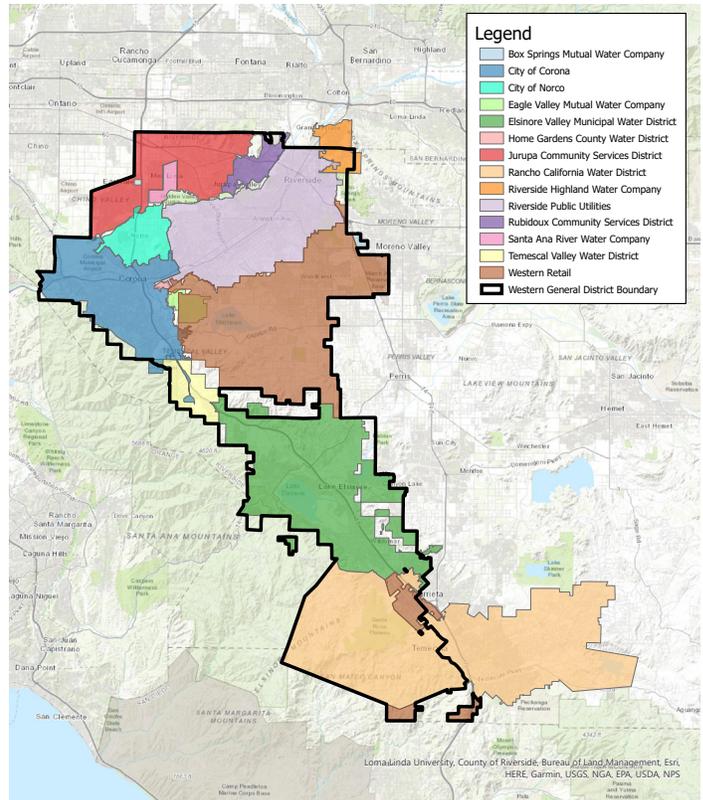
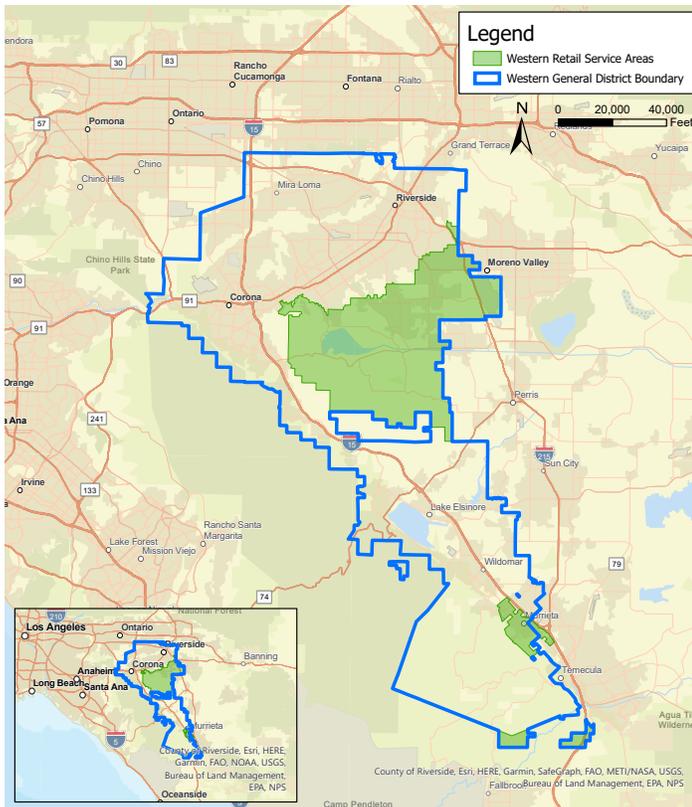


Providing Water Security to Western Riverside County for over 60 years

Western is a regional leader for safe, reliable, and affordable water supply.

The Western Municipal Water District (Western) was formed in 1954 to bring supplemental water to the growing western Riverside county. Today, Western provides water supply, wastewater treatment and disposal, and water resource management to nearly one million people in a service area covering roughly 527-square miles in western Riverside County.

Western serves approximately 25,000 retail and fourteen (14) wholesale customers with water from the Colorado River, State Water Project, recycled water and local groundwater.



