	Pick Up	Ad Type	Released for Publication
		Legal Liner	

Notice of Public Hearing

DRAFT 2020 URBAN WATER MANAGEMENT PLAN, DRAFT WATER SHORTAGE CONTINGENCY PLAN, AND DRAFT APPENDIX I TO 2015 URBAN WATER MANAGEMENT PLAN

The West Basin Municipal Water District (West Basin) Board of Directors will hold a public hearing on **Thursday, June 10, 2021 at 10:00AM,** to receive comments on the District's draft 2020 Urban Water Management Plan (UWMP), draft Water Shortage Contingency Plan (WSCP), and draft Appendix I as an addendum to its 2015 UWMP.

The public hearing will be conducted during a West Basin Special Board meeting. Pursuant to the Governor's Executive Orders of March 12, 2020, and March 19, 2020, this meeting will be hosted by teleconference, with no physical meeting location being provided. Meeting details are provided herein:

West Basin Board of Directors: Special Board Meeting
Thursday, June 10, 2021 at 10:00 AM
Teleconference Participation Only
(GoToMeeting and Phone-In Number)

The public hearing will be live streamed through GoToMeeting and will also be recorded. The meeting may be accessed using the following link on the West Basin website: http://wbmwdca.iqm2.com/Citizens/Default.aspx (Please check this website for additional details including final agenda and agenda packet).

The 2020 UWMP assesses West Basin's water resources portfolio, demands, and planning strategies over the next 25 years, as a requirement set forth by the California Department of Water Resources. The draft 2020 UWMP complies with state law requiring urban water suppliers to prepare and update urban water management plans every five years.

The draft WSCP describes how West Basin is prepared to respond to a variety of water shortage conditions. West Basin's draft WSCP satisfies the requirements of the California Water Code.

The draft Appendix I to the 2015 UWMP and draft Appendix D to the 2020 UWMP includes all of the elements described in Delta Plan Policy WR P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (Cal. Code Regs. tit. 23, § 5003) which need to be included in a water supplier's UWMP to support a certification of consistency for a future covered action.

Final drafts of the 2020 UWMP, WSCP, and Appendix I to the 2015 UWMP may be viewed on the West Basin website at www.westbasin.org. Public input is welcomed and will be considered prior to finalizing the 2020 UWMP, WSCP, and Appendix I to the 2015 UWMP. **All written comments must be received by 5:00 PM PDT on June 9, 2021.**

For more information, or to provide comments on the draft 2020 UWMP, draft WSCP, and draft Appendix I to the 2015 UWMP, please contact E.J. Caldwell, Manager of Water Policy and Resources Development at edwardc@westbasin.org.

Pub May 25; June 1, 2021 (2t) DB (11461578)

Product	Requested Placement	Requested Position	Run Dates	# Inserts
Daily Breeze	Legals CLS	General - 1076~	05/25/21, 06/01/21	2

Order Charges:

Net Amount	Tax Amount	Total Amount	Payment Amount	Amount Due
1,107.32	0.00	1,107.32	0.00	**$1,107.32**

If this confirmation includes an advertising proof, please check your proof carefully for errors, spelling, and/or typos. Errors not marked on the returned proof are not subject to credit or refunds.

Please note: To meet our printer's deadline, we must have your proof returned by the published deadline, and as indicated by your sales rep.

Please note: If you pay by bank card, your card statement will show the merchant as "SoCal Newspaper Group".

Notice of Public Hearing

DRAFT 2020 URBAN WATER MANAGEMENT PLAN, DRAFT WATER SHORTAGE CONTINGENCY PLAN, AND DRAFT APPENDIX I TO 2015 URBAN WATER MANAGEMENT PLAN

The West Basin Municipal Water District (West Basin) Board of Directors will hold a public hearing on **Thursday, June 10, 2021at 10:00 AM**, to receive comments on the District's draft 2020 Urban Water Management Plan (UWMP), draft Water Shortage Contingency Plan (WSCP), and draft Appendix I as an addendum to its 2015 UWMP.

The public hearing will beconducted duringa West Basin Special Board meeting. Pursuant to the Governor's Executive Orders of March 12, 2020, and March 19, 2020, this meeting will be hosted by teleconference, with no physical meeting location being provided. Meeting details are provided herein:

West Basin Board of Directors: Special Board Meeting Thursday, June 10, 2021 at 10:00 AM Teleconference Participation Only (GoToMeeting and Phone-In Number)

The public hearing will be live streamed through GoToMeeting and will also be recorded. The meeting may be accessed using the following link on the West Basin website: http://wbmwdca.iqm2.com/Citizens/Default.aspx (Please check this website for additional details including final agenda and agenda packet).

The 2020 UWMP assesses West Basin's water resources portfolio, demands, and planning strategies over the next 25 years, as a requirement set forth by the California Department of Water Resources. The draft 2020 UWMP complies with state law requiring urban water suppliers to prepare and update urban water management plans every five years.

The draft WSCP describes how West Basin is prepared to respond to a variety of water shortage conditions. West Basin's draft WSCP satisfies the requirements of the California Water Code.

The draft Appendix I to the 2015 UWMP anddraft Appendix D to the 2020 UWMP includes all of the elements described in Delta Plan Policy WR P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (Cal. Code Regs. tit. 23, § 5003) which need to be included in a water supplier's UWMP to support a certification of consistency for a future covered action.

Final drafts of the 2020 UWMP, WSCP, and Appendix I to the 2015 UWMP may be viewed on the West Basin website at www.westbasin.org. Public input is welcomed and will be considered prior to finalizing the 2020 UWMP, WSCP, and Appendix I to the 2015 UWMP. **All written comments must be received by 5:00 PM PDT on June 9, 2021.**

For more information, or to provide comments on the draft 2020 UWMP,draft WSCP, and draft Appendix I to the 2015 UWMP, please contact E.J. Caldwell, Manager of Water Policy and Resources Development at edwardc@westbasin.org.

Published The Malibu Times 5/27, 6/3/21

Legal Notice

NOTICE OF PETITION TO ADMINISTER ESTATE OF: BETTY MARGUERITE MCGINNIS
CASE NO. 21STPB04847

To all heirs, beneficiaries, creditors, contingent creditors, and persons who may otherwise be interested in the WILL or estate, or both of BETTY MARGUERITE MCGINNIS.

A PETITION FOR PROBATE has been filed by KATHLEEN A. CICCARELI in the Superior Court of California, County of LOS ANGELES.

THE PETITION FOR PROBATE requests that KATHLEEN A. CICCARELI be appointed as personal representative to administer the estate of the decedent.

THE PETITION requests the decedent's WILL and codicils, if any, be admitted to probate. The WILL and any codicils are available for examination in the file kept by the court.

THE PETITION requests authority to administer the estate under the Independent Administration of Estates Act. (This authority will allow the personal representative to take many actions without obtaining court approval. Before taking certain very important actions, however, the personal representative will be required to give notice to interested persons unless they have waived notice or consented to the proposed action.) The independent administration authority will be granted unless an interested person files an objection to the petition and shows good cause why the court should not grant the authority.

A HEARING on the petition will be held in this court as follows: 06/18/21 at 8:30AM in Dept. 2D located at 111 N. HILL ST., LOS ANGELES, CA 90012

IF YOU OBJECT to the granting of the petition, you should appear at the hearing and state your objections or file written objections with the court before the hearing. Your appearance may be in person or by your attorney.

IF YOU ARE A CREDITOR or a contingent creditor of the decedent, you must file your claim with the court and mail a copy to the personal representative appointed by the court within the later of either (1) four months from the date of first issuance of letters to a general personal representative, as defined in section 58(b) of the California Probate Code, or (2) 60 days from the date of mailing or personal delivery to you of a notice under section 9052 of the California Probate Code.

