2025

San Gorgonio Pass Regional Urban Water Management Plan

Table of Contents

Contents

List of Tables

List of Figures

Prepared By:

ZANJERO

This 2025 Urban Water Management Plan was prepared under the direction of a California licensed civil engineer.

Executive Summary

After the devastating drought in the late 1970s, the California Legislature declared California's water supplies a limited resource, subject to ever-increasing demands, and that the long-term, reliable supply of water is essential to protect California's businesses, communities, agricultural production, and environmental interests. The Legislature also recognized a need to strengthen local and regional drought planning and increase statewide resilience to drought and climate change. Thus, in 1983, the California Legislature created the Urban Water Management Planning Act (UWMPA).[1] The UWMPA requires urban water suppliers serving over 3,000 customer connections or supplying at least 3,000 acre-feet of water annually to prepare and adopt an urban water management plan (UWMP) every five years,[2] and demonstrate water supply reliability in a normal year, single dry year, and droughts lasting at least five years over a twenty-year planning horizon.[3] The UWMPA also requires each urban water supplier to prepare a drought risk assessment and Water Shortage Contingency Plan (WSCP).[4] In addition, each urban water supplier must prepare an annual water supply and demand assessment.[5] The California Legislature emphasizes that aggregating these legal requirements at the urban water supplier management level will improve local, regional, and statewide water planning and water resilience.

At a practical level, the UWMP is the legal and technical water management foundation for urban water suppliers throughout California. A well-constructed UWMP provides elected officials, management, staff, customers, and the public with an understanding of past, current, and future water conditions. The UWMP integrates local and regional land use planning, water supply planning, infrastructure considerations, and demand management measures, while also addressing statewide challenges that may manifest through climate change, drought, and evolving regulations. Thoughtful urban water management planning

[1] California Water Code Section 10610 *et seq.* (Chapter 1 added by Stats. 1983, Ch. 1009, Sec. 1) and its subsequent amendments
[2] California Water Code Section 10610 et seq.
[3] California Water Code Section 10631-10635
[4] California Water Code Section 10632
[5] California Water Code Section 10632.1

provides an opportunity for water suppliers to integrate supplies and demands in a balanced and methodical planning platform that addresses short-term and long-term planning conditions. In brief, the UWMP gathers, characterizes, and synthesizes water-related information from numerous sources into a plan with local, regional, and statewide practical utility.

ES-1 The San Gorgonio Pass Region

The 2025 San Gorgonio Pass Regional Urban Water Management Plan (2025 RUWMP or Plan) has been prepared by the San Gorgonio Pass Water Agency (SGPWA or Agency) with full collaborative participation from the Beaumont-Cherry Valley Water District (BCVWD or District). It is the first RUWMP prepared for the San Gorgonio Pass Region and reflects the Agency's commitment to advancing integrated and collaborative water management through the year 2050.

SGPWA was established in 1961 to serve a 225-square-mile area primarily within Riverside County, with a small portion in San Bernardino County, and imports State Water Project (SWP) water and other conjunctive use supplies to recharge local groundwater basins and strengthen regional water supply reliability. For the purposes of this RUWMP, the SGPWA service area is defined as the San Gorgonio Pass Region (Region). SGPWA works in partnership with retail water agencies including the City of Banning, BCVWD, Yucaipa Valley Water District (YVWD), and South Mesa Water Company (SMWC) to augment groundwater resources, develop local water facilities, participate in statewide water projects, and advance regional conservation programs. In 2014, thirteen agencies spanning the Santa Ana River and Whitewater River watersheds formed the San Gorgonio Pass Regional Water Alliance to improve coordination and communication among water suppliers and local governments.

The San Gorgonio Pass Region occupies a unique geographic and hydrologic corridor between the Upper Santa Ana River Watershed to the west and the Coachella Valley to the east, serving as a critical connection between major water management areas of Southern California. The Region overlies portions of the San Gorgonio Pass Subbasin and the San Timoteo Subbasin within two larger groundwater basins: the Upper Santa Ana Valley Groundwater Basin and the Coachella Valley Groundwater Basin. Groundwater is the primary local water supply source, replenished through natural precipitation and managed recharge of imported SWP supplies.

The RUWMP Planning Area includes SGPWA as the regional wholesale water supplier and multiple retail water purveyors. BCVWD is the largest retail water supplier within the region, serving the City of Beaumont and the unincorporated community of Cherry Valley across

approximately 28 square miles. BCVWD serves more than 68,000 residents today through a system of wells, reservoirs, and an expanding non-potable and recharge network. As the primary retail participant in this RUWMP, BCVWD satisfies its individual UWMP requirements through this RUWMP, and specifically its retail Chapter 7.

Other retail purveyors within the SGPWA service area include the City of Banning, YVWD, SMWC, Cabazon Water District, High Valleys Water District, Banning Heights Mutual Water Company, Mission Springs Water District and the Morongo Band of Mission Indians. These agencies coordinate water supply operations, exchange data, and jointly plan for sustainable use of local and imported water resources. The City of Banning and YVWD are preparing individual UWMPs aligned with this 2025 RUWMP effort; SMWC participates in the San Bernardino Valley RUWMP.

Regional Chapters 1 through 5 establish the shared planning framework, including the regional description, water supply and use characterizations, and regional water service reliability analysis. Chapter 6 addresses SGPWA's wholesale water supply, imported water management, managed groundwater storage, and other regional water management responsibilities; Chapter 6 also contains SGPWA's WSCP. Chapter 7 provides BCVWD's retailer-specific UWMP, including detailed supply, demand, and reliability analyses, and BCVWD's WSCP.

ES-2 San Gorgonio Pass Region Water Service Reliability

The San Gorgonio Pass Region's reliability approach is rooted in managed groundwater conjunctive use. Because the Region depends primarily on groundwater, reliability is evaluated based on the coordinated management of groundwater, imported water, return flows, stormwater capture, recycled water, stored water assets, transfers, exchanges, and the legal and institutional frameworks governing water use across the region.

Regionally managed water supplies, inclusive of SGPWA and BCVWD's water supply portfolios, are capable of meeting the water uses of the San Gorgonio Pass Region in normal, single dry, and five consecutive dry years from 2025 through 2050. A key feature of this reliability strategy is capturing and storing surplus imported water during normal and wet years to supplement regional demands during dry years. SGPWA, BCVWD, and the regional retailers manage supplies and groundwater storage to preserve dry-year reserves.

The five-year Drought Risk Assessment (DRA) for the period 2026 through 2030 integrates regional water supplies and demands under dry year conditions. The DRA demonstrates that

when aggregated across multiple dry years, the Region would be expected to draw on a portion of its stored water assets during the middle of a multi-year drought to meet demands. This is consistent with the Region's conjunctive use strategy and confirms that regional reliability is maintained throughout the five-year assessment period. Similarly, BCVWD's individual DRA confirms that the District's Beaumont Basin storage account and supply portfolio provide sufficient coverage through five dry years.

The long-term reliability analysis evaluates water supply and demand conditions through 2050 under normal year, single dry year, and five consecutive dry year scenarios. Under normal and single dry year conditions, SGPWA's portfolio of SWP Table A supplies and additional water supply agreements provide a diverse supplemental annual supply for recharge to managed groundwater basins. Sites Reservoir storage and deliveries, expected beginning approximately 2035 or sooner, further strengthen supply reliability as demands grow with regional population.

Under five consecutive dry year conditions, the Region relies more heavily on managed groundwater storage as population grows and demands increase. SGPWA and retail agencies maintain stored water reserves to bridge shortfalls during extended drought periods. The five consecutive dry year analysis confirms that supply remains sufficient to meet projected demands through 2050, underscoring the importance of continued regional management, SGPWA importation and recharge of supplemental water, and proactive demand management. BCVWD's reliability analysis confirms that the District has a water supply portfolio capable of meeting the water demands of its service area in normal, single dry, and five consecutive dry years from 2025 through 2050, with strategic reliance on its Beaumont Basin storage account, imported SWP water, Edgar Canyon groundwater, stormwater capture, and future recycled water supplies. The other urban water suppliers (City of Banning, SMWC, YVWD) perform individual DRAs and long-term reliability assessments in their respective UWMPs.

In summary, the San Gorgonio Pass Region’s coordinated management of groundwater, imported water, stormwater capture, return flows, recycled water, transfers, exchanges, and stored water assets provides a reliable water supply portfolio to meet current and projected regional demands through 2050. The 2025 RUWMP demonstrates that the Region has reliable water supplies under normal, single dry, and five consecutive dry year conditions, while also providing the foundation for annual water supply and demand assessments and implementation of retailer-specific WSCPs.

Chapter 1.0
Introduction

The 2025 San Gorgonio Pass Regional Urban Water Management Plan (RUWMP or Plan) establishes a long-term roadmap for regional water resource planning and management through the year 2050. This Plan provides a comprehensive framework for improving water supply reliability, supporting groundwater sustainability, and enhancing regional resilience to drought and climate change. It represents the first RUWMP prepared in the San Gorgonio Pass Water Agency (SGPWA or Agency) service area and reflects the Agency's commitment to advancing integrated and collaborative water management within the San Gorgonio Pass Region.

SGPWA was established in 1961 to serve a 225-square-mile area primarily within Riverside County[6] with imported State Water Project water to recharge local groundwater basins and strengthen regional water supply reliability. SGPWA works in partnership with retail water agencies, including the City of Banning, Beaumont-Cherry Valley Water District (BCVWD), Yucaipa Valley Water District (YVWD), and South Mesa Water Company (SMWC), to augment groundwater resources, assist smaller water systems, develop local water facilities, participate in statewide water projects, and advance regional conservation programs. In 2014, thirteen agencies spanning two major watersheds, the Santa Ana River to the west and the Whitewater River to the east, formed the San Gorgonio Pass Regional Water Alliance (Alliance) to improve coordination, collaboration, and communication among water suppliers and local governments. The Alliance laid the groundwork for a more cohesive regional approach to water management and planning efforts.

SGPWA and its regional partners work collaboratively to ensure reliable and sustainable water management across the San Gorgonio Pass Region. The San Gorgonio Pass Region occupies a unique geographic and hydrologic position between the Upper Santa Ana River

[6] SGPWA also has a small portion of its service area in San Bernardino County.

Watershed Region to the west and the Coachella Valley Region to the east, serving as a critical connection between major water management areas of Southern California. Together, the participating agencies coordinate on supply development, groundwater management, and long-term planning to address shared challenges and support local decision-making. This cooperative approach has resulted in a number of joint studies, data-sharing efforts, and planning documents that guide how water resources are managed at both the regional and local levels.

This document presents a 2025 Regional Urban Water Management Plan for the San Gorgonio Pass Region. The Plan is prepared for the service area of the SGPWA (Region) and the Region's boundaries are defined as such herein. The RUWMP included full collaborative participation from the Beaumont-Cherry Valley Water District (BCVWD or District) as a primary retail water purveyor in the Region. BCVWD satisfies its Urban Water Management Plan reporting requirements with this RUWMP, specifically in its retailer-specific Chapter 7 that assesses the BCVWD service area, supplies, demands, reliability, and contains its Water Shortage Contingency Plan (WSCP).

In addition, seven retail water purveyors within the Agency's service area maintain strong collaborative efforts and shared resource management. These agencies – the Banning Heights Mutual Water Company, High Valleys Water District, Morongo Band of Mission Indians, City of Banning, South Mesa Water Company, Cabazon Water District, Yucaipa Valley Water District, and a small portion of Mission Springs Water District – collectively coordinate water supply operations, exchange data, and jointly plan for the sustainable use of local and imported water resources. Each purveyor plays an active role in advancing regional water reliability through cooperative groundwater management and engagement in regional planning processes. The agencies that meet the UWMP criteria are preparing individual UWMPs in alignment with the 2025 RUWMP effort. South Mesa Water Company is participating in the San Bernardino Valley RUWMP, while Yucaipa Valley Water District and the City of Banning are developing their own individual UWMPs.

1.1.1 Background and Purpose

The primary purpose of the Regional Urban Water Management Plan is to support coordinated, long-term water resource planning among the agencies within the San Gorgonio Pass Regional planning area. The RUWMP provides a comprehensive assessment of the Region's water supplies, demands, and reliability through 2050, and identifies management strategies to ensure the Region can meet its future water needs under a range of hydrologic and development conditions. This Plan serves as a key tool for aligning local and regional water supply planning efforts, supporting compliance with the Urban Water

Management Planning Act (UWMPA), and enhancing consistency with other statewide planning initiatives such as the California Water Plan and the Sustainable Groundwater Management Act (SGMA), among others.

The UWMPA was enacted by the California Legislature in 1983 to promote comprehensive and consistent water supply planning throughout the state. Codified in California Water Code Sections 10610–10656, the UWMPA requires urban water suppliers serving more than 3,000 connections or delivering more than 3,000 acre-feet of water annually to prepare and adopt an Urban Water Management Plan (UWMP) every five years.

SGPWA has prepared this 2025 RUWMP in collaboration with participating retail water purveyors to comply with the UWMPA requirements. The Plan documents regional water management efforts that ensure adequate and reliable water supplies are available to meet projected demands over the next 25 years within the SGPWA service area

As required by the UWMPA, this 2025 RUWMP evaluates the reliability of regional water supplies to meet projected demands under average-year, single-dry-year, and five-consecutive-dry-year conditions through 2050. A key objective of this Plan is to verify that future water demands will not exceed available supplies, even under extended drought conditions. The State Legislature passed numerous new requirements for the 2020 UWMP cycle which continue to apply to this 2025 RUWMP. Since there have been no additional statutory changes to UWMP requirements between 2020 and 2025, this plan incorporates the same comprehensive framework established for 2020 UWMPs. The 2025 RUWMP builds upon and updates the 2020 Urban Water Management Plans prepared by SGPWA and its partner agencies, incorporating new data, analysis, and regulatory requirements established by the California Department of Water Resources (DWR) and the California Water Code since 2020.

The RUWMP also plays an important role in guiding regional investments in water supply, infrastructure, and conservation programs, and in improving eligibility for state and federal funding opportunities. Each update provides an opportunity for participating agencies to assess progress toward regional objectives, evaluate system performance under changing conditions, and incorporate new or modified projects that improve regional water reliability and sustainability. Preparation and implementation of the RUWMP requires significant collaboration among SGPWA and its retail partners, ensuring that the region continues to plan and invest strategically in a resilient and sustainable water future.

This RUWMP serves as a comprehensive water management and planning tool for the San Gorgonio Pass Region. It provides detailed assessments of current and future water supply reliability, projected water demands, water use efficiency programs, and ongoing regional coordination efforts. Given the inherent uncertainties in California water management,

planning assumptions may shift in response to various factors. Accordingly, the RUWMP is a planning framework that establishes strategy and approach, rather than detailed implementation plans with specific actions. The Plan is intended to guide and inform SGPWA, BCVWD, participating retail agencies, stakeholders, and the State of California regarding the Region's integrated long-term water resource planning. It reflects the Agency's continued commitment to sustainable water management, proactive planning, and ensuring water reliability to support the Region's communities, economy, and environment.

1.1.2 Basis for Preparation

The purpose of preparing the San Gorgonio Pass Regional Urban Water Management Plan is to provide a consistent and coordinated evaluation of regional water supplies, demands, and management strategies shared among the participating agencies within the San Gorgonio Pass Water Agency service area. By developing a single, regional plan, the participating agencies are able to leverage collective knowledge, technical expertise, and data resources to improve planning consistency. The RUWMP fulfills the reporting requirements established by the DWR to implement the UWMPA and ensures alignment with statewide water management objectives.

The Regional Plan incorporates and builds upon information presented in the previous UWMPs of regional suppliers, reflecting many of the same participating agencies and regional water supply concepts. This RUWMP expands upon that foundation by providing a detailed assessment of current and projected water use, reliability under normal and dry-year conditions, and the strategies needed to meet future water demands through 2050. As the first RUWMP prepared for the San Gorgonio Pass Region, it establishes a coordinated planning framework that will be updated every five years in accordance with DWR requirements, ensuring that the Region continues to adapt to changing conditions and emerging challenges.

The Plan fulfills the requirements of the UWMPA for SGPWA as a wholesale water supplier and for BCVWD as a retail water supplier. Together, these components form a coordinated, regionally integrated planning document intended to ensure reliable and sustainable water management across the San Gorgonio Pass Region.

Chapters 1 through 5 of the RUWMP provide a regional analysis that establishes the common foundation for all participating agencies. This regional section includes information on the physical setting, climate, demographics, land use, shared water supply sources, and overall regional demand and reliability assessments. The regional data and characterizations

presented provide a basis for the SGPWA wholesale analysis and the individual retail purveyor analyses.

Chapter 6 concentrates on SGPWA and its wholesale activities and associated UWMP requirements. It provides analyses of the SGPWA service area and its imported supply sources, regional demands, long-term supply reliability, and demand management strategies and contingency planning. The chapter incorporates supply and demand data from agencies in the SGPWA service area and is designed to meet the SGPWA's individual UWMPA requirements as a wholesale supplier within the established regional framework. Chapter 6 includes a stand-alone section dedicated to the Agency's Water Shortage Contingency Plan.[7]

Chapter 7 within this RUWMP focuses specifically on BCVWD, the largest retail water purveyor in the SGPWA service area. This focused retail UWMP provides a comprehensive analysis of BCVWD's water service area, supply reliability, demand projections, and demand management strategies, developed in coordination with the regional data and planning framework presented in this RUWMP. The BCVWD section is intended to meet all applicable UWMPA requirements for an individual retail supplier while maintaining full alignment with the regional assumptions and strategies established by SGPWA. Chapter 7 includes a stand-alone section dedicated to the District's Water Shortage Contingency Plan.[8]

Together, the regional, SGPWA, BCVWD, and individual agency components of this RUWMP provide a unified framework for long-term, coordinated water management and planning among SGPWA and its retail partners.

1.1.3 Coordination and Outreach

The San Gorgonio Pass Region is a model of collaboration and cooperation utilizing integrated solutions. Water suppliers in the area have worked together for decades to develop an integrated regional approach to water management for the greater basin and watershed.

The following is a discussion of how the Region has coordinated with neighboring regions, water resources planning, and land use planning in the development and on-going implementation of this Plan.

[7] As required by Water Code Section 10640(b) and 10632.
[8] As required by Water Code Section 10640(b) and 10632.

Development of the 2025 RUWMP included coordination with local governments, neighboring water agencies, and relevant regulatory entities, as required by the UWMPA. Coordination efforts were undertaken to ensure consistency with applicable city and county General Plans, Water Master Plans, the Beaumont Basin Watermaster, and other related planning documents.

In accordance with California Water Code Section (CWC) 10621(b), SGPWA and the participating urban water supplier, BCVWD, conducted joint public outreach and provided required public notices prior to adoption of the RUWMP by each individual urban water supplier. A summary of coordination and public outreach activities is provided in **Table 1-1**.

TABLE 1-1: PUBLIC AND PUBLIC AGENCY COORDINATION

Coordinating Agencies	Coordinate Regarding Demands	Sent Copy of Draft UWMP	Sent 60-Day Notice	Notice of Public Hearing
City of Banning	X	X	X	X
Beaumont Basin Watermaster	X	X	X	X
Beaumont-Cherry Valley Water District	X	X	X	X
City of Beaumont	X	X	X	X
City of Calimesa			X	X
City of Yucaipa			X	X
Yucaipa Valley Water District	X	X	X	X
South Mesa Water Company	X	X	X	X
High Valleys Water District	X	X	X	X
Banning Heights Mutual Water Company	X	X	X	X
Cabazon Water District	X	X	X	X
Mission Springs Water District			X	X
Morongo Band of Mission Indians	X	X	X	X

Coordinating Agencies	Coordinate Regarding Demands	Sent Copy of Draft UWMP	Sent 60-Day Notice	Notice of Public Hearing
Riverside County Flood Control and Water Conservation District			X	X
Riverside County Planning Department		X	X	X
San Bernardino County Planning Department			X	X
San Gorgonio Pass Subbasin GSA	X		X	X
Verbenia GSA	X		X	X
Yucaipa SGMA			X	X
California Department of Water Resources		X	X	X
Local Agency Formation Commission (LAFCO) for Riverside County			X	X
LAFCO for San Bernardino County			X	X
General Public				X

1.1.3.1 Coordination with Neighboring Regions and RUWMP Planning

The San Gorgonio Pass Regional Urban Water Management Plan has been developed through extensive coordination among the participating agencies to support a unified, efficient, and regionally resilient approach to water resource management. Consistent collaboration is essential in the Region, where water suppliers share common groundwater basins, imported water supplies, and interconnected management responsibilities.

In accordance with California Water Code Section 10620(d)(1), this RUWMP serves as the collective regional plan for the participating urban water suppliers. By preparing this plan, the participating agencies reduce duplicative costs, align technical data and assumptions, and

strengthen efforts to advance water conservation, improve efficiency, and enhance local drought resilience.

Although this RUWMP provides a shared regional planning framework, each participating urban water supplier maintains responsibility for its own Water Shortage Contingency Plan (WSCP), as required by Water Code Section 10620(d)(2). Agencies collaborated throughout RUWMP development to exchange data, coordinate methodologies, and ensure consistency between individual WSCPs and the regional planning context. This collaborative approach supports clear communication, resource sharing, and improved readiness for future drought and emergency conditions.

Integrated Regional Water Management Program

The Integrated Regional Water Management (IRWM) Program promotes regional self-reliance, collaboration, and coordinated planning to support shared social, environmental, and economic objectives. Groundwater and surface water management activities, along with existing monitoring programs, are described within two IRWM Plans that overlap the San Gorgonio Pass Region.

The San Gorgonio Pass Groundwater Subbasin lies within the boundaries of both the San Gorgonio Pass IRWM Region and the Coachella Valley IRWM Region. Four San Gorgonio Pass GSA member agencies: Cabazon Water District (CWD), San Gorgonio Pass Water Agency, Banning Heights Mutual Water Company, and the City of Banning participated in preparation of the San Gorgonio Pass IRWM Plan. In addition, Desert Water Agency (DWA) and Mission Springs Water District (MSWD), two of the five water purveyors within the Coachella Valley Regional Water Management Group, contributed to the development of the Coachella Valley IRWM and Stormwater Resources Plan, which addresses regional water management and stormwater needs.

In 2016, the San Gorgonio Integrated Regional Water Management Group (RWMG) was formed to guide collaborative water resource planning for the San Gorgonio Pass Region. The RWMG includes the City of Banning, Banning Heights Mutual Water Company, Cabazon Water District, High Valleys Water District, the Riverside County Flood Control and Water Conservation District, and SGPWA, which serves as the regional coordinating entity. Together, these partners developed the San Gorgonio IRWM Plan, formally adopted in May 2018, to advance integrated water resource strategies that support regional resilience and complement SGMA implementation.

1.1.3.2 Water Supplier Information Exchange

Water Code Section 10631(h) requires retail and wholesale suppliers to exchange information to ensure that projected water demands and available supplies are consistent and accurately represented in their respective planning documents. Beaumont-Cherry Valley Water District is a participating retail agency in the RUWMP. Other retail purveyors within the SGPWA service area coordinated with SGPWA for data consistency and prepared their own Urban Water Management Plans independently.

Retail Supplier Requirements

In accordance with Water Code Section 10631(h), retail suppliers in the SGPWA service area—including BCVWD, the City of Banning, South Mesa Water Company, and Yucaipa Valley Water District—provided SGPWA with projected water demands for the full planning horizon. These projections reflect anticipated growth, planned conservation efforts, and the expected role of imported water in meeting the retailers' future needs. Submission of these projections allows SGPWA to align regional wholesale supplies with the Region's anticipated demand for imported water. Documentation of this information exchange occurred through formal data requests, technical coordination meetings, and the review of draft demand forecasts.

Wholesale Supplier Requirements

Likewise in accordance with Water Code Section 10631(h), SGPWA provided the retailers with identification and quantification of existing and planned imported water supplies available to the Agency. This included updated estimates of State Water Project deliveries, supplemental supply programs, imported water banking arrangements, and projected supplies under normal, single dry, and multiple dry year conditions.

Coordination with Other Retail Purveyors

Additional retail water agencies within the SGPWA service area, including the City of Banning, Yucaipa Valley Water District, Cabazon Water District, South Mesa Water Company, Banning Heights Mutual Water Company, High Valleys Water District, Mission Springs Water District, and the Morongo Band of Mission Indians, engaged with SGPWA for general data consistency and regional coordination. The City of Banning, YVWD, and SMWC are preparing UWMPs but participated in the exchange of demand and supply information to support consistent regional information.

1.1.3.3 Statutory Requirements for Notice

In accordance with the UWMPA, notification of the RUWMP update was provided to cities and counties within the RUWMP Planning Area at least 60 days prior to the public hearing of the RUWMP as required by CWC Section 10621(b). Electronic copies of the final RUWMP will be provided to the County of Riverside and the County of San Bernardino no later than 30 days after its submission to DWR.

1.1.4 RUWMP Adoption

SGPWA and BCVWD have reviewed, approved, and will implement the portions of this RUWMP that are specific and applicable to their respective service areas. While the RUWMP was developed collaboratively to ensure consistency and coordination across the San Gorgonio Pass Region, not all elements of the RUWMP apply equally to SGPWA and BCVWD. The RUWMP is therefore organized in a modular format, allowing adoption of only those chapters and sections relevant to its operations, water supplies, and service area.

Any future amendments or updates made by individual agencies to their respective UWMPs—whether they are the individual chapters within this RUWMP or were prepared separately from this RUWMP—will not alter or affect the adopted portions of the Plan for the other participating agency. This structure preserves autonomy while maintaining the benefits of regional coordination, ensuring that the Agency and the District continue to contribute to a unified framework for sustainable water management within the San Gorgonio Pass Water Agency service area.

Accordingly, information regarding the dates of adoption for the SGPWA wholesale UWMP and BCVWD retail UWMP components are listed in Chapter 6 and Chapter 7, respectively. Following adoption, the Plans were submitted to DWR, the California State Library, and a copy was provided to all stakeholders identified previously in this Chapter.

1.1.5 Document Organization

The UWMP is organized as follows:

- **Chapter 1** establishes the basis for the RUWMP, regional agency context, coordination efforts, and introduces the document organization.
- **Chapter 2** provides the overview of the San Gorgonio Pass Region, its service areas, groundwater basins, infrastructure, climate, population, land use, and economic trends.

- **Chapter 3** characterizes the regional water supply, shared supply sources, planned supply projects and programs, and statewide regulatory context.
- **Chapter 4** summarizes regional customer water use, including past and future estimated uses.
- **Chapter 5** presents regional water service reliability into the future, including drought risk assessment.
- **Chapter 6** is the San Gorgonio Pass Water Agency wholesale chapter, which satisfies UWMPA requirements for wholesale suppliers and includes the SGPWA's stand-alone water shortage contingency plan incorporated as a section in Chapter 6, but also available to be shared and utilized separate from this RUWMP.
- **Chapter 7** provides Beaumont-Cherry Valley Water District's retail agency requirements for the UWMPA, including its stand-alone water shortage contingency plan, which is also available to be shared and utilized separate from this RUWMP.

NOTE TO DWR:

The SGPWA and BCVWD have prepared this Regional Urban Water Management Plan (RUWMP) primarily as a water resources planning tool to effectively manage water supply, reliability and demand in the San Gorgonio Pass Region. This RUWMP also satisfies all the requirements of the Urban Water Management Planning Act (UWMPA) for both SGPWA and BCVWD.

The body of the document provides narratives, analysis and data that DWR requests in its 2025 UWMP Guidebook, including enhancements wherever possible, acknowledging there have been no statutory changes to the Water Code regarding UWMPs since 2020.

To facilitate review by DWR for compliance with the UWMPA, data from the body of the document has been transferred into required DWR submittal tables consistent with the organization of the tables in Appendix E of the 2025 UWMP Guidebook. These tables are separately uploaded to DWR's web portal. This UWMP has been reviewed for adequacy according to the UWMP Checklist as contained in Appendix F in the 2025 UWMP Guidebook.

Chapter 2.0
The San Gorgonio Pass Region

This chapter provides an overview of the San Gorgonio Pass Region (Region), including its population characteristics, land use patterns, and climate conditions. It also introduces the various local entities and water purveyors that play key roles in managing and delivering water resources throughout the region. This RUWMP defines the San Gorgonio Pass Region as being conterminous with the SGPWA service boundary, and encompasses Beaumont-Cherry Valley Water District and portions of the other urban water suppliers in the Region that must also comply with the Urban Water Management Planning Act UWMPA. The San Gorgonio Pass Region, as a result, allows this RUWMP to capture the entirety of SGPWA's service area, as well as overlap of the service areas of the four other urban water suppliers that sit within SGPWA.

2.1.1 Regional Overview

The San Gorgonio Pass Region occupies a critical geographic and hydrologic corridor within Riverside County and a small portion of San Bernardino County, forming the primary connection between the Riverside County's urbanized western areas and the desert landscapes to the east. The SGPWA service area encompasses approximately 225 square miles of an arid inland zone in Southern California, connecting the San Bernardino Valley to the west and the Coachella Valley to the east (**Figure 2-1**). Bounded by the San Jacinto Mountains to the south and the San Gorgonio Mountains to the north, the Pass creates a natural east–west valley that strongly influences regional climate, groundwater systems, and patterns of growth and development.

The Region serves as a transitional zone between Western Riverside County, which has experienced substantial urban expansion, and the more rural and desert-oriented areas of Eastern Riverside County, including the Coachella Valley. Within the Region, the Cities of Banning, Beaumont, and Calimesa function as the primary population and economic centers, while surrounding communities such as Cherry Valley, Cabazon, and Whitewater, along with

lands of the Morongo Band of Mission Indians, contribute to the Region's diverse land use and water demand characteristics. This growth corridor supports major transportation, energy, and water infrastructure that is regionally significant to Southern California.

From a water management perspective, the Region overlies portions of the San Gorgonio Pass Subbasin and the adjacent San Timoteo Subbasin. These groundwater basins contain important subbasins that form the foundation of the local water supply and are managed through multiple Groundwater Sustainability Agencies (GSAs) under the Sustainable Groundwater Management Act (SGMA). These subbasins are discussed later in this chapter. The GSAs include the San Gorgonio Pass GSA, Verbenia GSA, Desert Water Agency GSA, San Timoteo GSA, and Yucaipa GSA. These overlapping hydrogeographic and institutional boundaries reflect the complex, multi-jurisdictional nature of water management within the Region.

Groundwater is the primary local water supply source and is replenished through a combination of natural and managed processes. Recharge occurs from natural runoff, infiltration of precipitation and stormwater, subsurface inflows from adjacent basins, and return flows from irrigation and wastewater. The Beaumont Basin Watermaster (discussed in detail later in this chapter) accounts for both natural and managed recharge. Because natural recharge is insufficient and unsustainable to support long-term water supply for the Region, imported water to augment storage maintains an important role in supporting supply reliability and groundwater sustainability. Water supplies are discussed in depth in Chapter 3.

As the State Water Project (SWP) contractor for the Region, the San Gorgonio Pass Water Agency (SGPWA) is responsible for importing supplemental water supplies and coordinating their integration with local groundwater agencies. Imported supplies are used to meet regional demands, offset groundwater pumping, and support recharge (water banking) efforts where feasible. This integrated approach is essential in a region where local supplies alone are insufficient to meet long-term demand with continued economic development and increasing hydrologic variability.

Water management in the San Gorgonio Pass Region occurs across multiple geographic and administrative scales. At the regional level, SGPWA provides wholesale water supply and coordinates with state agencies and neighboring water providers. At the local level, retail water purveyors are responsible for delivering water to customers and supporting development **Figure 2-2** shows the Region's water suppliers.

Effective management of water resources in the Region depends on ongoing coordination among SGPWA, retail water agencies, the Beaumont Basin Watermaster, GSAs, tribal entities,

mutual water companies, and land use and regulatory agencies. This collaboration supports groundwater sustainability planning, imported water management, infrastructure investment, and drought response within a broader framework of regional and statewide water planning efforts.