As a member agency of the Metropolitan Water District of Southern California (Metropolitan), Western Wholesale provides supplemental water to the cities of Corona, Norco, and Riverside and the water agencies serving Box Springs, Eagle Valley, Elsinore Valley, Temescal Valley, and Temecula.

Western Retail serves retail customers directly in Orangecrest, Mission Grove, El Sobrante, Eagle Valley, Temescal Canyon, Woodcrest, Lake Mathews, portions of Mead Valley and Perris, and March Air Reserve Base.

Western's 2020 Urban Water Management Plan

Contents of Western's 2020 URBAN WATER MANAGEMENT PLAN

PART 1: INTRODUCTION

Chapter 1 – Introduction

Chapter 2 – Outreach and
Engagement

Chapter 3 – Service Area
Description

PART 2: WESTERN WHOLESALE

Chapter 4 – Wholesale
Water Supply

Chapter 5 – Wholesale
Water Use

Chapter 6 – Wholesale Water
Service Reliability and Drought
Risk Assessment

Chapter 7 – Wholesale Demand
Management Measures

Chapter 8 – Wholesale Water
Shortage Contingency Plan

PART 3: WESTERN RETAIL

Chapter 9 – Retail Water Supply

Chapter 10 – Retail Water Use

Chapter 11 – Retail Water Service
Reliability and Drought Risk
Assessment

Chapter 12 – Retail Demand
Management Measures

Chapter 13 – Retail Water
Shortage Contingency Plan

PART 4: SUPPORTING INFORMATION

References

Appendices

One document that describes Western's water vision.

Water agencies in California that serve more than 3,000 customers or 3,000 acre-feet (AF) annually are required by California law to prepare an Urban Water Management Plan (UWMP or Plan) every five years. The Plan supports Western's long-term resource planning to ensure that adequate water supplies are available to meet existing and future water needs. The Plan integrates local and regional land use planning, regional water supply, infrastructure, and demand management projects, as well as statewide issues of concern like climate change and regulatory requirements.

The Plan includes sections for **Western Wholesale and Western Retail**, and focuses on the following topics:

Supply and Demand – A detailed analysis of current and future water use and sources of supply over a 25-year planning horizon

Water Supply Reliability – A detailed assessment of water supply reliability

Drought Risk Assessment – An analysis of drought risk assuming a five consecutive year drought

Water Use Efficiency and Conservation – A summary of water use efficiency and conservation programs

Water Shortage Contingency Plan – A summary of planned responses in the event of a water shortage

Outreach and Engagement – A summary of the outreach, communication and engagement that was conducted in support of the Plan

Western is both a water wholesaler (Western Wholesale) and retailer (Western Retail), and the 2020 UWMP covers both roles separately.

The 2020 UWMP is an Important Part of Water Planning in the Region

The UWMP integrates with many other regional and local planning efforts for planning consistency.

This UWMP is just one of many interrelated local and regional planning efforts Western is either leading or coordinating with to secure water supplies for customers within its service area. For more information on the specific scope and content of each of the plans shown below, refer to Figure 1-2 in the UWMP. The 2020 UWMP was prepared in parallel with a Drought Contingency Plan (DCP) that is being developed for the entire Western Wholesale service area.

REGIONAL PLANS	WESTERN'S PLANS	LOCAL PLANS
Metropolitan Integrated Resources Plan and 2020 UWMP	Western Retail Facilities Master Plans	Retail Agency UWMPs
One Water One Watershed (OWOW) Plan	Western's 2020 UWMP	Local Hazard Mitigation Plan
2020 Upper Santa Ana Watershed Integrated Regional UWMP	Risk and Resilience Assessment & Emergency Response Plan	
Arlington Basin Groundwater Sustainability Plan	2019 Water Use Efficiency Master Plan	
Western 2020 Drought Contingency Plan		



Connecting with Stakeholders and the Public

Western is committed to informing and engaging stakeholders and the general public.

Western is committed to engaging its customers and stakeholders in a proactive and collaborative way to assist in its water planning efforts. The various groups involved with the UWMP and their role are summarized in the graphics below. Western implemented a tiered engagement plan that included local, regional, state and national participation, including the general public and Western’s own Board of Directors.