Other California statutes and legal authority may affect your rights as a creditor. You may want to consult with an attorney knowledgeable in California law.

YOU MAY EXAMINE the file kept by the court. If you are a person interested in the estate, you may file with the court a Request for Special Notice (form DE-154) of the filing of an inventory and appraisal of estate assets or of any petition or account as provided in Probate Code section 1250. A Request for Special Notice form is available from the court clerk.

Attorney for Petitioner
THE DLJ LAW FIRM, P.C.
DORIAN L. JACKSON, ESQ.
SBN 269795
3655 TORRANCE BLVD.,
SUITE 300
TORRANCE CA 90503
5/24, 5/25, 5/31/21
CNS-3473456#
THE DAILY BREEZE

FICTITIOUS BUSINESS NAME STATEMENT
File No. 2021 097228
The following person is doing business as:
CHASE WORLDWIDE
1441 W. 130th St
Gardena, CA 90249
LA COUNTY
REGISTERED OWNER:
Chase Packaging, LLC
18207 S Broadway
Gardena, CA 90248
CA
This Business is conducted by:
A LIMITED LIABILITY COMPANY
The registrant commenced to transact business under the fictitious business name or names listed above on: **N/A**
I declare that all information in this statement is true and correct.
Signed: **Chase Packaging, LLC**
Managing Member,
Frances Chase
This statement was filed with the County Clerk of Los Angeles on **Apr 26, 2021**
NOTICE: This Fictitious Name Statement expires five years from the date it was filed in the office of the County Clerk. A new Fictitious Business Name Statement must be filed before that time. The filing of this statement does not of itself authorize the use in this state of a fictitious business name in violation of the rights of another under federal, state, or common law (See Section 14411 et seq., Business and Profession Code).
Pub May 25; June 1, 8, 15, 2021
(41) DB (11464802)

Legal Notice

Notice Calling for Requests for Proposals

District:	Torrance Unified School District
Project Description:	A Complete Assessment of all Mechanical Air Handling Equipment
Project Number:	RFP No. 19-06.11.21
Proposals Due By:	Friday, June 11, 2021; 3:00 PM
Submit Proposal To:	Torrance Unified School District via VENDOR REGISTRY

RFP Documents
Available Via:
https://vrapp.vendorregistry.com/Vendor/Register/Index/torrance-unified-school-district-purchasing-ca-vendor-registration

NOTICE IS HEREBY GIVEN that the TORRANCE UNIFIED SCHOOL DISTRICT, acting by and through its Board of Education, hereinafter "the District" will receive up to, but not later than the above-stated date and time, sealed Proposals for the Contract for the Work of the Project generally described as RFP No. 19-06.11.21 A Complete Assessment of all Mechanical Air Handling Equipment.

Submittal of Proposals. All Proposals shall be submitted on forms furnished by the District. Proposals must conform with, and be responsive to, the proposal and Contract Documents, copies of which may be obtained from the District as set forth above. Only Proposals submitted to the District via Vendor Registry prior to the date and time set forth above shall be considered.

No Withdrawal of Proposals. The District's Board reserves the right to reject any and all proposals and/or waive any irregularity in any bid received. Proposals shall not be withdrawn by any Bidder for a period of Ninety (90) calendar days after the opening of Proposals. During this time, all Bidders shall guarantee prices quoted in their respective Proposals.

Contrator's License. Required License: C-20 Warm-Air Heating, Venti- lating, and Air Conditioning Contrators to provide a comprehensive assessment of all mechanical air handling equipment servicing all District schools and support facilities with the goal of improving indoor air quality. In accordance with the provisions of California Public Contract Code §3300, the District requires that Bidders posses the required license classification at the time of award and throughout the duration of this contract and the license shall be stated on the bidder's proposal.

Voluntary Job-Walk. On June 1, 2021 at 8:00 AM a voluntary site walk will be held at 3 District properties to assist in the development of proposals. The 3 sites will assist contractors in understanding the basic conditions that will be encountered while conducting the assessment. We will meet for the walk at the Purchasing Office located at 2334 Plaza Del Amo, Torrance, CA. 90501 at 8:00 AM on June 1st. We will be walking one elementary school, one middle school, and one high school.

Public Works. Completion of this contract may require the Bidder to assemble/disassemble air handling equipment in order to inspect, which become subject to public works requirements and registration with the Department of Industrial Relations.

Award of Contract. The Contract for the Work, if awarded, will be by action of the District's Board of Education to the proposal that meets the qualifications and established by the RFP documents.

Inquiries and Clarifications. This document is for informational purposes and shall not relieve the Bidder of the requirements to fully become familiarized with all the factors affecting the Proposal. The Bidder is advised that all inquiries and clarifications about the RFP documents, specifications, etc., shall be submitted to the District in writing no later than **Friday June 4, 2021 at 11:00 AM.** The District will respond by the end of the business day on Tuesday, June 8, 2021. Verbal communication by either party with regard to this matter is invalid. Inquiries shall be made in writing to: Richard Vazquez, Director, Purchasing & Communication Services, via email at: vazquez.richard@tusd.org or on Vendor Registry.

Richard Vazquez
Director, Purchasing & Communication Services
TORRANCE UNIFIED SCHOOL DISTRICT
Los Angeles County, State of California
FOR: The Board of Trustees

Pub May 25, 31, 2021 (21) DB (11464676)

Notice of Public Hearing

DRAFT 2020 URBAN WATER MANAGEMENT PLAN, DRAFT WATER SHORTAGE CONTINGENCY PLAN, AND DRAFT APPENDIX I TO 2015 URBAN WATER MANAGEMENT PLAN

The West Basin Municipal Water District (West Basin) Board of Directors will hold a public hearing on **Thursday, June 10, 2021 at 10:00AM,** to receive comments on the District's draft 2020 Urban Water Management Plan (UWMP), draft Water Shortage Contingency Plan (WSCP), and draft Appendix I as an addendum to its 2015 UWMP.

The public hearing will be conducted during a West Basin Special Board meeting. Pursuant to the Governor's Executive Orders of March 17, 2020, and March 19, 2020, this meeting will be hosted by teleconference, with no physical meeting location being provided. Meeting details are provided herein:

West Basin Board of Directors; Special Board Meeting
Thursday, June 10, 2021 at 10:00 AM
Teleconference Participation Only
(GoToMeeting and Phone-In Number)

The public hearing will be live streamed through GoToMeeting and will also be recorded. The meeting may be accessed using the following link on the West Basin website: http://wbmwdca.iamz.com/Citizens/Default.aspx (Please check this website for additional details including final agenda and agenda packet).

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The draft WSCP describes how West Basin is prepared to respond to a variety of water shortage conditions. West Basin's draft WSCP satisfies the requirements of the California Water Code.

The draft Appendix I to the 2015 UWMP and draft Appendix D to the 2020 UWMP includes all of the elements described in Delta Plan Policy WR P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (Cal. Code Regs. tit. 23, § 5003) which need to be included in a water supplier's UWMP to support a certification of consistency for a future covered action.

Final drafts of the 2020 UWMP, WSCP, and Appendix I to the 2015 UWMP may be viewed on the West Basin website at www.westbasin.org. Public input is welcomed and will be considered prior to finalizing the 2020 UWMP, WSCP, and Appendix I to the 2015 UWMP. **All written comments must be received by 5:00 PM PDT on June 9, 2021.**

For more information, or to provide comments on the draft 2020 UWMP, draft WSCP, and draft Appendix I to the 2015 UWMP, please contact E.J. Caldwell, Manager of Water Policy and Resources Development at edwardc@westbasin.org.