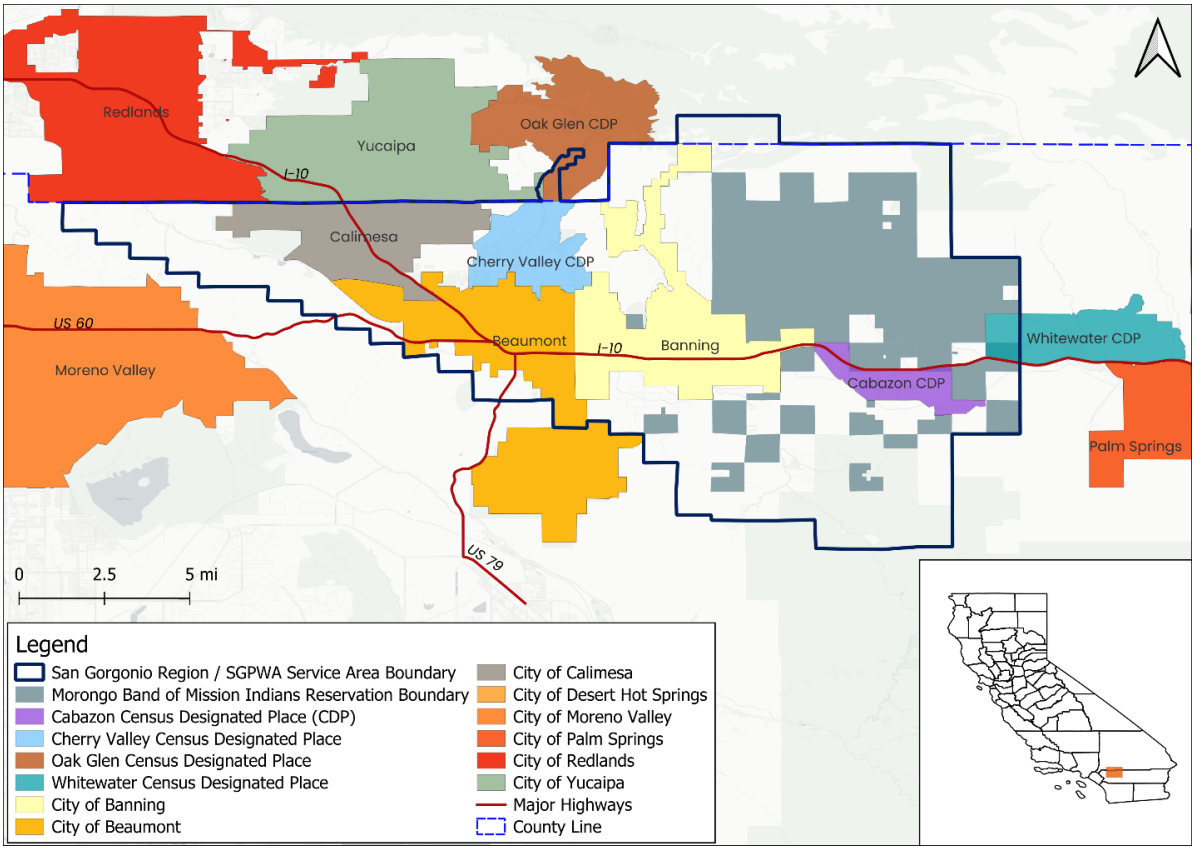


FIGURE 2-1: THE SAN GORGONIO PASS REGION

2.1.2 Water Suppliers of the San Gorgonio Pass Region

The San Gorgonio Pass Region encompasses a geographically diverse transitional area situated between the San Bernardino and San Jacinto Mountains, with most of the population in the Region located at elevations ranging between approximately 1,800 and 2,600 feet. The Region includes a mix of incorporated cities, unincorporated communities, tribal lands, and extensive areas of undeveloped open space. Four retail urban water suppliers operate within the Region that are subject to the UWMPA, with SGPWA serving as the wholesale water provider to these agencies. Multiple smaller agencies and rural water users also draw on the water resources of the Region that are not subject to the UWMPA.[9] An overview of the water suppliers follow.

2.1.2.1 San Gorgonio Pass Water Agency

SGPWA serves as the wholesale water supplier for the San Gorgonio Pass Region and manages water supply reliability across its approximately 225-square-mile service area. The Agency's core responsibility is to address regional water management challenges, including limited local surface water availability, reliance on groundwater, and the need to balance continued economic development with long-term supply sustainability.

To support long-term reliability for its wholesale customers, SGPWA manages the importation of SWP supplies from the California Aqueduct. As the SWP contractor for the Region, SGPWA is responsible for acquiring, delivering, and coordinating the use of imported water to augment managed groundwater supplies and native basin resiliency.

SGPWA does not provide direct retail water service but instead operates at the regional level by integrating imported supplies with local groundwater resources to enhance supply reliability, support groundwater recharge, and improve drought resilience. This role requires ongoing coordination with retail water purveyors, GSAs, tribal entities, and regional stakeholders to align imported water operations with groundwater sustainability objectives and broader regional planning efforts.

[9] The UWMP Act requires an urban water supplier (Supplier) providing water for municipal purposes to more than 3,000 customers or serving more than 3,000 acre-feet annually to adopt an Urban Water Management Plan (UWMP) every five years, demonstrating water supply reliability in normal, single dry, and multiple dry water years.

2.1.2.2 Retail Water Suppliers

The San Gorgonio Region is served by multiple state-permitted Public Water Systems that vary in size and operational characteristics but are collectively classified as retail water suppliers. These agencies primarily rely on local groundwater supplies, which are supplemented and replenished with managed groundwater by SGPWA.

This RUWMP is prepared for the San Gorgonio Region and includes participation from Beaumont-Cherry Valley Water District (BCVWD) as the largest urban retail water supplier. In addition, three other urban retail water suppliers operate within the Region and contribute to overall water supply reliability through coordinated planning, groundwater management, and shared use of imported supplies. Other small systems also operate in the Region and have been incorporated into regional supplies and demands in Chapter 3 and Chapter 4, respectively.

Table 2-1 summarizes the retail water suppliers within the RUWMP Planning Area, including their approximate service areas and number of connections.

TABLE 2-1: RETAIL WATER SUPPLIERS WITHIN THE SAN GORGONIO REGION

Retail Water Supplier	Service Area (sq. miles)	Approximate Connections
Banning Heights Mutual Water Company	1	170
Beaumont-Cherry Valley Water District*	28	22,100
Cabazon Water District	10	930
City of Banning*	26	12,000
High Valleys Water District	8	250
Morongo Band of Mission Indians	54	12,750
South Mesa Water Company (within the SGPWA service area)*	2	1,600 ([A])
Yucaipa Valley Water District (within the SGPWA service area)*	12	2,000 ([A])

*Indicates water supplier subject to the UWMPA

([A]) Connections estimated based on geospatial analysis

Beaumont-Cherry Valley Water District

BCVWD is the largest retail water supplier within the San Gorgonio Region and provides potable and non-potable water service to the City of Beaumont and potable water to the community of Cherry Valley. BCVWD is a participant in this RUWMP. A detailed description of the District's service area, facilities, water supplies, and planning assumptions is provided in Chapter 7 of this RUWMP.

City of Banning

The City of Banning provides water service to its municipal population and surrounding areas, relying on groundwater production from wells within five of the Region's storage units (Beaumont Basin, West Banning Storage Unit, Cabazon Storage Unit, Banning Bench Storage Unit, Banning Water Canyon Storage Unit). The City also receives Whitewater River diversions through the San Gorgonio Flume system to enhance recharge in the Banning Water Canyon Storage Unit, and is planning to capture stormwater flows for additional recharge in its service area. The City of Banning developed their own 2025 UWMP and coordinated regarding supplies and demands for this RUWMP.

Banning Heights Mutual Water Company

Banning Heights Mutual Water Company (BHMWC) is a private mutual water company located north of the City of Banning and serving the elevated "Banning Bench" area. It historically utilized surface water diversions from the Whitewater River via the Whitewater Flume, but damage from the Apple Fire of 2020 remains and the system is unable to deliver surface water to BHMWC. Therefore, BHMWC water demands are currently met by deliveries from the City of Banning while Whitewater Flume operations are restored. BHMWC currently has a surface water reservoir, two groundwater wells, and one interconnection with the City of Banning. BHMWC is not required by the UWMPA to prepare an UWMP.

Cabazon Water District

The Cabazon Water District is an independent special district that serves the unincorporated community of Cabazon and surrounding communities in the eastern portion of the Region. Cabazon Water District relies solely on groundwater wells to meet residential and commercial water demands within its service area. Groundwater is pumped from the Cabazon Storage Unit which is a subbasin of the San Gorgonio Pass Groundwater Basin. CWD is not required by the UWMPA to prepare an UWMP.

High Valleys Water District

High Valleys Water District is a small public water system that serves approximately 225 connections in the communities of Mt. Edna, Twin Pines, and Poppet Flats. The district purchases treated water from the City of Banning. High Valleys Water District is not required by the UWMPA to prepare an UWMP.

South Mesa Water Company

South Mesa Water Company (SMWC) is a mutual water utility that serves portions of the Cities of Yucaipa and Calimesa, and straddles the San Bernardino and Riverside County lines. It lies in the northern part of the San Gorgonio Pass Region and is only partially within the SGPWA service area. Water resources are derived primarily from the Calimesa, Live Oak, Yucaipa groundwater basins, and the adjudicated Beaumont Basin. South Mesa Water Company is not participating in this RUWMP but did coordinate on supply and demand, and is preparing its own UWMP.

Yucaipa Valley Water District

The Yucaipa Valley Water District is a special district that provides water, wastewater, and recycled water services to a broad service area spanning the Cities of Yucaipa and Calimesa. It straddles the border of San Bernardino and Riverside Counties and is partially within the SGPWA service area. Its supply portfolio includes groundwater, imported water surface water via SGPWA, and recycled water. Yucaipa Valley Water District coordinated supply and demands for this RUWMP but is not a participant and is preparing their own UWMP.

Morongo Band of Mission Indians Water Department

The Morongo Band of Mission Indians (MBMI) operates its own water system, relying on groundwater and limited surface water supplies to support residential, commercial, and agricultural uses within reservation lands that are located in the eastern and northern part of the San Gorgonio Pass Region. MBMI is not required to prepare an UWMP.

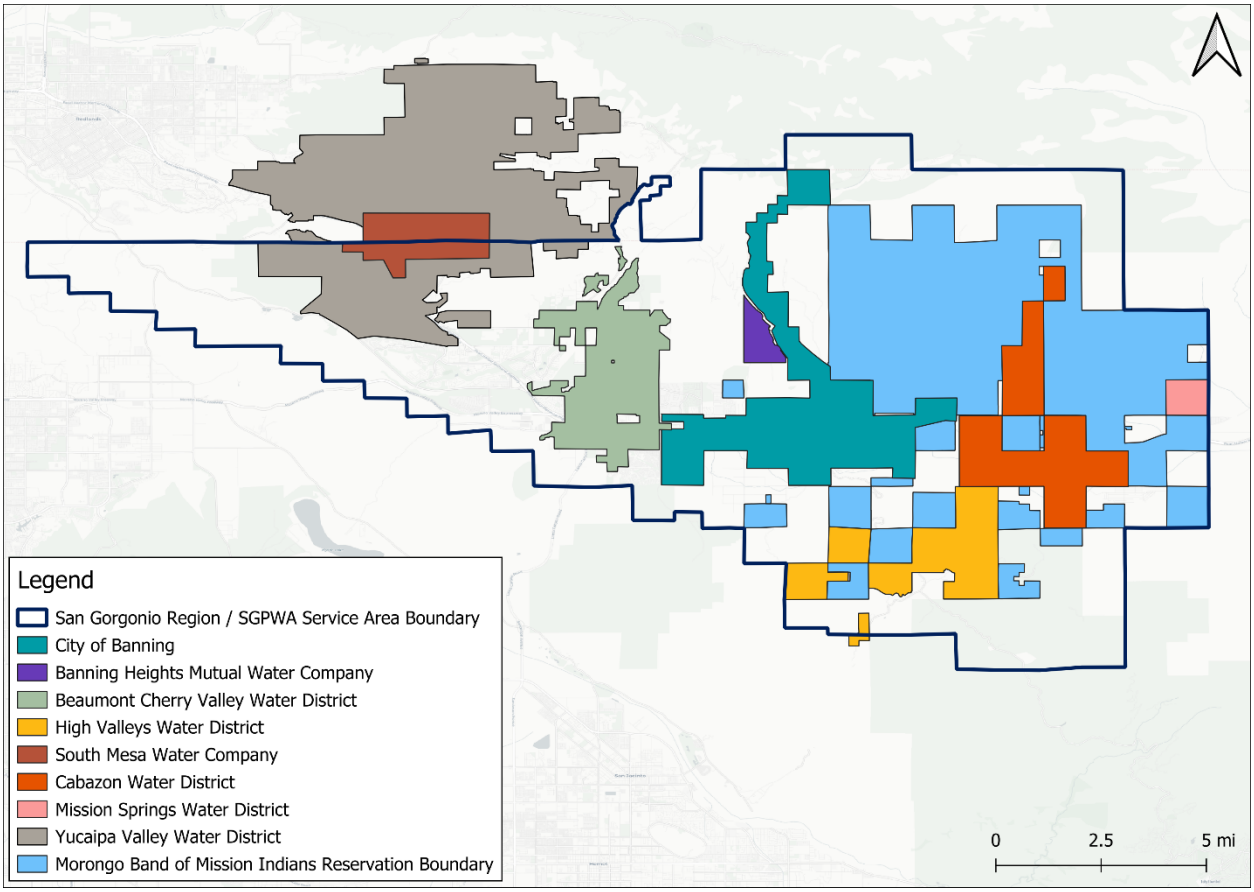


FIGURE 2-2: WATER SUPPLIERS WITHIN THE SAN GORGONIO REGION

2.1.3 San Gorgonio Region Groundwater Basins and Subbasins

The RUWMP Planning Area overlies two major groundwater basins: the Upper Santa Ana Valley Groundwater Basin and the Coachella Valley Groundwater Basin (**Figure 2-3**). Each basin is further divided into hydrologically distinct subbasins that provide local water supply for communities within the Region. **Table 2-2** identifies the subbasins that occur within the RUWMP Planning Area.

The Region encompasses nearly all of the San Gorgonio Pass Subbasin within the Coachella Valley Groundwater Basin, with only a small portion (amounting to approximately 5% of the total subbasin area) extending beyond the eastern boundary of the Agency's service area. In addition, most of the San Timoteo Subbasin within the Upper Santa Ana Valley Groundwater Basin lies within the Region. A small portion of the Yucaipa Subbasin extends into the

northwestern corner of the planning area, overlapping with the Yucaipa Valley Water District service area. These subbasins are discussed in more detail below.

The San Gorgonio Pass Subbasin is bordered by the Indio Subbasin to the east and the San Jacinto Groundwater Basin to the south. The San Jacinto Mountains form the primary geologic and topographic boundary between the San Gorgonio Pass and San Jacinto Basins, acting as a natural barrier to groundwater flow and defining the southern hydrologic boundary of the Region.

TABLE 2-2: GROUNDWATER BASINS AND SUBBASINS WITHIN THE SAN GORGONIO REGION

DWR Subbasin	Groundwater Subbasin Name
Upper Santa Ana Valley Groundwater Basin	
8-002.08	San Timoteo
8-002.07	Yucaipa
Coachella Valley Groundwater Basin	
7-021.04	San Gorgonio

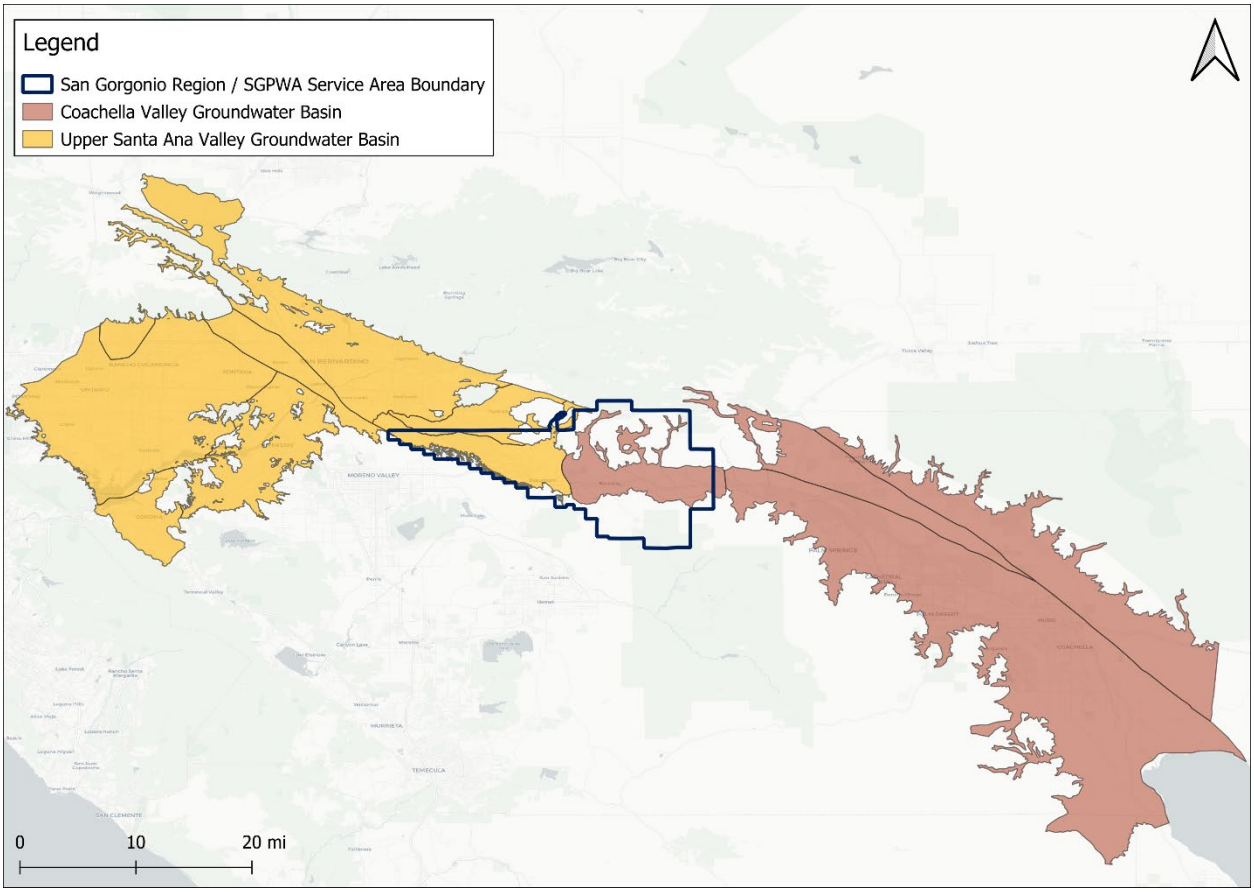


FIGURE 2-3: GROUNDWATER BASINS WITHIN THE SAN GORGONIO REGION

Groundwater management within the Region is guided by the Sustainable Groundwater Management Act (SGMA) and implemented through multiple Groundwater Sustainability Agencies (GSAs). These include the San Timoteo GSA, the Yucaipa GSA, the San Gorgonio Pass GSA, Desert Water Agency GSA, and the Verbenia GSA, each generally corresponding to the boundaries of their respective subbasins. The Verbenia GSA manages a small portion of the eastern San Gorgonio Pass Subbasin, while the San Gorgonio Pass GSA oversees the remaining portion within the Region. The San Timoteo GSA is responsible for the non-adjudicated areas of the San Timoteo Subbasin, while groundwater production within the Beaumont Basin is governed under the 2004 adjudication. The Beaumont Basin is central to the Region's water supply and the Region's water suppliers' managed conjunctive use and storage. Accordingly, Section 2.1.3.1 provides a detailed discussion of the Beaumont Groundwater Basin and its adjudicated management framework.

2.1.3.1 Beaumont Groundwater Basin

The Beaumont Groundwater Basin (Beaumont Storage Unit or Beaumont Basin) is one of the largest groundwater storage units in the RUWMP Planning Area. As shown in **Figure 2-4** below, the adjudicated boundary is located predominantly within the San Timoteo Groundwater Subbasin, with a smaller eastern portion extending into the western area of the San Gorgonio Pass Groundwater Subbasin, as defined by DWR Bulletin 118. While DWR subbasin boundaries are based on hydrogeologic conditions, the adjudicated boundary reflects legal and management considerations established through the court judgment discussed in the following subsections.[10] Accordingly, groundwater production, storage, and management within the Beaumont Basin are governed by the adjudication, which overlays portions of these two DWR-defined subbasins.

Basin Description

The Beaumont Basin covers an area of approximately 19.5 square miles (12,480 acres) and is bounded on all sides by non-water bearing postulated faults, including the Banning Fault to the north and the Cherry Valley Fault, which separates the Beaumont Basin from the Singleton storage unit. These structural features limit groundwater movement and define the basin boundaries.[11]

Groundwater in the Beaumont Basin primarily occurs within older alluvial deposits and the San Timoteo Formation, underlain by relatively impermeable granitic and metamorphic basement rocks.

[10] Beaumont Basin Watermaster. 2025 Consolidated Annual and Engineering Report (Draft), Section 3.1.3.2 and Figure 3-2.
[11] Ibid.

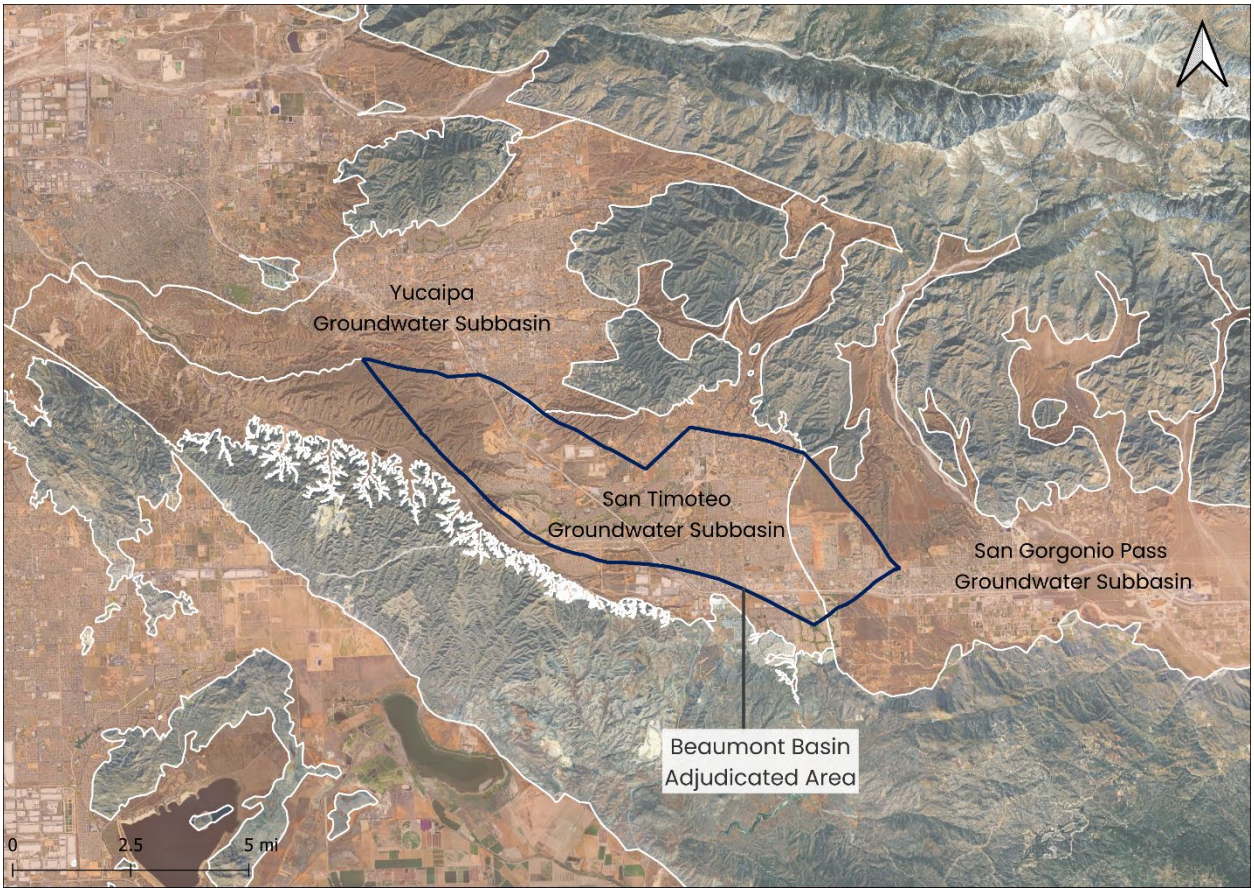


FIGURE 2-4: BEAUMONT BASIN ADJUDICATED AREA

Prior to adjudication in 2004, the Beaumont Basin experienced groundwater level declines due to overdraft conditions dating back to the early 20th century. Since adjudication and implementation of Watermaster management, groundwater levels have stabilized.[12] In addition, recharge of imported State Water Project supplies has contributed to maintaining groundwater levels. Groundwater movement is generally directed southeasterly toward Banning and southwesterly toward San Timoteo Creek.

The adjudication agreement, titled, "San Timoteo Watershed Management Authority, vs. City of Banning, et al."[13] (the Judgment) defines groundwater extraction and storage rights and establishes a framework for conjunctive use and artificial recharge operations, including the

[12] Beaumont Basin Watermaster. 2025 Consolidated Annual and Engineering Report (Draft), Section 3.8; and Beaumont-Cherry Valley Water District. 2020 Urban Water Management Plan (Final), Section 6.3.5.
[13] Honorable Judge Gary Tranbarger of the Superior Court of the State of California for the County of Riverside, signed the Judgment on February 4, 2004 (Case No. RIC 389197)

use of imported SWP supplies delivered by SGPWA. The adjudicated areas within the basins are exempt from the SGMA but are coordinated with SGMA management efforts in adjacent, unadjudicated portions of the subbasins to maintain overall hydrologic consistency and basin sustainability.

The Beaumont Basin has a total estimated storage capacity of over 1 million acre-feet, of which 290,000 acre-feet had been allocated to participating agencies as of December 31, 2024. There are seven participating agencies with approved storage accounts, including BCVWD with an allocation of 80,000 acre-feet and SGPWA with an allocation of 10,000 acre-feet.

Table 2-3 summarizes the current storage capacity allocations within the adjudicated Beaumont Basin.

TABLE 2-3: BEAUMONT BASIN ADJUDICATED STORAGE

Agency/Party to the Judgment	Storage Allocation
City of Banning	80,000
City of Beaumont	30,000
Beaumont-Cherry Valley WD	80,000
South Mesa Water Company	20,000
Yucaipa Valley Water District	50,000
Morongo Band of Mission Indians	20,000
San Gorgonio Pass Water Agency	10,000
Total	290,000

Groundwater Management Under the Beaumont Basin Adjudication

The Beaumont Basin Judgment adjudicated the Beaumont Groundwater Basin on February 4, 2004 (Case No. RIC 389197). The Judgment established the Beaumont Basin Watermaster and quantified production rights amongst the Basin's major parties, including local water districts and private overlying landowners. A court-appointed five-member Watermaster committee is responsible for administering the adjudicated water rights and management of the basin. The Watermaster committee includes representatives from the City of Banning,

City of Beaumont, Beaumont-Cherry Valley Water District, Yucaipa Water District, and South Mesa Water Company.

The Judgment distinguishes between "overlying parties," who have rights to pump native groundwater, and "appropriator parties," who may pump groundwater subject to storage accounts, recharge activities, and other provisions of the Judgment. There are five Appropriative Producers: City of Banning, City of Beaumont, BCVWD, SMWC, and YVWD. There are 17 overlying right holders that were each assigned a specific annual pumping allocation, limiting how much groundwater may be pumped each year. Overlying producers are subject to operational limits, including provisions that require mitigation if production exceeds allowable thresholds over defined multi-year periods.

In addition to allocating baseline pumping, the Judgment created a "temporary surplus," or a controlled overdraft mechanism that allowed appropriative producers to extract a maximum of 16,000 acre-feet per year (AFY) during the first ten years after adoption of the Judgment. The temporary surplus was distributed among the appropriative producers as follows:

- Beaumont-Cherry Valley Water District – 42.51 percent or 6,802 AFY
- City of Banning – 31.43 percent or 5,029 AFY
- South Mesa Water Company – 12.48 percent or 1,997 AFY
- Yucaipa Valley Water District – 13.58 percent or 2,173 AFY

Appropriators stopped receiving the temporary surplus in 2014. Following its conclusion, appropriators are only permitted to extract the amount each has in storage or credited to them. These credits may include imported water recharge, recycled water recharge, return flows from imported water or recycled water applied to land overlying the Beaumont Basin, transferred water from an appropriator's storage account, forbearance water from providing potable or recycled water to the overlying producers land, and unused overlying production allocated to appropriators.

The Watermaster, on an annual basis, determines how much groundwater each producer is entitled to extract from the Beaumont Basin without incurring a replenishment obligation. The allocation of unused overlying water is based on their share of the operating safe yield.

In addition, the Judgment allows overlying parties to receive water service from an appropriator in lieu of pumping (commonly referred to as "forbearance"), whereby the appropriator may extract an equivalent amount of groundwater. The Watermaster also has authority to manage groundwater storage programs, enter into storage agreements, and

oversee recharge and replenishment activities to support long-term basin sustainability and conjunctive use.

At the time of the Judgment, the Safe Yield for the Basin was originally established at 8,650 acre-feet per year; however, a stipulation of the Judgment requires a reevaluation of the Safe Yield every 10 years, at a minimum. In 2013, the safe yield of the basin was revised to be 6,700 acre-feet per year. The most recent reevaluation occurred in 2024, resulting in the safe yield of the Beaumont Basin for the next ten years to be 7,100 acre-feet per year.

2.1.3.2 San Gorgonio Pass Groundwater Subbasin

The San Gorgonio Pass Groundwater Subbasin (SGPSb) underlies the eastern half of the Agency's service area and a small portion of the western jurisdictional boundary of Desert Water Agency and Mission Springs Water District. The City of Banning, the Banning Heights Mutual Water Company, the Cabazon Water District, and the Mission Springs Water District each pump water from the SGPSb to meet retail water demands. In addition, the Morongo Band of Mission Indians (MBMI) has wells in the SGPSb.

Several localized groundwater storage units within the San Gorgonio Pass Subbasin are recognized by local water agencies to represent distinct hydrogeologic areas with varying recharge and production characteristics. These include the Cabazon, Banning Canyon, Banning, and Banning Bench Storage Units. Each unit exhibits different aquifer properties, recharge mechanisms, and groundwater elevations, but is hydraulically connected within the broader San Gorgonio Pass Subbasin.

The City of Banning manages production and monitoring within the Banning-area storage units, while Cabazon Water District manages groundwater production and recharge within the Cabazon Storage Unit.

SGMA requires the development of a Groundwater Sustainability Plan (GSP). The GSAs develop and implement GSPs to avoid undesirable results and mitigate overdraft in the groundwater basins. The Yucaipa and San Gorgonio Pass GSAs have developed GSPs and determined the sustainable yield of the basin to allow for pumping to occur without causing undesirable results. The Yucaipa GSP has estimated the sustainable yield of the Yucaipa Subbasin to be 10,980 acre-feet per year.[14] The San Gorgonio Pass GSP states that the sustainable yield of the San Gorgonio Pass Subbasin is 10,200 acre-feet per year. It should be

[14] Dudek. (2022). Final Groundwater Sustainability Plan for the Yucaipa Groundwater Subbasin Part 1. pp. 183.

noted that the sustainable yield will continue to be evaluated in the future based on monitoring data that indicate the presence or absence of undesirable results.[15]

These coordinated management activities help maintain groundwater levels and storage capacity in the San Gorgonio Pass region, supporting long-term water supply reliability and compliance with DWR's sustainable groundwater management objectives. **Table 2-4** presents an overview of the regional groundwater basins.

TABLE 2-4. REGIONAL GROUNDWATER BASIN AND SUBBASIN MATRIX

Basin/Subbasin/ Storage Unit or Management Unit	DWR Basin No.	Parent Basin	General Location/ Relationship to SGPWA Service Area	Primary Managing Entities	Key Characteristics/ Notes
San Gorgonio Pass Subbasin (SGPSb)	7-021.04	Coachella Valley Basin	Central and eastern portions of the SGPWA service area	SGPWA, Cabazon Water District, Desert Water Agency, Mission Springs, City of Banning	Principal groundwater source for the Pass region; recharged with local runoff and imported SWP supplies.
Cabazon Storage Unit	--	SGPSb	Eastern portion near Cabazon	Cabazon Water District	Local production and recharge area; managed by Cabazon Water District.
Banning Canyon Storage Unit	--	SGPSb	Northern City of Banning	City of Banning	Receives recharge from Banning Canyon; supplies high-elevation wells.
Banning Storage Unit	--	SGPSb	Central City of Banning	City of Banning	Primary groundwater production zone for City of Banning; hydraulically connected to nearby units.
Banning Bench Storage Unit	--	SGPSb	Northwest of Banning	City of Banning, BHMWC	Elevated bench area with limited recharge; supports local wells.
San Timoteo Subbasin (STSb)	8-002.08	Upper Santa Ana Valley Basin	Western portion of the SGPWA service area	City of Redlands, SGPWA, BCVWD, YVWD	Hydrologically connected with the Yucaipa Subbasin; receives recharge from San Timoteo Creek and alluvial deposits.
Beaumont Basin Adjudicated Area	--	STSb	Central portion of SGPWA service area, south of Beaumont	Beaumont Basin Watermaster (City of Beaumont, BCVWD, City of Banning, YVWD, SMWC)	Adjudicated in 2004, exempt from SGMA; Over 1 million AF storage capacity; 290,000 AF allocated to seven agencies (SGPWA 10,000 AF).

[15] San Gorgonio Pass Groundwater Sustainability Plan. (2021). pp. 182. https://www.sgpgsas.org/wpcontent/uploads/2022/01/Final_SGPGSP_1230_2021-web.pdf

Basin/Subbasin/ Storage Unit or Management Unit	DWR Basin No.	Parent Basin	General Location/ Relationship to SGPWA Service Area	Primary Managing Entities	Key Characteristics/ Notes
Yucaipa Subbasin (YSb)	8-002.07	Upper Santa Ana Valley Basin	Northwestern boundary of SGPWA service area	YVWD (GSA), SMWC	Portions extend into SGPWA; managed under the Yucaipa Valley Groundwater Sustainability Plan.
San Timoteo Management Area	--	YSb	Southeastern portion of YSb	YVWD, SMWC	Western peninsula of subbasin, City of Redlands boundary.
Western Heights Management Area	--	YSb	Western portion of YSb	Western Heights Water Company	Overlaps with western YVWD service area.
Calimesa Management Area	--	YSb	Central portion of YSb, near City of Calimesa	YVWD, City of Calimesa, SMWC	Rapidly urbanizing area; southern portion within SGPWA service area.
North Bench Management Area	--	YSb	Northern portion of YSb	YVWD	Largest of the management areas, independent hydrologic behavior, supports local wellfields.
Indio Subbasin (ISb)*	7-021.01	Coachella Valley Basin	East of SGPWA boundary	Coachella Valley Water District	Major Coachella Valley production area, outflows from the SGPSb to the ISb average ~25,000 AFY.