DROUGHT TASK FORCE MEMBER ORGANIZATIONS

ENVIRONMENTAL AND CONSERVATION GROUPS

- Inland Empire Resource Conservation District
- Inland Empire Waterkeeper
- Riverside-Corona Resource Conservation District
- Santa Ana Watershed Project Authority

ENVIRONMENT AND SOCIAL JUSTICE

- Center for Community Action and Environmental Justice

REGIONAL GOVERNMENT (6%)

- Riverside County Flood Control and Water Conservation District
- Western Riverside Council of Governments

RESEARCH

- University of California, Riverside Water Resources Institute

LOCAL GOVERNMENT

- City of Murrieta

TRIBAL REPRESENTATIVES

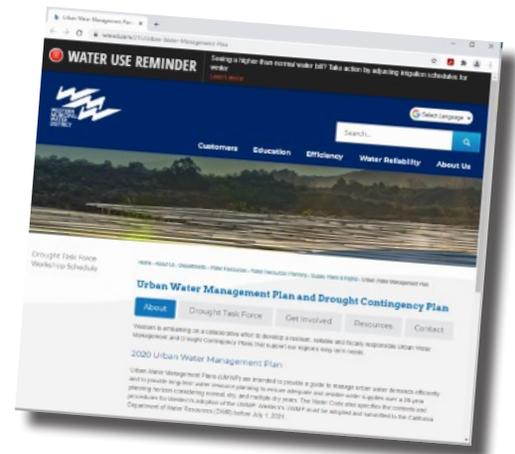
- Pechanga Tribal Government

RETAIL: CUSTOMER STAKEHOLDER

- Altman Plants
- March Air Reserve Base
- Vons/Kroger
- Woodcrest MAC
- Woodcrest MAC/Riverside County

WATER AGENCY: REGIONAL

- Eastern Municipal Water District
- Metropolitan Water District of Southern California
- San Bernardino Valley Municipal Water District
- Box Springs Mutual Water Company
- City of Corona
- City of Norco
- Elsinore Valley Municipal Water District
- Jurupa Community Services District
- Rancho California Water District
- Riverside Highland Water Company
- Riverside Public Utilities
- Rubidoux Community Services District
- Temescal Valley Water District



Western created a webpage to provide another opportunity for interested individuals or organizations to learn more about the UWMP, view the Drought Task Force participants and workshop schedules, subscribe to project updates, review and comment on the Plan and access related resources.

Western formed a Drought Task Force that includes diverse perspectives to inform development of the UWMP and the DCP that will be completed in 2022.