Pub May 25; June 1, 2021 (21) DB (11461578)

Legal Notice

NOTICE OF PETITION TO ADMINISTER ESTATE OF MARION KAY REEVE
Case No. 21STPB04803

To all heirs, beneficiaries, creditors, contingent creditors, and persons who may otherwise be interested in the will or estate, or both, of MARION KAY REEVE

A PETITION FOR PROBATE has been filed by Javier Rodriguez in the Superior Court of California, County of LOS ANGELES.

THE PETITION FOR PROBATE requests that Javier Rodriguez be appointed as personal representative to administer the estate of the decedent.

THE PETITION requests authority to administer the estate under the Independent Administration of Estates Act. (This authority will allow the personal representative to take many actions without obtaining court approval. Before taking certain very important actions, however, the personal representative will be required to give notice to interested persons unless they have waived notice or consented to the proposed action.) The independent administration authority will be granted unless an interested person files an objection to the petition and shows good cause why the court should not grant the authority.

A HEARING on the petition will be held on June 18, 2021 at 8:30 AM in Dept. No. 44 located at 111 N. Hill St., Los Angeles, CA 90012.

IF YOU OBJECT to the granting of the petition, you should appear at the hearing and state your objections or file written objections with the court before the hearing. Your appearance may be in person or by your attorney.

IF YOU ARE A CREDITOR or a contingent creditor of the decedent, you must file your claim with the court and mail a copy to the personal representative appointed by the court within the later of either (1) four months from the date of first issuance of letters to a general personal representative, as defined in section 58(b) of the California Probate Code, or (2) 60 days from the date of mailing or personal delivery to you of a notice under section 9052 of the California Probate Code.

Other California statutes and legal authority may affect your rights as a creditor. You may want to consult with an attorney knowledgeable in California law.

YOU MAY EXAMINE the file kept by the court. If you are a person interested in the estate, you may file with the court a Request for Special Notice (form DE-154) of the filing of an inventory and appraisal of estate assets or of any petition or account as provided in Probate Code section 1250. A Request for Special Notice form is available from the court clerk.

Attorney for petitioner:
MARC A MAZOROW ESQ
SBN 149073
LAW OFFICE OF MARC A MAZOROW
25202 CRENSHAW BLVD
STE 205
TORRANCE CA 90505
CN977924 REEVE
May 24,25,31, 2021

Legal Notice

NOTICE OF PETITION TO ADMINISTER ESTATE OF BARBARA JEAN FUSCO
Case No. 21STPB04902

To all heirs, beneficiaries, creditors, contingent creditors, and persons who may otherwise be interested in the will or estate, or both, of BARBARA JEAN FUSCO

A PETITION FOR PROBATE has been filed by Sergio Fusco in the Superior Court of California, County of LOS ANGELES.

THE PETITION FOR PROBATE requests that Sergio Fusco be appointed as personal representative to administer the estate of the decedent.

THE PETITION requests authority to administer the estate under the Independent Administration of Estates Act. (This authority will allow the personal representative to take many actions without obtaining court approval. Before taking certain very important actions, however, the personal representative will be required to give notice to interested persons unless they have waived notice or consented to the proposed action.) The independent administration authority will be granted unless an interested person files an objection to the petition and shows good cause why the court should not grant the authority.

A HEARING on the petition will be held on June 18, 2021 at 8:30 AM in Dept. No. 4 located at 111 N. Hill St., Los Angeles, CA 90012.

IF YOU OBJECT to the granting of the petition, you should appear at the hearing and state your objections or file written objections with the court before the hearing. Your appearance may be in person or by your attorney.

IF YOU ARE A CREDITOR or a contingent creditor of the decedent, you must file your claim with the court and mail a copy to the personal representative appointed by the court within the later of either (1) four months from the date of first issuance of letters to a general personal representative, as defined in section 58(b) of the California Probate Code, or (2) 60 days from the date of mailing or personal delivery to you of a notice under section 9052 of the California Probate Code.

Other California statutes and legal authority may affect your rights as a creditor. You may want to consult with an attorney knowledgeable in California law.

YOU MAY EXAMINE the file kept by the court. If you are a person interested in the estate, you may file with the court a Request for Special Notice (form DE-154) of the filing of an inventory and appraisal of estate assets or of any petition or account as provided in Probate Code section 1250. A Request for Special Notice form is available from the court clerk.

Attorney for petitioner:
R CHRISTINE BROWN ESQ
SBN 141292
LAW OFFICES OF R CHRISTINE BROWN APC
2377 CRENSHAW BLVD
STE 330
TORRANCE CA 90501
CN978113 FUSCO
May 25,26, Jun 1, 2021

Legal Notices-GV

court and mail a copy to the personal representative appointed by the court within the later of either (1) four months from the date of first issuance of letters to a general personal representative, as defined in section 58(b) of the California Probate Code, or (2) 60 days from the date of mailing or personal delivery to you of a notice under section 9052 of the California Probate Code.
Other California statutes and legal authority may affect your rights as a creditor. You may want to consult with an attorney knowledgeable in California law.
YOU MAY EXAMINE the file kept by the court. If you are a person interested in the estate, you may file with the court a Request for Special Notice (form DE-154) of the filing of an inventory and appraisal of estate assets or of any petition or account as provided in Probate Code section 1250. A Request for Special Notice form is available from the court clerk.
Attorney for petitioner: MARK E SWATIK ESQ
SBN 269542
BURKLEY BRANDLIN & SWATIK LLP
21515 HAWTHORNE BLVD STE 820
TORRANCE CA 90503
CN977527 GONZALEZ May 13,20,27, 2021
Gardena Valley News 5/13,20,27/21-105964

NOTICE OF PETITION TO ADMINISTER ESTATE OF: JULIA DEE LUTH CASE NO. 19STPB00702

To all heirs, beneficiaries, creditors, contingent creditors, and persons who may otherwise be interested in the WILL or estate, or both of JULIA DEE LUTH.
A PETITION FOR PROBATE has been filed by THOMAS D. LUTH in the Superior Court of California, County of LOS ANGELES.
THE PETITION FOR PROBATE requests that THOMAS D. LUTH be appointed as personal representative to administer the estate of the decedent.
THE PETITION requests the decedent's WILL and codicils, if any, OR in the alternative, probate of the decedent's LOST WILL be admitted to probate. The WILL and any codicils are available for examination in the file kept by the court.
THE PETITION requests authority to administer the estate under the Independent Administration of Estates Act. (This authority will allow the personal representative to take many actions without obtaining court approval. Before taking certain very important actions, however, the personal representative will be required to give notice to interested persons unless they have waived notice or consented to the proposed action.) The independent administration authority will be granted unless an interested person files an objection to the petition and shows good cause why the court should not grant the authority.
A HEARING on the petition will be held in this court as follows: 07/26/21 at 9:30AM in Dept. 44 located at 111 N. HILL ST., LOS ANGELES, CA 90012
IF YOU OBJECT to the granting of the petition, you should appear at the hearing and state your objections or file written objections with the court before the hearing. Your appearance may be in person or by your attorney.
IF YOU ARE A CREDITOR or a contingent creditor of the decedent, you must file your claim with the court and mail a copy to the personal representative appointed by the court within the later of either (1) four months from the date of first issuance of letters to a general personal representative, as defined in section 58(b) of the California Probate Code, or (2) 60 days from the date of mailing or personal delivery to you of a notice under section 9052 of the California Probate Code.
Other California statutes and legal authority may affect your rights as a creditor. You may want to consult with an attorney knowledgeable in California law.
YOU MAY EXAMINE the file kept by the court. If you are a person interested in the estate, you may file with the court a Request for Special Notice (form DE-154) of the filing of an inventory and appraisal of estate assets or of any petition or account as provided in Probate Code section 1250. A Request for Special Notice form is available from the court clerk.
Attorney for Petitioner
ERIC B. JETER, ESQ.
SBN 261839, JETER LAW
3655 TORRANCE BLVD.
3RD FLOOR
TORRANCE CA 90503
5/27, 6/3, 6/10/21
CNS-3473990#
GARDENA VALLEY NEWS
Gardena Valley News 5/27,6/3,10/2021-106366