*Indio Subbasin is outside the RUWMP Region and is included for hydrologic context.

Banning Storage Unit

The Banning Storage Unit (SU), located east of the adjudicated Beaumont Basin, is an unadjudicated groundwater area. Recharge occurs through precipitation, septic system percolation, surface water infiltration, and subsurface inflow from the Beaumont Basin and Banning Bench. Groundwater leaves the unit through pumping and subsurface outflow to the Cabazon SU. The 2018 Water Supply Reliability Study estimates a safe yield of approximately 1,130 acre-feet per year, which is assumed constant through the planning horizon. The City of Banning is the sole municipal producer, with a pumping capacity of approximately 3,500 gallons per minute.[16]

Banning Bench Storage Unit

The Banning Bench SU is located at a higher elevation than the surrounding valley and canyon areas and historically supported agricultural uses, particularly in the vicinity of Banning Heights Mutual Water Company. In addition, the City of Banning operates three

[16] *2018 Water Supply Reliability Study, Chapter 2: Baseline Assessment*. Prepared by RMC and Woodard & Curran. Included in the 2018 Revised San Gorgonio Integrated Regional Water Management Plan Appendices.

groundwater wells within the SU, with a combined nominal pumping capacity of approximately 3,600 gallons per minute (gpm).

Banning Canyon Storage Unit

The Banning Canyon SU represents approximately 10 percent acreage of the subbasin and has historically supported some of the highest groundwater production. Groundwater levels have remained relatively stable over time, and the City of Banning enhances recharge through spreading basins during high flow events.

Cabazon Storage Unit

The Cabazon SU comprises the majority of the subbasin and is subdivided into western, central, and eastern areas. Monitoring efforts, including wells installed in coordination with the U.S. Geological Survey, provide data on groundwater conditions. Additional recharge occurs from treated wastewater discharges from the Morongo Band of Mission Indians (MBMI) wastewater treatment facility.

Groundwater Management and SGMA

The San Gorgonio Pass Subbasin is classified as a medium-priority basin under the SGMA, with a sustainability deadline of 2042. A significant portion of the subbasin overlies lands owned by the MBMI, which are not subject to SGMA management as MBMI is a federally recognized tribe.

San Gorgonio Pass Subbasin Groundwater Sustainability Plan

The Subbasin is managed under a coordinated Groundwater Sustainability Plan (GSP) adopted in January 2022 by three GSAs: Desert Water Agency GSA, San Gorgonio Pass GSA, and Verbenia GSA. These agencies collaboratively implement the GSP to achieve long-term groundwater sustainability. The San Gorgonio Pass GSA includes Banning Heights Mutual Water Company, the City of Banning, Cabazon Water District, and SGPWA, while the Verbenia GSA includes Mission Springs Water District and SGPWA.

2.1.4 Surface Water Resources

Surface water resources within the San Gorgonio Pass region are limited and highly variable. The western portion of the Region drains to the Santa Ana River watershed, while the eastern portion drains to the Whitewater River watershed. Major surface water features include the San Gorgonio River, Whitewater River, Little San Gorgonio Creek, San Timoteo Creek, Noble Creek, Marshall Creek, and Smith Creek.

Most streams in the Region are ephemeral, with flows occurring primarily during and shortly after storm events. As a result, most surface water is not directly diverted, treated, and distributed as some surface water supplies tend to be. Rather, agencies such as BCVWD use surface water to recharge groundwater supplies, such as in Edgar Canyon, where the surface water percolates after rainstorms and is then pumped out of the ground to meet a portion of District demands.

However, some reaches of San Timoteo Creek and Cooper's Creek maintain localized, intermittent baseflows due to treated wastewater discharges from the Yucaipa Valley Water District and the City of Beaumont. A portion of the City of Beaumont's discharge is required to be maintained to support sensitive habitat for threatened and endangered species.[17]

Despite limited natural surface flows, surface water plays an important role in groundwater recharge. Under established water rights, Southern California Edison, the City of Banning, and Banning Heights Mutual Water Company (BHMWC) historically diverted up to 13.26 cubic feet per second from the South Fork of the Whitewater River and conveyed it via the Whitewater Flume. These diversions averaged approximately 1,500 acre-feet per year since 1961, with BHMWC directly treating a portion for potable use. The remaining flows are conveyed to the San Gorgonio River system, where they are used for recharge via spreading basins in the Banning Water Canyon area. The Apple Fire of 2020 damaged the Whitewater Flume structure that diverted water for recharge into the Banning Water Canyon. The system was partially restored in 2022 to convey water to the Banning Water Canyon, but is still damaged and unable to deliver surface water to BHMWC. BHMWC receives water from the City of Banning in the interim while Southern California Edison (SCE) in conjunction with the agencies is working to get the system back in operation.[18]

As discussed, BCVWD diverts some flow from Little San Gorgonio Creek to percolation basins adjacent to the creek for the benefit of their wells in Upper, Middle, and Lower Edgar Canyon. BCVWD, in conjunction with Riverside County Flood Control and Water Conservation District, completed construction of the MDP Line 16 project which conveys stormwater to BCVWD's recharge basins north of Brookside Avenue.

[17] Discharges from the City of Beaumont are being evaluated to redirect for recycled water use. This is discussed in Chapter 3 and Chapter 7.
[18] Southern California Edison owns the Whitewater Flume. In 2010 SCE, the City of Banning, BHMWC, and SGPWA entered into an "Agreement for Transfer of San Gorgonio Hydroelectric Project No. 344 Water Conveyance Facilities" which would restore and repair facilities and transfer ownership.

BCVWD has two (2) surface water diversions in Little San Gorgonio Creek (Edgar Canyon), which are on file with the State of California Division of Water Rights: Diversion Numbers 14351 (first used in 1907) and 14352 (first used in 1894). Additional details can be found in BCVWD's 2016 Potable Water Master Plan and in Chapter 7 of this RUWMP.

2.1.5 Major Regional Infrastructure

The Agency is one of 29 State Water Contractors (SWC), who are responsible for the capital and operations and maintenance costs of the State Water Project (SWP). The State Water Contractors association is an organization of 27 State Water Contractors that advance policies and actions that protect, modernize, and maintain affordability of the SWP, working through the Department of Water Resources (DWR) and other agencies.

In 1961, the SGPWA contracted with the DWR for a Table A maximum of 17,300 acre-feet per year of water from the SWP to supplement natural recharge. Water is imported into the service area by the California Aqueduct via the East Branch Extension and extensive transmission pipelines to local groundwater basins and reservoirs. The Agency's infrastructure is primarily designed to convey and recharge imported SWP water to enhance local groundwater resources and improve regional supply reliability.

2.1.5.1 State Water Project

The State Water Project is the largest state-built, multi-purpose water project in the country. It was authorized by the California State Legislature in 1959, with the construction of most facilities completed by 1973. Today, the SWP includes 28 dams and reservoirs, 26 pumping and generating plants, and approximately 660 miles of aqueducts.

The primary water source for the SWP is the Feather River, a tributary of the Sacramento River. The water flowing in the Feather River is captured by the SWP in Oroville dam and reservoir. Storage released from Oroville Dam flows down natural river channels to the Sacramento-San Joaquin River Delta (Delta). While some SWP supplies are pumped from the northern Delta into the North Bay Aqueduct or diverted by SWP contractors upstream, the vast majority of SWP supplies are pumped from the southern Delta into the 444-mile-long California Aqueduct. The California Aqueduct conveys water along the west side of the San Joaquin Valley to the Edmonston Pumping Plant, where water is pumped over the Tehachapi Mountains. From there the California Aqueduct divides into the East and West Branches.

SGPWA takes its SWP deliveries from the East Branch Extension (EBX), which was completed in 2003. Phase 2 of the East Branch Extension was completed in 2018 which increased the capacity of the supplemental water supplies and allowed the SGPWA to take the Agency's official maximum allotment of SWP water.

SGPWA delivers SWP supplies, along with other water supplies, to recharge local groundwater basins through transmission pipelines and recharge systems as well as some direct delivery of raw imported water to Yucaipa Valley Water District. BCVWD, the City of Banning, and YVWD purchase imported water from the SGPWA, which is discharged to BCVWD and SGPWA recharge facilities, and stored in the adjudicated Beaumont Basin. The retailers access this supply through various wells and pipelines. The Region generally recharges and banks imported water and then later extracts it from the ground for use

East Branch Extension (EBX) Facilities

SGPWA receives its imported water through the East Branch Extension of the California Aqueduct, a major component of the SWP operated in coordination with the California DWR and the San Bernardino Valley Municipal Water District (Valley District). Water is lifted from the California Aqueduct via the Greenspot Pumping Plant, Citrus Pump Station and reservoir and conveyed through the Crafton Hills Reservoir and Crafton Hills Pump Station before entering the Cherry Valley Pipeline via the Cherry Valley Pump Station for delivery eastward into the SGPWA service area.

As previously mentioned, the EBX was constructed in two phases, with Phase I completed in 2003 and Phase II completed in 2018, providing additional capacity and operational flexibility. The EBX begins at the terminus of the SWP East Branch at the Devil Canyon Powerplant Afterbay and conveys water through a series of pump stations, pipelines, and storage facilities. Water is conveyed through pump stations and reservoirs and conveyed via approximately 30 miles of pipeline to the EBX terminus at Noble Creek in Cherry Valley. Along this route, water is stored temporarily in Crafton Hills Reservoir before being conveyed downstream.

The Noble Creek Turnout and Mountain View Turnout serve as the primary delivery points for imported water to the region, where SGPWA supplies water for groundwater recharge in partnership with the BCVWD and other local agencies. Recharge operations occur within the Beaumont Basin Adjudicated Area, as well as at recharge basins and spreading grounds located at the Brookside East Recharge Facility and Noble Creek Facility. Each of these facilities has approximately 25 acres of recharge basins.

Phase II of the EBX (EBX II) provides additional conveyance capacity and system redundancy through the construction of the Mentone Pipeline and Citrus Reservoir and Pump Station facilities. EBX II allows for operational flexibility and is now the primary conveyance route, including a crossing beneath the Santa Ana River, improving the overall reliability of imported water deliveries to the region.

In addition, SGPWA has increased its conveyance capacity within the EBX system. Prior to 2020, SGPWA's capacity in the Foothill Pipeline was limited to approximately 32 cfs. Through the Fourth Joint Facilities Agreement executed in June 2020, SGPWA secured an additional 32 cfs of capacity, increasing its total conveyance capacity in the EBX to approximately 64 cfs.

BCVWD receives imported water from a 24-inch diameter turnout and metering station located at the terminus of the EBX near Orchard Avenue and Noble Creek in Cherry Valley. The turnout capacity was increased to approximately 34 cubic feet per second (cfs) in 2019 to accommodate higher delivery demands and improve operational flexibility.

Within the EBX system, overall conveyance capacity is generally sufficient to meet SGPWA demands. However, it is important to note that since SGPWA is at the very end of the SWP, the Region is subject to any deficiencies, outages or constraints that arise in the SWP system before their service area. As such SGPWA and the agencies in the Region are proactive about water supply management and planning to ensure reliable delivery of imported supplies.

A summary of the EBX Phase I and Phase II facilities, including major conveyance components and associated capacities, is provided in **Table 2-5**.

TABLE 2-5: EBX I AND II FACILITIES (FOOTHILL PIPELINE TO CRAFTON HILLS PUMP STATION)

Facility	Description	Size	Capacity	SGPWA Capacity	Operational Notes
Devil Canyon Afterbay to Crafton Hills Pump Station					
Foothill Pipeline	From Devil Canyon to Santa Ana River Crossing	78"	288 cfs	64 cfs	Can use additional capacity with SBVMWD Board Approval
Santa Ana River Crossing (SARC)	Under Santa Ana River to Greenspot Pump Station	42"	108 cfs	16 cfs	Has 48 cfs capacity in parallel route (EBX II)
Greenspot Pump Station	Greenspot Pump Station		70 cfs	16 cfs	Has 48 cfs capacity in parallel route (EBX II)
Greenspot Pipeline	Greenspot Pump Station to Crafton Hills Pump Station	48"	70 cfs	16 cfs	Has 48 cfs capacity in parallel route (EBX II)
Parallel Facilities – Foothill Pipeline to Crafton Hills Pump Station					
Mentone Pipeline South	Foothill Pipeline to Citrus Reservoir	66"	175 cfs	48 cfs	Has 16 cfs capacity in parallel route (EBX I)

Facility	Description	Size	Capacity	SGPWA Capacity	Operational Notes
Citrus Reservoir			400 AF		
Citrus Pump Station			160 cfs	48 cfs	Has 16 cfs capacity in parallel route (EBX I) 4@ 25 cfs, 4 @ 20 cfs, 2 @ 10 cfs
Mentone Pipeline East	Citrus Pump Station to Crafton Hills Pump Station	60”	160 cfs	48 cfs	Has 16 cfs capacity in parallel route (EBX I)
Crafton Hills Pump Station			135 cfs total	64 cfs	3 @25 cfs, 2 @ 20cfs, 2 @ 10 cfs
Crafton Hills Pipeline	Crafton Hills Pump Station to Crafton Hills Reservoir	54”		64 cfs	
Crafton Hills Reservoir			220 cfs		Enlarged in EBX II from 85 AF
Bryant Street Pipeline	Crafton Hills Reservoir to Riverside San Bernardino County Line	54”	104 cfs	64 cfs	
Singleton Pipeline	Riverside San Bernardino County Line to Cherry Valley Pump Station	54”	64 cfs	64 cfs	
Yucaipa Connector and Yucaipa Pipeline			60 cfs	16 cfs	
Cherry Valley Pump Station			52 cfs total	52 cfs	Includes 20 cfs pump added in EBX II plus 1@16 cfs, 2@ 8 cfs
Noble Creek Pipeline	Cherry Valley Pump Station to Noble Creek Terminus	36”	52 cfs	52 cfs	

2.1.5.2 Delivery System

The regional delivery system facilitates the movement, distribution, and management of imported SWP supplies through the RUWMP Planning Area. While the EBX provides the primary conveyance backbone, the broader delivery system consists of interconnected pipelines, turnouts, pump stations, and recharge facilities that allow participating agencies to receive, store, and utilize imported water supplies.

Key delivery points to the Region include the Mountain View Turnout to SGPWA basins, and the Noble Creek Turnout that feeds BCVWD basins. These turnouts take delivery of imported supplies for groundwater recharge. In addition to deliveries within the Beaumont Basin, the system extends westward toward the Yucaipa area, where turnouts and interties support regional supply reliability and provide flexibility to convey water for recharge within the Yucaipa Subbasin and service area.

Recharge Facilities

Managed groundwater recharge is a critical component of water supply management within the Region, allowing imported water supplies to be stored in local aquifers for later use. Imported SWP supplies delivered through the EBX are conveyed to regional recharge and treatment facilities.

The BCVWD Noble Creek Recharge Facility serves as BCVWD's primary recharge location within the Region. The facility consists of 14 percolation ponds covering approximately 25 acres. Since 2006, BCVWD has utilized this facility to recharge imported water purchased from SGPWA, providing an important mechanism for storing supplemental supplies within the Beaumont Basin.

In addition to the Noble Creek Recharge Facility, SGPWA operates the Brookside East Recharge Facility, which is fed from the Mountain View Turnout, directly south and west of the Noble Creek Facility. The Mountain View Turnout has a 20 cfs capacity and Brookside East consists of five recharge basins totaling approximately 25 acres. Between BCVWD's Noble Creek and SGPWA's Brookside East Recharge Facilities, the estimated recharge capacity to the Beaumont Basin is approximately 20,000 acre-feet per year.

Looking forward, additional recharge and groundwater sustainability projects are planned to expand the Region's ability to capture and store supplemental water supplies. SGPWA is constructing a new recharge basin in the City of Calimesa within the Calimesa Management Area of the Yucaipa GSA that is anticipated to be completed in late 2026. The Agency also acquired 60 acres directly west of the Brookside East Recharge Facility and is in the design phase for a new "Brookside West" recharge facility.

As identified in the San Gorgonio Pass GSP, additional projects include expansion of stormwater capture facilities, additional imported water spreading in the Beaumont Basin, and development of new conveyance and recharge infrastructure within the Cabazon and Banning storage units. Operational efficiencies such as BCVWD and the City of Banning co-owned wells also highlight examples projects and management actions that collectively

benefit the Region and can be expanded in the future. As a whole, these efforts are intended to enhance recharge capacity, improve groundwater conditions, provide strategic water resource operational flexibility, and increase regional resilience to hydrologic variability.

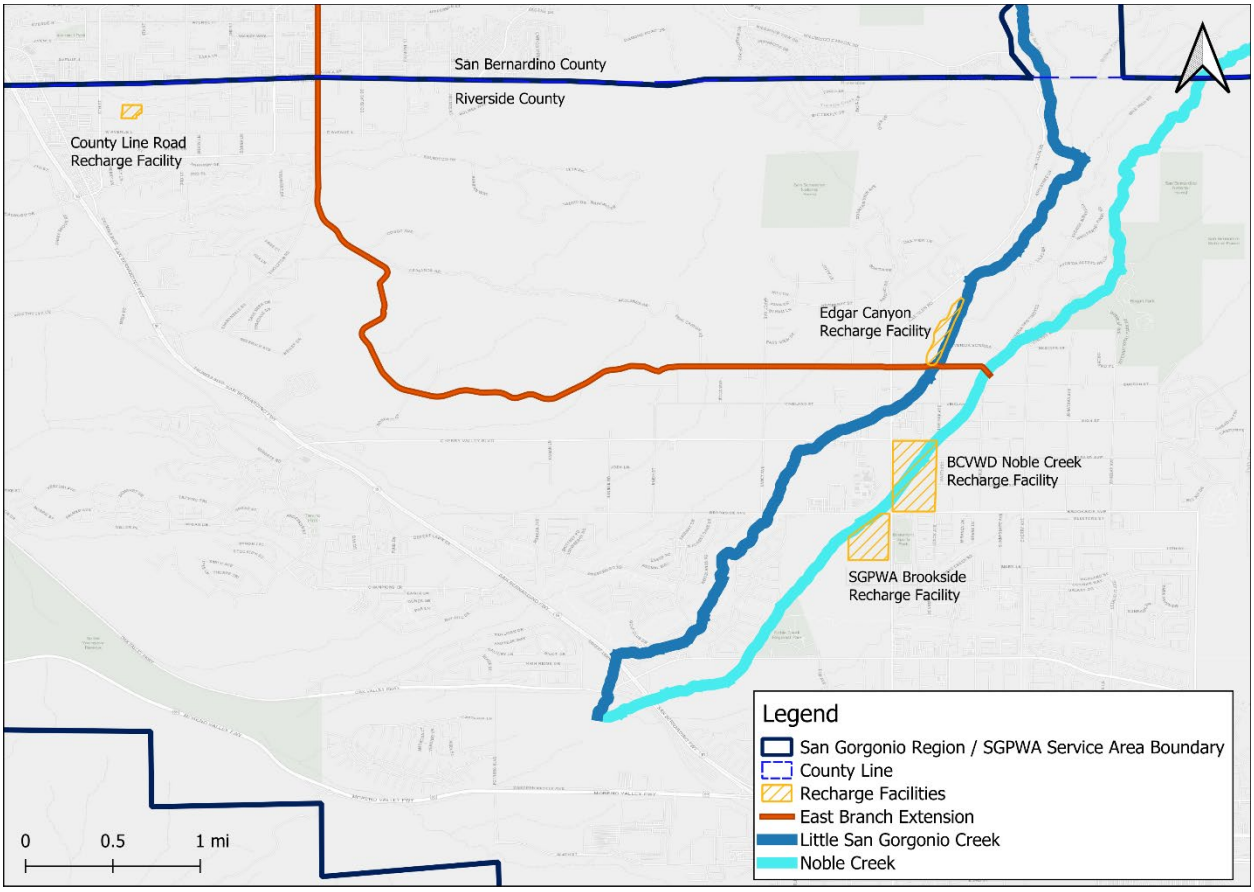


FIGURE 2-5: REGIONAL GROUNDWATER RECHARGE FACILITIES

2.1.5.3 Delta Conveyance Project

The Delta Conveyance Project (DCP) is a proposed infrastructure project led by the California DWR intended to improve the reliability of SWP deliveries by modernizing water conveyance through the Sacramento–San Joaquin Delta. The project is designed to address ongoing and future risks to SWP operations associated with regulatory constraints, sea level rise, seismic vulnerability, levee instability, and increasing hydrologic variability.

The DCP would introduce a new point of diversion in the northern Delta and convey water through a tunnel facility to existing SWP infrastructure south of the Delta. While the project would not increase water rights or Table A allocations, it is intended to reduce supply

interruptions and operational constraints that currently limit SWP exports, thereby helping to maintain or improve delivery reliability and water quality under future conditions.

SGPWA is a participating agency in the DCP and has committed to a 2 percent participation level. As a participant, SGPWA's investment supports project planning and would secure a proportional share of conveyance capacity and associated delivery benefits for the San Gorgonio Pass Region when the project is constructed. Participation in the DCP is intended to help protect the reliability of imported SWP supplies, which are a critical component of the Region's long-term water supply portfolio.

The DCP remains in the planning and design phase and faces a range of regulatory, environmental, and political considerations that may affect its implementation timeline. However, given the Region's reliance on imported water, the project represents a potential long-term strategy to mitigate risks to SWP supply and support continued water supply reliability under changing conditions. DCP assumed supplies are discussed in Chapter 3.

2.1.5.4 Sites Reservoir

SGPWA is advancing regional water supply reliability through participation in strategic, long-term water supply projects. A key component of this portfolio is the Sites Reservoir Project, a north-of-Delta off stream storage facility designed to capture and store excess Sacramento River flows during wet periods, for use during dry and critical years. SGPWA's investment provides a proportional share of storage capacity and access to an estimated long-term average water supply, with greater delivery potential during drought conditions when other supplies, such as SWP allocations, may be limited. SGPWA currently holds 14,000 shares in the Sites Reservoir Project, representing approximately 6.2 percent of the active storage allocated to Project Agreement Members (87,276 acre-feet). Beaumont-Cherry Valley Water District (BCVWD) entered into a cost sharing agreement with SGPWA for 4,000 of these shares, with SGPWA retaining the remaining 10,000 shares. This investment provides SGPWA with long term access to a proportional share of stored water and represents a significant component of the agency's future supply portfolio. The project is expected to provide an important supplemental supply and enhance regional drought resilience and operational flexibility over the long term. Site Reservoir supplies are discussed in Chapter 3.

2.1.5.5 Backbone Pipeline Project

The SGPWA is advancing regional water supply reliability through development of the Backbone Pipeline Project, a long-planned regional conveyance improvement designed to

enhance the distribution of imported State Water Project (SWP) supplies throughout the San Gorgonio Pass area. The proposed project would convey water imported from the SWP from the existing East Branch Extension pipeline in the City of Beaumont to multiple facilities across the region, ultimately supporting groundwater recharge and water supply delivery in communities including Banning and Cabazon. The Backbone Pipeline (**Figure 2-6**) is intended to improve operational flexibility by expanding access to imported supplies and facilitating recharge within local groundwater basins, thereby strengthening regional drought resilience.

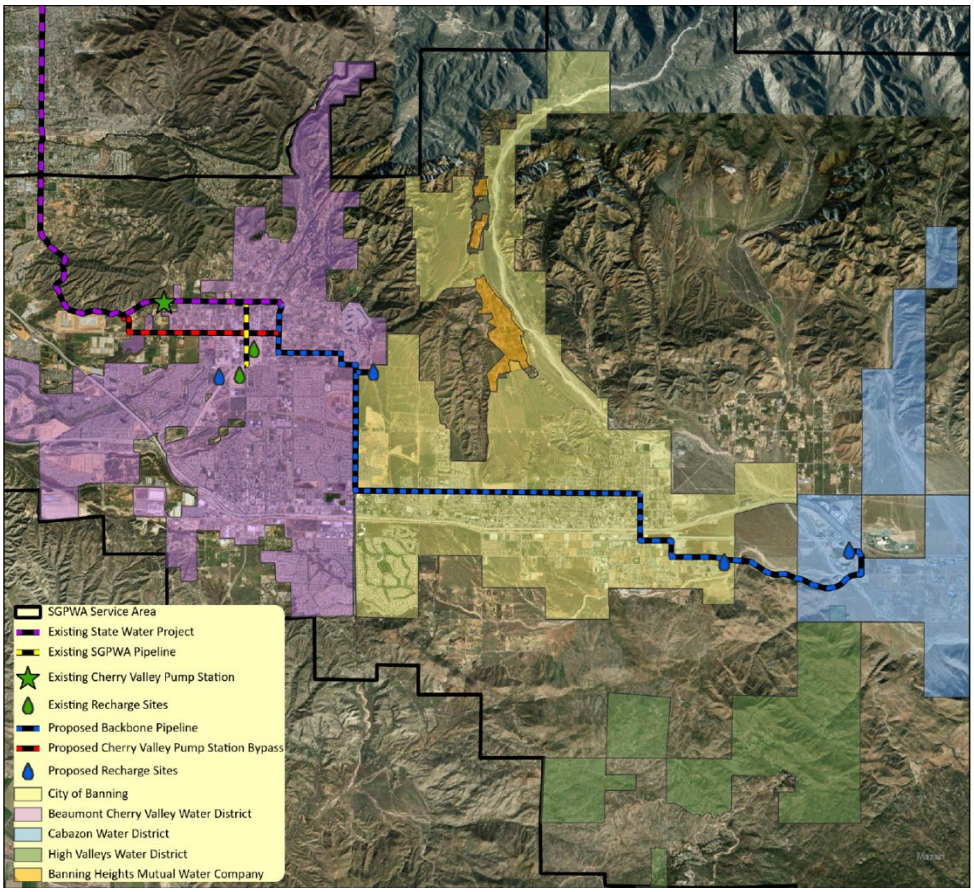


FIGURE 2-6: BACKBONE PIPELINE PROJECT OVERVIEW

2.1.6 Regional Climate

Typical of Southern California's Mediterranean climate, the Region experiences hot, dry summers and mild, wet winters. Owing to its higher elevation, the region's temperatures are generally 5 to 10 degrees cooler than adjacent lower-lying areas, with occasional snowfall

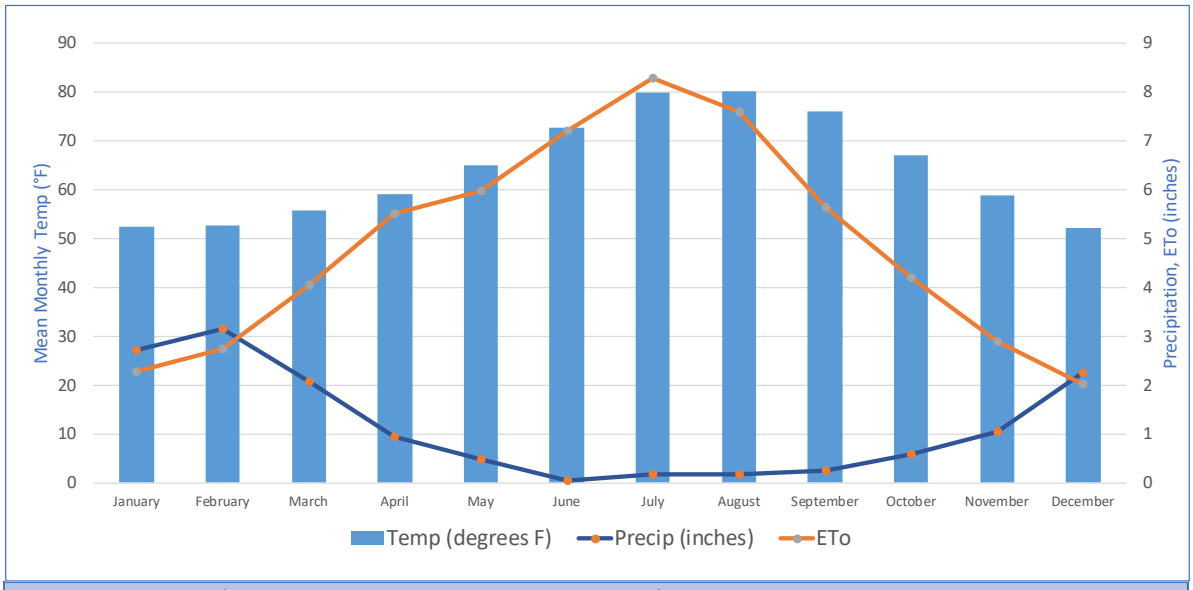
during winter months. Historically, December through February are the coldest months, while July and August are the hottest.

The wet season extends from December through March, with a 30-year annual average precipitation of approximately 14 inches. Notably, 2023 was an exceptionally wet year, with the region receiving about 23 inches of precipitation. The average annual temperature is approximately 63°F, with summer highs often reaching the mid-90s and winter lows dropping into the low 40s.

Additional climate characteristics include occasional summer thunderstorms resulting from monsoonal moisture originating in the nearby low desert, though these events typically contribute minimal precipitation. Snowfall is uncommon compared to surrounding mountain areas and generally melts before accumulating. The average annual evapotranspiration (ETo)—representing the combined loss of water through evaporation and plant transpiration—is about 58.4 inches, or approximately 4.9 feet per year.[19]

The region's distinctive climate is a key factor influencing local water resource management. Variations in temperature and precipitation directly affect both water supply availability and customer demand. Regional water managers rely on historical climate data and trends to forecast demand and assess supply reliability under varying hydrologic conditions, including wet, dry, and average years, as well as seasonal variations between summer and winter. **Figure 2-7** presents the San Gorgonio Pass Region's average climate conditions.

[19] ETo data is from CIMIS Highland - Los Angeles Basin - Station 251, Oct 2016 - Jan 2025.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Temp	52.4	52.6	55.6	59.1	65.0	72.7	79.8	80.2	75.9	67.1	58.9	52.3
Precip	2.71	3.16	2.06	0.96	0.49	0.06	0.17	0.19	0.25	0.58	1.05	2.25
ETo	2.29	2.74	4.05	5.52	5.97	7.20	8.29	7.59	5.64	4.19	2.90	2.02

FIGURE 2-7: AVERAGE CLIMATE CONDITIONS[20]

2.1.6.1 Climate Change

The California Water Code recognizes climate change as an important consideration for water suppliers assessing drought risk, water conservation and use efficiency, and demand management and supply.

Precipitation across the past 30 years has had wide variation, highlighting multiple dry periods and occasional extremely wet years (**Figure 2-8**). As shown by the trendlines in **Figure 2-9,** the region has experienced gradual warming in average temperatures over the past 100 years, with annual temperatures having increased by approximately 3ºF since the mid-20th century. Increasing temperatures locally within the service area can result in higher evapotranspiration, leading to additional water demand. Although annual median precipitation levels remain relatively consistent, projected changes in the frequency,

[20] Temperature and rainfall data represents annual averages from 1995-2024 from the PRISM Climate Group https://prism.oregonstate.edu/ Location: Latitude 33.9140 Longitude: -116.8746 Elevation: 2339ft; ETo data is from CIMIS Highland - Los Angeles Basin - Station 251, Oct 2016 - Jan 2025.

magnitude, and volume of precipitation show large variability, which has implications for uncertainties in stormwater runoff and peak flow rates.[21]

Imported water will also be influenced by the effects of climate change. The San Gorgonio Pass Water Agency is one of 29 contractors that import water from Northern California and the Sacramento Delta through the State Water Project (SWP). Any effect from climate change that impacts water flows derived from the Sierra Nevada snowpack will impact SWP water deliveries, including to the SGPWA. Most notably, warming temperatures throughout California contribute to an overall decline in snowpack. With more precipitation falling as rain rather than snow, and an earlier snowmelt, runoff patterns are fundamentally altered.[22] These effects are discussed further in Chapter 3.