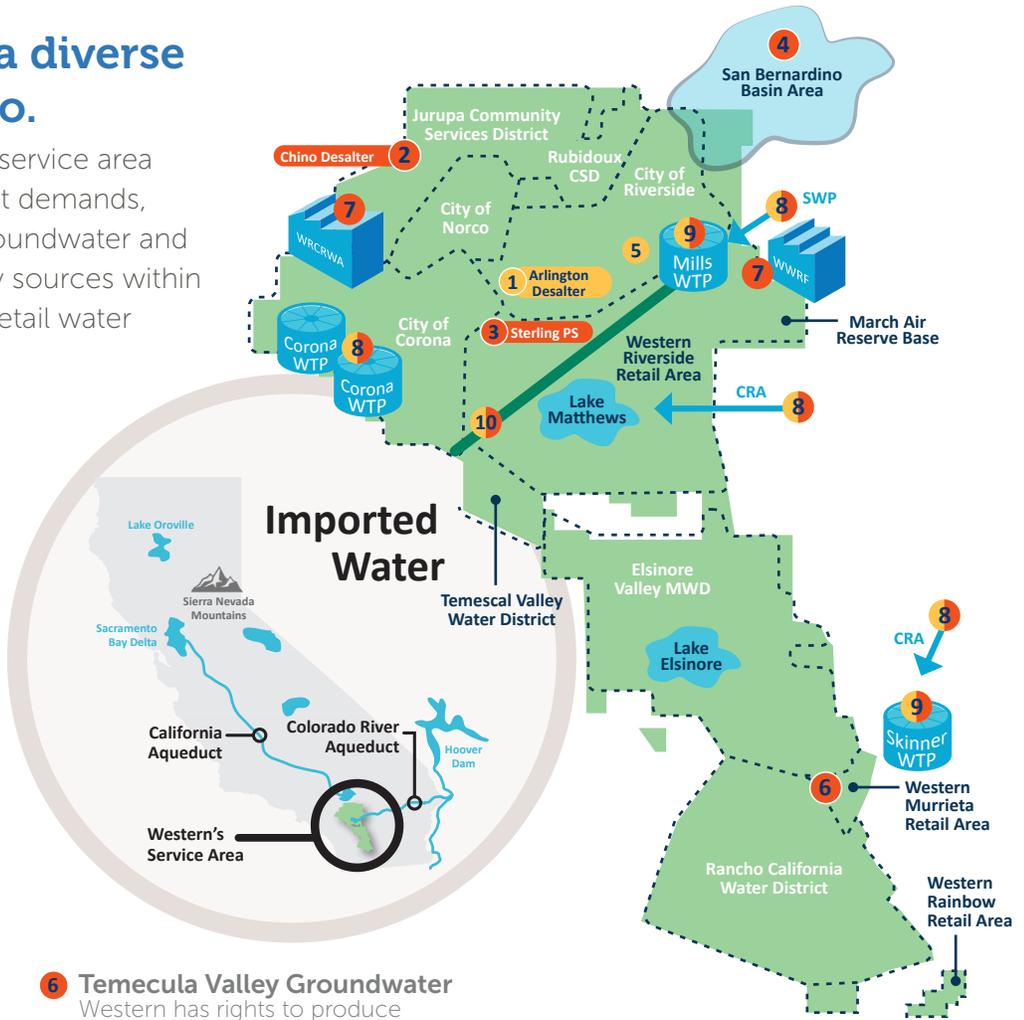
Where Western's Water Comes From

The region relies on a diverse water supply portfolio.

Retail water agencies in Western's service area rely on a variety of sources to meet demands, including imported water, local groundwater and recycled water. Many of the supply sources within the region are shared by multiple retail water agencies, including Western Retail.

SUPPLIES AND INFRASTRUCTURE

- 1 Arlington Desalter and Victoria Recharge Basin**
Produces drinking water by treating local non-potable groundwater using reverse osmosis to remove salt and other matter. This process also helps clean up the groundwater basin and improve the quality over time. The new Victoria Recharge Basin captures stormwater from precipitation and runoff and percolates into the groundwater basin where it is later used by the Arlington Desalter, increasing local supply reliability.
- 2 Chino Desalter**
Western partners with several other water agencies to treat local non-potable groundwater using reverse osmosis to create a new high quality drinking water supply.
- 3 Sterling Pump Station and La Sierra Pipeline**
The recently completed Sterling pump station and La Sierra Pipeline connect the Chino and Arlington Desalters to and allow Western to deliver both water sources to many different locations, increasing regional reliability.
- 4 San Bernardino Basin (SBBA)**
Western owns rights to pump local potable groundwater from the SBBA and has a long term lease with Meeks & Daley Water Company to use additional water from the SBBA.
- 5 City of Riverside**
Western has an agreement with Riverside to purchase their surplus local groundwater. Riverside also pumps and delivers Western's water from the SBBA to Western Retail at interconnections using their existing facilities.



- 6 Temecula Valley Groundwater**
Western has rights to produce water from this basin for service to Western's Murrieta Retail system.
- 7 Recycled Water a Local Drought Proof Supply**
Western provides recycled water and non-potable groundwater to meet non-potable irrigation water needs, preserving the potable supplies for domestic use.
- 8 Imported Water**
Western Wholesale obtains potable and nonpotable imported water supply from the SWP and CRA through Metropolitan at various locations and delivers it to Western Retail and other wholesale customers in their service area. Some Western Wholesale customers receive raw imported water directly from Metropolitan pipelines and use the water for groundwater recharge or treat it at their own treatment plants for potable use.
- 9 Mills and Skinner Water Treatment Plants (WTP)**
Metropolitan treats imported water at their Mills and Skinner WTPs and provides potable imported water to Western to distribute to Western Retail and other wholesale customers.
- 10 Mills Gravity Line**
Deliver treated imported water from the Mills WTP to Western Retail and several Western Wholesale customers.