NOTICE OF SALE
NOTICE IS HEREBY GIVEN that the undersigned intends to sell personal property and business goods and boxes of unknown content identified by Occupant name and items unit below, to enforce a lien imposed on said property pursuant to Sections 21700-21716 of the Business & Professions, section 2328 of the UCC, Section 535 of the Penal Code and provisions of the Civil Code.
The undersigned will sell at public sale by competitive bidding on **JUNE 3, 2021 AT 10:00 AM**, on the premises where said property has been stored known as:
SAF KEEP SELF STORAGE
2045 W ROSECRANS AVE
GARDENA, CA 90249
310-225-2577
County of Los Angeles, State of California, the following:
NAME and ITEMS
ROBY LAPLACE: DESK, SHOES, BARRELS, AND BLANKETS
JAMES SHAMBURGER: DRESSER, AND BOXES
JONESHA SCOTT: SCOOTER, CLOTHES, AND BAGS
MICHAEL GIBSON: LOOSE ITEMS, COLLECTABLES
ADRINNA HAWTHORNE: HOUSEHOLD ITEMS, AND BOXES
PIERCE ROBINSON: COUCH AND LOVE SEAT
JAMIE MCALISTER: LOOSE ITEMS, BOXES AND TOYS
BABY BERMUDEZ: TOTES, BOXES AND CABINET
JASMINE SIITIA: SPEAKER AND BAGS
ANGELA HOOKS: HOUSEHOLD FURNITURE
DLITA MILLER: TOTE, AND WRAPPING PAPER
LYNN TAYLOR: HOUSEHOLD ITEMS, AND BAGS
NATALIA MELGAR AYALA: BAGS, CLOTHES AND TIRES
CHRIS ITOW: EXERCISE EQUIPMENT, AND TOTES
Purchases must be paid for at the time of purchase in cash only. All purchased items are sold as is, where is and must be removed at the time of sale. The sale is subject to cancellation in the event of settlement between Owner and obligated party.
AUCTIONEER: O'Brien's Auction and Vehicle Lien Service
(951) 681-4113
B/N 158525941
Gardena Valley News 5/20,27/2021-106149

NOTICE OF PETITION TO ADMINISTER ESTATE OF: PERRY HIROSHI UCHIDA CASE NO. 20STPB03477

To all heirs, beneficiaries, creditors, contingent creditors, and persons who may otherwise be interested in the will or estate, or both, of PERRY HIROSHI UCHIDA.
A PETITION for Probate has been filed by: RYAN UCHIDA in the Superior Court of California, County of Los Angeles.
The Petition for Probate requests that RYAN UCHIDA be appointed as personal representative to administer the estate of the decedent.
The petition requests authority to administer the estate under the Independent Administration of Estates Act. (This authority will allow the personal representative to take many actions without obtaining court approval. Before taking certain very important actions, however, the personal representative will be required to give notice to interested persons unless they have waived notice or consented to the proposed action.) The independent administration authority will be granted unless an interested person files an objection to the petition and shows good cause why the court should not grant the authority.
A hearing on the petition will be held in this court as follows: **06/14/2021 at 9:30 AM, Dept. 44, 111 North Hill Street, Los Angeles, CA 90012.**
If you object to the granting of the petition, you should appear at the hearing and state your objections or file written objections with the court before the hearing. Your appearance may be in person or by your attorney.
If you are a creditor or a contingent creditor of the decedent, you must file your claim with the court and mail a copy to the personal representative appointed by the court within the later of either (1) four months from the date of first issuance of letters to a general personal representative, as defined in section 58(b) of the California Probate Code, or (2) 60 days from the date of mailing or personal delivery to you of a notice under section 9052 of the California Probate Code. Other California statutes and legal authority may affect your rights as a creditor. You may want to consult with an attorney knowledgeable in California law.
You may examine the file kept by the court. If you are a person interested in the estate, you may file with the court a Request for Special Notice (form DE-154) of the filing of an inventory and appraisal of estate assets or of any petition or account as provided in Probate Code section 1250. A Request for Special Notice form is available from the court clerk.
Attorney for Petitioner: Cara J. Hagan, Esq., 110 E Wilshire Ave., Suite 405, Fullerton, CA 92832. 714-526-3377
Gardena Valley News 5/27,6/3,10/2021-106462

ORDER TO SHOW CAUSE FOR CHANGE OF NAME CASE NO. 21TRCP00122

TO ALL INTERESTED PERSONS: Petitioner: MARIA GLORIA RODRIGUEZ filed a petition with this court for a decree changing names as follows: MARIA GLORIA RODRIGUEZ to GLORIA RODRIGUEZ.
THE COURT ORDERS that all persons interested in this matter shall appear before this court at the hearing indicated below to show cause, if any, why the petition for change of name should not be granted. Any person objecting to the name changes described above must file a written objection that includes the reasons for the objection at least two court days before the matter is scheduled to be heard and must appear at the hearing to show cause why the petition should not be granted. If no written objection is timely filed, the court may grant the petition without a hearing.
NOTICE OF HEARING
06/18/2021
8:30 a.m., Dept. B
Superior Court of California
County of Los Angeles
825 Maple Ave
Torrance, CA 90503
A copy of this Order to Show Cause shall be published at least once each week for four successive weeks prior to the date set for hearing on the petition in the following newspaper of general circulation, printed in this county: Gardena Valley News
DATE: 04/27/2021
Gary Y. Tanaka
Judge of the Superior Court
Gardena Valley News 5/6,13,20,27/21-105740

NOTICE OF PETITION TO ADMINISTER ESTATE OF LARRY EDWARD VOIT CASE NO. 21STPB04720

To all heirs, beneficiaries, creditors, contingent creditors, and persons who may otherwise be interested in the will or estate, or both, of: LARRY EDWARD VOIT
A PETITION FOR PROBATE has been filed by MONIKA VOIT in the Superior Court of California, County of LOS ANGELES.
THE PETITION FOR PROBATE requests that CARLOS ANWANDTER - Brother of Surviving Spouse be appointed as personal representative to administer the estate of the decedent.
THE PETITION requests authority to administer the estate under the Independent Administration of Estates Act with full authority . (This authority will allow the personal representative to take many actions without obtaining court approval. Before taking certain very important actions, however, the personal representative will be required to give notice to interested persons unless they have waived notice or consented to the proposed action.) The independent administration authority will be granted unless an interested person files an objection to the petition and shows good cause why the court should not grant the authority.
A HEARING on the petition will be held on 06/16/2021 at 8:30 in Dept. 5 located at 111 N. HILL ST. LOS ANGELES CA 90012 STANLEY MOSK COURTHOUSE.
IF YOU OBJECT to the granting of the petition, you should appear at the hearing and state your objections or file written objections with the court before the hearing. Your appearance may be in person or by your attorney.
IF YOU ARE A CREDITOR or a contingent creditor of the decedent, you must file your claim with the court and mail a copy to the personal representative appointed by the court within the later of either (1) four months from the date of first issuance of letters to a general personal representative, as defined in section 58(b) of the California Probate Code, or (2) 60 days from the date of mailing or personal delivery to you of a notice under section 9052 of the California Probate Code.
Other California statutes and legal authority may affect your rights as a creditor. You may want to consult with an attorney knowledgeable in California law.
YOU MAY EXAMINE the file kept by the court. If you are a person interested in the estate, you may file with the court a Request for Special Notice (DE-154) of the filing of an inventory and appraisal of estate assets or of any petition or account as provided in Probate Code section 1250. A Request for Special Notice form is available from the court clerk.
Attorney for Petitioner: SUSAN H. HOOVER
SBN 165438
425 VIA CORTA, SUITE 201
PALOS VERDES ESTATES, CA 90274
Telephone: (310) 373-8525
5/27, 6/3, 6/10/21
CNS-3475060#
GARDENA VALLEY NEWS
Gardena Valley News 5/27,6/3,10/2021-106466