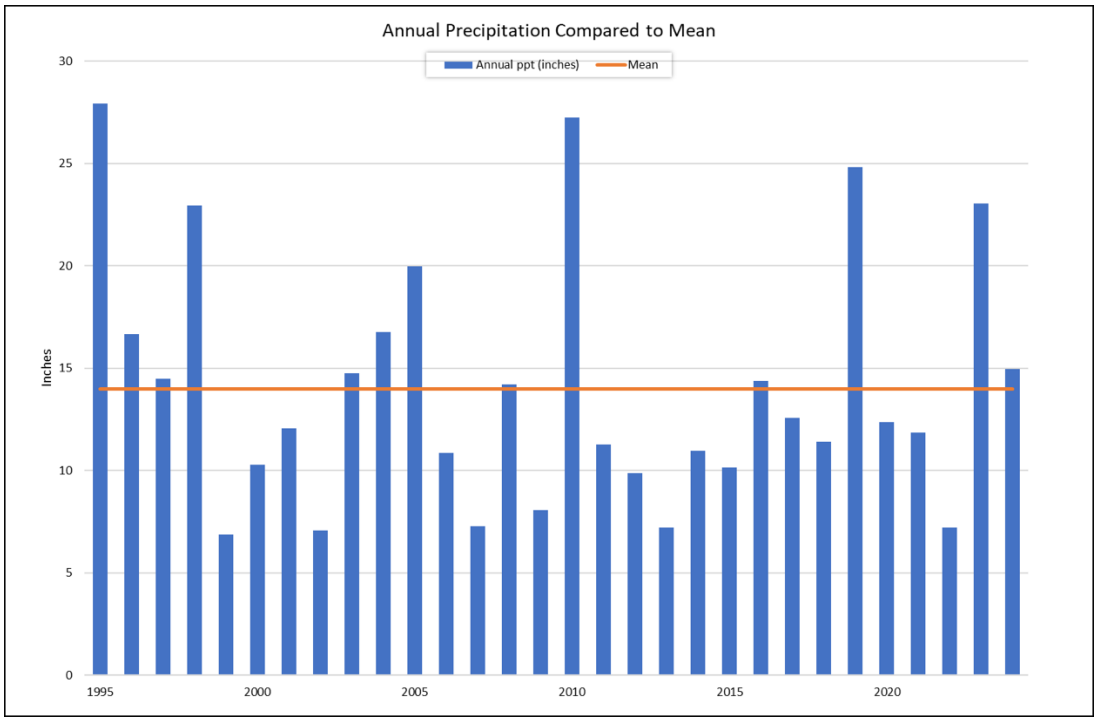


FIGURE 2-8: ANNUAL PRECIPITATION VARIABILITY (1995-2025)

[21] The U.S. Department of the Interior, Bureau of Reclamation (USBR) published the Los Angeles Basin Study Summary Report in 2016 to strategically assess water supply and demand imbalances, analyzing the impacts climate change among other stressors.

[22] See Section 1. Reasons to Assess SWP Water Delivery Capability of the Delivery Capability Report published by DWR for 2023.

As shown by the trendlines in **Figure 2-9** there has been a gradual warming in average temperatures over the past 100 years. Increasing temperatures locally within the service area can result in higher evapotranspiration, leading to additional water demand.

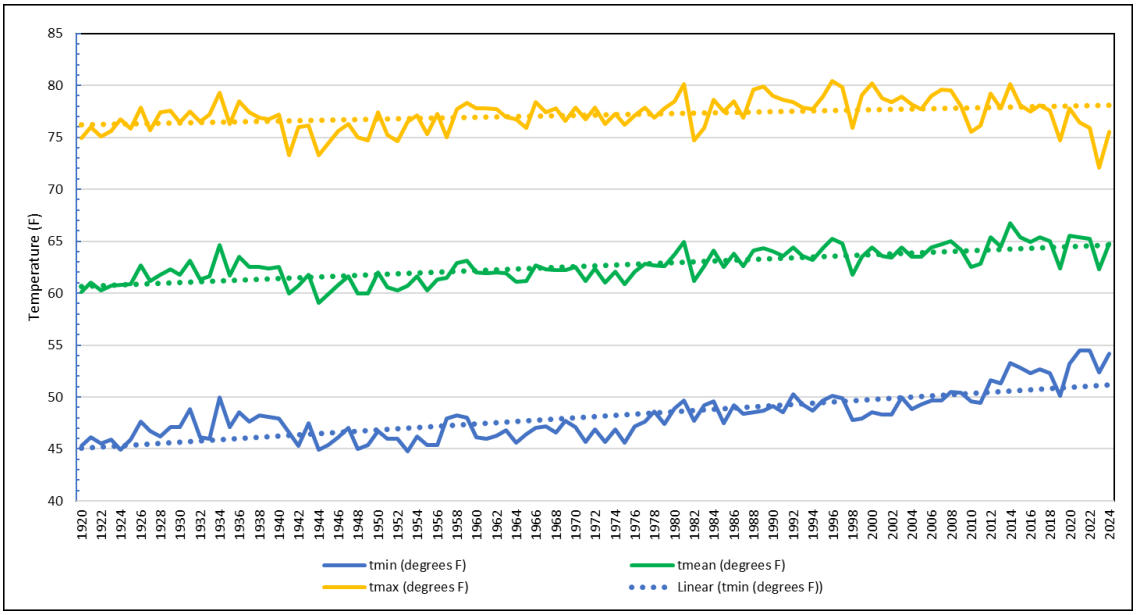


FIGURE 2-9: HISTORICAL ANNUAL TEMPERATURE (1920-2024)[23]

2.1.7 Current and Projected Population, Land Use, Economy, and Demographics

Population growth and land-use changes are the primary influences on water demand within the service area. Consequently, these projections are vital for planning supply, delivery, and infrastructure. By examining regional demographic and economic trends, this section provides a basis for the San Gorgonio Pass Region's water use projections.

Riverside County contains a highly diverse urban landscape that stretches from the dense, fast-growing communities of Western Riverside County to the more rural, agricultural, and resort-oriented areas of the Coachella Valley in the east. The county's western portion, anchored by cities such as Riverside, Corona, Moreno Valley, Perris, Menifee, Lake Elsinore, Murrieta, Temecula, Hemet, San Jacinto, has historically experienced the highest levels of

[23] Temperature data is from the PRISM Climate Group https://prism.oregonstate.edu/ Location: Lat: 33.9140 Lon: -116.8746 Elev: 2339ft

population growth and urban development. This western urban corridor is characterized by master-planned residential communities, commercial centers, industrial logistics hubs, and major regional transportation infrastructure along Interstates 15, 215, and 10.

In contrast, the eastern portion of Riverside County transitions from the Western and Eastern Coachella Valley, where land uses include a blend of destination tourism, agriculture, tribal lands, and lower-density residential communities. Ultimately, both halves of the county are connected physically, economically, and culturally by a critical east–west passage: the San Gorgonio Pass Region.

Situated between the San Jacinto and San Gorgonio Mountains, the Pass forms a natural and essential corridor linking Western Riverside County with the Coachella Valley and the broader desert region. This area, which includes the Cities of Beaumont and Banning and the City of Calimesa on the western slope, serves as the county's principal gateway between its two major population centers. The Pass is traversed by Interstate 10, one of the most heavily traveled freight and commuter routes in Southern California, providing continuous access from Los Angeles to the Inland Empire, and beyond.

Because of its location, the San Gorgonio Pass Region functions as a structural hinge point. It is the geographic, transportation, and utility connection that ties together the more urbanized western cities and the rapidly evolving communities of the Coachella Valley. The region supports this linkage not only through transportation but also through water, power, and communication infrastructure, which all rely on the Pass region as the primary crossing between the county's two halves.

Urban development within the Pass has accelerated in recent decades, particularly in Beaumont and Calimesa, reflecting its strategic importance and expanding role as a residential and economic center. This growth further increases the significance of long-range water planning, as the Pass Region influences and supports the functionality, reliability, and resilience of water systems serving both Western Riverside County and the Coachella Valley.

2.1.7.1 Current Population and Historic Trends

Population within the San Gorgonio Pass Region – which for purposes of this RUWMP corresponds to the SGPWA service area – has grown substantially over the past several decades. Growth has been concentrated primarily within the region's three incorporated

cities: Beaumont, Banning, and Calimesa. Together, these cities account for nearly 90 percent of the population within the SGPWA service area.[24]

Historically, the largest population centers in the region have been Beaumont and Banning, although their growth trajectories have differed throughout the last few decades. The BCVWD service area experienced transformative growth since 1990, largely driven by growth in the City of Beaumont. As discussed in section 7.2, population in the BCVWD service area more than doubled from 17,275 in 2000 to 43,239 in 2010 as large master-planned residential subdivisions were constructed primarily within the City of Beaumont. Since then, growth has continued, reaching approximately 68,665 by 2025.[25] The City of Banning grew at a comparatively modest pace over the same period, from 31,125 in 2020 to around 31,949 in 2025, consistent with more limited residential development activity.[26]

The remainder of the SGPWA service area, including smaller communities and unincorporated areas, experienced modest incremental growth consistent with regional trends. Calimesa grew from 7,879 residents in 2010 to 10,026 in 2020, while Cherry Valley increased slightly from 6,362 to 6,509 residents. The census-designated places of Cabazon and Whitewater remained relatively small population centers with 2020 populations of 2,629 and 971 residents, respectively.[27]

More recent population estimates suggest that the growth trends observed since 2010 have continued in the years following the 2020 Census.[28] Beaumont and Calimesa have experienced particularly strong growth compared with both Riverside County and statewide trends. Since 2010, these communities have grown significantly faster than the state average, reflecting continued residential development and expanding housing supply.

Housing construction has been a primary driver of population growth throughout Southern California, and the same pattern is evident within the San Gorgonio Pass Region. Communities that have added housing units most rapidly have also experienced the greatest population increase. Between 2010 and 2024, Banning's population grew by approximately 5.8 percent while housing stock increased by 3.2 percent, slower than the statewide housing growth rate of 8.4 percent. In contrast, Calimesa experienced substantially

[24] San Gorgonio Pass Economic Outlook and Forecast, July 2025 – Beacon Economics (Beacon Economics, 2025).
[25] City of Banning, 2025 Urban Water Management Plan, Section 2.5; Beaumont-Cherry Valley Water District, 2025 Urban Water Management Plan, Section 7.2.4.1, Table 7-4.
[26] City of Banning, 2025 Urban Water Management Plan, Section
[27] U.S. Census Bureau
[28] Recent population estimates were sourced from Department of Finance (DOF) data or were provided directly by BCVWD and City of Banning

faster growth, with housing stock increasing by nearly 26 percent and population growing by approximately 39 percent during the same period.[29]

Overall, these trends indicate continued population expansion within portions of the SGPWA service area, particularly in Beaumont and Calimesa, while growth in Banning and smaller communities has been more moderate. The region's historical population on a 5-year timestep since 1990 is shown on **Table 2-6**, and **Table 2-7** presents the recent regional population and growth rate on an annual basis since 2015.

TABLE 2-6: HISTORICAL POPULATION[30]

1990	1995	2000	2005	2010	2015	2020	2025
47,476	49,257	53,661	67,499	86,779	98,401	109,243	119,216

TABLE 2-7: POPULATION GROWTH RATE, 2015-2024

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
98,401	100,561	102,741	104,877	107,040	109,243	110,882	113,481	115,779	117,635
2.05%	2.20%	2.17%	2.08%	2.06%	2.06%	1.50%	2.34%	2.02%	1.60%

2.1.7.2 Projected Population in the San Gorgonio Pass Region

Accurate population projections are a foundational element of regional water planning because they directly inform future water demand estimates and long-term supply reliability analyses. For the 2025 Regional Urban Water Management Plan, projected population in the San Gorgonio Pass Region provides the basis for evaluating whether existing and planned water supplies can reliably meet the needs of current and future residents under normal, dry, and multiple-dry-year conditions. Consistent with the Urban Water Management Planning Act, California Water Code Section 10631(a) requires urban water suppliers to identify and quantify projected population and water demands to support sound, coordinated water management decisions. Developing accurate, well-supported population projections

[29] Beacon Economics, 2025 at p. 7.

[30] Agency-specific forecasts for Beaumont-Cherry Valley Water District and the City of Banning are incorporated into SGPWA population estimates in lieu of the Beacon Economics estimates. Outside of those service areas, however, SGPWA uses the Beacon Economics projections. For consistency purposes, this same methodology was applied to develop historical population estimates between 2015-2024. Estimates for 1990-2010 are derived solely from Beacon Economics historical population estimates for the SGPWA area.

therefore ensures that regional water planning remains aligned with land use assumptions, retail agency planning efforts, and statutory requirements for demonstrating long-term water supply reliability.

Methodology

Accurate population forecasting within the service area is predicated on historical trends, economic forecasting, and planned land utilization. The UWMPA encourages coordination for population projections with retail water suppliers and SGPWA collaborated on a detailed regional study with Beacon Economics to determine a regional growth outlook.[31] This approach uses a spatial Census-based methodology that aligns population estimates with the water service boundary. Historical Census Block population was assigned to the SGPWA service boundary when the Census Block centroid fell within the boundary. Growth trends and observed housing development patterns and land availability were analyzed within cities and Census Designated Places within the service boundary. Employment and labor force trends were assessed in conjunction with these housing and land use outlooks to develop the regional projections. The Beacon Economics population projections assume that future growth within the San Gorgonio Pass Region will generally reflect historical trends observed in Decennial Census data, with population increases primarily driven by the pace and location of residential housing development. Growth is constrained to areas that are developable and consistent with existing service area boundaries, with mountainous and otherwise undevelopable lands assumed not to contribute materially to future population. The projections further assume that housing availability is the primary limiting factor on population expansion. For the purposes of this RUWMP, the Beacon Economics forecast is applied to the portions of the SGPWA service area not covered by the independent agency forecasts described below, specifically the portions served by South Mesa Water Company and Yucaipa Valley Water District that fall within the SGPWA boundary, as well as small system water suppliers and rural domestic users.

Two retail water suppliers within the Region, the Beaumont-Cherry Valley Water District and the City of Banning, each developed independent population forecasts as part of their respective 2025 Urban Water Management Plans, and those agency-specific forecasts are incorporated into the SGPWA regional projections in lieu of the Beacon Economics estimates for those service areas.

[31] Beacon Economics, 2025.

Beaumont-Cherry Valley Water District's population forecast is based on a planned land use development methodology using Equivalent Dwelling Units (EDUs), as detailed in Section 7.2 of this RUWMP.[32] The City of Banning's population forecast is derived from the Southern California Association of Governments (SCAG) 2024 Regional Transportation Plan household forecast, supplemented by projections for two major future developments. This methodology is detailed in Section 2.5 of the City of Banning 2025 Urban Water Management Plan.[33]

Results

The population projections inform the water demand and reliability assessments in Chapter 4 and Chapter 5. When specific housing development and land use forecasts are less clear, population is the key metric that informs per capita demand. For the purposes of the RUWMP, The Beacon economics forecast for SGPWA was revised to incorporate the independent agency forecasts from both BCVWD and the City of Banning. To construct the revised regional total, the Beacon Economics projections for the BCVWD and City of Banning service areas were removed from the Beacon regional total, and the respective agency-developed forecasts were added in their place. This approach ensures that the most service-area-specific and locally validated projections are used for the two largest population centers in the Region while preserving the Beacon Economics spatial methodology for the remainder of the service area. The resulting revised regional population forecast is presented in **Table 2-8**. The population projections inform the water demand and reliability assessments in Chapter 4 and Chapter 5.The Beacon Economics report projections are used for the retail service areas within the SGPWA service area boundary, which includes the City of Banning, the portions of South Mesa Water Company and Yucaipa Valley Water District that lie within the SGPWA boundary, and small system water suppliers and rural domestic users that are reliant on the water resources available in the region. BCVWD's own population projections are incorporated into these regional forecasts as previously discussed. **Table 2-8** summarizes the population estimates for the San Gorgonio Pass Region.

TABLE 2-8: SAN GORGONIO PASS REGION POPULATION FORECAST

Year	2025	2030	2035	2040	2045	2050
Projected Population	119,216	128,220	140,527	155,361	171,862	187,374
Growth Rate		7.55%	9.60%	10.56%	10.62%	9.03%

Annual Rate: 1.81%

[32] Beaumont-Cherry Valley Water District. 2025 Urban Water Management Plan. Section 7.2.4.2, Table 7-6.
[33] City of Banning. 2025 Urban Water Management Plan. Section 2.5.1, Tables 2.4 and 2.5.

2.1.8 Land Use, Economy, and Demographics

Land use within the Region reflects an ongoing transition from historically rural and agricultural conditions toward increased urbanization and economic development. Positioned along the Interstate 10 corridor between the Inland Empire and the Coachella Valley, the Region has become an attractive location for residential growth, commercial activity, and regional transportation infrastructure. This growth is driven in part by relatively more affordable housing compared to western portions of Riverside and San Bernardino Counties, as well as strong regional connectivity.

Urban development is concentrated within the Cities of Beaumont, Banning, and Calimesa, where continued expansion of residential neighborhoods, commercial centers, and light industrial uses is reshaping the regional landscape. Growth patterns generally follow the Interstate 10 corridor, reinforcing its role as the primary axis for economic activity, commuting, and goods movement through the Region. Nearby communities, including Yucaipa, further contribute to regional population and employment dynamics.

In contrast, the unincorporated communities of Cherry Valley, Cabazon, and Whitewater remain largely rural in character, consisting of low-density residential development, open space, and desert terrain. While agricultural land uses persist in limited areas, particularly in the central portion of the Region, these lands have steadily declined over time as development pressures increase and land use is converted to residential and commercial purposes.

The Region also includes lands of the Morongo Band of Mission Indians, located primarily near Cabazon along Interstate 10. The Morongo Reservation represents a significant economic center within the eastern portion of the service area, supporting commercial, hospitality, and tribal operations. As a sovereign nation, the Tribe maintains independent authority over land use and water resources, while continuing to coordinate with regional and state agencies on broader water management and planning efforts.

2.1.8.1 Current and Projected Land Use

The San Gorgonio Pass Region is expected to continue experiencing steady population growth and urban expansion over the coming decades. Existing land use patterns indicate that significant areas remain available for development, particularly within and adjacent to

the incorporated Cities of Beaumont, Banning, and Calimesa, where planned economic development is concentrated along the Interstate 10 corridor. These areas are anticipated to accommodate the majority of future residential development, including both infill and expansion into previously undeveloped lands, supported by new commercial centers, schools, and community services.

Additional economic development extends into nearby communities such as Yucaipa, which, while outside portions of the RUWMP Planning Area, contribute to broader regional development trends influencing housing demand, employment patterns, and infrastructure needs. Within the unincorporated areas of Cherry Valley, Cabazon, and Whitewater, development is expected to remain more limited in scale, with continued predominance of low-density residential uses, rural character, and open space. However, select areas, particularly near existing transportation corridors and infrastructure, may experience incremental growth over time.

In the eastern portion of the Region, the Morongo Band of Mission Indians is expected to continue development within its reservation lands near Cabazon, including commercial, hospitality, and economic enterprises that serve both local and regional populations. These activities represent an important component of the regional economy and contribute to water demand within the service area.

Land uses are incorporated in regional demand planning and the corresponding water reliability assessments contained in this RUWMP.

2.1.8.2 Economic Trends & Other Social and Demographic Factors

Economic conditions within the San Gorgonio Pass Region reflect its role as a growing residential and economic corridor within the Inland Empire. Over the past decade, the Region has experienced sustained population growth that has driven expansion across a range of service-oriented and goods movement industries. Positioned along Interstate 10, the Region benefits from strong regional connectivity, supporting both local economic activity and broader freight and commuter movement between Southern California and the Coachella Valley and beyond.

Demographic trends within the Region have closely paralleled its recent economic development. The Region's communities collectively support a diverse population that includes growing family-oriented neighborhoods, established residential areas, and a

significant retiree population. Homeownership rates remain relatively high throughout the Region, reflecting its role as a desirable residential location within the Inland Empire. The Region exhibits a unique demographic profile compared to many rapidly growing Inland Empire communities. While Beaumont has experienced significant growth among working-age households and young families, Banning and Calimesa maintain comparatively larger senior populations. This diversity contributes to varying residential water use patterns across the Region and reinforces the close relationship between demographic change, housing growth, and infrastructure planning.

The regional economy is closely tied to residential growth and the needs of an expanding population. Employment is concentrated in retail trade, government services, education, health care, and leisure and hospitality, all of which support local communities and reflect the Region's function as a residential and service-oriented economy. Retail trade remains one of the most prominent sectors, supported by continued population increases and commercial development along the Interstate 10 corridor.

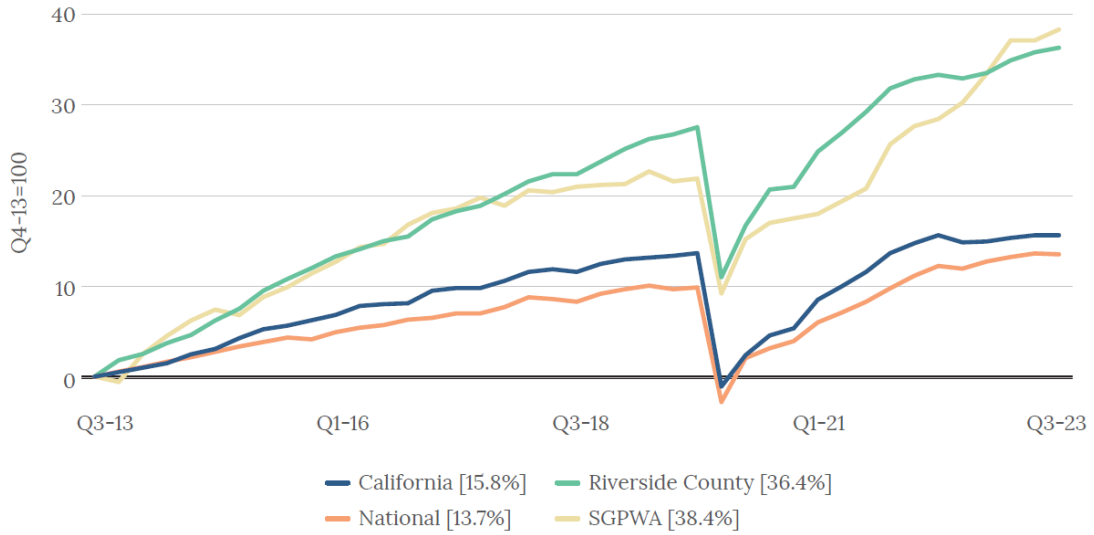
At the same time, the Region has experienced growing influence from the Inland Empire's logistics and goods movement economy. Expansion of e-commerce and regional distribution networks has supported the development of warehouse and fulfillment facilities, particularly in the City of Beaumont. This trend mirrors broader patterns across the Inland Empire, where industrial land availability and proximity to major transportation corridors continue to attract logistics-related investment. Growth in this sector has contributed to increased employment in transportation, warehousing, and related industries, while also expanding the Region's economic base.

These structural shifts have occurred alongside broader economic cycles. The COVID-19 pandemic in 2020 resulted in a temporary contraction in employment; however, the Region demonstrated a relatively strong recovery compared to many other parts of California. By 2021, employment levels had largely rebounded, supported by continued population growth, housing development, and sustained demand for logistics and local services. Inland regions, including the San Gorgonio Pass, generally experienced more rapid recovery than coastal areas, reflecting differences in housing availability, cost of living, and industry composition.

Overall, employment growth in the Region has outpaced state and national trends in recent years. As shown in **Figure 2-10**: , employment increased by approximately 38 percent between 2013 and 2023, exceeding growth observed in Riverside County, California, and the nation. This growth has been distributed across multiple sectors, including logistics, retail

trade, government, construction, education, and health care, reinforcing the strong relationship between population growth and economic activity within the Region.

Looking forward, continued residential development, expansion of logistics and goods movement industries, and the Region's strategic location within the Inland Empire are expected to remain the primary drivers of economic activity. These trends suggest that the San Gorgonio Pass will continue to evolve as both a residential growth area and an emerging employment center, with economic conditions closely linked to regional population dynamics and infrastructure development.



Source: California Employment Development Department. Analysis by Beacon Economics.

FIGURE 2-10: INDEXED EMPLOYMENT GROWTH (2013–2023): SGPWA SERVICE AREA COMPARED WITH RIVERSIDE COUNTY, CALIFORNIA, AND THE UNITED STATES[34]

[34] Beacon Economics. 2025. *Economic Outlook and Forecast Report for the San Gorgonio Pass Water Agency.* July 2025.

2.1.9 Summary

The San Gorgonio Pass Region continues to experience steady economic development driven by its position along the eastern edge of the Inland Empire and its role as a key corridor connecting inland Southern California to the Coachella Valley. Relatively affordable housing, expanding residential communities, and continued development along the Interstate 10 corridor are contributing to increasing population and economic activity. At the same time, the Region remains highly dependent on groundwater and imported supplies via the State Water Project infrastructure, both of which are subject to hydrologic variability, regulatory and environmental constraints. Maintaining reliable and sustainable water supplies will be essential to supporting further development and regional resilience. This 2025 RUWMP provides a framework for SGPWA and its regional partners to coordinate water resource planning, integrate local and imported supplies, and address long-term uncertainties while supporting continued development in the San Gorgonio Pass Region.

Chapter 3.0
Regional Water Supply Characterization

This chapter describes the water supply sources of the San Gorgonio Pass Region, which includes stored and native groundwater supplies managed collectively by the Region's groundwater users and SGPWA. Wholesale water acquired by the Agency is distributed to the various urban water suppliers in its boundaries, which include Beaumont-Cherry Valley Water District, City of Banning, South Mesa Water Company, and Yucaipa Valley Water District. Individual urban water suppliers also maintain various water assets, in addition to stored water supplied by SGPWA. Importantly, this chapter also describes local surface and native groundwater supplies managed collectively by the Region's retail water suppliers and the Beaumont Basin Watermaster in that adjudicated basin.

A more specific characterization of stored water originating from imported supply is presented in Chapter 6 (SGPWA Wholesale). A detailed characterization of BCVWD's supply is discussed within the specific retailers' separate urban water management plans, or, in the case of Beaumont-Cherry Valley Water District, presented in this RUWMP's retail chapter (Chapter 7).

The available regional supplies discussed in this chapter reflect a summary of the more specific SGPWA and retailer supply conditions, broadly organized by subbasin and supply source, as described in Chapter 2. Organizing supplies for each retailer by subbasin and supply source facilitates the integration with regional demands, presented in Chapter 4, providing a foundation for the Region's supply reliability analysis, presented in Chapter 5. This approach allows the entire San Gorgonio Pass Region to be viewed in a more aggregated form, while still reflecting important geographic, hydrologic and management circumstances. Each of the retail urban water supplier UWMPs (only BCVWD of which is

included in this RUWMP) reflect each retailer's reliance on the managed groundwater that results from two primary categories: (1) annually available sources to commit to storage, including State Water Project (SWP) imports delivered primarily by SGPWA and subsequently recharged in the Beaumont Basin, and (2) groundwater supplies comprised of natural recharge from regional precipitation and streams, and return flows from water use. Recycled water is an important third component that is currently being deployed within the San Gorgonio Pass Region by YVWD at the retail urban water supplier level. BCVWD and the City of Beaumont are currently pursing recycled water, and it is anticipated that recycled water will continue to expand as an important supply source for the Region into the future.

3.1.1 San Gorgonio Pass Region Water Supply Sources

This section summarizes the water supplies available to the Region within the SGPWA service area boundary, including imported water to storage and local water supplies. As described in Chapter 2, the San Gorgonio Pass Region is situated in an arid inland zone in Southern California, connecting the San Bernardino Valley to the west and the Coachella Valley to the east, forming a natural valley that strongly influences regional climate, as well as a groundwater systems serving as the primary supply source for the Region. Beyond the minimal precipitation in the Region, natural recharge of the aquifers occurs primarily from local runoff, subsurface inflows from adjacent basins, and return flows from irrigation and wastewater. Augmentation of the native groundwater is largely dependent on imported supplies conveyed to the Region.

For purposes of this RUWMP, water supplies available to the Region fall into the following major categories, each of which is described in detail throughout this chapter:

- Groundwater
- Imported and Managed Groundwater
- Return Flows
- Surface Water
- Stormwater
- Wastewater and Recycled Water
- Water Transfers and Exchanges
- Planned Water Supplies

3.1.1.1 Groundwater

Groundwater is the primary source of municipal water supply in the San Gorgonio Pass Region. Nearly all retail water suppliers operating within the Region rely on managed groundwater – a blend of natural inflows and recharged imported water – to meet current and projected demand. As noted above, SGPWA supports groundwater management in the Region by importing water supplies that are used to replenish native groundwater, provide additional stored water, and help manage groundwater basin health.

Natural inflows into the groundwater aquifers are fed through direct percolated precipitation across the basin area and infiltration and storm runoff into stream systems during wet weather. The primary source of natural inflow is infiltration of local stormflow runoff water, providing the majority of natural groundwater replenishment to the basin.

Geographically, SGPWA overlies portions of two major groundwater basins, the Upper Santa Ana Valley Basin and Coachella Valley Basin, each of which is subdivided into hydrologically distinct subbasins that provide local sources of water to communities in the San Gorgonio Pass Region. Of the many subbasins, three fall within SGPWA boundaries: (1) Upper Santa Ana Valley – Yucaipa Subbasin; (2) Upper Santa Ana Valley – San Timoteo Subbasin; and (3) Coachella Valley – San Gorgonio Pass Subbasin. The latter two subbasins are in turn divided into water storage units, locally called 'basins.' The principal storage units and basins used by local water retail agencies are the Beaumont, Banning, Yucaipa, and Cabazon groundwater basins. **Figure 3-1** presents the DWR-described groundwater subbasins and management areas.

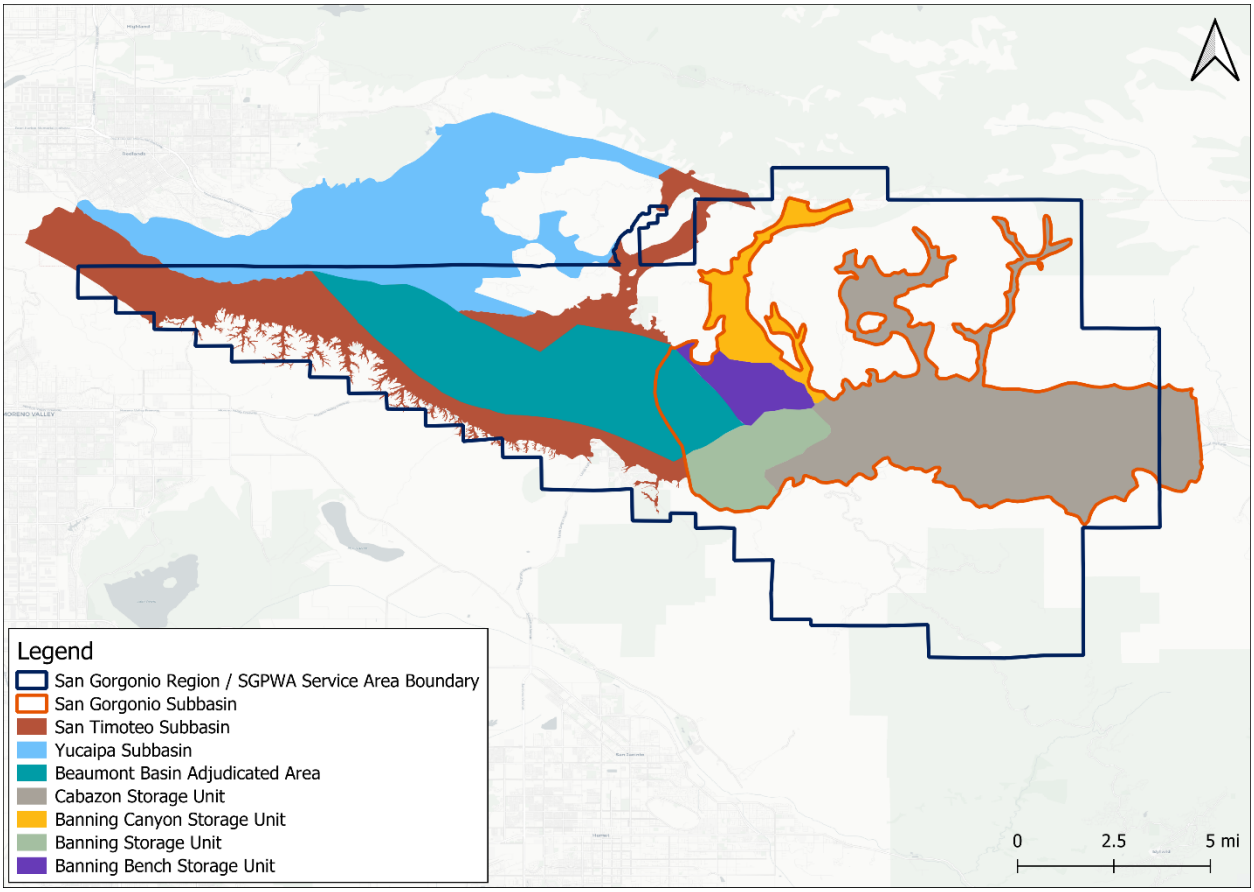


FIGURE 3-1: DWR GROUNDWATER BASIN DESCRIPTIONS

These subbasins are managed by both SGPWA and local water retailers under coordinated management frameworks. Each subbasin is described briefly below, including relevant groundwater management actions by urban water suppliers within the SGPWA service area. Beaumont Basin management is summarized as it applies to regional water users, with full detail provided in Chapter 2.

Upper Santa Ana Valley – Yucaipa Subbasin

The Yucaipa Subbasin encompasses approximately 40 square miles and underlies the southeast part of San Bernardino Valley, extending into just the northern edge of the SGPWA service area.[35] The Yucaipa groundwater subbasin underlies Yucaipa Valley in southwestern San Bernardino County and northwestern Riverside County. It is bounded to the north by

[35] Approximately 5.8 square miles of the Yucaipa Subbasin lie within the SGPWA service area. Relative to the Agency's 225-square miles service area, this overlap represents approximately 2.6% of the service area.

surface drainage divides, the Crafton Hills, and the San Andreas Fault Zone; to the east by surface drainage divides and consolidated rocks along the foothills of the San Bernardino Mountains; and to the south by the San Timoteo groundwater subbasin, with the boundary defined by surface drainage divides and the Cherry Valley fault. The basin is drained by Oak Glen, Wilson, and Yucaipa Creeks, which flow westward toward San Timoteo Wash—a tributary to the Santa Ana River. Average annual precipitation across the basin ranges from approximately 12 to 28 inches.