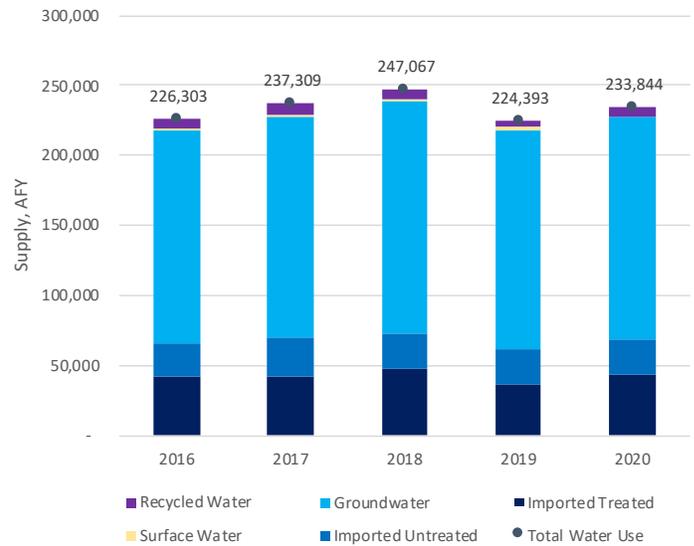
● Wholesale	● Retail
● Wholesale & Retail	
CRA - Colorado River Aqueduct	
SWP - State Water Project	

Total Water Use within Western's Service Area

Western's retail agencies rely on a mix of supplies, and not all supply comes from Western.

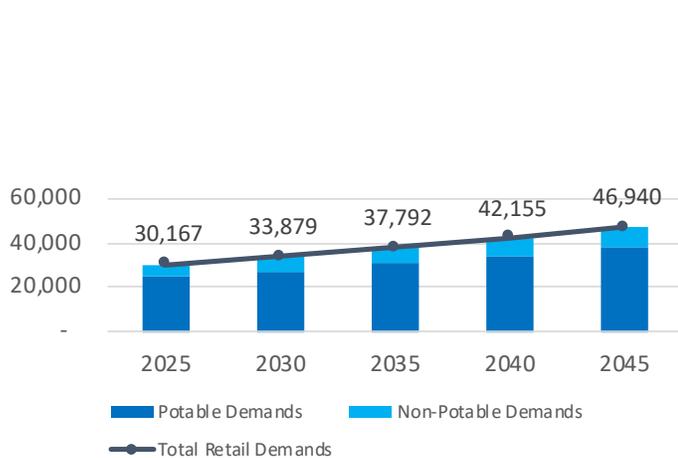
Total water use within Western's service area has ranged from approximately 220,000 AF to more than 245,000 AF in the last five years, including Western Retail. In 2020, approximately 31% of the total water used within Western's service area was provided by Western Wholesale. In addition to wholesale water purchased from Western, most of the water purveyors within Western's service area also deliver local surface and groundwater and/or recycled water within their respective service areas and some rely solely on local water supplies.

TOTAL WATER USE IN WESTERN'S SERVICE AREA FROM 2016 THROUGH 2020.

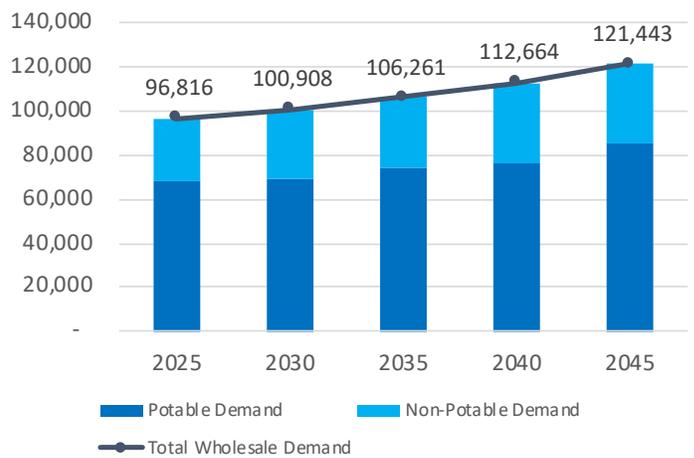


Western Wholesale delivers potable and non-potable supplies to its wholesale customers. Western Wholesale's total demand is expected to increase from 74,927 AF in 2020 to over 121,000 AF in 2045.

PROJECTED RETAIL DEMAND, AFY.



PROJECTED WHOLESALE DEMAND, AFY, INCLUDING WESTERN RETAIL DEMANDS.