PUBLIC NOTICE
TO; Roberto Cabrera
FROM:Wendy Cabrera
I am in the process of terminating your parental rights of your child born 01-04-2010. If you object contact me immediately at 310-989-6293.
Gardena Valley News 5/20,27/2021-106176

Lien Sale
Indo US fulfillment Inc, Unit G5 at 153 Rosecrance Ave Warehousing, LLC / ReadySpaces located at 153 W Rosecrans Ave, Gardena CA 90248 will be sold to the highest bidder at www.StorageAuctions.com on June 1, 2021 at 5:00 PM to satisfy the owner's lien for rent in accordance with CA law. All contents sold "as is" and by office only. Seller neither warrants title to any items sold and does not make any express or implied warranties to any item sold.
Gardena Valley News 5/20,27/21-106234

FBN Legal Notices-

FICTITIOUS BUSINESS NAME STATEMENT 2021-086945

The following person is doing business as: **BRADLEY LOCK & KEY**, 3181 E IMPERIAL HWY #D, LYNWOOD, CA 90262. Registered Owners: JOSE ARMANDO MORALES SANTAY, 9120 1/4 SOUTH VERMONT AVE, LOS ANGELES, CA 90262. This business is conducted by: INDIVIDUAL. The date registrant started to transact business under the fictitious business name or names listed above: N/A. Signed: JOSE ARMANDO MORALES SANTAY. This statement was filed with the County Recorder Office: 04/13/2021. Notice — This Fictitious Name Statement expires five years from the date it was filed in the office of the County Recorder Office. A new Fictitious Business Name Statement must be filed before that time. The filing of this statement does not of itself authorize the use in this state of a Fictitious Business Name in violation of the rights of another under federal, state or common law (see Section 14411 et.seq., Business and Professions Code).
Gardena Valley News 5/6,13,20,27/21-103304

FICTITIOUS BUSINESS NAME STATEMENT 2021-086950

The following person is doing business as: **BASKINS ROBBINS #360037**, 4066 S. VICTORIA AVE., LOS ANGELES, CA 90008.

Notice of Public Hearing

DRAFT 2020 URBAN WATER MANAGEMENT PLAN, DRAFT WATER SHORTAGE CONTINGENCY PLAN, AND DRAFT APPENDIX I TO 2015 URBAN WATER MANAGEMENT PLAN

The West Basin Municipal Water District (West Basin) Board of Directors will hold a public hearing on **Thursday, June 10, 2021 at 10:00 AM**, to receive comments on the District's draft 2020 Urban Water Management Plan (UWMP), draft Water Shortage Contingency Plan (WSCP), and draft Appendix I as an addendum to its 2015 UWMP.
The public hearing will be conducted during a West Basin Special Board meeting. Pursuant to the Governor's Executive Orders of March 12, 2020, and March 19, 2020, this meeting will be hosted by teleconference, with no physical meeting location being provided. Meeting details are provided herein:
West Basin Board of Directors: Special Board Meeting
Thursday, June 10, 2021 at 10:00 AM
Teleconference Participation Only (GoToMeeting and Phone-In Number)

The public hearing will be live streamed through GoToMeeting and will also be recorded. The meeting may be accessed using the following link on the West Basin website: http://wbmwdca.iqm2.com/Citizens/Default.aspx (Please check this website for additional details including final agenda and agenda packet).
The 2020 UWMP assesses West Basin's water resources portfolio, demands, and planning strategies over the next 25 years, as a requirement set forth by the California Department of Water Resources. The draft 2020 UWMP complies with state law requiring urban water suppliers to prepare and update urban water management plans every five years.
The draft WSCP describes how West Basin is prepared to respond to a variety of water shortage conditions. West Basin's draft WSCP satisfies the requirements of the California Water Code.
The draft Appendix I to the 2015 UWMP and draft Appendix D to the 2020 UWMP includes all of the elements described in Delta Plan Policy WR P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (Cal. Code Regs. tit. 23, § 5003) which need to be included in a water supplier's UWMP to support a certification of consistency for a future covered action.
Final drafts of the 2020 UWMP, WSCP, and Appendix I to the 2015 UWMP may be viewed on the West Basin website at www.westbasin.org. Public input is welcomed and will be considered prior to finalizing the 2020 UWMP, WSCP, and Appendix I to the 2015 UWMP. **All written comments must be received by 5:00 PM PDT on June 9, 2021**.
For more information, or to provide comments on the draft 2020 UWMP, draft WSCP, and draft Appendix I to the 2015 UWMP, please contact E.J. Caldwell, Manager of Water Policy and Resources Development at edwardc@westbasin.org.
Gardena Valley News 5/27,6/3/21-105922

Aviso Publicos/ Legales

Avisos Legales

AUTORIDAD DE TRANSPORTE METROPOLITANO DEL CONDADO DE LOS ÁNGELES (LACMTA)
SOLICITUD DE PROPUESTA

LACMTA recibirá propuestas para **PS75288 – Consultor de Revisión de Diseño Turno de Desarrollo Conjunto en el Mostrador de Recepcionista** del 9° Piso, Departamento de Gestión de Proveedores/ Contratos, One Gateway Plaza, Los Ángeles, CA 90012.

Todas las propuestas deben enviarse a LACMTA en una de las dos maneras, ya sea (1) sobres sellados por correo o entregados personalmente a la dirección de abajo, o (2) electrónicamente por correo electrónico a bids@metro.net. Todas las propuestas deben ser recibidas por LACMTA en o antes de las **2:00 p.m.** Hora del Pacífico del **miércoles 26 de mayo de 2021.** Las Las propuestas recibidas después de la fecha y hora anteriores serán rechazadas y devueltas al proponente sin abrir. Además, se recomiendo que el correo(s) electrónico(s) del proponente se envíen con un recibo de Entrega y Lectura para sus registros. Por último, los proponentes deberán enviar un correo electrónico de verificación a nombre del Administrador del Contrato de la RFP después de enviar la propuesta(s) por correo electrónico a bids@metro.net. El correo electrónico de verificación deberá indicar qué una propuesta ha sido enviada por el Nombre del Proveedor para la RFP# en X números de correos electrónicos.

Una conferencia Virtual Previa a la Propuesta se llevará a cabo a las 9:00 a.m. del miércoles 5 de mayo de 2021. Consulte la solicitud para obtener más detalles.