The Yucaipa Basin is not adjudicated. Its sustainable yield is estimated at approximately 10,980 acre-feet per year, with an estimated storage capacity exceeding 800,000 acre-feet.[36] Historical groundwater extractions have averaged approximately 14,000 AFY; however, pumping has declined significantly in recent years due to the availability of supplemental State Water Project supplies and increased use of recycled water. The Basin is conjunctively managed by SGPWA, SBVMWD, YVWD, South Mesa Water Company, Western Heights Water Company, and the City of Yucaipa.

The Yucaipa Valley Water District and South Mesa Water Company are the primary retail agency drawing on this subbasin, relying on groundwater from production wells for the majority of its supply, supplemented by imported SWP water recharged to the basin during wet years. YVWD has proactively recharged surplus imported supplies into the Yucaipa Basin, increasing groundwater levels and building a substantial conjunctive use reserve. Refer to YVWD's 2025 individual UWMP, as well as Chapter 2, Section 2.3 for additional detail on this subbasin.

Upper Santa Ana Valley – San Timoteo Subbasin

The Upper Santa Ana Valley – San Timoteo Subbasin spans both San Bernardino and Riverside Counties, with a majority of the subbasin located in Riverside County and the SGPWA service area, thus the San Gorgonio Pass Region. It underlies the communities of Cherry Valley and the City of Beaumont in southwestern San Bernardino County and northwestern Riverside County. The subbasin is bounded to the north and northeast by the Banning fault and impermeable rocks of the San Bernardino Mountains, Crafton Hills, and Yucaipa Hills; to the south by the San Jacinto Fault, to the west by the San Jacinto Mountains; and to the east by a topographic drainage divide separating it from the Colorado River Hydrologic Region. Surface drainage occurs primarily through Little San Gorgonio Creek and San Timoteo Canyon, which conveys flow to the Santa Ana River. Average annual

[36] Dudek. (2022). Final Groundwater Sustainability Plan for the Yucaipa Groundwater Subbasin Part 1. pp. 183.

precipitation ranges from 12 to 14 inches in the western part of the subbasin and 16 to 18 inches in the eastern part of the subbasin.

The subbasin is hydrologically connected with the Yucaipa Subbasin and serves as both a natural groundwater reservoir and the host formation for the adjudicated Beaumont Basin, which is governed separately by the Beaumont Basin Watermaster, discussed below and extensively in Section 2.3.1.[37]

Retail agencies drawing on the non-adjudicated portions of this subbasin include the City of Banning, YVWD, and South Mesa Water Company, each managing production within their respective management areas under the San Timoteo Groundwater Sustainability Agency framework. For a detailed discussion of individual groundwater management actions, refer to the individual retail urban water management plans for 2025 (not included in this RUWMP).

Coachella Valley – San Gorgonio Pass Subbasin

The San Gorgonio Pass Subbasin extends from the City of Banning on its western edge to the Verbenia area on the east, including the communities of Cabazon and the MBMI. It represents the portion of the Coachella Valley Groundwater Basin that lies entirely within the San Gorgonio Pass. The subbasin is bounded on the north by the San Bernardino Mountains and by semi-permeable rock formations, and to the south by the San Jacinto Mountains. A surface drainage divide between the Colorado River and South Coastal Hydrologic Study Areas forms the western boundary, while the eastern boundary is defined by a bedrock constriction that creates a groundwater cascade into the Indio Subbasin. Average annual precipitation across the subbasin ranges from approximately 15 to 18 inches. The San Gorgonio River flows intermittently across the subbasin and serves as its primary surface drainage feature, with runoff from precipitation in the northern San Bernardino Mountains contributing to river flows.

The San Gorgonio Pass Subbasin is the principal local groundwater source for the eastern portion of the SGPWA service area, spanning from the City of Banning to the Cabazon community and serving as the primary production aquifer for the City of Banning, Cabazon Water District, the Morongo Band of Mission Indians, and Banning Heights Mutual Water Company. The subbasin has a sustainable yield of approximately 10,200 AFY as established by the San Gorgonio Pass Groundwater Sustainability Plan, and is further subdivided into

[37] Hydrology of the Yucaipa Groundwater Subbasin: Characterization and Integrated Numerical Model, San Bernardino and Riverside Counties, California, U.S. Geological Survey Scientific Investigations Report 2021–5118 (2022), https://doi.org/10.3133/sir20215118

several localized storage units (including the Beaumont, West Banning, Banning Bench, Banning Canyon, and Cabazon Storage Units) each with distinct recharge characteristics and production capacities discussed in Chapter 2.[38]

The City of Banning draws groundwater from all five of these storage units and projects significant increases in extraction over the planning horizon to meet growth demands; detailed supply projections are provided in the City of Banning's individual UWMP. The Cabazon Storage Unit encompasses the largest geographic area within the subbasin and benefits from percolation of treated wastewater as an additional recharge mechanism. For further detail on the storage units, safe yields, and GSP framework, refer to Section 2.3.2.

Groundwater in the Beaumont Basin

The Beaumont Basin, located primarily within the San Timoteo Groundwater Subbasin (with a smaller eastern portion extending into the western area of the San Gorgonio Pass Groundwater Subbasin) warrants additional discussion as the most active and only adjudicated groundwater system in the San Gorgonio Pass Region. The Basin is governed under a 2004 adjudication, which quantified both overlying and appropriative production rights and is discussed in further detail in RUWMP Section 2.3. The safe yield was redetermined in 2024 as 7,100 acre-feet per year, and the 290,000 acre-feet of total storage capacity is allocated among seven participating agencies as shown in **Table 3-1**:[39]

[38] San Gorgonio Pass Groundwater Sustainability Plan. Prepared for the San Gorgonio Pass Groundwater Sustainability Agency. December 30, 2021.
[39] Beaumont Basin Watermaster 2025 Consolidated Annual and Engineering Report Draft. Prepared for the Beaumont Basin Watermaster. April 2026.

TABLE 3-1: BEAUMONT BASIN STORAGE ALLOCATIONS (ACRE-FEET)

Agency	Amount
City of Banning	80,000
City of Beaumont	30,000
Beaumont-Cherry Valley Water District	80,000
South Mesa Water Company	20,000
Yucaipa Valley Water District	50,000
Morongo Band of Mission Indians	20,000
San Gorgonio Pass Water Agency	10,000

Following an exceptionally wet year in 2023, in which regional precipitation reached approximately 23 inches, well above the 100-year historical average of roughly 16.75 inches, 2024 and 2025 were characterized as dry years with below average precipitation. Natural surface water inflow to the Region's groundwater basins is limited and highly variable; the Beaumont Basin's streams and creeks run dry for most of the year, with recharge occurring primarily through infiltration of episodic storm flows and subsurface seepage. Beyond the brief wet-year recovery in 2023, the Region's recovery from the compounding effects of prior drought years, particularly the severe 2020-2022 period, were primarily due to imported water by SGPWA replenishing groundwater supplies. These imported supplies included over 48,000 acre-feet added as supplemental groundwater as shown in the 2025 Beaumont Basin Watermaster Report.[40]

Table 3-2 and Table 3-3 present a summary of annual production and groundwater storage for appropriators of the Beaumont Basin, as reported in the most recent Beaumont Basin Watermaster Report.

[40] Beaumont Basin Watermaster 2025 Consolidated Annual and Engineering Report Draft. Prepared for the Beaumont Basin Watermaster. April 2026. Table 3-9.

TABLE 3-2: SUMMARY OF ANNUAL GROUNDWATER PRODUCTION FROM THE BEAUMONT BASIN (ACRE-FEET)[41]

Appropriator	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
City of Banning	1,678	1,473	1,444	2,261	2,121	2,549	3,668	3,594	1,327	1,503	2,544
BCVWD	8,973	10,160	11,651	12,209	11,141	12,539	12,610	12,490	10,213	10,883	10,996
City of Beaumont	0	0	0	0	0	0	0	0	0	0	0
SMWC	317	353	368	365	331	229	466	575	277	225	263
YVWD	119	5	0	191	529	1,408	1,229	687	892	985	998
TOTAL – All Appropriators	**11,088**	**11,990**	**13,462**	**15,026**	**14,122**	**16,725**	**17,972**	**17,345**	**12,709**	**13,596**	**14,801**

TABLE 3-3: SUMMARY OF GROUNDWATER STORAGE IN THE BEAUMONT BASIN (ACRE-FEET)[42]

Appropriator	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
City of Banning	47,888	49,991	51,961	52,273	51,810	51,034	48,960	46,751	47,832	49,358	50,007
BCVWD	25,568	27,566	32,296	35,012	39,421	39,946	32,327	23,438	33,129	38,313	45,470
City of Beaumont	0	0	0	0	0	0	0	0	0	0	0
SMWC	8,198	8,678	9,130	9,588	9,816	10,192	10,335	10,296	10,578	10,960	11,271
YVWD	13,976	14,878	15,769	16,474	16,618	16,063	15,864	16,239	16,934	19,087	19,191
Morongo Band of Mission Indians	0	0	0	0	0	0	0	0	0	0	0
SGPWA	0	0	0	0	0	0	0	1	894	1,595	2,519
TOTAL	**95,628**	**101,113**	**109,155**	**113,347**	**117,665**	**117,706**	**107,485**	**96,725**	**109,367**	**119,313**	**128,458**

Groundwater Summary

Across all agencies and subbasins, **Table 3-4** presents the summary of managed groundwater supplies. These volumes represent recharged groundwater supplied by

[41] Totals reflect appropriators only; overlying party production is not included here. See Table 3-3 in the Watermaster Report for combined totals. Totals may not add due to rounding.
[42] Morongo Band and City of Beaumont have authorized storage accounts but recorded no activity in this period. SGPWA's storage account was approved in June of 2017. Totals may not add due to rounding.

stormwater capture, surface water used for groundwater recharge, and imported water that is stored as groundwater and managed conjunctively as a regional supply. Importantly, this volume does not include surface water that is directly diverted and treated, nor does it include recycled water supplies. Table 3-4 is an aggregation of regional supplies, including those referenced in BCVWD's retail Chapter 7 in this RUWMP; SMWC's forecasted production within the SGPWA service area; YVWD's forecasted production within the SGPWA service area; forecasted supplies from the City of Banning's 2025 UWMP; small retailer water suppliers' forecasted production within the service area; and rural water use based on demand unit factor and aerial analysis.

TABLE 3-4: SUMMARY OF PROJECTED MANAGED GROUNDWATER SUPPLIES (ACRE-FEET)

	2030	2035	2040	2045	2050
Managed Groundwater	26,900	28,500	29,800	31,100	32,500

3.1.1.2 Groundwater Sustainability Agencies

Groundwater management within the RUWMP Planning Area is influenced by implementation of the SGMA and the Beaumont Basin Adjudication. Multiple GSAs operate within or adjacent to the SGPWA service area and coordinate management activities affecting regional groundwater supplies, groundwater storage, recharge, and imported water management.

The GSAs affecting the SGPWA service area include the San Timoteo Subbasin GSA, the Yucaipa SGMA, the San Gorgonio Pass Subbasin GSA, and the Verbenia GSA. In addition, the Desert Water Agency serves as the exclusive GSA for the easternmost portion of the San Gorgonio Pass Subbasin outside of the SGPWA service area boundary. A large portion of the San Timoteo Subbasin within the Region is exempt from SGMA due to its inclusion within the adjudicated Beaumont Basin.

The San Timoteo Subbasin GSA generally borders the western portion of the SGPWA service area, while the Yucaipa SGMA lies primarily north of the Agency boundary. The San Gorgonio Pass Subbasin GSA encompasses the majority of the groundwater basin underlying the SGPWA service area east of Beaumont. The Verbenia GSA covers a small overlap area between the SGPWA and Mission Springs Water District service areas in the eastern portion of the basin. **Figure 3-2** illustrates the GSAs and groundwater basins within and adjacent to the SGPWA service area.

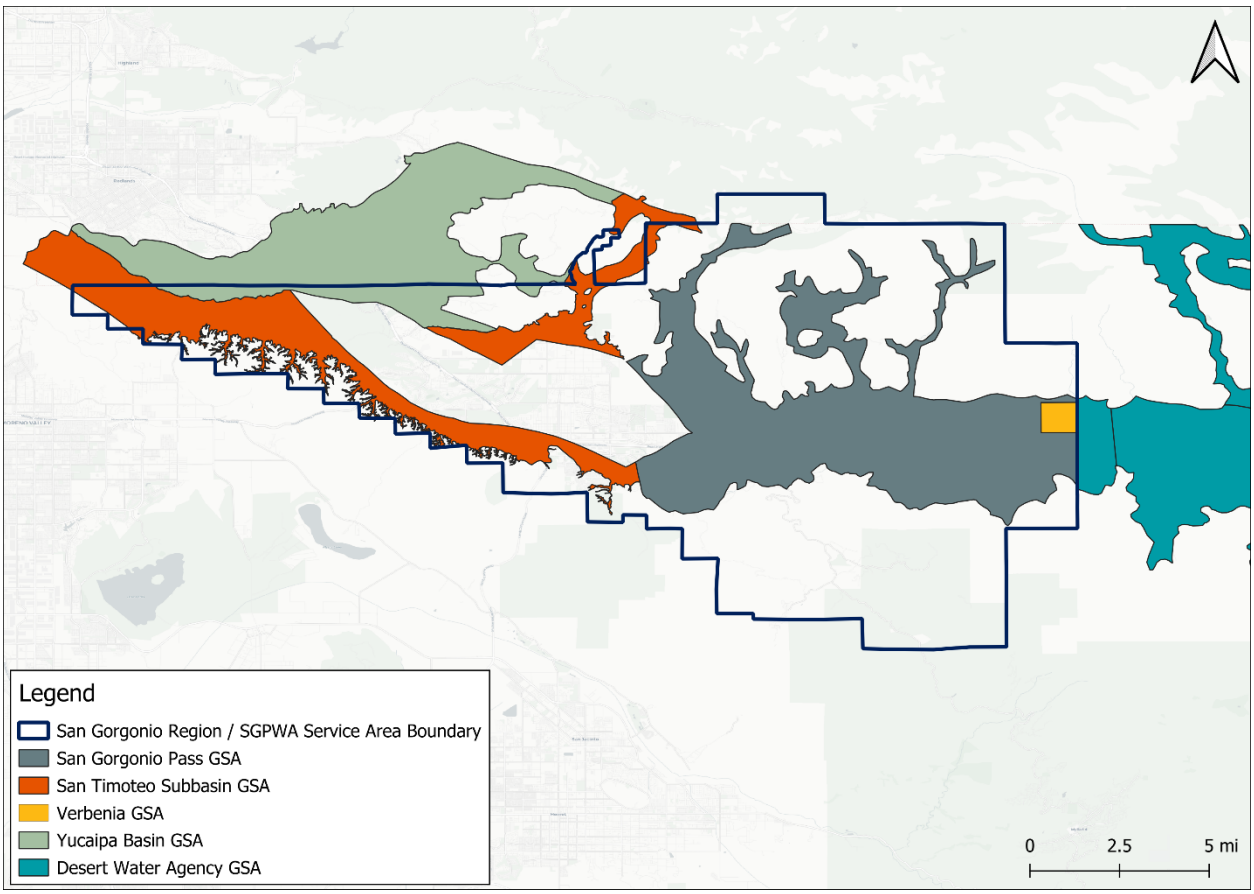


FIGURE 3-2: GSAS WITHIN THE SGPWA SERVICE AREA

San Gorgonio Pass Subbasin GSA

The San Gorgonio Pass Subbasin GSA manages the San Gorgonio Pass Subbasin, which comprises the westernmost portion of the Coachella Valley Groundwater Basin within the SGPWA service area. Member agencies include SGPWA, Banning Heights Mutual Water Company, the City of Banning, and Cabazon Water District.

The subbasin extends generally from the City of Banning eastward toward the community of Whitewater and includes portions of the Morongo Band of Mission Indians Reservation. Although tribal governments are not required to participate as GSA members under SGMA, the Morongo Band is an important sovereign tribal government within the basin that continues to coordinate with regional agencies on groundwater sustainability and management activities.

San Timoteo Subbasin GSA

The San Timoteo GSA was formed in 2017 through a Memorandum of Agreement among the City of Redlands, SGPWA, BCVWD, and Yucaipa Valley Water District. The GSA manages the non-adjudicated portions of the San Timoteo Subbasin, which surrounds portions of the adjudicated Beaumont Basin.

The San Timoteo GSA coordinates groundwater management activities with Eastern Municipal Water District, which manages the West San Jacinto Groundwater Basin, and with the Beaumont Basin Watermaster for adjudicated areas.

Verbenia GSA

The Verbenia Groundwater Sustainability Agency covers an approximately one-square-mile area in the eastern portion of the San Gorgonio Pass Subbasin where the service areas of SGPWA and Mission Springs Water District overlap. The Verbenia GSA is jointly managed by SGPWA and Mission Springs Water District.

Due to its limited geographic extent, the Verbenia GSA coordinates closely with adjacent GSAs and groundwater management entities to support consistent basin management and SGMA compliance.

Yucaipa Sustainable Groundwater Management Agency

The Yucaipa Sustainable Groundwater Management Agency (Yucaipa SGMA) was formed in 2017 pursuant to SGMA. Member agencies include San Bernardino Valley Municipal Water District, , SGPWA, South Mesa Water Company, South Mountain Water Company, Western Heights Water Company, the City of Yucaipa, and Yucaipa Valley Water District. The Yucaipa SGMA covers areas in both San Bernardino and Riverside Counties, encompassing the entire Upper Santa Ana – Yucaipa Subbasin area.

The Yucaipa Basin Groundwater Sustainability Plan established sustainable management criteria and identified opportunities for groundwater recharge and conjunctive use management within the basin. Imported SWP supplies and recharge facilities, including the Wilson Creek spreading basins and County Line Road recharge facility, play an important role in supporting basin sustainability and regional water supply reliability.

Desert Water Agency GSA

Desert Water Agency serves as the exclusive GSA for areas east of the SGPWA service area within the broader Coachella Valley groundwater system. Although outside the RUWMP

Planning Area boundary, groundwater management activities undertaken by Desert Water Agency influence regional groundwater conditions within the San Gorgonio Pass Subbasin.

Accordingly, coordination among Desert Water Agency and neighboring GSAs supports regional consistency in groundwater management, monitoring, and sustainability planning.

3.1.1.3 Imported and Managed Groundwater

As discussed in Chapter 2, San Gorgonio Pass Water Agency (SGPWA) was created in 1961 to acquire State Water Project water and deliver such water to retail agencies within its boundaries as to recharge local groundwater basins and eliminate overdraft conditions. Importantly, SGPWA serves as the regional wholesaler, responsible for acquiring the physical water and maintaining conveyance infrastructure and does not directly deliver potable water to service connections. SGPWA is able to support regional water users within the Region by leveraging the 290,000 acre-foot storage capacity in the Beaumont Basin, and they are also entitled to store 10,000 acre-feet of native groundwater annually as an appropriator of the Beaumont Basin.

Furthermore, SGPWA is working to strengthen long-term water security within the San Gorgonio Pass Region through its Backbone Pipeline Project, intended to improve the distribution of imported State Water Project supplies to groundwater recharge facilities across Beaumont, Banning, and Cabazon. The project is expected to benefit local water retailers by increasing supply reliability, reducing pressure on groundwater resources, and creating greater flexibility to meet future customer demands and growth.[43]

SGPWA relies on a diverse portfolio of imported surface water supplies. Imported water is delivered to the SGPWA service area by the California State Water Project's (SWP) California Aqueduct. As one of 29 SWP Contractors, SGPWA's primary imported supply source is its Annual Table A Allocation, followed by supplementary supplies obtained by various contractual agreements, transfers, and exchanges. Upon delivery of imported water, by the East Branch Extension, to the Agency's service area, SGPWA then delivers this blend of imported water to its constituent retail agencies. Additional details on the SWP, Table A Water, other SWP water, contractual agreement supplies, major infrastructure, and conveyance constraints are discussed at length in Chapter 6.

[43] Record Gazette. 'SGPWA Announces New Project.' (17 January 2025) https://www.recordgazette.net/news/sgpwa-announces-new-project/article_afdade82-d444-11ef-ace6-730b344c47d3.html

SGPWA is also building artificial recharge capture ponds in Calimesa in partnership with San Bernardino Valley Municipal Water District (SBVMWD) and SMWC expected to be complete at the end of 2026 which will further augment groundwater supplies and contribute to regional resiliency.

For the purposes of this RUWMP, it is assumed that imported water stored and then used within the Region shall be supplied by SGPWA, thus, the imported water forecast presented in Chapter 6 serves as the basis for estimating future imported water usage by individual retailers and small water systems within the San Gorgonio Pass Region. Although some retailers within the Agency's boundaries receive imported water from other SWP contractors, such as San Bernardino Valley Municipal Water District, the Agency assumes that non-SGPWA imported water will be used outside of the Region.

3.1.1.4 Return Flows

When water supplies are extracted from the groundwater basins, a portion of the water pumped is consumed, and another portion of the extracted water is returned to the groundwater aquifer and becomes part of the available water supply. This "return flow" is an important component of the Region's managed groundwater supply. For example, vast majority of indoor water use is assumed to be returned to the basin either by percolation from septic tanks or treated wastewater effluent produced by municipal wastewater facilities. The Beaumont Basin Watermaster Report calculates consumptive use for each producer in the Beaumont Basin. The calculation is based on production amount, type of use, and an evaluation of processes that consume water.

Return flows can be calculated as a percent of the previous years' water production for each water use category. Return flows comprise a sizeable portion of the groundwater production, varying significantly by subbasin and on an annual basis. Importantly, as water extractions increase in the Region, the return flows will also increase over time. However, as system efficiencies improve, return flows may begin to slowly decline.

For purposes of this RUWMP, this supply source is not considered. This is a conservative assumption to avoid inadvertently double-counting supplies in the Region's overall water reliability assessment.

3.1.1.5 Local Surface Water

Several local retail agencies maintain appropriative diversions on local creeks to capture intermittent surface flows for recharge. Local watersheds, like the Little San Gorgonio Creek,

contribute some surface flows to Beaumont-Cherry Valley Water District (discussed in detail in Section 7.3), but these flows vary considerably and are diverted to recharge basins when available. Within the City of Banning's retail service area, surface water is similarly diverted from the Whitewater River via the San Gorgonio Flume System for indirect recharge, though portions also serve Banning Heights Mutual Water Company. However, the flume has experienced damage in recent years, affecting operations. For forecasting purposes, SGPWA assumes that the BHMWC will receive surface water supplies throughout the planning horizon. This is effectively the only local surface water supply included in the regional estimate, shown in **Table 3-5**.

TABLE 3-5: SUMMARY OF PROJECTED LOCAL SURFACE WATER SUPPLIES (ACRE-FEET)

Source	2030	2035	2040	2045	2050
Whitewater Flume Direct Diversions	1,000	1,000	1,000	1,000	1,000

Some agencies, such as YVWD, also rely on local surface supplies, but that surface water source is located outside of the San Gorgonio Pass Region. Other retailers, such as South Mesa Water Company, do not maintain surface water supplies. More information about the local surface water supplies of retailers within the Region can be found within individual UWMPs, or for BCVWD, in Chapter 7.

3.1.1.6 Stormwater

Capturing stormwater for supplemental groundwater recharge is a key strategy to increase local supplies, enhancing long-term sustainability of groundwater basins, and helping mitigate the effects of climate change on local supplies.

Several retail agencies within the SGPWA service area are pursuing stormwater capture as a strategy to augment local groundwater supplies. These efforts generally involve allowing stormwater flows from local tributary creeks to percolate into underlying basins, converting runoff that would otherwise be lost into a sustainable local supply. Certain urban water suppliers maintain existing stormwater capture projects, such as Beaumont-Cherry Valley Water District's Master Drainage Plan (MDP) Line 16 project. The MDP Line 16 project is a stormwater capture and groundwater recharge facility that has been operational since 2023. The project intercepts and conveys stormwater flows along local drainage infrastructure to the Noble Creek Recharge Facility where stormwater can percolate into the Beaumont Basin, converting episodic storm events into a reliable local water supply. The MDP Line 16 project is

a good example of regional water supply resiliency by augmenting groundwater resources and supporting long-term adaptation to hydrologic variability and climate change.

In some cases, these stormwater capture initiatives are integrated with broader conjunctive use programs coordinated with local municipalities, for example, Yucaipa Valley Water District's collaboration with the Cities of Yucaipa and Calimesa. For specific details on each agency's stormwater management approach and planned projects, refer to the retailers' individual UWMPs.

3.1.1.7 Wastewater and Recycled Water

The Region's recycled water supplies are provided by cities and local retail agencies. Several local water agencies and cities within SGPWA's boundaries operate advanced wastewater treatment plants (WWTP) and use recycled water to varying degrees.

- Yucaipa Valley Water District (YVWD): manages the most extensive recycled water system in SGPWA's service area, which includes a 2.5 million gallon per day (MGD) reverse osmosis system and the eight (8) MGD Wochholz Regional Water Recycling Facility. This infrastructure enables YVWD to meet 16% of its overall demand. Expansion plans designed to accommodate future growth and water demand are underway.
- City of Banning (Banning): operates a recycled water system, complemented by its own 3.6 MGD capacity WWTP. A hallmark of Banning's recycled water system is its vertical integration that allows it to treat wastewater to secondary standards before discharging it into percolation ponds for groundwater recharge.
- City of Beaumont (Beaumont): upgraded its WWTP in October 2022, allowing Beaumont to produce up to 6 MGD, with a future buildout capacity of 8 MGD. Beaumont is also evaluating indirect potable reuse options, which may include conveying recycled water to spreading basins operated by BCVWD and/or SGPWA.

The integration of these recycled water systems is regionally critical to enhancing the efficient use of locally sourced and imported supplies of raw water. Furthermore, these projects bolster regional self-reliance, directly addressing actions within the Delta Reform Act and helping local retail agencies meet Urban Water Use Objective targets. Consequently, although SGPWA does not manage these facilities, incorporating their output into the regional supply portfolio is essential for navigating the evolving regulatory landscape impacting the Agency and local retail agencies. A summary of regional recycled water supplies is provided in **Table 3-6**.

TABLE 3-6: SUMMARY OF PROJECTED LOCAL RECYCLED WATER SUPPLIES (ACRE-FEET)[44]

Source	2030	2035	2040	2045	2050
Locally Available Recycled Water	2,900	3,700	4,700	5,100	5,100

3.1.1.8 Water Transfers and Exchanges

SGPWA and urban water suppliers within the Region engage in water transfers and exchanges involving its SWP, other contractors' SWP water assets, and various imported supplies in the California water market. Historically, SGPWA has both received and delivered water through these transfers and exchanges with various agencies throughout California and facilitated transfers on behalf of urban water suppliers throughout the Region. These transfers are essentially spot market transfers where short-term opportunities are identified and then actions taken for acquisition. These transfers help support management of SGPWA's and the retail agencies' water supply portfolios. Future transfers and exchanges depend upon the opportunities available to SGPWA and other water purveyors. For SGPWA-specific water transfers and exchanges, see Chapter 6.

3.1.1.9 Planned Water Supplies

Retail agencies within the SGPWA service area have identified a range of near-term and longer-term capital projects aimed at improving water supply reliability, system infrastructure, and water quality. The City of Banning is replacing and expanding wells to support anticipated population growth and new development, including several new and redrilled wells planned in conjunction with the Atwell development project, alongside broader system upgrades to meters, pipelines, hydrants, and valves.[45] Yucaipa Valley Water District has several significant projects in development, including multiple Aquifer Storage and Recovery programs that will use fully treated recycled water for groundwater injection and recovery to create drought-resilient drinking water supplies, as well as a salinity reduction project that will expand treatment capacity at its existing drinking water facility while

[44] The regional forecast is composed of the combined estimates of forecasted recycled water production for BCVWD, YVWD, and the City of Banning, sourced from their respective 2025 UWMPs. Recycled water forecasts for BCVWD are discussed in Chapter 7, and YVWD's forecasted demands (provided to the District upon request) were scaled to proportionally represent recycled water uses by customers within the YVWD and SGPWA service area overlap.
[45] 2025 Urban Water Management Plan, City of Banning. Prepared for the City of Banning Public Works Department. Draft, May 2026.

reducing concentrate discharge.[46] For specific details on each agency's planned water supply projects, refer to the retailers' individual UWMPs.

From a regional wholesale perspective, potential future water supply projects consist of the Agency's participation in Sites Reservoir, Delta Conveyance Project, and Cabazon Recharge Projects. All three planned supply projects are anticipated to increase the amount of wholesale water available to SGPWA, above that of its existing water supply sources. More discussion of the projects is available in Chapter 6.

3.1.2 Water Quality

Water quality is a critical consideration in the San Gorgonio Pass Region. Because local potable supplies are derived from blended groundwater sources, well locations, recharge activities associated with imported water, and other key system components are actively coordinated and managed among retailers and SGPWA.

3.1.2.1 Imported Water Quality

Generally, the imported surface water conveyed through the California Aqueduct and recharged throughout the Region is considered to be good quality. Many retailers rely on the imported supplies to help manage the quality of water delivered to customers, using the benefits of the imported water as a blending supply to the native groundwater. Water quality delivered to the Region is monitored by the DWR Division of Operations and Maintenance within the California Aqueduct. More details regarding the specific quality information are included in Chapter 6.

3.1.2.2 Groundwater Quality

Groundwater quality in the San Gorgonio Pass Region is considered excellent. There is no known historical industrial or mining activity in the region that has generated harmful plumes of pollutants. The Santa Ana RWQCB has a "maximum benefit" goal of 330 milligrams per liter (mg/L) for total dissolved solids (TDS) (or salinity) for the Beaumont Basin. The current TDS concentration in the Beaumont Basin remains relatively low, with an average concentration of approximately 232 mg/L during the 2025 reporting period, indicating generally high groundwater quality and remaining well below the Santa Ana Regional Water Quality Control

[46] Based on 2025 data submitted by YVWD, as requested by SGPWA.

Board's maximum benefit objective of 330 mg/L.[47] The Basin Plan requires local entities to begin planning desalters when the ambient TDS increases to 320 ppm. YVWD has constructed an advanced treatment system and brine disposal pipeline to address the TDS issue.

Nitrate is closely monitored alongside salinity (or TDS). The RWQCB also regulates this water quality issue, but nitrate concentrations are currently well within the maximum benefit standards. Despite a handful of high nitrate concerns over the past few years, these occurrences have been isolated incidents and relatively short periods of time in response to major rainstorms, which result in system flushing. These have not proven to be a health hazard.

Total chromium has also been regulated by the SWRCB at an maximum contaminant level (MCL) of 50 micrograms per liter, which includes both chromium-3 and chromium-6. The California EPA Office of Environmental Health Hazard Assessment set a Public Health Goal (PHG) of 0.02 ug/L for chromium-6 in 2011. Subsequently, the SWRCB adopted a separate chromium-6 MCL of 10 ug/L, which became effective on October 1, 2024.

Naturally occurring chromium-6 concentrations in portions of the Region exceed the current MCL. Multiple wells owned by the City of Banning and BCVWD have recorded chromium-6 concentrations above the 10 ug/L, resulting in the temporary removal of service for the affected wells and the implementation of operational and treatment strategies to maintain regulatory compliance. Additional details on groundwater quality management actions are identified in the retail water agencies' UWMP (see BCVWD Chapter 7).

3.1.2.3 Groundwater Monitoring and Protection

The general goal of groundwater protection activities is to maintain the groundwater and the aquifer to ensure a reliable high quality water supply. Activities to meet this goal include continued and increased monitoring, data sharing, education and coordination with other agencies that have local or regional authority or programs. The current SGPWA groundwater monitoring program includes groundwater quality data collected by SGPWA and the USGS through their cooperative water resources program and through the Drinking Water Program

[47] Beaumont Basin Watermaster. 2025 Consolidated Annual and Engineering Report (Draft), Section 4.1.1, Total Dissolved Solids.

directed by the State Water Resources Control Board Department of Drinking Water (SWRCB DDW).

The SWRCB DDW enforces the monitoring requirements established in Title 22 of the California Code of Regulations (CCR) for drinking water wells and all the data collected must be reported to the DDW (note: each participating retailer's specific Consumer Confidence Report is included within its respective Chapter). Title 22 also designates the regulatory limits (e.g., MCLs for various water contaminants, including volatile organic compounds, non-volatile synthetic organic compounds, inorganic chemicals, radionuclides, disinfection byproducts, general physical constituents, and other parameters). Title 22 testing applies to potable public drinking water systems. All retail water purveyors are subject to drinking water standards set by the Federal Environmental Protection Agency (EPA) and the SWRCB DDW.

3.1.3 Desalination Opportunities

The California UWMP Act requires a discussion of potential opportunities for use of desalinated water (Water Code Section 10631(i)). In the past, SGPWA has evaluated potential options for developing desalination projects. However, none of the opportunities are currently practical or economically feasible for the San Gorgonio Pass Region, and SGPWA has no current plans to pursue them. Therefore, desalinated supplies are not included in the supply summaries in this RUWMP.

3.1.4 Delta Reliance

The San Gorgonio Pass Region continues to demonstrate reduced reliance on water supplies derived from the Delta and regional self-sufficiency through the actions of the retail agencies and SGPWA. The reduced reliance and regional self-sufficiency are attributable to advances in developing recycled and reusable water supplies combined with a region-wide emphasis on water use efficiency among SGPWA and the retail agencies. **Table 3-6** presents the reduced reliance analysis for the SGPWA Region. The Reduced Delta Reliance and improved regional self-sufficiency are detailed in Appendix A.