Using Water Wisely

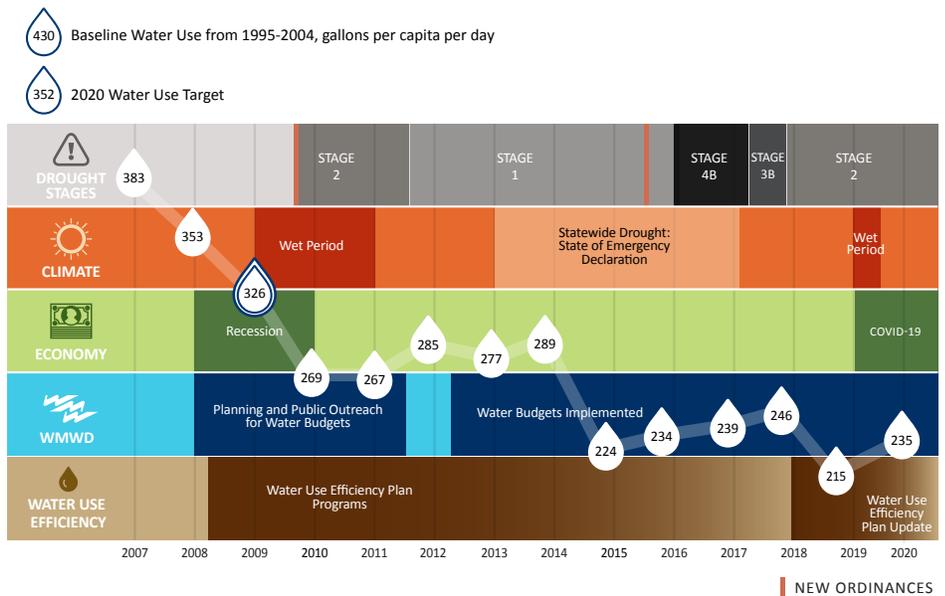
Western is an active and visible advocate and resource for wise water use in the region.

Western has been a leader in water use efficiency for many years and actively collaborates with local and regional agencies and the communities it serves to implement innovative programs and drive reductions in water usage. Western staff also serves in a leadership role for the California Water Efficiency Partnership (CalWEP) whose mission is to maximize urban water efficiency and conservation throughout California by supporting and integrating innovative technologies and practices; encouraging effective public policies; advancing research, training, and public education; and building collaborative approaches and partnerships.

20% BY 2020

By 2009, Western Retail had met their target to reduce per capita water consumption by 20% by 2020 and went on to achieve a reduction of more than 45% by 2020.

Activities that have affected retail water usage in Western Municipal Water District.



Water use efficiency is a core business component in Western's customer partnership with both wholesale and retail customers.



Western's Supplies are Reliable, Even in Drought

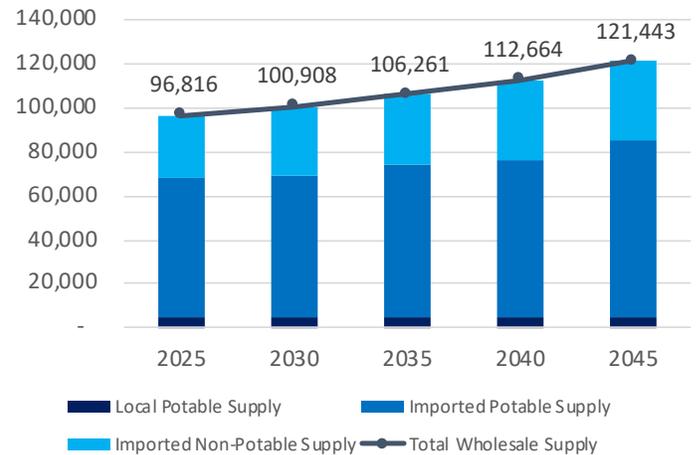
Western's diverse supplies and continued investments provide reliable water for the region.

Western evaluates the reliability of its supplies considering short and long-term variations in weather and climate patterns, including the impacts of climate change. Additionally, Western's supply sources may be impacted by water quality and legal restrictions, environmental and/or ecological constraints, as well as potential for interruption of supply driven by catastrophic events.