Para obtener una copia de la especificación de la Propuesta/Licitación visite nuestra Página de Convocatoria en nuestro Portal de Proveedores en https://business.metro.net o para obtener más información envíe un correo electrónico a Erica Rodríguez-Duvergel a rodriguezduvergele@metro.net.
4/21, 4/22, 4/23, 4/24, 4/25, 4/26, 4/27, 4/28, 4/29, 4/30, 5/1, 5/2, 5/3, 5/4, 5/5, 5/6, 5/7, 5/8, 5/9, 5/10, 5/11, 5/12, 5/13, 5/14, 5/15, 5/16, 5/17, 5/18, 5/19, 5/20, 5/21, 5/22, 5/23, 5/24, 5/25, 5/26/21
CNS-3459802#
LA OPINION

Design/Build Opportunity with LACCD
For future bidding opportunities please register with the District's Online Vendor Portal which can be accessed by visiting the website www.build-laccd.org then clicking the PlanetBids link.
NOTICE IS HEREBY GIVEN that the Los Angeles Community College District ("District") invites Design Build Entities to submit Statements of Qualification (SOQ) for the following procurement:
Request for Qualifications (RFQ) from Design Build Entities for Los Angeles City College, Cesar Chavez Admin & Workforce Replacement Bldg.
Phase 1 Scope of Work (tentative):
The new Cesar Chavez building is located at a central crossroads on the campus. Located immediately north of the Student Services building - it opens on the east to the College's Main Quad; frames a new college North Quad; and creates a west entry plaza for the campus along Heliotrope. The design of these quads, and their interconnections, will create a new 'sense of place' for LACC for decades to come. The building will form a functional and physical center for the College and should be visible from the nearby 101 freeway.
The new structure will be a 4-story building consolidating 16 departments into one building, including Senior Leadership, Business, Information Technology, Campus Safety, Dietetics, Career Technical Education, and Faculty and Staff Center. There is a large multi-purpose room intended to foster indoor/outdoor events and available for community as available. The new building is estimated to be approximately 67,000 total Gross Square Feet (GSF), and 43,650 total Assignable Square Feet (ASF). All site work and site utilities required to integrate the new building into the campus are also included as defined by the Programming and Project Criteria (PPC) documents.
Phase 2 Scope of work (tentative):
Demolition of the existing Cesar Chavez building after completion of the new building. The existing Cesar Chavez is a 3-story (plus partial basement), concrete-frame building that totals approximately 86,400 gross square feet, and shall be completely demolished as part of this project. Hazardous materials abatement to be performed prior to demolition. The scope of work also includes site restoration and creation of a new campus west entry plaza as defined by the PPC.
How the Procurement Process for this Project will take place: This procurement process will take place in two steps: Step 1 is the instant Request for Qualifications process ("RFQ"); to be followed by Step 2, a Request for Proposal process to pre-qualified firms ("RFP"). Upon receipt and evaluation of the Statements of Qualifications ("SOQ's") submitted in response to this RFQ, the SOQ's will be scored, evaluated and ranked with the District selecting three pre-qualified Applicant firms, designated as "Finalists", to receive the RFP. The Finalists' proposals (including cost component) submitted in response to the RFP will then be scored, evaluated, and a successful Design Build Entity ("DBE") will be identified for award of a Design Build Contract using a "Best Value" (qualitative) method of selection.
All Statement of Qualifications (SOQ) must be uploaded to the Online Vendor Portal per instructions contained in the RFQ. **The District's Online Vendor Portal can be accessed by visiting the website www.build-laccd.org then clicking the PlanetBids link.**
Details regarding the **Non-Mandatory (for GCs) Pre-SOQ Meeting** can be found on the PlanetBids information tab. All questions shall be directed through the Online Vendor Portal.
5/25/21
CNS-3473776#
LA OPINION

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY (LACMTA)

REQUEST FOR PROPOSAL

LACMTA will receive proposals for **PS76262 - Los Angeles Union Station Strategic Advisor** at the 9th Floor Receptionist Desk, Vendor/ Contract Management Department, One Gateway Plaza, Los Angeles, CA 90012.

This project is a Small Business Enterprise (SBE) Set-Aside contract. To participate in this RFP, proposers must be SBE certified with LACMTA prior to proposal due date. For information on the Set-Aside Program, visit: https://business.metro.net/VendorPortal/faces/home1/certifications.

All proposals must be submitted to LACMTA in one of two ways, either (1) sealed envelopes by mail or hand delivered to the address below, or (2) electronically via email to bids@metro.net. All proposals must be received on or before **2:00 p.m. Pacific Time** on Wednesday, June 30, 2021. Proposals received later than the above date and time will be rejected and returned to the proposer unopened. Additionally, it is recommended that proposer's email(s) are sent with a Delivery and Read receipt for their records. Lastly, proposers should send a verification email to the named Contract Administrator of the RFP after the email submission(s) of proposal to bids@metro.net. The verification email should indicate that a proposal has been submitted by Vendor Name for RFP# on X number of emails.

A Virtual Pre-Proposal conference will be held at 11:00 a.m. on Wednesday, June 2, 2021. Refer to solicitation for details.

For a copy of the Proposal/Bid specification visit our Solicitation Page on our Vendor Portal at https://business.metro.net or for further information email Erica Rodriguez-Duvergel at rodriguezduvergele@metro.net.
5/19, 5/20, 5/21, 5/24, 5/25, 5/26, 5/27, 5/28, 5/31, 6/1, 6/2, 6/3, 6/4, 6/7, 6/8, 6/9, 6/10, 6/11, 6/14, 6/15, 6/16, 6/17, 6/18, 6/21, 6/22, 6/23, 6/24, 6/25, 6/28, 6/29, 6/30/21
CNS-3469381#
LA OPINION

Bienes Raíces

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Call Ray

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En negocio de licoreria, Con drive through, completamente equipada, $700 al mes "Negociable".
11436 Cedar Ave. Bloomington, Ca. 92316
Para mas informes llame al:
443-983-3911
909-961-2441

Venta de Propiedades

Se Venden Terrenos Vacantes En Nevada
Residenciales y Comerciales, 7 lotes grandes en Hwy 95 y 140, desde $23,700 total cada uno, bajo enganche, $187 al mes. Llame a Dueña Beatriz
818-521-2042

Aviso de Audiencia Pública

BORRADOR DEL PLAN DE GESTIÓN DE AGUAS URBANAS 2020, BORRADOR DEL PLAN DE CONTINGENCIA POR ESCASEZ DEL AGUA, Y BORRADOR DEL APÉNDICE I PARA EL PLAN DE GESTIÓN DE AGUAS URBANAS 2015

La Junta de Directores de West Basin Municipal Water District (West Basin) llevará a cabo una audiencia pública el **jueves 10 de junio de 2021 a las 10:00 AM,** para recibir comentarios sobre el borrador del Plan de Gestión del Agua Urbana (UWMP, por sus siglas en inglés) del Distrito, el borrador del Plan de Contingencia por Escasez de Agua (WSCP, por sus siglas en inglés) y el borrador del Apéndice I como un adendum a sus UWMP de 2015.

La audiencia pública se llevará a cabo durante una reunión Especial de la Junta de West Basin. De conformidad con las Órdenes Ejecutivas del Gobernador del 12 de marzo de 2020, esta reunión será presentada por teleconferencia, sin que se proporcione una ubicación física para la reunión. Aquí se proporcionan los detalles de la reunión:

Junta de Directores de West Basin: Reunión Especial de la Junta
Jueves 10 de junio de 2021 a las 10:00 AM
Solo Participación en Teleconferencia (GoToMeeting y Número con Llamadas)

La audiencia pública será transmitida en vivo a través de GoToMeeting y también será grabada. Se puede acceder a la reunión utilizando el siguiente enlace en el sitio web de West Basin: http://wbmwdca.iqm2.com/Citizens/Default.aspx (Consulte este sitio web para detalles adicionales, incluyendo la agenda final y el paquete de la agenda).

El UWMP de 2020 evalúa la cartera de recursos hídricos de West Basin, y las estrategias de planificación durante los próximos 25 años, como un requisito establecido por el Departamento de Recursos Hídricos de California. El borrador del UWMP de 2020 cumple con la ley estatal que requiere que los proveedores de agua urbana preparen y actualicen los planes de gestión de agua urbana cada cinco años.

El borrador WSCP describe cómo el West Basin está preparada para responder a una variedad de condiciones de escasez de agua. El borrador WSCP de West Basin satisface los requisitos del Código de Aguas de California.