TABLE 3-7: REDUCED DELTA RELIANCE

Year	2015	2020	2025	2030	2035	2040	2045	2050
Total Water Supplies from the Delta Watershed	34.6%	32.0%	26.0%	23.3%	21.3%	19.4%	17.6%	16.0%
Change in Water Supplies from the Delta Watershed	-17.5%	-20.0%	-26.1%	-28.8%	-30.8%	-32.7%	-34.5%	-36.0%

3.1.5 Summary of Existing and Planned Water Supplies

Available water supplies in the San Gorgonio Pass service area consist of supplies imported for storage by SGPWA, with a small amount delivered for direct use to YVWD, and other supplies managed by regional water users. While SGPWA does not anticipate meeting all regional demands solely through the collective water assets it directly controls, the Agency plans to work collaboratively with retail agencies and other stakeholders to manage available water supplies and ensure that projected regional demands can be met. The Region's overall water asset portfolio consists of SWP Table A, Article 56 Carryover (and Article 21 Interruptible Water), City of Ventura Table A, Yuba Accord, Nickel Agreement, Sites Reservoirs shares, Water Transfers and Exchanges, local native groundwater, local surface water, return flows, and recycled water supplies.

The total current and projected supplies that will be used in the SGPWA Service Area from sources coordinated by SGPWA are presented in Chapter 6.

The supplies that are beyond the purview of SGPWA are considered regionally managed supplies. These supplies consist of locally available surface water, groundwater extractions, recycled supplies, and other supplies that the retail agencies may use in meeting demands in addition to supplies provided by SGPWA. **Table 3-7** depicts the regionally managed supplies available to meet demands in the San Gorgonio Pass Region. The table does not reflect details about specific sources of supplies that each retail agency uses; details are available in BCVWD Retail Chapter 7, and the individual urban water supplier UWMPs and planning documents.

TABLE 3-8: PROJECTED TOTAL WATER SUPPLY FOR SGPWA THROUGH 2050

Water User Category		2030	2035	2040	2045	2050
Large Retailer	Beaumont-Cherry Valley Water District	15,500	16,600	17,900	18,700	19,400
	South Mesa Water Company	900	1,000	1,000	1,000	1,000
	City of Banning	8,800	9,600	10,100	10,600	10,900
	Yucaipa Valley Water District	2,100	2,100	2,200	2,200	2,200
	Total Large Retailer	27,300	29,300	31,200	32,500	33,500
Retailers serving <3,000 AFY	High Valleys Water District	2,500	2,800	3,100	3,400	3,700
	Banning Heights Mutual Water Company					
	Cabazon Water District					
	Mission Springs (SGPWA area)					
	Morongo Band of Mission Indians					
Small Water Systems, Rural Domestic, Agricultural		1,000	1,100	1,200	1,300	1,400
Total Water Use in Service Area		30,800	33,200	35,500	37,200	38,600

Chapter 4.0
Regional Water Use Characterization

Understanding water use characteristics across the San Gorgonio Pass Region is fundamental to evaluating long-term water supply reliability and informing regional water management strategies. As described in Chapter 2, the Region encompasses a diverse range of communities, land use patterns, and economic drivers, all of which influence water use behavior and demand. This chapter characterizes current water use across the region and develops projections of future water demand over the planning horizon.

Consistent with the regional approach established for the 2025 RUWMP, population, land use, and economic growth assumptions described in Chapter 2 form the basis for demand projections across the Region. Beaumont-Cherry Valley Water District demand characteristics, as well as demand projections from the additional San Gorgonio Pass Region urban water suppliers defined in Chapter 2 are incorporated into the regional demand assessment presented in this chapter. Demands occurring outside the service area boundaries of participating and coordinating urban water retail suppliers, namely demands from small water systems and rural domestic pumpers, are also incorporated either from data and projections coordinated directly or by performing an aerial land use assessment and applying unit factor calculations for indoor and outdoor use.

Projected water demands in this chapter serve as the framework for integrating regional water use with available supplies described in Regional Chapter 3. Together, these elements support the evaluation of system reliability under normal, single dry year, and multiple dry year conditions presented in Chapter 5.

This chapter therefore provides a comprehensive and consistent framework for quantifying regional water use, supporting both near-term and long-term planning requirements and

water resource management across the San Gorgonio Pass Water Agency service area, and thus the San Gorgonio Pass Region as defined in this RUWMP.

This Chapter is organized as follows:

- Current Regional Water Use – this subsection presents data reflecting regional water use from 2020 to 2025.
- Future Regional Water Use – this subsection presents the derivation and results of future regional water use in the SGPWA service area.
- Forecasting Urban Water Retail Supplier Water Use – this subsection presents the projected future use of both existing customers and new customers for urban water retail suppliers, as well as the factors that impact these projections.
- Adjusting Water Use Forecasts for Single Dry and Multi-Dry Conditions - this subsection focuses on the adjustments made, or lack thereof, to the regional water use forecast necessary for completing the five-year Drought Risk Assessment ("DRA") presented in Chapter 5.
- Climate Change Considerations – this subsection examines the Region's long-term demand reliability and groundwater management framework under evolving climate and hydrologic conditions.

4.1.1 Current Regional Water Use

Water use within the San Gorgonio Pass Region reflects a diverse mix of urban, rural, industrial, recreational, and agricultural demands supported by a combination of managed groundwater and supplemental supplies. Understanding how water is currently used across the Region provides critical context for evaluating demand trends, informing future projections, and assessing long-term water supply reliability.

Water use within the Beaumont Basin Area is tracked and reported through Beaumont Basin Watermaster annual reports, which document production across the Beaumont Basin in accordance with the terms of the adjudication. In addition, urban water suppliers track and report their production to the State Water Resources Control Board (SWRCB) through monthly reporting requirements.

Information gathered from the retail urban water suppliers, as well as additional estimates for small public water systems and rural users, was used to develop a historic representation of

regional water use derived from all sources within the Region. For small and rural systems for which data was not provided, water usage was estimated based on a conservative per-person demand factor applied to publicly available population estimates from SWRCB's CA Drinking Water Watch. Similarly, the water usage attributed to small water systems, rural domestic users, and agriculture in the region was estimated based on aerial imagery of San Gorgonio Pass Water Agency customers located outside of designated water service areas and calculated using unit factors as previously mentioned. **Table 4-1** outlines the resulting regional historic and current water use. This recent and current regional water use helps SGPWA understand water use trends and other pertinent water use considerations relevant to forecasting future regional water use.

TABLE 4-1: REGIONAL WATER USE FOR 2020 – 2025 (AFY, ROUNDED TO NEAREST 100 ACRE-FEET)[48]

Water User Category		2020	2021	2022	2023	2024	2025
Large Retailer	Beaumont-Cherry Valley Water District	12,500	13,300	13,000	11,400	12,300	12,900
	South Mesa Water Company	900	900	800	800	800	800
	City of Banning	7,100	7,500	7,300	6,800	7,400	7,900
	Yucaipa Valley Water District	1,800	2,500	2,400	3,000	3,200	3,300
	Total Large Retailer	22,300	24,200	23,500	22,000	23,700	24,900
Retailers serving <3,000 AFY	High Valleys Water District	2,300	2,300	2,300	2,300	2,300	2,300
	Banning Heights Mutual Water Company						
	Cabazon Water District						
	Mission Springs (SGPWA area)						
	Morongo Band of Mission Indians						
Small Water Systems, Rural Domestic, Agricultural		900	900	900	900	900	1,000
Total Water Use in Service Area		25,500	27,400	26,800	25,200	27,000	28,200

4.1.2 Future Regional Water Use

Forecasting future regional water demands begins with an understanding of existing regional demands and trends, recognizing the additional customers anticipated through growth, and considering the factors that will directly influence the water use of both existing and future customers – especially factors that affect the efficiency of water use.

[48] Totals may not add due to rounding.

As mandated by California Water Code §10610.4(c), all urban water suppliers "shall be required to develop water management plans to actively pursue the efficient use of available supplies." As required by the Act, the future water use of both existing customers and those added over the 25-year planning horizon should reflect the "efficient use" of water.

4.1.2.1 Forecasting Urban Water Retail Supplier Use

The four retail urban water suppliers served by SGPWA, all within the Agency service area, have prepared water use forecasts to reflect the effects of efficient water use of both existing customers' future use and new use of new customers anticipated by various growth projections and specific development projects. As previously discussed, water use projections from BCVWD's Chapter 7 are incorporated into this forecast, and SGPWA coordinated with the other three retail urban water suppliers to obtain future demand forecasts.

There are several factors significantly impacting the projection of future water use for the urban water retail suppliers, ultimately informing the majority of the water use within the San Gorgonio Pass Region. These factors include State and local landscape regulations, building code requirements, and residential water-use mandates, as well as changes in types of housing products offered. These factors are incorporated into determining appropriate per-customer connection water demand values for use in forecasting future water needs. Relevant factors include:

- California Model Water Efficient Landscape Ordinance[49]
- Green Building Standards Code (hereafter the "CAL Green Code)[50]
- Per-capita Urban Water Conservation Objectives[51]

A significant portion of the projected growth in water demand includes a range of residential and non-residential uses within the urban water retail suppliers' service areas, driven by the varied development proposals already approved (but not yet built) as well as future proposals, to meet regional population increases. Residential customers will include both single-family dwelling units, some with accessory dwelling units, built under a variety of densities, as well as multi-family residential dwelling units. Non-residential uses are expected to include a blend of commercial, institutional, industrial, and active landscapes such as parks, in ratios similar to current residential-to-non-residential connections. The forecasted

[49] Information regarding the California Model Water Efficient Landscape Ordinance (MWELO) can be accessed here.
[50] Information regarding the Green Building Standards Code (CAL Green Code) can be accessed here.
[51] Information regarding Per-capita Urban Water Conservation Objectives can be accessed here.

future demands of the four RUWMP urban water retail suppliers will reflect the needs of existing customers and future new customers. The methodology for BCVWD is explained in detail in Chapter 7. Methodologies for the three additional coordinating retail suppliers (City of Banning, Yucaipa Valley Water District, and South Mesa Water Company), are detailed in their individual UWMPs.

Demand forecasts also incorporate additional growth anticipated from the other smaller retail service areas and private domestic users in rural parts of the service area. The resulting future regional water use estimate represents users throughout the SGPWA service area for which the Agency imports surface water. The forecast for each five-year increment through 2050 is provided in **Table 4-2**.

TABLE 4-2: FUTURE REGIONAL WATER USE (AFY, ROUNDED TO NEAREST 100 ACRE-FEET)

Water User Category		2030	2035	2040	2045	2050
Large Retailer	Beaumont-Cherry Valley Water District	15,500	16,600	17,900	18,700	19,400
	South Mesa Water Company	900	1,000	1,000	1,000	1,000
	City of Banning	8,800	9,600	10,100	10,600	10,900
	Yucaipa Valley Water District	2,100	2,100	2,200	2,200	2,200
	Total Large Retailer	27,300	29,300	31,200	32,500	33,500
Retailers serving <3,000 AFY	High Valleys Water District	2,500	2,800	3,100	3,400	3,700
	Banning Heights Mutual Water Company					
	Cabazon Water District					
	Mission Springs (SGPWA area)					
	Morongo Band of Mission Indians					
Small Water Systems, Rural Domestic, Agricultural		1,000	1,100	1,200	1,300	1,400
Total Water Use in Service Area		30,800	33,200	35,500	37,200	38,600

In addition to population and employment, weather and water conservation also impact regional water usage. Historically, when weather is hotter and drier, water usage increases, and conversely decreases when weather is cooler and wetter. This is particularly important when water use increases in response to consecutive years of hot, dry weather.

4.1.2.2 Adjusting Water Use Forecasts for Single Dry and Multi-Dry Conditions

The regional water use forecast reflects expected demands under normal climatic conditions. While forecasts often adjust for low-rainfall scenarios – which typically prompt earlier irrigation – the SGPWA's semi-arid climate renders such adjustments unnecessary. Generally, water users do not rely on rainfall for landscaping or agricultural irrigation; therefore, a seasonal shortfall in precipitation does not materially change behavior as it may in climates more reliant on precipitation.

4.1.2.3 Climate Change Considerations

Incorporating climate change considerations into demand planning allows regional water suppliers to evaluate long-term demand reliability under evolving hydrologic conditions. Regional climate projections for inland Southern California generally indicate increasing temperatures, greater variability in precipitation, and a higher frequency of extreme weather events. These trends can influence water use patterns by modestly increasing outdoor irrigation demands during extended hot periods and altering the timing and magnitude of natural recharge.

The San Gorgonio Pass Region, however, is already characterized by a high-desert climate with limited reliance on local precipitation to meet demands. As a result, projected climate-driven changes in temperature and precipitation are expected to have a comparatively limited effect on baseline regional water use behavior. Long-term demand projections in this chapter therefore continue to reflect efficient water use assumptions under normal climatic conditions, consistent with historical usage patterns and existing conservation requirements.

Regional groundwater resources, particularly those within the San Timoteo Subbasin and San Gorgonio Pass Subbasin (inclusive of the adjudicated Beaumont Basin) continue to serve as the foundation of long-term water supply reliability in the Region.[52] These basins benefit from established management frameworks, adjudicated pumping limits in the case of the Beaumont Basin, and active monitoring programs that support sustainable groundwater use under a wide range of hydrologic conditions. The San Timoteo Basin's designation as a low-priority basin under the Sustainable Groundwater Management Act reflects the absence

[52] Refer to Chapter 2, Figure 2-4 for a map of the basins.

of identified chronic overdraft or significant groundwater sustainability concerns, even when evaluated in the context of climate variability.

Natural recharge remains a key component of basin resiliency. While climate change may affect the interannual timing of recharge associated with storm events, the region's groundwater system has historically accommodated variability through managed pumping, storage capacity, and coordinated basin oversight. Groundwater use projections in this chapter are therefore considered consistent with long-term basin sustainability and adaptable to future climatic conditions without requiring structural changes to demand assumptions.

Overall, San Gorgonio Pass Region water use planning must recognize climate change as an important long-term consideration while also reflecting the inherent resilience of the region's groundwater-based supply portfolio. Continued monitoring of climate trends, basin conditions, and imported supply reliability will inform future RUWMPs, ensuring that water use forecasts remain aligned with evolving conditions and sound groundwater stewardship.

Chapter 5.0
Regional Water Service Reliability

This chapter outlines the San Gorgonio Pass Water Agency's general water system reliability findings on a regional basis as required under CWC §10635 and provides reliability information that the SGPWA and its constituent retail agencies may use in completing an annual supply and demand assessment under CWC §10632.1.

Assessing water service reliability is the fundamental purpose for the SGPWA and the participating retail suppliers in preparing this 2025 RUWMP. Water service reliability reflects the San Gorgonio Pass Region's ability to demonstrate that the regional water needs may be satisfied under projected hydrological and regulatory conditions. The region's 2025 RUWMP considers the reliability of meeting water demands by analyzing plausible hydrological variability, regulatory variability, climate conditions, and other factors that impact the regional water supplies. The reliability assessment looks beyond past experiences and considers what could be reasonably foreseen in the future in order to reflect potential water supply planning scenarios. This chapter synthesizes the details imbedded in Chapters 3 and 4 and provides a rational basis for future decision-making related to supply management, demand management, and project development. This chapter presents two regional water reliability findings:[53]

- Five Year Drought Risk Assessment: the 2026 through 2030 Drought Risk Assessment (DRA) for the SGPWA Region;
- Long-Term Service Reliability: the reliability findings for a Normal Year, Single Dry Year, and Five Consecutive Dry Years in five-year increments through 2050.

[53] These findings are also used by SGPWA to represent reliability for its "wholesale water supplier" responsibilities under the UWMPA.

In summary, regional water supplies are sufficient to meet regional water demands during normal, single dry, and five consecutive dry years through 2050.

5.1.1 Fundamental Reliability Considerations

SGPWA aggregates regional water supplies as a wholesale water purveyor responsible for acquiring State Water Project supplies, securing additional regional water supplies, and conducting groundwater storage activities. All of these efforts require examination of water supplies at a regional level to ensure supply reliability for retail purveyors and others that depend upon regional water resources.

This RUWMP extends the planning horizon considered from the statutorily required twenty-year timeline to a twenty-five-year period through 2050. This extended planning horizon allows SGPWA, BCVWD, and the Region to address longer-term land use planning, water planning, and infrastructure considerations that go beyond the UWMP Act's statutory requirements. The extended timeline assists SGPWA's and BCVWD's staff and Board of Directors in examining historical and long-term trends in water resources conservation, management, and use to inform current and future decision-making. Together, these considerations help improve regional coordination and planning.

SGPWA's water supply portfolio is diverse, incorporating SWP Table A supplies, the Ventura Water transfer, the Nickel Agreement, Yuba Accord Water, Sites Reservoir allocations (expected by 2035), and other SWP supplies such as Article 56 Carryover and Article 21 interruptible water. These imported water supplies are largely conveyed to the region via the California Aqueduct's East Branch Extension for recharge into regional groundwater basins, where retail agencies place them in storage and then extract water as needed to meet end-user demands. SGPWA also holds adjudicated groundwater storage rights in the Beaumont Basin, providing a managed groundwater storage resource that can be drawn upon during dry conditions.

The long-term average reliability of SGPWA's SWP Table A supplies has trended downward over successive Delivery Capability Reports (DCRs). As described in Section 6.3.1, the 2025 DCR characterizes current long-term average SWP reliability at approximately 54%, declining to approximately 48% under future conditions that account for climate change and sea level rise. Despite this downward trend in imported supply reliability, SGPWA and its retail partners manage their coordinated water asset portfolios to maintain supply reliability across all year types through 2050.

A key feature of the Region's reliability strategy is capturing and storing surplus imported water during normal and wet years to supplement regional demands during dry years. This approach stabilizes annual fluctuations in imported supplies that, without active management, could leave regional demands unmet in extended dry conditions. When imported supplies are reduced, the water users draw upon stored and regionally managed supplies, including Carryover water held in San Luis Reservoir, groundwater banking outside of the service area, managed groundwater stored in the Beaumont Basin, and supplies from agreements such as the Nickel Agreement and Yuba Accord, to offset supply shortfalls.

Future supply additions also improve long-term reliability. SGPWA's participation in the Sites Reservoir Project is expected to provide an average of approximately 10,500 to 10,700 acre-feet per year beginning in 2035, with higher deliveries in drier year types and reduced deliveries in wet conditions. Additional opportunities for supply augmentation are described in Section 6.3. The combined effect of these supply sources and management strategies positions SGPWA to reliably meet regional wholesale demands through the 2050 planning horizon.

5.1.2 San Gorgonio Pass Region Five-Year Drought Risk Assessment

The San Gorgonio Pass Region as a whole is characterized by a unique portfolio of water supplies and infrastructure components. As noted in Chapter 3, the available regional supplies include Imported Water to storage (primarily SGPWA's SWP Table A Annual Amount), native groundwater, local surface water, return flows, stormwater, wastewater, recycled water and stored and Carryover supplies (such as Article 56). These supplies are individually and collectively managed throughout each of the subbasins by SGPWA, retail water agencies, GSAs, and the Beaumont Basin Watermaster. For instance, as previously mentioned, although SGPWA brings its annual SWP Table A allocation into its service area for recharge and eventual extraction by retail agencies, it also may store some of its Table A allocation within the SWP system under the Carryover provisions in its SWP Contract or may store portions of the Table A allocation in regional groundwater basins for use in later years. As such, the annual management of the diverse water supply sources in the regional water supply portfolio forms the supply reliability assessment described in this Chapter.

The region (as coordinated through SGPWA), including the participating retailers and other users, manages its water supplies to address projected dry conditions. Specifically, SGPWA and retail urban water suppliers capture and store surplus imported water in normal and wet

years to use those water assets to meet regional demands in dry years. These strategic management actions stabilize annual fluctuations in supplies that may not meet regional demands under certain dry conditions. In other words, any surplus imported water supplies are captured and stored for future delivery to improve long-term supply reliability.

Table 5-1 below shows the region's Five-Year Drought Risk Assessment (DRA) which integrates all of the regional water supplies for 2026 through 2030 as described in Chapter 3 and reflects the water uses described in Chapter 4. As presented in the table, the Region is able to draw upon managed groundwater to meet demands during a projected five-year dry period.

TABLE 5-1: SAN GORGONIO PASS REGION FIVE YEAR DROUGHT RISK ASSESSMENT (AFY)

Five Year Drought	2026	2027	2028	2029	2030
Supply	28,700	29,200	29,800	30,300	30,800
Demand	28,700	29,200	29,800	30,300	30,800
Difference	0	0	0	0	0

The key takeaway is that when aggregated into a multiple dry year projection, the Region would be expected to use a portion of its stored water assets in the middle of a multi-year drought period to address deficits in the otherwise predictable water supplies. In years where imported supplies in combination with other supplies exceed the demands, SGPWA has the option for excess water to be stored for future use as either carryover supply in the SWP system or banked underground in local groundwater basins.

5.1.3 San Gorgonio Pass Region Long-Term Service Reliability

The UWMPA directs urban water purveyors to analyze water supply reliability in normal, single dry, and five consecutive dry years over a 20-year planning horizon. The 2025 UWMP Guidebook recommends extending that period to 25 years to provide a guiding document for future land use and water supply planning through the next UWMP Cycle. The following subsections describe the long-term water service reliability for the San Gorgonio Pass Region through 2050.

5.1.3.1 Normal and Single Dry Conditions 2030-2050

The region's long term service reliability is characterized in normal, single dry, and five consecutive dry years through 2050. The future water supplies in normal and single dry conditions depicted in this section reflect the same hydrological, regulatory, and institutional criteria associated with each water asset as described in Chapter 3. In normal years, for example, SWP supplies are generally constrained only by the projected Table A allocations derived from DWR's Delivery Capability Report. Under normal conditions, the same-year SWP Table A allocation, combined with other supplies, is adequate to fully meet demand without using any of the locally pre-stored Managed Groundwater. In dry years, additional hydrological, regulatory, and institutional issues reduce SWP supply availability based on reduced allocation percentages as noted in Chapter 3. In these years, regionally managed groundwater storage, carryover supplies, and non-SWP contracted supplies play a critical role in bridging the gap between reduced imported supply and sustained wholesale and retail demands. Additionally, other future water supplies, like return flow, tend to grow in annualized volumes as annualized demands grow in parallel. However, as described in Chapter 3, many of these other supplies are not reflected as an annually available predictable supply to allow this RUWMP to make a conservative estimate of reliability. This information is described in detail in Chapter 3 and is incorporated into the supply and demand tables presented below.

The region's future water demands in normal and single dry conditions through 2050 reflect the same considerations described in previous sections of this chapter. In both normal and dry conditions, demands tend to reflect anticipated uses based upon the climatological conditions in the region. Future water demands are generally predicted to increase as land uses and populations grow within the region. This information is detailed in Chapter 4 and reflected in the values shown in the tables below. In normal years when the Agency has surplus water, SGPWA can recharge and store available supplies for future dry-year needs or coordinate with other SWP contractors to manage surplus supplies. **Table 5-2** shows the normal year and single dry-year supplies and demands from 2030 through 2050. The single-dry conditions reflect the use of managed groundwater storage to meet forecast shortfalls, where the volume of managed groundwater storage is set to resolve any shortfall to zero.

TABLE 5-2: NORMAL AND SINGLE DRY YEAR WATER SUPPLY AND DEMAND THROUGH 2050 (AFY)

Normal Year	2030	2035	2040	2045	2050
Supply	30,800	33,200	35,500	37,200	38,600
Demand	30,800	33,200	35,500	37,200	38,600
Difference	0	0	0	0	0
Single Dry Year	**2030**	**2035**	**2040**	**2045**	**2050**
Supply	30,800	33,200	35,500	37,200	38,600
Demand	30,800	33,200	35,500	37,200	38,600
Difference	0	0	0	0	0

5.1.3.2 SGPWA Five Consecutive Dry Years through 2050

The Agency defines drought conditions lasting five consecutive years as one that constrains SGPWA from obtaining some of the water supplies within its water supply portfolio due to hydrological, regulatory, and institutional constraints. These conditions include more restrictive regulatory constraints that limit its Table A allocation. In dry years, when SWP supply availability is constrained, other supply sources discussed previously maintain more stable annual availability. Future supplies from Sites Reservoir, expected from 2035 onward, incrementally improve SGPWA's long-term supply position. As more thoroughly described in Chapter 6, the multiple dry years are assumed to use the following consecutive Table A allocations: 35%, 5%, 5%, 20%, 35%. These assumptions set forth the available same-year Table A supply that is added to the native groundwater and other local supplies, as summarized in Chapter 3.

Demands for five consecutive dry years reflect historical trends in water usage during drought conditions by retail customers within the SGPWA region. As a drought persists, demands may moderate as supply constraints become apparent at the retail customer level and conservation measures are implemented. The five-year timestep figures in **Table 5-3** also account for reasonable ongoing water conservation measures resulting from improved efficiencies in indoor fixtures, improved outdoor landscape irrigation management, and a general consumer awareness of the value of long-term water conservation. In addition, future dry conditions reflect increased land use and population that would rely upon the regional supply portfolio.

The future dry year projections show the San Gorgonio Pass Region relying more on managed groundwater storage as its population grows and water demands increase. Specifically, the region continues to increase its use of stored groundwater supplies as needed through the

entire planning horizon. However, a gradual decrease in supply availability and an eventual reduction in storage would also impact SGPWA's ability to store surplus water in those years. Accordingly, although SGPWA will have adequate water supplies to meet the regional demands for five consecutive dry years in 2050, the region will be using more of its stored groundwater supplies to handle those conditions.

Table 5-3 presents the water supply and demand conditions for SGPWA's service area in five consecutive dry years from 2030 through 2050.

TABLE 5-3: FIVE CONSECUTIVE DRY YEARS WATER SUPPLY AND DEMAND THROUGH 2050 (AFY)

		2030	2035	2040	2045	2050
Year 1	Supply	30,800	33,200	35,500	37,200	38,600
	Demand	30,800	33,200	35,500	37,200	38,600
	Difference	0	0	0	0	0
Year 2	Supply	30,800	33,200	35,500	37,200	38,600
	Demand	30,800	33,200	35,500	37,200	38,600
	Difference	0	0	0	0	0
Year 3	Supply	30,800	33,200	35,500	37,200	38,600
	Demand	30,800	33,200	35,500	37,200	38,600
	Difference	0	0	0	0	0
Year 4	Supply	30,800	33,200	35,500	37,200	38,600
	Demand	30,800	33,200	35,500	37,200	38,600
	Difference	0	0	0	0	0
Year 5	Supply	30,800	33,200	35,500	37,200	38,600
	Demand	30,800	33,200	35,500	37,200	38,600
	Difference	0	0	0	0	0

5.1.4 Annual Reliability Assessment

Each year, SGPWA considers current supply and demand conditions and performs an annual water supply and demand assessment (AWSDA) pursuant to California Water Code §10632.1 to evaluate real time or near-term circumstances that are different than the DRA scenario. This assessment evaluates actual current water supply and use conditions for a prescribed 12-month forecast (July through the following June). Procedures for conducting the Annual Assessment are contained in SGPWA's Water Shortage Contingency Plan. The Agency has historically conducted the assessment as required by the California Water Code and will continue this planning exercise to provide a reliability assessment for then-current conditions

regarding supplies and expected (unconstrained) demands. Other urban suppliers in the Region also complete an Annual Reliability Assessment, including BCVWD as described in Chapter 7.

5.1.5 Regional Water Supply Reliability Summary

Regionally managed water supplies, inclusive of SGPWA's water supply portfolio, are capable of meeting the water uses in the Region in normal, single dry, and five consecutive dry years from 2025 through 2050.

Chapter 6.0
San Gorgonio Pass Water Agency
Wholesale UWMP

TABLE OF CONTENTS

Contents

LIST OF TABLES

List of Figures

Section 6.1
Introduction

San Gorgonio Pass Water Agency (SGPWA or Agency) is a regional wholesale water agency that provides local groundwater, imported surface water, and managed groundwater to regional purveyors. This chapter details the San Gorgonio Pass Water Agency's service area, delivery infrastructure, population trends, water supply sources, and retail agency water use and projections. For purposes of this RUWMP, the SGPWA service area is also defined as the San Gorgonio Pass Region (Region). This chapter of the RUWMP satisfies the Urban Water Management Planning Act and supports long-term water resource planning by assessing water supply reliability and drought risk for SGPWA. Section 6.6 contains the Agency's Water Shortage Contingency Plan to guide Agency actions and response during drought or catastrophic supply shortages.

SGPWA was created as a special district in 1961 per the San Gorgonio Pass Water Agency Act (Act). The Act effectively created the SGPWA, with Section 101-15 prescribing the "Powers of agency" to include the acquisition of water, water rights, and waterworks and to supply and deliver agency water to other entities. The Act established the SGPWA boundaries and expressly identified the need to acquire State Water Project water. The Act stipulated: "It is the intent of the Legislature that, in allocating water received from the State Water Project pursuant to this act, the highest priority shall be given to eliminating groundwater overdraft conditions within any agency or district receiving the water." In this way, the Act made SGPWA responsible for acquiring and distributing SWP water and other water supplies as available for delivery to entities within its boundaries.

The San Gorgonio Pass Water Agency utilizes a diversified portfolio of imported surface water, managed groundwater, and local water assets to meet the demands of its constituent retail water agencies. This chapter describes SGPWA's wholesale water supply sources. The description includes the historical sources available in the SGPWA service area and quantifies existing and projected water supply sources over five-year increments through 2050 under normal, single-dry, and five-year droughts. SGPWA delivers water supplies to retail agencies by making imported water deliveries to managed groundwater systems in the SGPWA service area boundary that can be extracted by retail agencies and end users. These imported supplies become part of the Region's groundwater use and aquifer replenishment cycle with imported water essentially transitioning to local water supplies as they are pumped, used, and returned to the groundwater basins as return flow.

As discussed in Regional Chapter 3 of this RUWMP, retail water agencies and users in the Region source water supply almost entirely from pumped groundwater. As a State Water Project (SWP) contractor, SGPWA acts as a wholesale supplier to retail water agencies and provides supply reliability benefits to many other individual users and uses throughout its service area by importing water supplies and recharging groundwater basins to support on-going groundwater basin health needs.[1] Imported water, whether stipulated by judgment or based upon pre-emptive and anticipatory actions, supports the Region's reliance on managed groundwater supplies.

6.1.1 Background and Purpose

The Agency has ensured compliance with the Urban Water Management Plan Act (UWMPA) requirements for urban water suppliers through its participation in the 2025 RUWMP and preparation of this wholesale-specific chapter.[2] The UWMPA requires urban water suppliers to evaluate the adequacy of their water supplies to meet projected demands under average conditions, single dry years, and multiple dry year scenarios through a 20-year planning horizon. This chapter, in conjunction with critical Region summary tables in Chapter 3, Chapter 4, and Chapter 5, presents SGPWA's evaluation of these requirements and demonstrates its ability to meet anticipated water demands under near-term and long-term normal and drought conditions.

The 2025 RUWMP, together with this wholesale-specific chapter, updates SGPWA's 2020 Wholesale Urban Water Management Plan (UWMP) and incorporates new data, analyses, and regulatory guidance issued since 2020 by the California Department of Water Resources (DWR) pursuant to the California Water Code (CWC). In addition to satisfying statutory requirements, the 2025 RUWMP serves as a comprehensive planning document describing existing and future water supplies, projected water demands, demand management progress, and actions necessary to maintain long-term supply reliability. The regional approach also documents cooperative efforts among participating agencies to efficiently manage shared resources and address future water needs across the RUWMP Region.

6.1.2 Basis for Plan Preparation

SGPWA is classified as an Urban Water Supplier pursuant to CWC Section 10617, as it provides water for wholesale water supplies for municipal purposes to more than 3,000 service connections and supplies more than 3,000 acre-feet of water annually through the management of imported water supplies on behalf of the San Gorgonio Pass Region. These qualifications require the preparation and adoption of a UWMP every five years. Under CWC

[1] SGPWA also provides a small amount of imported surface water directly to Yucaipa Valley Water District.
[2] California Water Code Sections 10610 through 10657

Section 10620 (d)(1), these requirements may be satisfied through participation in a RUWMP, which the SGPWA and the Beaumont-Cherry Valley Water District (BCVWD) have elected to do collaboratively in coordination with other Urban Water Suppliers in the Region.

6.1.3 Coordination and Outreach

SGPWA and BCVWD coordinated with neighboring agencies and relevant public entities, as required by the UWMPA, to ensure consistency with related land use and water resource planning efforts. This coordination included agencies that share common water sources, regional water management entities, and local governments with land use authority. SGPWA also met the requirements of CWC Section 10621(b) by conducting a required public hearing to encourage community participation. As part of 2025 RUWMP development, these coordination and outreach activities were carried out at the regional level. A detailed description of these efforts is provided in Chapter 1.

6.1.3.1 Water Supplier Information Exchange

Compliance with CWC Section 10631 is described in Regional Chapter 1.

6.1.4 RUWMP Adoption

The SGPWA held a public hearing regarding the 2025 RUWMP on June 15, 2026. Before the hearing, the Agency made a draft of the 2025 RUWMP available for public inspection at 1210 Beaumont Avenue, Beaumont, CA 92223, and on the SGPWA website. Pursuant to CWC Section 10642, general notice of the public hearing was provided through publication of the hearing date and time in the local press as required under the UWMPA.

The Agency's elected body adopted this 2025 RUWMP on June 15, 2026. A copy of the 2025 RUWMP will be submitted to DWR, provided to the County and the California State Library, and posted onto SGPWA's website.