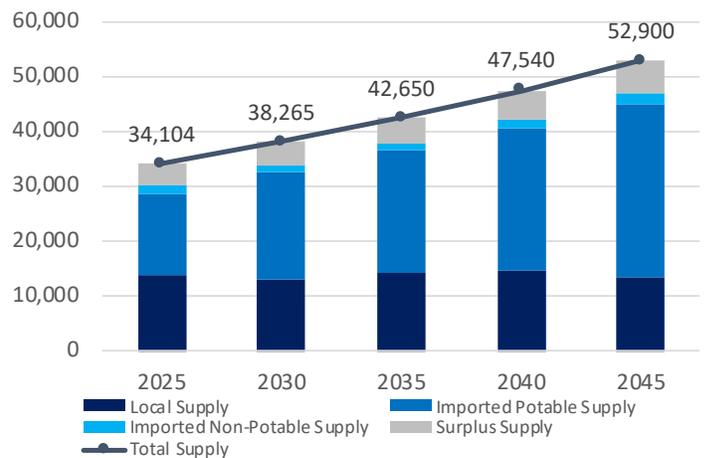
To address these risks, Western and Metropolitan invest in a variety of projects and programs to enhance water supply reliability. These include investing in water conservation and development of local supplies, as well as storage, transfer and exchange programs, and improvements in regional infrastructure. Metropolitan is also pursuing solutions in enhance reliability of SWP supplies through long-term investments in the Sacramento-San Joaquin Delta (Bay-Delta). The net effect is a very robust and reliable supply, even under extended drought conditions.

Western evaluated supply reliability during a single dry year, multiple dry years, and a multiple year drought that could potentially occur within the next five years (2021-2025). In all cases, Western's supplies were sufficient to meet demand without any supply shortages.

PROJECTED WESTERN WHOLESALE SUPPLIES IN A SINGLE DRY YEAR, AFY



PROJECTED WESTERN RETAIL SUPPLIES IN A SINGLE DRY YEAR, AFY



What Happens if Supplies are Interrupted?

Western's Water Shortage Contingency Plan (WSCP) describes how Western is preparing for and may respond to potential water shortage.

A water shortage occurs when water supply available is insufficient to meet the normally expected customer water use at a given point in time. A shortage may occur due to several reasons, such as water supply quality changes, climate change, drought, regional power outage, and catastrophic events (e.g., earthquake). Additionally, the State may declare a statewide drought emergency and mandate that water suppliers reduce demands, as occurred in 2014. The WSCP serves as the operating manual that Western will use to prevent catastrophic service disruptions

through proactive, rather than reactive, mitigation of water shortages. The Western WSCP provides a process for an annual water supply and demand assessment and structured steps designed to respond to actual conditions. Although Western does not foresee implementing water shortage levels for Western Wholesale or Western Retail unless determined by Metropolitan, this level of detailed planning and preparation provide accountability and predictability and help Western maintain reliable supplies and reduce the impacts of any supply shortages and/or interruptions.

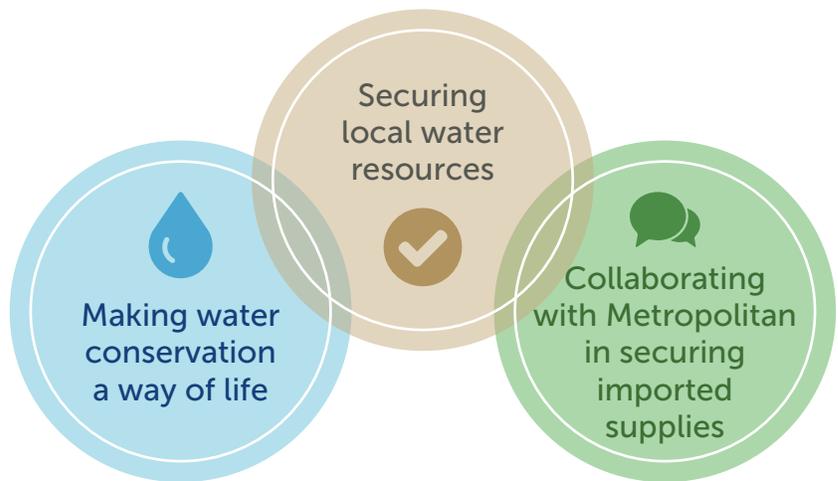


Looking to the Future – Delivering Long-term Water Security



Western is poised for continued leadership to support the region’s long-term water security.

Western has ongoing programs to continue its mission of providing safe, reliable, environmentally sensitive, and financially responsible water resources for its customers.



Additionally, Western is currently partnering with the Drought Task Force to prepare a Drought Contingency Plan (DCP) that takes a deeper dive into drought planning and preparedness across Western’s entire service area, including an in-depth evaluation of the potential range of impacts of climate change on Western’s long-term supplies.

STAY INFORMED AND INVOLVED

Tap into education, advocacy and awareness by staying involved with Western.

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