El borrador del Apéndice I al UWMP de 2015 y el borrador del Apéndice D al UWMP de 2020 incluye todos los elementos descritos en la Política del Plan Delta WR P1, Reducir la Dependencia Delta a Través de la Autosuficiencia Regional Mejorada del Agua (Código de Regs. De Cal. tít. 23, § 5003) que deben ser incluidos en un UWMP del proveedor de agua para respaldar una certificación de consistencia para una futura acción cubierta.

Los borradores finales del UWMP de 2020, WSCP, y el Apéndice I al UWMP de 2015 pueden ser vistos en el sitio web de Basin West en www.westbasin.org. Las aportaciones del público son bienvenidas y serán consideradas antes de finalizar el UWMP de 2020, WSCP, y el Apéndice I al UWMP de 2015. **Todos los comentarios escritos deben ser recibidos antes de las 5:00 PM PDT del 9 de junio de 2021.**

Para obtener más información, o para proporcionar comentarios sobre el borrador UWMP de 2020, el borrador WSCP, y el borrador del Apéndice I al UWMP de 2015, comuníquese con E.J. Caldwell, Gerente de Desarrollo de Recursos y Políticas del Agua en edwardc@westbasin.org.

La Autoridad de Vivienda de la Ciudad de Los Angeles

Actualización y cierre de la lista de espera de vivienda pública

La Autoridad de Vivienda de la Ciudad de Los Angeles (HACLA) actualizará la lista de espera para los solicitantes a su programa de Vivienda Pública

Avisos de la actualización de la lista de espera se enviarán por correo a partir del 31 de mayo de 2021 y los solicitantes tendrán hasta el viernes 2 de julio de 2021 para responder. Los solicitantes que no respondan serán eliminados de la lista de espera.

Si ya ha solicitado vivienda pública y no ha recibido un aviso llame al 1-833-HACLA-4-U (833-422-5248) lunes – viernes 8:00 AM – 4:00 PM

HACLA cerrará la lista de espera para los solicitantes de unidades de vivienda pública de una (1) habitación. A partir del viernes 2 de julio de 2021, HACLA ya no aceptará solicitudes para unidades de 1 habitación. Cualquier solicitud recibida antes del 2 de julio de 2021 será honrada. Las solicitudes de unidades de una habitación recibidas después del 2 de julio de 2021 no se procesarán.

HACLA Centro de solicitudes
2600 Wilshire Blvd
Los Angeles, CA 90057
1-833-HACLA-4-U

HACLA

CNSB#3472034

109-97870-1

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213-422-4772 ó 213-422-9972

La Opinión tiene cientos de trabajos en la edición impresa y en la red para que puedas escoger el tuyo.

¡La Opinión lo tiene!
Clasificados!

Public Notices

Notice of Public Hearing
DRAFT 2020 URBAN WATER MANAGEMENT PLAN, DRAFT WATER SHORTAGE CONTINGENCY PLAN, AND DRAFT APPENDIX I TO 2015 URBAN WATER MANAGEMENT PLAN

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For more information, or to provide comments on the draft 2020 UWMP, draft WSCP, and draft Appendix I to the 2015 UWMP, please contact E.J. Caldwell, Manager of Water Policy and Resources Development at edwardc@westbasin.org.
5/27, 6/3/21
CNS-3473202#
LOS ANGELES SENTINEL

COASTAL DEVELOPMENT PERMIT NO. 14-058, CODE VIOLATION NO. 21-016, VARIANCE NO. 19-046, SITE PLAN REVIEW NOS. 14-044 AND 14-045, AND DEMOLITION PERMIT NO. 17-024 - An application for demolition of existing unpermitted 5,062 square-foot equestrian facility and construction of a new two-story 4,034 square foot barn, a one-story 1,486 square foot horse stable, a one-story 2,624 square foot horse stable, riding ring, and new onsite wastewater treatment system, with associated development including a new driveway, grading, and retaining walls, including a variance for a retaining wall exceeding six feet in height, site plan review for construction in excess of 18 feet in height, up to 28 feet for a pitched roof, and a site plan review for development on slopes steeper than 3 to 1

Location: 6295 Murphy Way
APN: 4467-006-019
Zoning: Rural Residential-Two Acre (RR-2)
Applicant: The Land and Water Co.
Owner: Tomboy Farms, LLC
Appealable to: City Council
Environmental Review: Categorical Exemption CEQA Guidelines Section15303(a)
Application Filed: September 30, 2014
Case Planner: Lilly Rudolph, Contract Planner
(310) 456-2489, extension lrudolph@malibucity.org

WIRELESS COMMUNICATION FACILITY NO. 19-020, COASTAL DEVELOPMENT PERMIT NO. 20-019, VARIANCE NO. 19-049, AND SITE PLAN REVIEW NO. 20-020 - An application filed on November 4, 2019, for the replacement of wireless antennas and electrical support equipment attached to a replacement utility pole with a new height of 39 feet (currently 34 feet), including a variance for construction of a wireless communications facility over 28 feet in height and a site plan review to place a wireless communications facility in the public right-of-way. In addition to City-issued permits, the applicant is required to obtain permits for use of the pole by Southern California Edison and will need to obtain an encroachment permit from Caltrans.

Nearest Location: 18921.5 Pacific Coast Highway
Nearest APN: 4449-009-012
Nearest Zoning: Rural Residential-Forty Acre
GPS Coorinate: 34.039453, -118.587804
Pole ID: #00203ATC
Property Owner: Caltrans public right-of-way
Appealable to: City Council and California Coastal Commission
Environmental Review: Categorical Exemption CEQA Guidelines Sections 15301(b) and 15303(d)
Application Filed: November 4, 2019
Case Planner: Tyler Eaton, Assistant Planner
(310) 456-2489, extension 273 teaton@malibucity.org
Applicant: Alexa Rome, Motive, on behalf of Verizon Wireless
arome@motive-energy.com (714) 752-4263

WIRELESS COMMUNICATION FACILITY NO. 20-005, COASTAL DEVELOPMENT PERMIT NO. 20-031, VARIANCE NO. 20-021, AND SITE PLAN REVIEW NO. 20-037 - An application, filed on June 8, 2020, for the

Pole ID: #4303313E
Property Owner: Caltrans, public right-of-way
Appealable to: City Council and California Coastal Commission
Environmental Review: Categorical Exemption CEQA Guidelines Section 15303(d)
City Case Planner: Tyler Eaton, Assistant Planner
(310) 456-2489, extension 273 teaton@malibucity.org
Applicant: Bardo Osorio, Eukon Group, on behalf of Verizon Wireless
bardo.osorio@eukongroup.com (949) 702-0566

For the projects identified above with a categorical exemption for environmental review, pursuant to the authority and criteria contained in the California Environmental Quality Act (CEQA), the Planning Director has analyzed these proposed projects and found that they are listed among the classes of projects that have been determined not to have a significant adverse effect on the environment. Therefore, the projects are categorically exempt from the provisions of CEQA. The Planning Director has further determined that none of the six exceptions to the use of a categorical exemption apply to these projects (CEQA Guidelines Section 15300.2).

A written staff report will be available at or before the hearing for the projects. All persons wishing to address the Commission regarding these matters will be afforded an opportunity in accordance with the Commission's procedures.

Copies of all related documents can be reviewed by any interested person by contacting the case planner during regular business hours. Oral and written comments may be presented to the Planning Commission on, or before, the date of the meeting.

LOCAL APPEAL – A decision of the Planning Commission may be appealed to the City Council by an aggrieved person by written statement setting forth the grounds for appeal. An appeal shall be filed with the City Clerk within ten days following the date of action (15 days for tentative maps) for which the appeal is made and shall be accompanied by an appeal form and filing fee, as specified by the City Council. Appeals shall be emailed to psalazar@malibucity.org and the filing fee shall be mailed to Malibu Planning Department, attention: Patricia Salazar, 23825 Stuart Ranch Road, Malibu, CA 90265. Payment must be received within 10 days of the appeal deadline. Appeal forms may be found online at www.malibucity.org/planningforms. If you are unable to submit your appeal via email, please contact Patricia Salazar by calling (310) 456-2489 ext. 245 at least two business days before your appeal deadline to arrange alternative delivery of the appeal.