The Agency plans to submit all required documentation related to the UWMPA through the DWR submittal website soon after adoption.

6.1.5 Document Organization

This chapter is organized as follows:

Section 6.2 Water Service Area and System Description

Section 6.3 Water Supply Characterization

Section 6.4 Water Use Characterization

Section 6.5 Water System Reliability and Drought Risk Assessment

Section 6.6 Water Shortage Contingency Plan

Section 6.7 Energy Intensity Analysis

Section 6.2
Water Service Area and System Description, Population, Land Use, Economy, and Demographics

The SGPWA service area encompasses approximately 225 square miles of semi-arid inland Southern California, spanning the region between the San Bernardino Valley to the west and the Coachella Valley to the east. The San Gorgonio Pass Region (Region) is a natural gap between the San Bernardino Mountains to the north and the San Jacinto Mountains to the south. The western portion lies within the Santa Ana River watershed, while the eastern portion drains to the Whitewater River watershed. The area functions as a major transportation corridor, with Interstate 10 and the Union Pacific Railroad traversing the Region and providing a critical link between the Greater Los Angeles Area and the interior United States. The SGPWA service area defines the Region for the purposes of this RUWMP, and includes the incorporated cities of Calimesa, Beaumont, and Banning, as well as the communities of Cherry Valley, Cabazon, and the Banning Bench.

The Agency is one of 29 State Water Project contractors, which entitles it to an annual allocation of water supplies derived from the California State Water Project. Legislation for the SWP passed in 1959, authorizing construction of the California Aqueduct, along with passage of the Davis-Grunsky Act, which allowed regions to form local water agencies. Shortly thereafter, in 1961, SGPWA was established to "import water to local water agencies and protect and enhance local water supplies for use by present and future water suppliers."[3] Imported water is conveyed to the service area via the California Aqueduct's East Branch Extension and distributed through an extensive transmission system to local groundwater basins and surface reservoirs.

The SGPWA service area is divided into five geographic divisions, each represented by a publicly elected board member serving a four-year term. In addition, two at-large Directors serve on the Board, for a total of seven members. Elections are held in November of even-

[3] California Water Code App., §§ 101-1 et seq.

numbered years. SGPWA's Sphere of Influence (SOI) is generally contiguous with its service area, which is shown in **Figure 6-1**.

Water supplies within the SGPWA service area are sourced almost entirely from pumped groundwater drawn from multiple basins, subbasins, and aquifers. Groundwater recharge occurs through natural stormwater flows, infiltration from local rivers and streams, SWP deliveries to recharge basins, other imported water supplies, and irrigation and wastewater return flows, including contributions from septic systems and recycled water facilities. SGPWA continues to work closely with its retail partners to strengthen current and future surface water supplies and to manage these resources within a framework of enhanced regional conservation and integrated water resources management.

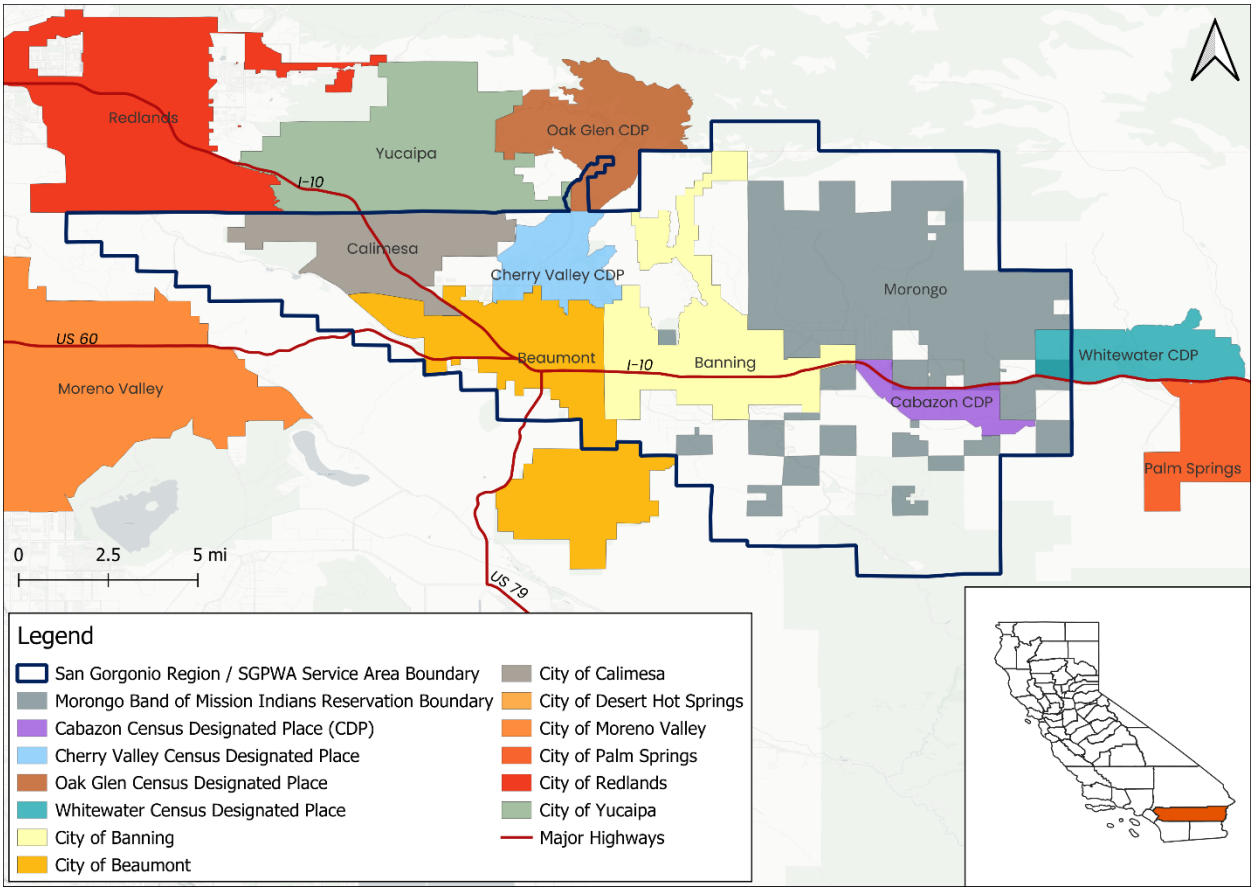


FIGURE 6-1: WATER SERVICE AREA AND RETAIL AGENCIES

Population growth and land-use changes are the primary influences on water demand within the service area. Consequently, these projections are vital for planning supply, delivery, and infrastructure. Examining demographic and economic trends provides a basis for SGPWA's future water use projections.

6.2.1 Current Population and Historic Trends

The SGPWA service area encompasses the incorporated cities of Beaumont, Banning, and part of Calimesa, alongside several unincorporated communities and census-designated places within the San Gorgonio Pass Region. The service area also encompasses the Morongo Band of Mission Indians (MBMI) sovereign nation lands and community, but the MBMI maintains independent oversight of its own water department. Generally, the Region is characterized by a highly diverse urban landscape that ranges from dense suburbs in Western Riverside County to rural, agricultural, and hospitality-oriented areas in the Coachella Valley.

Following steady growth throughout the 20th century, the Region experienced a significant population surge starting around 2000. Driven by its proximity to the Los Angeles metropolitan area and comparatively lower housing costs, the service area underwent a rapid increase in urban development. Notably, Beaumont and Banning emerged as two of California's fastest-growing cities over the last two decades, with Beaumont's population expanding by more than 200% between the years 2000 and 2010.[4] Detailed discussions of the Region's current population and historic trends are described in Chapter 2.

Historic population for the SGPWA service area is presented in **Table 6-1**, demonstrating on a five-year timestep how population has more than doubled since 2000. **Table 6-2** presents service area population and associated growth rates on a 1-year timestep.

TABLE 6-1: SGPWA REGION HISTORICAL POPULATION

1990	1995	2000	2005	2010	2015	2020	2025
47,476	49,257	53,661	67,499	86,779	98,401	109,243	119,216

TABLE 6-2: SAN GORGONIO PASS REGION POPULATION GROWTH RATE, 2015-2024

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
98,401	100,561	102,741	104,877	107,040	109,243	110,882	113,481	115,779	117,635
2.05%	2.20%	2.17%	2.08%	2.06%	2.06%	1.50%	2.34%	2.02%	1.60%

[4] Beacon Economics, *Beacon Economic Outlook and Forecast: San Gorgonio Pass Water Agency* (prepared for San Gorgonio Pass Water Agency, July 23, 2025), "Population Totals, San Gorgonio Pass Water Agency Cities and Census Designated Places (CDPs)" table, https://www.sgpwa.com/wp-content/uploads/2025/10/6.A-2025.07.23.-Beacon-Economic-Outlook-and-Forecast-SGPWA.pdf

6.2.2 Projected Population

Accurate population forecasting within the service area is predicated on historical trends, economic forecasting, and planned land utilization. The UWMPA encourages coordination for population projections with retail water suppliers; as discussed in Chapter 2 of this RUWMP, SGPWA collaborated on a detailed regional study with Beacon Economics to determine a regional growth outlook.[5] This approach analyzed growth trends within cities and Census Designated Places along with employment, labor force trends and housing and land use outlooks around the San Gorgonio Pass Region. With Beacon forecasts as its starting point, SGPWA further refined its regional population forecasts by substituting individualized population forecasts developed by both the City of Banning and BCVWD (largely representative of growth within the City of Beaumont). As detailed in Chapter 7 of this RUWMP, BCVWD's projected population methodology is consistent with its UWMP water demand planning. The District bases population projections on planned land use development, using "Equivalent Dwelling Units", or EDUs, to estimate population growth within the area. This methodology is described in Chapter 7 of this RUWMP. Similarly, the City of Banning provided updated population projections consistent with its UWMP water demand planning, based on a combination of 2024 SCAG housing forecasts and anticipated future development within the City.[6] Accordingly, BCVWD and Banning's portions of the Beacon Economics Study's projected population was replaced by the District's more specific land-use based approach These projections, which extend through 2050, serve as the basis for **Table 6-3**.

TABLE 6-3: REGIONAL POPULATION FORECAST AND GROWTH RATE

Year	2025	2030	2035	2040	2045	2050
Projected Population	119,216	128,220	140,527	155,361	171,862	187,374
Growth Rate		7.55%	9.60%	10.56%	10.62%	9.03%

Annual Rate: 1.81%

As discussed, the San Gorgonio Pass Region's proximity to the Los Angeles metropolitan area and comparatively lower housing costs continue to drive population growth and urban development. These inevitably drive additional shifts in land use, particularly in incorporated cities and communities along transportation corridors like Interstate 10. Additional discussion of current and projected regional population and land use trends are described in Chapter 2.

[5] San Gorgonio Pass Economic Outlook and Forecast, July 2025. Beacon Economics and San Gorgonio Pass Water Agency.

[6] City of Banning. 2025 Urban Water Management Plan. Section 2.5.1, Tables 2.4 and 2.5.

6.2.3 Land Use Trends

Population growth and land use change are the primary drivers of water demand in the SGPWA service area, which is undergoing a broader transition from rural and agricultural uses toward urbanization and economic development. The Region's western corridor, anchored by Beaumont, Banning, and Calimesa along Interstate 10, is characterized by master-planned communities, commercial centers, and logistics development, while the eastern portion retains a mix of tourism, agriculture, tribal lands, and lower-density residential uses. For a detailed discussion of land use trends, see Chapter 2 of this RUWMP.

6.2.3.1 Economic Trends and Other Social and Demographic Factors

The San Gorgonio Pass Region's economy is expanding with diversified growth drivers – population influx, tourism and hospitality, manufacturing, renewable energy, and strategic logistics positioning – while infrastructure projects and evolving industry dynamics continue to shape future opportunities. Traditionally focused on retail and commercial services, the Region is rapidly transitioning into a critical logistics and residential hub. Driven by its strategic location along Interstate 10 and the Union Pacific Railway, the Region has seen a massive expansion in transportation and warehousing, anchored by major facilities like the Amazon fulfillment warehouse in Beaumont and the Nestle Water North America bottling plant in Cabazon. Employment growth forecasts suggest that by 2050, professional services, healthcare, education, entertainment, and construction will emerge as leading regional employment sectors.[7] Further analysis is described in Chapter 2 of this RUWMP.

[7] San Gorgonio Pass Economic Outlook and Forecast, July 2025. Beacon Economics and San Gorgonio Pass Water Agency.

Section 6.3
Water Supply Characterization

This section describes San Gorgonio Pass Water Agency's water supply sources. The description includes historical and current sources available to SGPWA as well as projected water supply sources through 2050.[8]

SGPWA categorizes its supply sources in essentially four groupings. The first grouping includes supply sources that are generally available on an annual basis. These sources include SGPWA's State Water Project supplies and other long-term contracted supplies that are made available each year. Imported water supplies are conveyed to the Region via the California Aqueduct's East Branch Extension (EBX) and is largely used to replenish groundwater storage and enhance managed groundwater supplies and long-term supply reliability (only a small portion is delivered directly to Yucaipa Valley Water District). Recharge infrastructure is described in Chapter 2. The second group are sources that SGPWA could make available in any given year but are generally not renewable. These include short-term transfers between SWP Contractors and other exchanges. These other sources are discussed in this RUWMP but the supply availability is dynamic nature. The third group is SGPWA managed groundwater storage in the adjudicated Beaumont Basin.

SGPWA's long-term water supply management actions focus on optimal utilization of its annually available supply sources and protection of its pre-stored supply sources to guard against extended drought conditions and catastrophic outage impacting water users in the Region. Through conjunctive use, regional recharge programs, and coordination with its retail agencies, SGPWA manages available supplies to support sustainable groundwater conditions and meet current and future demands in its service area.

6.3.1 State Water Project

The California State Water Project (SWP) serves as the primary water supply source for the San Gorgonio Pass Water Agency. The Agency is one of 29 agencies that hold a SWP Contract with the Department of Water Resources (DWR). The original SWP Contract became effective in November of 1962 and includes 20 amendments, including a 2019 amendment extending

[8] The UWMP Act mandates a 20-year planning horizon and the UWMP Guidebook recommends a 25-year planning horizon.

the term through 2085. Imported water is delivered to the SGPWA by the California Aqueduct's East Branch Extension. Refer to Chapter 2 for detailed descriptions of the SWP's Major infrastructure, operations, and conveyance characteristics.

6.3.1.1 Table A Contract Amount

SGPWA's SWP Contract amount (Table A) is 17,300 acre-feet per year. SGPWA's Table A Annual Amount represents a maximum contract amount that could be available each year assuming that the SWP could deliver 100% of contract supplies to all SWP Contractors. The last 100% allocation year was 2023. The characterization of the history of SGPWA's Table A Annual Amount is important in understanding the historically available supplies to SGPWA and how the available supplies have been managed.

SGPWA's SWP Contract has numerous components that allow SGPWA to manage the annually available supplies and the water delivery activities. SGPWA's SWP Contract has six important provisions that characterize the available supplies and the water delivery activities. The key aspects are: (1) Annual Table A Amount, (2) Annual Table A Allocation, (3) Article 56 Carryover, (4) Article 21 Surplus Supplies, and (5) Article 12(f) on SWP conveyance priorities, and (6) water transfer and exchanges supported by Amendment No. 20, the "Water Management Tools".

As mentioned previously, the Agency's Annual Table A Amount is 17,300 acre- feet. Although SGPWA's SWP Contract provides for the Annual Table A Amount, that total volume of water supply is subject to reduction each year based on actual water supply availability in the State Water Project system as determined by DWR. SGPWA's average Table A Allocation under existing conditions is 54% of the Annual Table A Amount.[9] In this case, SGPWA's current average annual Table A Allocation would be 9,342 acre-feet, 54% of its Annual Table A Amount. This average Table A Allocation provided by DWR's 2025 Delivery Capability Report (DCR) is based on fluctuating Table A Allocations from past years as well as water supply and climate change projections for the future.

6.3.1.2 Historical SWP Table A Allocations

Normally, SWP Table A allocations are less than 100% of SGPWA's Table A Annual Amount. Annual SWP Table A allocations fluctuate based upon hydrology, water storage, and regulatory criteria in the Delta. SGPWA's Table A Annual Amount and its water storage and banking activities have rendered these fluctuations less problematic than they otherwise may be for other SWP Contractors that rely on direct SWP deliveries. **Table 6-4** below shows the SGPWA Table A Annual Amount from 2015 through 2025, the SWP Table A percentage allocation, and the final Table A Allocation from 2015 to 2025. Over this period, the SGPWA

[9] The State Water Project Draft Delivery Capability Report 2025, December 2025 at Table 5-2.

received an average of approximately 7,785 acre-feet per year, which represents about 45% of the Table A contract amount. The period includes several years of significantly reduced allocations associated with the 2020–2022 drought. Notably, the 2023 full allocation was the first time the SWP provided a 100% allocation since 2006.

TABLE 6-4: SWP TABLE A ALLOCATIONS AND DELIVERIES (ACRE-FEET)

Year	SWP Contract Table A	Percent Allocation	Allocation Amount
2015	17,300	20%	3,460
2016	17,300	60%	10,380
2017	17,300	85%	14,705
2018	17,300	35%	6,055
2019	17,300	75%	12,975
2020	17,300	20%	3,460
2021	17,300	5%	865
2022	17,300	5%	865
2023	17,300	100%	17,300
2024	17,300	40%	6,920
2025	17,300	50%	8,650

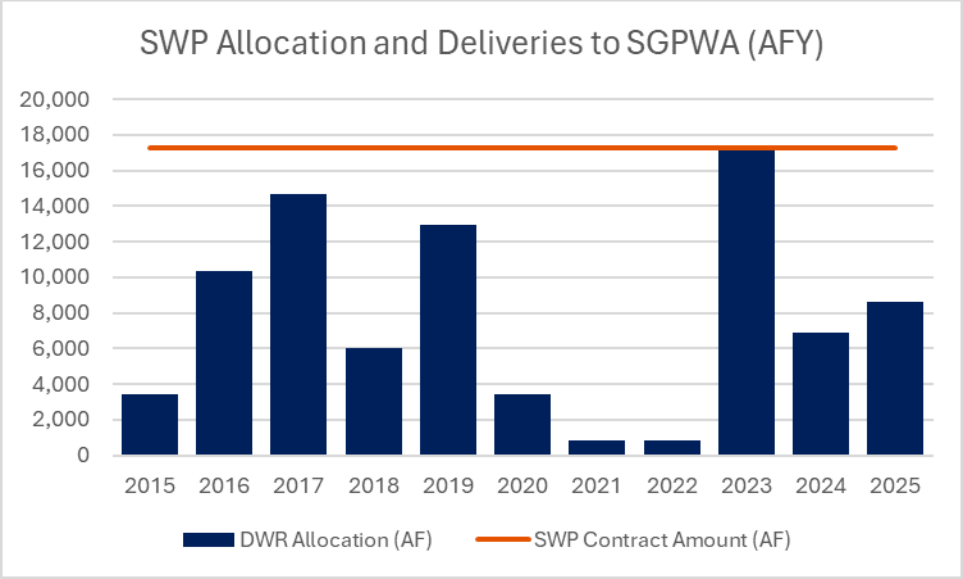


FIGURE 6-2: HISTORIC SWP TABLE A DELIVERIES, 2015-2025

6.3.1.3 Future SWP Allocations and Long-Term Reliability

DWR has suggested that it is less likely that 100% allocation years will occur on a regular basis in the future. In December 2025, DWR released the 2025 Draft SWP Delivery Capability Report that outlined the probable future water supply allocations for the SWP. The DCR showed variations in future Table A deliveries based upon hydrological and regulatory conditions. These conditions for the entire State Water project system are summarized below in **Table 6-5**.

TABLE 6-5: SWP ESTIMATED TABLE A DELIVERIES FROM DCR (VALUES IN 1,000 ACRE-FEET)

Year	Long Term Average		Single Dry Year (1977)		Dry Periods							
					2 Year Drought (1976-77)		2-Year Drought (2014-15)		6-Year Drought (1987-92)		6-Year Drought (1929-34)	
2021 Report (1922-2015)	2,321	56%	233	6%	1,377	33%	708	17%	1,163	28%	1,039	25%
2023 Report (1922-2021)	2,202	53%	184	4%	922	22%	360	9%	860	21%	597	14%
2025 Report (1922-2021)	2,234	54%	237	6%	936	23%	403	10%	897	22%	627	15%

As shown in Table 6-5, DWR's long-term average reliability shows a downward trend from 56% in the 2021 SWP DCR to 54% in the 2025 Draft DCR. Further, under future conditions with climate change and sea level rise considerations, discussed within the Technical Addendum of the DCR, SWP long-term average reliability reduces to 48%.[10]

SGPWA's annual Table A allocation has specific utility to provide recharge water for the adjudicated Beaumont Basin and support sustainable groundwater management. SGPWA imports SWP water primarily for groundwater recharge, both for the SGP Region's retailers and to maintain its 10,000 acre-foot storage right in the Beaumont Basin. These supplies provide reliability during drought conditions and ensure long-term water security for the retail water suppliers and end users within its service area.

Consistent with the 2025 DCR, SGPWA characterizes the 2025 SWP long-term average reliability at approximately 54%, with a projected decline to approximately 48% by 2045 under future conditions. For planning purposes, SGPWA conservatively assumes that this reduced reliability persists through its planning horizon. Accordingly, SGPWA's projected Table A supply is estimated at approximately 54 percent of 17,300 acre-feet (approximately 9,340 acre-feet per year) under current conditions, declining to approximately 48% (approximately 8,300 acre-feet per year) by 2045.

The 2023 and 2025 DCR identify 1977 as the single driest year, with allocation estimates ranging from approximately 4 to 6 percent. However, more recent SWP operations indicate that similarly low or lower allocations have occurred under current conditions. The SWP allocation reached 5 percent in 2014 and again in both 2021 and 2022. Consistent with this recent operational record and a conservative planning approach, SGPWA assumes a single driest year allocation of 5 percent, equivalent to approximately 865 acre-feet per year, throughout the planning horizon.

The DCR also identifies various drought periods for purposes of characterizing SWP allocation percentages that would accompany those drought periods. The averaging of the allocations over the course of the drought period is not representative of SGPWA's drought planning preparedness. As such, SGPWA will use the following drought characterization for its short-term and long-term planning: dry year 1 at 35%; year 2 at 5%; year 3 at 5%; year 4 at 20%; and year 5 at 35%. This characterization adequately represents a critical drought over five consecutive year period with two extreme drought years imbedded in the assessment. SGPWA uses these two extreme drought conditions out of an abundance of caution to ensure its available supplies meet its long-term demands. **Table 6-6** shows the normal year, single dry year, and five consecutive dry years planned SWP Table A Allocation for the Agency.

[10] The State Water Project Draft Delivery Capability Report 2025. Table 6-2, "2043 50% Level of Concern."

TABLE 6-6: SWP ALLOCATION FOR FIVE CONSECUTIVE DRY YEARS, 2026-2030 (ACRE-FEET)

Year Type		Amount
Normal		9,342
Single Dry Year		865
Five Consecutive Dry Years	Year 1 (2026)	6,055
	Year 2 (2027)	865
	Year 3 (2028)	865
	Year 4 (2029)	3,460
	Year 5 (2030)	6,055

Table 6-7 shows the normal year, single dry year, and five consecutive dry years planned SWP Table A Allocation for SGPWA through 2050 as described previously in this section.

TABLE 6-7: FUTURE SWP ALLOCATIONS BY YEAR TYPE FROM 2030-2050 (ACRE-FEET)

Year Type		2030	2035	2040	2045	2050
Normal		9,342	9,342	9,342	8,304	8,304
Single Dry Year		865	865	865	865	865
Five Consecutive Dry Years	Year 1	6,055	6,055	6,055	6,055	6,055
	Year 2	865	865	865	865	865
	Year 3	865	865	865	865	865
	Year 4	3,460	3,460	3,460	3,460	3,460
	Year 5	6,055	6,055	6,055	6,055	6,055

6.3.2 Other SWP Water Supplies

SGPWA has several opportunities to supplement its SWP Table A Allocation through additional SWP assets. These include Article 56 Carryover Water, Article 21 Interruptible Water, and the

State Water Contractors' "Turnback Pool." Article 56 Carryover Water consists of surplus supplies stored in San Luis Reservoir for use in future years (as discussed below). Article 21 water may be made available by DWR when excess flows are available in the Delta, while the Turnback Pool allows State Water Contractors with excess supplies to "turn back" some supplies for purchase by other contractors. Additionally, SGPWA may acquire unused or stored SWP supplies through transfers and exchanges with other contractors. Collectively, these sources improve supply reliability and provide flexible water management opportunities, strengthening the overall reliability of SGPWA's Table A Allocation. In summary, the availability of wet year supplies through SGPWA's Table A, Article 56, Article 21, Turnback Pool, and SWP transfers and exchanges improve SGPWA's opportunities to store and manage regional water supplies for the benefit of its customers.

6.3.2.1 Article 56 – Carryover

SGPWA's SWP Contract allows it to forego delivery of its allocated SWP Table A supply and retain a portion of that allocated supply in storage for future use. This retained supply is classified as "Carryover" and is governed under Article 56 of SGPWA's SWP Contract. Carryover water is water that is released from Oroville Dam and Reservoir, re-diverted at the Delta, and then stored in San Luis Reservoir – an off-stream reservoir located outside of the City of Santa Nella at the junction of Interstate 5 and California State Highway 152. San Luis Reservoir is jointly owned and operated by the state and federal governments and all SWP Contractors may use the storage facility to manage Carryover water supplies. In short, the San Luis Reservoir receives, regulates, and stores exported water derived from the State Water Project and federal Central Valley Project.

Article 56 imposes limitations to the total allowable Carryover amounts, subject to a percentage of the Annual Table A Amount, dependent on the final allocation percentage for that year. For example, if the final Table A allocation was 50% (8,650 AF), SGPWA could store (carryover) 25% of its Table A Amount (4,325 AF). If storage requests exceed capacity in San Luis Reservoir, the available capacity will be allocated among contractors in proportion to their Table A entitlement. Reallocation can also result in "displacement" of stored water, sometimes known as "spill" or reclassification, that results in stored amounts being released.

Nevertheless, SGPWA generally retains a portion of its Table A supply as Carryover in any given year and continues to maintain a Carryover balance to provide a buffer against drought or other shortage risk. **Table 6-8** shows SGPWA's year-end Carryover balance (i.e., supplies available for the following year) from 2015 through 2025.

TABLE 6-8: SGPWA HISTORIC YEAR-END SWP CARRYOVER AMOUNTS

Year	Year-End Carryover
2015	36
2016	153
2017	2,714
2018	2,668
2019	4,211
2020	835
2021	1,452
2022	1,923
2023	8,639
2024	1,217
2025	50

The Carryover supplies noted in **Table 6-8** combine a number of water management factors that influence SGPWA's overall water supply availability. In years when additional water assets are available during normal and wet conditions, SGPWA may store SWP supplies for use in subsequent dry years. Similarly, through transfers, exchanges, and coordinated regional supply management, the Agency can preserve SWP supplies even during critically dry periods. This is demonstrated during the recent drought from 2020 through 2022, when SWP allocations declined to 20 percent in 2020 and 5 percent in both 2021 and 2022. Despite these constraints, SGPWA maintained carryover supplies through active portfolio management and coordination with the retail agencies. For example, carryover storage remained above 1,452 acre-feet in 2021 and increased to approximately 1,923 acre-feet in 2022. Following the return to wetter conditions and a 100 percent allocation in 2023, SGPWA significantly increased carryover supplies to approximately 8,639 acre-feet, before drawing them down to about 1,217 acre-feet in 2024 as part of ongoing supply management. These actions reflect SGPWA's continued ability to strategically manage its water resources to enhance reliability across a wide range of hydrologic conditions.

SGPWA will manage its Article 56 Carryover supplies in future years based upon the hydrological and regulatory conditions. The Article 56 Carryover supplies result from multiple variables that are tied to the SWP Table A annual allocation, operations in San Luis Reservoir, and water supply management throughout its service area. While 2021-2022 represented historically dry years, 2016-2019 reflect normal allocation years for the SWP and typical SWP management of Carryover supplies for SGPWA. Therefore, for planning purposes, SGPWA conservatively estimates future Carryover supplies in a normal year to be approximately 3,200 acre-feet and Carryover in a single dry year to be approximately 1,700 acre-feet. The future normal year Carryover supply represents less than half of SGPWA's normal year allocation based upon DWR's 2025 DCR but other years represent SGPWA multi-year management actions similar to the previous drought periods that made Carryover supplies available during these drought periods. **Table 6-9** shows the representative Article 56 Carryover supply in normal and five consecutive dry years. **Table 6-10** shows future availability of Carryover supply in multiple dry years across RUWMP the planning horizon.

TABLE 6-9: NORMAL, SINGLE DRY, AND FIVE DRY YEARS TABLE A CARRYOVER SUPPLIES (AFY)

Year Type		Supply Available
Normal		3,200
Single Dry Year		1,700
Five Consecutive Dry Years	2026	2,700
	2027	1,920
	2028	840
	2029	840
	2030	1,700

TABLE 6-10: FUTURE AVAILABLE TABLE A CARRYOVER SUPPLIES IN DRY YEARS (AFY)

Year Type		2030	2035	2040	2045	2050
Normal		3,200	3,200	3,200	3,200	3,200
Single Dry Year		1,700	1,700	1,700	1,700	1,700
Five Consecutive Dry Years	Year 1	2,700	2,700	2,700	2,700	2,700
	Year 2	1,920	1,920	1,920	1,920	1,920
	Year 3	840	840	840	840	840
	Year 4	840	840	840	840	840
	Year 5	1,700	1,700	1,700	1,700	1,700

SGPWA's Table A Carryover supplies are incorporated into its stored water management portfolio. Although SGPWA may use its Carryover supplies under normal year conditions, it generally preserves these supplies to manage shortage conditions. As such, for planning purposes, this 2025 UWMP incorporates SGPWA's Article 56 Carryover supply as a component of stored water for its water management purposes contemplated in this chapter.

6.3.2.2 Article 21 – Interruptible Water

Article 21 of SGPWA's SWP contract outlines the rules for "interruptible water service." Interruptible water service means allocation of water that is essentially surplus in the SWP system and is in addition to the Table A Allocation in any given year. In other words, DWR may determine at a later time in the water year that there is additional water that could be delivered to SWP contractors that is in excess to the system-wide Table A allocations already confirmed. Article 21 was recently amended (Contract Amendment 20), and outlines the provisions for allocation, notice and process for obtaining, rates, and transfers of Article 21 interruptible water. Notably, Amendment 20 allows for transfers of Article 21 water from certain SWP contractors to others if the contractor can demonstrate a special need for the transfer.

As a SWP Contractor, the Agency has access to Article 21 water when this "excess" water is made available. Article 21 water is identified as non–Table A water that becomes available on an intermittent, interruptible basis. Allocations of Article 21 water are made based on the available supply in proportion to each contractor's annual entitlement as set forth in its Table A for that year.

When available, Article 21 water delivery is typically made in the wettest months of the year, December – May. As such, Article 21 water is sometimes called "wet weather water". It is offered to contractors when there is ample water in the system, and the State publishes a notice to contractors when it is made available. Article 21 water is not available for carryover storage in SWP facilities, however, a change in point of delivery is possible with a separate agreement with DWR in order to store Article 21 water outside of a SWP contractor's service area. Notifications of Article 21 water availability come based on forecasting and existing hydrology, and the Article provides for the timely processing of requests by contractors for delivery. Demands are typically submitted for Article 21 water on a weekly basis.

The ability to take advantage of Article 21 water for SGPWA requires access to conveyance capacity in the California Aqueduct and available storage outside of San Luis Reservoir. Importantly, priority for conveyance within the SWP starts with Table A water and, as such, Article 21 water deliveries may be interrupted if those deliveries impact any contractor's Table A water delivery through a shared reach of the aqueduct. The Agency's location on the East Branch Extension of the aqueduct factors into the inherent conveyance priority limitations associated with Article 21 water.

The 2025 SWP Delivery Capability Report indicates that Article 21 availability will be more frequent, especially in very wet years. Between 2000–2020 Article 21 water was available in all but two years, however, during multi-dry year stretches such as 2008-2010 and 2014–2016 the amount of Article 21 water available was orders of magnitude smaller than in normal to wet years. In summary, Article 21 water requires opportunistic operational flexibility for storage and conveyance capacity in the aqueduct to maximize its intermittent availability. Because of this uncertainty, this RUWMP does not include Article 21 as a quantifiable part of SGPWA's water supply. Rather, SGPWA will continue to be opportunistic and access this supply as may best serve longer-term imported water policy objectives and groundwater basin needs. For instance, the Agency could look for banking options within other SWP Contractor service areas to take advantage of the Amendment 20 tools that allow storage of Article 21 water.

6.3.3 SGPWA Additional Imported Water Supplies

SGPWA has numerous other current and future water assets besides its Table A Annual Amount and Table A carryover supplies. These supplies are derived from the following items: City of Ventura contract, Yuba Accord, Nickel Agreement, San Bernardino Valley Municipal Water District Agreement, and Sites Reservoir Agreement. These additional water sources are described further below.