COASTAL COMMISSION APPEAL – For projects appealable to the Coastal Commission, an aggrieved person may appeal the Planning Commission's approval to the Coastal Commission within 10 working days of the issuance of the City's Notice of Final Action. Appeal forms may be found online at www.coastal.ca.gov or by calling 805-585-1800. Such an appeal must be filed with the Coastal Commission, not the City.

IF YOU CHALLENGE THE CITY'S ACT
LIMITED TO RAISING ONLY THOSE ISSUES YOU OR SOMEONE ELSE

COMMON LAW (SEE SECTION 14411 ET SEQ., BUSINESS AND PROFESSIONS CODE).
Publish in The Malibu Times 5/27, 6/03, 6/10, 6/17/21.

2021 107312
FICTITIOUS BUSINESS NAME STATEMENT
THE FOLLOWING PERSON IS (ARE) DOING BUSINESS AS:
1.JEN'S PIRATE BOOTY
1048 S Los Angeles ST STE A
LOS ANGELES, CA 90015 LOS ANGELES COUNTY
2. OPEN ROAD COMPANY
3. GLOBAL GYPSY INC
4. GOLDEN
5. GOLDEN BY JPB
6. JEN'S LITTLE PIRATE
7. JPB
REGISTERED OWNER(S):
1.OPEN ROAD CO LLC
1048 S LOS ANGELES ST STE A
LOS ANGELES, CA 90015 CA
This business is conducted by a Limited Liability Company. The registrant has commenced to transact business under the fictitious business name or names listed above as of 02/2009. I declare that all information in this statement is true and correct. (A registrant who declares as true information which he or she knows to be false is guilty of a crime). Signed, JENNIFER ROSSI, CEO. This statement was filed with the County Clerk of Los Angeles County on MAY 10, 2021.
NOTICE IN ACCORDANCE WITH SUBDIVISION (a) OF SECTION 17920, A FICTITIOUS NAME STATEMENT GENERALLY EXPIRES AT THE END OF FIVE YEARS FROM THE DATE ON WHICH IT WAS FILED IN THE OFFICE OF THE COUNTY CLERK, EXCEPT, AS PROVIDED IN SUBDIVISION (b) OF SECTION 17920, WHERE IT EXPIRES 40 DAYS AFTER ANY CHANGE IN THE FACTS SET FORTH IN THE STATEMENT PURSUANT TO SECTION 17913 OTHER THAN A CHANGE IN THE RESIDENCE ADDRESS OF A REGISTERED OWNER. A NEW FICTITIOUS BUSINESS NAME STATEMENT MUST BE FILED BEFORE THE EXPIRATION.
THE FILING OF THIS STATEMENT DOES NOT OF ITSELF AUTHORIZE THE USE IN THIS STATE OF A FICTITIOUS BUSINESS NAME IN VIOLATION OF THE RIGHTS OF ANOTHER UNDER FEDERAL, STATE, OR COMMON LAW (SEE SECTION 14411 ET SEQ., BUSINESS AND PROFESSIONS CODE).
Publish in The Malibu Times 5/27, 6/03, 6/10, 6/17/21.

Notice of Public Hearing

DRAFT 2020 URBAN WATER MANAGEMENT PLAN, DRAFT WATER SHORTAGE CONTINGENCY PLAN, AND DRAFT APPENDIX I TO 2015 URBAN WATER MANAGEMENT PLAN
The West Basin Municipal Water District (West Basin) Board of Directors will hold a public hearing on **Thursday, June 10, 2021at 10:00 AM**, to receive comments on the District's draft 2020 Urban Water Management Plan (UWMP), draft Water Shortage Contingency Plan (WSCP), and draft Appendix I as an addendum to its 2015 UWMP.
The public hearing will beconducted duringa West Basin Special Board meeting. Pursuant to the Governor's Executive Orders of March 12, 2020, and March 19, 2020, this meeting will be hosted by teleconference, with no physical meeting location being provided. Meeting details are provided herein:
West Basin Board of Directors: Special Board Meeting Thursday, June 10, 2021 at 10:00 AM Teleconference Participation Only (GoToMeeting and Phone-In Number)
The public hearing will be live streamed through GoToMeeting and will also be recorded. The meeting may be accessed using the following link on the West Basin website: http://wbmwdca.iqm2.com/Citizens/Default.aspx (Please check this website for additional details including final agenda and agenda packet).
The 2020 UWMP assesses West Basin's water resources portfolio, water demands, and planning strategies over the next 25 years, as a requirement set forth by the California Department of Water Resources. The draft 2020 UWMP complies with state law requiring urban water suppliers to prepare and update urban water management plans every five years.
The draft WSCP describes how West Basin is prepared to respond to a variety of water shortage conditions. West Basin's draft WSCP satisfies the requirements of the California Water Code.
The draft Appendix I to the 2015 UWMP anddraft Appendix D to the 2020 UWMP includes all of the elements described in Delta Plan Policy WR P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (Cal. Code Regs. tit. 23, § 5003) which need to be included in a water supplier's UWMP to support a certification of consistency for a future covered action.
Final drafts of the 2020 UWMP, WSCP, and Appendix I to the 2015 UWMP may be viewed on the West Basin website at www.westbasin.org. Public input is welcomed and will be considered prior to finalizing the 2020 UWMP, WSCP, and Appendix I to the 2015 UWMP. **All written comments must be received by 5:00 PM PDT on June 9, 2021.**
For more information, or to provide comments on the draft 2020 UWMP,draft WSCP, and draft Appendix I to the 2015 UWMP, please contact E.J. Caldwell, Manager of Water Policy and Resources Development at edwardc@westbasin.org.
Published The Malibu Times 5/27, 6/3/21

NOTICE OF PUBLIC HEARING

E

Attachment E: Adoption Resolution

RESOLUTION NO. 06-21-1132

A RESOLUTION OF THE BOARD OF DIRECTORS OF WEST BASIN MUNICIPAL WATER DISTRICT ADOPTING THE WATER SHORTAGE CONTINGENCY PLAN

WHEREAS, West Basin Municipal Water District (West Basin) is a wholesale water agency that provides imported drinking water to more than 800,000 residents living in 17 cities and unincorporated areas of Los Angeles County; and

WHEREAS, the California Urban Water Management Planning Act requires urban water suppliers providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually to prepare and adopt, in accordance with prescribed requirements, a Water Shortage Contingency Plan; and

WHEREAS, the California Urban Water Management Planning Act specifies the requirements and procedures for adopting such Water Shortage Contingency Plans; and

WHEREAS, the West Basin Board of Directors has duly reviewed, discussed, and considered such Water Shortage Contingency Plan and has determined the Water Shortage Contingency Plan to be consistent with the California Urban Water Management Planning Act and to be an accurate representation of the planned actions during shortage conditions for the West Basin Municipal Water District.

NOW, THEREFORE, BE IT RESOLVED, by the Board of Directors of the West Basin Municipal Water District that, on June 28, 2021 this District hereby adopts this Water Shortage Contingency Plan for submittal to the state of California; and

BE IT FURTHER RESOLVED, that the President of the Board of Directors of the West Basin Municipal Water District is hereby authorized to sign the adopted Water Shortage Contingency Plan.

PASSED, APPROVED, AND ADOPTED on the 28th day, June 2021.

Harold C. Williams
President

ATTEST

Secretary