6.3.3.1 City of Ventura Table A Supply

The State Water Project Water Transfer Agreement (Agreement), entered into on April 26, 2022 by SGPWA and City of San Buenaventura (Ventura), secured the SGPWA a long-term

transfer of the Ventura's 10,000 acre-foot SWP Table A entitlement (Ventura Water).[11] Officially approved by DWR on December 29, 2022, the Agreement expires on December 31, 2042. This long-term transfer follows several short-term, one-year agreements (Prior Agreements) between the two agencies for the transfer and exchange of Ventura's Table A water. The Prior Agreements created an Outstanding Exchange Obligation (OEO), requiring SGPWA to return a total of 2,575 acre-feet of water to Ventura. This obligation is scheduled to be fulfilled in respective installments of 1,400, 675, and 500 acre-feet by 2028, 2029, and 2030. The Agreement also requires SGPWA to maintain at least 750 AF of OEO water available in its storage facilities or supply portfolio, ready for delivery should Ventura provide written request on or before April 1 of that delivery year.

A critical component of the Agreement revolves around Ventura's State Water Interconnection Project as Ventura currently lacks a physical connection to take delivery of SWP water.[12] The State Water Interconnection Project will enable delivery of SWP water by wheeling through Metropolitan Water District of Southern California and Calleguas Municipal Water District ("Calleguas") to Ventura. However, the terms of the Agreement will change significantly upon this project's completion:

- Before Completion: SGPWA maintains the right to the full amount of Ventura's annual Table A Allocation.
- After Completion: Ventura will gain the priority right – but not the obligation – to take delivery of up to 2,000 acre-feet per year of its Table A water, provided the annual DWR allocation is sufficient.

Notwithstanding these terms, Ventura staff represented that 2,000 acre-feet per year will be adequate to meet its water quality and supply needs, particularly since SWP water is expected to be its most expensive supply source.[13]

The Ventura Table A water supply, like all SWP supplies, are subject to reduction each year based on actual water supply availability as determined by DWR. The average Table A Allocation based on existing conditions is 54% of the Annual Table A Amount. For Ventura's Annual Table A Amount of 10,000 acre-feet, this results in an average yield of 5,400 acre-feet per year. Conveyance of Ventura water begins, like other SWP water, north-of-Delta, and

[11] Ventura has an agreement with Casitas Municipal Water District (Casitas) to receive a SWP water supply from Casitas' Annual Table A Amount (Table A) under its SWP contract. Ventura's Table A water supply is derived from a series of underlying agreements that tier from the Ventura County Watershed Protection District (VCWPD) SWP contract.

[12] https://www.cityofventura.ca.gov/1348/State-Water-Interconnection

[13] City of Ventura, Ventura Water Commission – Staff Report, "State Water Project Multi-Year Transfer Program with San Gorgonio Pass Water Agency", February 15, 2022. Presented in Ventura Water Commission Regular Meeting, February 22, 2022

travels down the California Aqueduct. Logistically, while Ventura's rights are tied to the West Branch (to Castaic Lake), SGPWA takes delivery of the water via the East Branch of the California Aqueduct, and subsequently the East Branch Extension to SGPWA's service area. This alternative delivery path – East Branch compared to West Branch – is generally limited only by the 29 cfs conveyance capacity in the East Branch during higher allocation years. Although Article 12(f) may apply to this water under some future scenario, the practical activities among SWP Contractors allows conveyance of various supplies so long as the total conveyance capacity is not exceeded.

SGPWA has the option to use Article 56 storage rights and capacity in San Luis Reservoir for Ventura Water through the Agreement. At the end of 2023, the Agency stored 4,178 acre-feet of Ventura Water in San Luis Reservoir. This added to the Agency's own Article 56 balance for the year (**Table 6-11**), bringing SGPWA's total available water in San Luis Reservoir for 2024 deliveries to 12,817 acre-feet. The Ventura Water supply is subject to the same DWR reclassification and operational criteria as SGPWA's SWP Contract supplies but active management by the SGPWA in coordination with DWR and State Water Contractors generally maintain availability of SWP water for delivery.

TABLE 6-11: RECENT TABLE A ALLOCATIONS OF VENTURA WATER (ACRE-FEET)

Year	SWP Contract Table A	Percent Allocation	Allocation Amount
2015	10,000	20%	2,000
2016	10,000	60%	6,000
2017	10,000	85%	8,500
2018	10,000	35%	3,500
2019	10,000	75%	7,500
2020	10,000	20%	2,000
2021	10,000	5%	500
2022	10,000	5%	500
2023	10,000	100%	10,000
2024	10,000	40%	4,000
2025	10,000	50%	5,000

As previously discussed, the Ventura Water Agreement expires in 2042, however, for purposes of this RUWMP, projected supply volumes assume the Agreement will be renewed or replaced with similar Table A supplies or an alternative that meets SGPWA's planning criteria. **Table 6-12** shows representative Ventura Water Table A supply in normal and five consecutive dry years. **Table 6-13** shows future availability of Ventura Water supply in multiple dry years across the RUWMP planning horizon.

TABLE 6-12: VENTURA SWP ALLOCATION FOR FIVE DRY YEARS, 2026-2030 (ACRE-FEET)

Year Type		Supply Available
Normal		4,300
Single Dry-Year		400
Five Consecutive Dry Years	2026	2,800
	2027	400
	2028	400
	2029	1,600
	2030	2,800

TABLE 6-13: FUTURE VENTURA SWP ALLOCATIONS BY YEAR TYPE FROM 2030-2050 (ACRE-FEET)

Year Type		2030	2035	2040	2045	2050
Normal		4,300	4,300	4,300	3,840	3,840
Single Dry Year		400	400	400	400	400
Five Consecutive Dry Years	Year 1	2,800	2,800	2,800	2,800	2,800
	Year 2	400	400	400	400	400
	Year 3	400	400	400	400	400
	Year 4	1,600	1,600	1,600	1,600	1,600
	Year 5	2,800	2,800	2,800	2,800	2,800

6.3.3.2 Nickel Agreement

SGPWA and Antelope Valley-East Kern Water Agency (AVEK) maintain a "take-or-pay" agreement for 1,700 acre-feet per year of non-project water, known as Nickel Water. The

agreement, dated July 7, 2017, expires on December 31, 2036. SGPWA holds a first right of refusal to renew the contract for an additional 20-year term through 2056.

Nickel Water originates from Nickel Family, LLC's (Nickel LLC) Kern River water rights, secured through a complex series of historical agreements involving La Hacienda, Inc., Nickel LLC, AVEK, Kern County Water Agency (KCWA), DMB Communities II LLC (DMBII), DMB Pacific LLC (DMB) and CV Communities LLC (CV). This non-SWP supply is considered highly reliable in all water year types and can be delivered directly to SGPWA's service area via the EBX, subject to the conveyance criteria governing the system.

The conveyance of Nickel Water is formally approved by a Letter Agreement (SWPAO #20011) between SGPWA, KCWA, AVEK, and the California Department of Water Resources dated April 24, 2020. KCWA makes 1,700 acre-feet of Nickel Water available at the Tupman delivery point, within Reach 12E of the SWP, just north of the Buena Vista Pumping Plant in Kern County. DWR then assumes delivery of the non-SWP water through the California Aqueduct's East Branch and EBX to SGPWA turnouts at Reach 4A and/or 4B. The delivery schedule is submitted in accordance with SGPWA's SWP Contract. Because Nickel Water is non-SWP water, its conveyance requires joint management by the Agency and DWR for conveyance and delivery. **Table 6-14** shows SGPWA Nickel Water deliveries since 2020. The supplemental amount of water delivered in 2023 included contract water not delivered to the SGPWA service area in 2022.

TABLE 6-14: NICKEL AGREEMENT WATER DELIVERIES SINCE 2020 (ACRE-FEET)

Year	Amount
2020	1,700
2021	1,700
2022	1,397
2023	2,008*
2024	1,700
2025	1,700

*308 acre-feet were stored from 2022 Nickel Water and delivered in 2023

SGPWA may consider the Nickel Agreement water supply always available in normal, single dry, and five consecutive dry years. The Nickel Agreement is a take or pay contract with no shortage provision that obligates AVEK to deliver the water in all year types. As previously discussed, the Nickel Water Agreement expires in 2036, however, for purposes of this RUWMP, projected supply volumes assume the agreement will be renewed or replaced with similar

contracted supply volumes. **Table 6-15** shows the SGPWA Nickel Agreement future water supply availability.

TABLE 6-15: FUTURE NICKEL WATER DELIVERIES BY YEAR TYPE, 2030-2050 (ACRE-FEET)

Year Type		2030	2035	2040	2045	2050
Normal		1,700	17,00	1,700	1,700	1,700
Single Dry Year		1,700	1,700	1,700	1,700	1,700
Five Consecutive Dry Years	Year 1	1,700	1,700	1,700	1,700	1,700
	Year 2	1,700	1,700	1,700	1,700	1,700
	Year 3	1,700	1,700	1,700	1,700	1,700
	Year 4	1,700	1,700	1,700	1,700	1,700
	Year 5	1,700	1,700	1,700	1,700	1,700

6.3.3.3 Yuba Accord Water

The SGPWA has historically supplemented its water asset portfolio by acquiring approximately 300 acre-feet of water annually from the Yuba County Water Agency (YCWA) under the 2008 Yuba River Accord. While a small component of SGPWA's overall supply, this water is a valuable asset due to its cost-effectiveness and high reliability, especially during dry and critically dry years. The Yuba Accord is a landmark settlement created to balance fishery protection on the lower Yuba River with local and statewide water supply needs.

On January 21, 2026 the SWRCB unanimously adopted a 25-year extension of the Yuba Accord agreement. SGPWA executed Amendment No. 7 to the Agreement.[14] Amendment No. 7 superseded the earlier Participation Agreements, extended the expiration date to December 31, 2050, outlined the method for establishing allocations and sharing of the water, and simplified the water storage components. Additionally, Amendment No. 7 updated the per unit costs of water with an approximate 17% increase, or 3.25% annually.

[14] Amendment No. 7 for the Supply and Conveyance of Water by the Department of Water Resources of the State of California Under the Dry Year Water Purchase Program Between the Department of Water Resources and the San Gorgonio Pass Water Agency.

The Yuba River Accord includes three major elements, all of which must be in place for the Yuba River Accord to become effective: (1) the Fisheries Agreement (dated November 3, 2007) to provide higher flows for fish in the lower Yuba River under certain conditions, (2) Conjunctive Use Agreements between Yuba and other Yuba County water districts for implementing a conjunctive use and water use efficiency program; and (3) the "Agreement for the Long-Term Purchase of Water from Yuba County Water Agency by the Department of Water Resources" (dated December 4, 2007) (Yuba Water Purchase Agreement). DWR purchases water under the Yuba Water Purchase Agreement to make water available for the Dry Year Water Purchase Program (Dry Year Program). The Dry Year Program uses the Yuba Water as the basis for a separate agreement that DWR controls and makes water available for purchase by State Water Project Contractors, including SGPWA. In 2008, SGPWA entered into an agreement with DWR as part of the Dry Year Program to acquire Yuba Water Purchase Agreement water. The water purchased under the Yuba Water Purchase Agreement is subject to losses associated with transporting it to SGPWA's service area through the State Water Project. The amount of Dry Year Program water available to DWR depends on the calculated Sacramento Valley Water Year Index. For the Yuba Water Purchase Agreement, each Water Year will be classified: (1) as "Wet," "Above-Normal," "Below Normal," "Dry" or "Critical," based on the Sacramento Valley Water Year Hydrologic Classification; or (2) as a "Conference Year." Conference Year means a Water Year for which the North Yuba Index is less than 500,000 acre-feet, calculated according to the procedures and formulas set forth in Exhibits 4 and 5 of the Yuba Accord Fisheries Agreement, and using the latest available forecasts for the Water Year. Between 75,000 AFY (Dry Years) and 140,000 AFY may be available to the group of Contractors depending on the Water Year Index. Contractors' share of the Yuba Accord Water is based on the proportion of the Table A of the 23 participants. If some SWP Contractors do not want to participate in a given year, the allocation to each Contractor is adjusted upward.

From 2009 through 2025, SGPWA purchased Yuba Accord Water eight times with average deliveries of about 280 AF. While the amount of water made available varies each year depending on hydrologic conditions, the Agency anticipates receiving an average future amount of approximately 300 AFY under the Dry Year Program. **Table 6-16** shows Yuba Accord Water deliveries since 2020. **Table 6-17** shows normal and dry year availability over the planning period.

TABLE 6-16: YUBA ACCORD WATER DELIVERIES, 2020-2025 (ACRE-FEET)

Year	Deliveries
2020	406
2021	213
2022	136
2023	0
2024	19
2025	6

TABLE 6-17: FUTURE YUBA ACCORD WATER DELIVERIES BY YEAR TYPE (ACRE-FEET)

Year Type		2030	2035	2040	2045	2050
Normal		400	400	400	400	400
Single Dry Year		100	100	100	100	100
Five Consecutive Dry Years	Year 1	300	300	300	300	300
	Year 2	100	100	100	100	100
	Year 3	100	100	100	100	100
	Year 4	200	200	200	200	200
	Year 5	300	300	300	300	300

6.3.3.4 San Bernardino Valley Municipal Water District Agreement

SGPWA entered the Surplus Water Sale Agreement with the San Bernardino Valley Municipal Water District ("SBVMWD Agreement") in June 2018. SBVMWD is a SWP contractor that holds an entitlement to 102,600 acre-feet under its Table A Annual Amount, per its 1960 SWP Contract. The SBVMWD Agreement entitles SGPWA to purchase up to 5,000 acre-feet of SWP entitlement each year with SBVMWD's express concurrence. The SBVMWD Agreement expires

on December 31, 2032, and there is no right of renewal. Nevertheless, SGPWA anticipates renewing this contract through the period covered by this UWMP or developing a similar supply.

The amount of water available under the contract varies each year and is subject to the "sole discretion" of SBVMWD whether the water will be made available for SGPWA to purchase. The water supply under this agreement may be available depending on SBVMWD's supply availability determination. The SBVMWD does not incorporate this potential supply into its water supply reliability determinations for all year types but considers the supply a component of its available transfer and exchange supplies and, when acquired, may be incorporated into its groundwater storage facilities.

SGPWA purchased 5,000 acre-feet of water from SBVMWD in 2025. The water was recharged into their basins and will return 4,250 acre-feet in a future year. This water is not incorporated into the SGPWA reliability assessment as it is intermittent water. Nevertheless, SGPWA manages this supply source as part of its portfolio to optimize imports that become managed groundwater. SGPWA expects to maintain and update this agreement in the future.

6.3.3.5 Water Transfers and Exchanges

SGPWA has carried out numerous short-term water transfers and exchanges with regional and state-wide partners to maximize supply reliability and provide beneficial returns using the flexibility of its assets. The access to conveyance that SGPWA has through the California Aqueduct makes strategic water transfers to meet service area demand possible across a statewide network of partners, while the SWP Contract provides abundant transfer and exchange opportunities that provide economic benefits for the Agency in times of surplus water. Importantly, short-term transfers and exchanges help support active management of SGPWA's and the retail agencies' water supply portfolios. These transfers and exchanges will continue to play a key part for SGPWA bolstering supply reliability across each planning horizon. **Table 6-18** shows the last five years of short-term incoming transfers with SWP Contractors, noting these were facilitated by Amendment No. 20 (Water Management Tools) between SWP Contractors. SGPWA also evaluates other exchange opportunities outside of SWP Contractor water but conveyed through the California Aqueduct for transfers and exchanges.

SGPWA also participates in the California water market by transferring water to other agencies when regional supplies are adequate and SGPWA SWP supplies can be beneficial to agencies outside of the SGPWA service area.

TABLE 6-18: RECENT SHORT-TERM WATER ACQUISITIONS VIA TRANSFER (ACRE-FEET)

Year	Transfer Amount
2021	0
2022	0
2023	2,134
2024	0
2025	3,000

6.3.4 Restrictions

The DWR and the State Water Project does not guarantee delivery of 100% of water allocations every year. Under the historic lowest 5% allocations, SWP allocations to SGPWA were 865 acre-feet for the year. This, in conjunction with the expected decrease in reliability of the SWP over time places a severe restriction on the reliability of SWP as imported water to recharge the managed groundwater supplies of the SGPWA and the SGP Region's retailers. While SGPWA's imported supplies are not limited to SWP water, the California Aqueduct and SWP infrastructure deliver the additional supplies mentioned in Section 6.3.3. All imported supplies are subject to available conveyance capacity and priorities as governed by Article 12(f) of SGPWA's SWP Contract. In addition to SWP system conveyance capacity restrictions, there are notable policy and regulation restrictions to SGPWA SWP supplies.

6.3.4.1 The Delta Reform Act

The Delta Reform Act (DRA) of 2009 established the Delta Plan and the Delta Stewardship Council.[15] Ultimately, the DRA requires water purveyors to reduce reliance on water supplies derived from the Sacramento-San Joaquin Delta and improve reliance on locally developed water sources (see this RUWMP's representation of compliance in Chapter 3). The Delta Plan is the governing document that guides the Delta's future and spawned the DRA regional self-reliance policies. The Delta Plan has two "co-equal goals": (1) providing a more reliable water supply for California; and (2) protecting, restoring, and enhancing the Delta ecosystem.

[15] California Water Code Section 85225

Specifically, the urban purveyors should demonstrate consistency with Delta Plan Policy WR P1 – Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (WR P1).[16] WR P1 subsection (a) states that:

Water shall not be exported from, transferred through, or used in the Delta if all of the following apply:

1) One or more water suppliers that would receive water as a result of the export, transfer, or use have failed to adequately contribute to reduced reliance on the Delta and improved regional self-reliance consistent with all of the requirements listed in paragraph (1) of subsection (c);

2) That failure has significantly caused the need for the export, transfer, or use; and

3) The export, transfer, or use would have a significant adverse environmental impact in the Delta.

The DRA is relevant to SGPWA's water asset portfolio and its retailers' water asset portfolios because the DRA's rules require reduced reliance on water supplies derived from the Delta in favor of locally developed water supplies. The methodology needed to comply with DRA's regulatory requirement as noted in the policy is a reduction in "the percentage of water used from the Delta watershed."

6.3.4.2 Healthy Rivers and Landscapes

The State Water Board is responsible for adopting and updating the Water Quality Control Plan for the San Francisco Bay/Sacramento–San Joaquin Delta Estuary (Bay-Delta Plan), which establishes water quality control objectives and flow requirements needed to provide reasonable protection of beneficial uses in the watershed. The State Water Board has been engaged for many years in updating the Bay-Delta Plan.

The Bay-Delta Plan is being updated through phases. Phase 1 is updating the Bay-Delta Plan objectives for the San Joaquin River and its major tributaries and the southern Delta salinity objectives. Phase 2 is updating the objectives for the Sacramento River and Delta and their major tributaries. (Plan amendments). On December 12, 2018, through State Water Board Resolution No. 2018-0059, the State Water Board adopted the Phase 1 Plan amendments and Final SED establishing the Lower San Joaquin River flow objectives and revised southern Delta salinity objectives. On February 25, 2019, the Office of Administrative Law approved the Plan amendments. This plan requires an adaptive range of 30-50 percent of the unimpaired flow to be maintained from February through June in the Stanislaus, Tuolumne, and Merced Rivers,

[16] Cal. Code Regs., tit. 23 Section 5003.

with a starting point of 40 percent of the unimpaired flow. During this same time period, the flows at Vernalis on the San Joaquin River, as provided by the unimpaired flow objective, are required to be no lower than a base flow of 1,000 cubic feet per second (cfs), with an adaptive range between 800 and 1,200 cfs, inclusive.

The State Water Board is also considering Phase 2 Plan amendments focused on the Sacramento River and its tributaries, Delta eastside tributaries (including the Calaveras, Cosumnes, and Mokelumne rivers), Delta outflows, and interior Delta flows. Staff is recommending an adaptive range of 45-65 percent Unimpaired Flow (UIF) objective with a starting point of 55 percent. Once the State Water Board adopts Phase 2 Plan amendments, the Board will need to conduct hearings to determine, consistent with water rights, water users' responsibilities for meeting the objectives in both Phase 1 and 2. At this time, the potential impacts to the SWP are unknown but this objective would have a large impact on water users in the Phase 2 planning area.

The Bay-Delta Plan's Healthy Rivers and Landscapes program, implemented through Voluntary Agreements (VAs), establishes specific "forgone export" requirements that would directly restrict State Water Project deliveries to south-of-delta contractors. Under these agreements, DWR and the Bureau of Reclamation must reduce exports from key Delta pumping facilities (Jones Pumping Plant and Clifton Court Forebay) based on water year types. The required export reductions range from zero in critical and wet years to 125,000 acre-feet in dry and below normal years, and up to 175,000 acre-feet in above normal years. These forgone exports are designed to ensure that additional upstream flows provided under the VAs actually reach the Delta as outflow rather than being captured by the export facilities.

The restriction mechanism works by establishing "reference conditions" representing pre-VA baseline operations, then requiring that SWP and CVP operations avoid exporting both these reference flows and the new additive VA flows. This creates a complex accounting system where south-of-delta water contractors would experience reduced deliveries not only from the direct export limitations, but also from the operational constraints needed to ensure VA tributary flows bypass the pumps and contribute to Delta outflow. The program includes detailed daily and monthly tracking requirements to verify that the Projects are indeed forgoing exports rather than simply capturing the additional upstream flows, effectively prioritizing ecosystem benefits over south-of-delta water supply reliability.

The water supply reliability projections described in this RUWMP reflect characterizations of water supplies and demands as they exist based upon reasonably available information. Although the Plan, HRL Program, and post-Plan water management adjustments could change UWMP water supply reliability projections, the water supply implications are not yet suitable for analytical integration into the current water supply reliability projections for this UWMP iteration. Once the Plan or HRL Program is adopted, and post-adoption implementation actions become better known, the projections for urban water supply reliability can be reasonably calculated. It is anticipated that the 2027 through 2030 iterations

of Annual Assessments will guide urban purveyors in assessing near term impacts of the Plan on water supply reliability and generate useful information that can be incorporated into the next RUWMP update in 2030.

6.3.5 Managing Supply Reliability Risks

SGPWA's water supply reliability is anchored by a diversified portfolio that includes State Water Project allocations, imported supplies, and strategically managed storage assets. This portfolio provides important flexibility in responding to hydrologic variability, regulatory uncertainty, and changing operational conditions. At the same time, reliance on imported supplies introduces interdependencies that require proactive and ongoing supply risk management.

As a State Water Project contractor and wholesale water importer, SGPWA manages risks associated with long-term changes in imported water reliability, evolving regulatory constraints, and increasing climate-driven variability. Maintaining access to imported supplies and supporting investments that enhance system resilience are central components of SGPWA's strategy to ensure reliable deliveries to its member agencies over the planning horizon.

Despite the benefits of a diversified portfolio, SGPWA faces a range of supply-related risks, including operational and regulatory constraints on the State Water Project, climate change impacts on hydrology, extended drought conditions, seismic vulnerability, and other emerging challenges. Addressing these risks requires comprehensive assessment and participation in regional and statewide initiatives that are intended to stabilize and improve the reliability of California's imported water systems.

6.3.5.1 Delta Conveyance Project

The Delta Conveyance Project (DCP) is a proposed project by DWR to mitigate lost supply to the SWP associated with transporting water through the Sacramento-San Joaquin Delta (Delta). SWP contractors situated south of the Delta are exposed to multiple risk scenarios for long-term SWP supplies, including previously discussed regulatory compliance statutes. Additional mitigation against other water supply risks driven by rising sea levels, earthquakes, progressive risk of levee failures, and extreme drought and flood are also identified as DCP benefits. Continuation of existing operation of the Delta is expected to increasingly expose water users that depend on water exported from the Delta to risks of interrupted water supply and decreasing water supply reliability over time. In short, the DCP is a significant risk mitigation component to help overcome uncertainties associated with conveying SWP water through the Delta.

The DCP does not increase water rights associated with the SWP but rather would restore losses caused by current physical and regulatory issues and mitigate against future changed

conditions affecting SWP exports by adding a new point of diversion in the northern Delta. The Final Environmental Impact Report (EIR) for the DCP was certified by DWR in December 2023 and a Change in Point of Diversion Petition was filed with State Water Resources Control Board (SWRCB) February 22, 2024.

SGPWA is an investor and participant in the DCP. The investment costs associated with SGPWA's role are to fund the work plan and reserve capacity space in the project. SGPWA's investment in the DCP is 2% of project capacity and should provide better access to SWP supplies in normal and wet years, as well as opportunities to deliver alternative planned supplies as they become available to SGPWA. SGPWA's participation in the DCP is a safeguard for long-term supply reliability for the Region and its critical imported water supply.

6.3.5.2 Sites Reservoir

SGPWA became a participating agency in the Sites Project Authority Joint Exercise of Powers Agreement in 2019. The Sites Reservoir Project is a proposed 1.5-million acre-foot off-stream storage reservoir located on the western side of the Sacramento Valley near the town of Maxwell. The project would divert excess flows from the Sacramento River during high-flow periods, store them in the reservoir, and release water during drier periods. The project is intended to improve statewide water supply reliability while also providing environmental, flood management, and recreational benefits.

The Sites Project includes 30 participating entities, including SGPWA and several State Water Project contractors, with additional agencies currently on a waitlist. Under existing conditions, Sites Reservoir is expected to provide approximately 240,000 acre-feet of additional average annual deliveries to participating agencies.

Since SGPWA's initial commitment, the project has advanced through major regulatory and planning milestones, including securing water rights approvals subject to final refinements. Current planning assumptions indicate construction would begin in 2027 with full operations commencing in 2033. The project is still subject to completion of permitting, financing, and construction activities.

The Sites Reservoir Project is structured as a beneficiary-pays partnership with an estimated total cost between $6.2 billion and $6.8 billion. Funding commitments include $1.094 billion from the State of California through Proposition 1 for public benefits, approximately $780 million in federal funding through the U.S. Bureau of Reclamation and related programs, and a pending low-interest EPA WIFIA loan. The remaining project costs are being financed by

participating local water agencies in proportion to their requested share of storage capacity.[17]

SGPWA currently holds 14,000 shares in the Sites Reservoir Project, representing approximately 6.2 percent of the active storage allocated to Project Agreement Members (87,276 acre-feet). Beaumont-Cherry Valley Water District entered into a cost sharing agreement with SGPWA for 4,000 of these shares, with SGPWA retaining the remaining 10,000 shares. This investment provides SGPWA with long-term access to a proportional share of stored water and represents a significant component of the agency's future supply portfolio.

As a participating agency, SGPWA participates in project governance through representation on the Reservoir Committee, which works with the Sites Project Authority Board to establish operating budgets, approve expenditures, and oversee project implementation. SGPWA's continued participation in the Sites Reservoir Project is a critical long-term investment in regional water supply reliability and drought resilience.

Figure 6-3 shows the indicated project timeline.

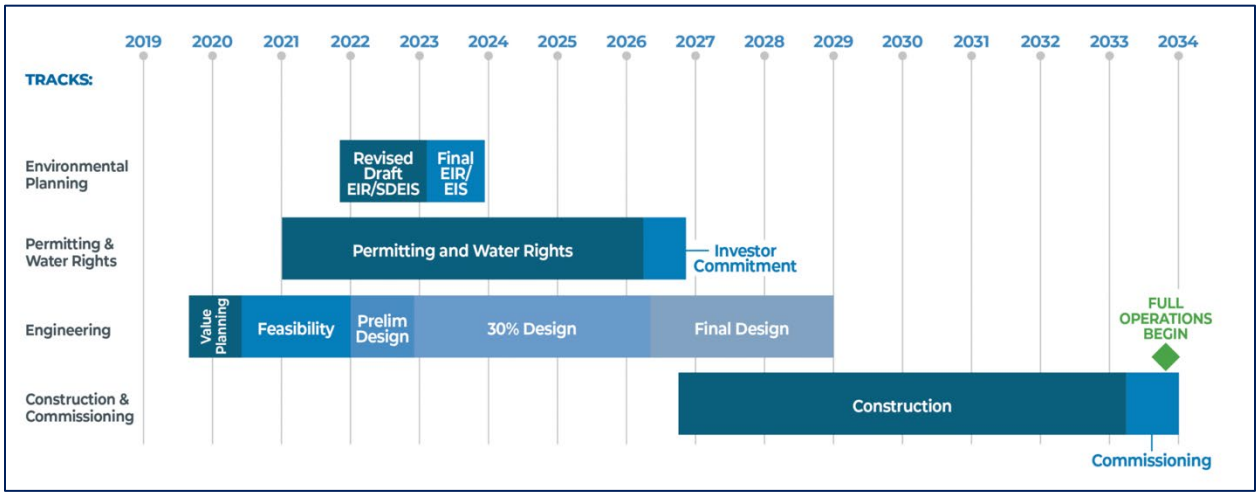


FIGURE 6-3: SITES RESERVOIR PROJECT TIMELINE (SITES PROJECT AUTHORITY)

6.3.5.3 Sites Reservoir – Modeled Supplies

San Gorgonio Pass Water Agency's (SGPWA) participation in the proposed Sites Reservoir Project was evaluated using CalSim 3 modeling results. The model simulates reservoir operations, surface water losses, and deliveries to project participants under a range of hydrologic conditions.

[17] Detailed information can be found on the Sites Project Authority website and in project documents and resources: https://sitesproject.org/

Under long-term average conditions, total releases from Sites Reservoir associated with SGPWA's participation range from approximately 12.8 to 14.4 thousand acre-feet per year (TAF). These releases represent the volume of water discharged from storage into the system to support project operations. Of the released water, deliveries to SGPWA average approximately 10.5 to 10.7 TAF, reflecting the portion of releases that can be physically diverted and credited to the Agency after accounting for operational and conveyance constraints. These delivered volumes represent SGPWA's usable supply from Sites Reservoir and are the values used for UWMP supply accounting.

Modeled net evaporation and precipitation losses at Sites Reservoir average approximately 1.6 to 1.7 TAF per year. This term represents reservoir surface evaporation offset by direct precipitation and constitutes a project-level loss that reduces total water available for release. These losses are not allocated directly to SGPWA but are reflected implicitly in the modeled deliveries.

Model results indicate that deliveries to SGPWA vary by hydrologic year type, with reduced deliveries occurring in wetter year types and increased deliveries in dry and critically dry conditions, consistent with the intended operation of off-stream storage to capture surplus flows and improve supply reliability. Overall, the Sites Reservoir Project provides a meaningful supplemental supply that enhances regional water supply flexibility and reliability for SGPWA under a broad range of hydrologic conditions.

Table 6-19 shows the future availability of Sites Reservoir water in the SGPWA's service area and incorporates both the SGPWA and Beaumont-Cherry Valley potential supplies.

TABLE 6-19: FUTURE AVAILABILITY OF SITES RESERVOIR WATER BY YEAR TYPE (ACRE-FEET)

Year Type		2030	2035	2040	2045	2050
Normal		0	10,500	10,500	10,500	10,500
Single Dry Year		0	21,900	21,900	21,900	21,900
Multi-Year Drought	Year 1	0	16,900	16,900	16,900	16,900
	Year 2	0	11,100	11,100	11,100	11,100
	Year 3	0	11,100	11,100	11,100	11,100
	Year 4	0	19,500	19,500	19,500	19,500
	Year 5	0	21,900	21,900	21,900	21,900

6.3.6 Groundwater Management and Basin Description

Managed groundwater serves as the keystone to SGPWA's water asset portfolio. Functioning as the regional wholesaler, the SGPWA imports surface water supplies to offset and replenish groundwater extractions and ensure compliance with regulatory requirements. A key component of this strategy is the Beaumont Basin Adjudicated Area, whose vast storage capacity is essential for recharging and holding these imported supplies. The storage capacity of the Beaumont Basin exceeds the total annual demand for water at build-out and this storage capacity is not likely to be a limiting factor.[18] Other minor sources, such as local surface runoff, stormwater, and recycled return flows, also contribute to managed recharge supplies. Together, these native groundwater supplies, recharged groundwater supplies, and other local surface supplies are aggregated as "Regionally Managed Supplies."

Groundwater is the primary water supply source for SGPWA and its local retail agencies. Fundamentally, SGPWA imports surface water to its service area to recharge the Region's underlying groundwater basins. Managed groundwater and local groundwater comingle in the Region's various subbasins and may remain banked underground or extracted. Due to concerns about long-term sustainability and historical overdraft, where more water is pumped out than can be naturally replenished, the area is subject to the Sustainable Groundwater Management Act (SGMA), with several local Groundwater Sustainability Agencies (GSA) responsible for the management of the corresponding subbasin. Additionally, the Beaumont Basin is adjudicated and a central groundwater unit within the Region.

Geographically, SGPWA is underlain by portions of two large groundwater basins, the Upper Santa Ana Valley Basin and Coachella Valley Basin. From these basins, three specific subbasins fall within SGPWA's boundaries: (1) Upper Santa Ana Valley – Yucaipa Subbasin; (2) Upper Santa Ana Valley – San Timoteo Subbasin; (3) Coachella Valley – San Gorgonio Pass Subbasin. The latter two subbasins are in turn divided into water storage units, locally called 'basins.' Chapter 2 of this RUWMP details each groundwater basin, subbasin, and respective management framework in the SGPWA service area. The coordinated management activities of each subbasin are additionally described in Chapter 3 as they relate to water supply within the Region.

6.3.6.1 Groundwater Basins Management Activities

There are numerous groundwater management actions occurring in the SGPWA jurisdictional boundary that impact regional supply activities. These management actions include

[18] Beaumont Basin Watermaster, 2025 Draft Consolidated Annual Report and Engineering Report, Section 2.3 "Storage Applications and Agreements," p. 2-13

implementation of the Beaumont Basin Adjudication (Adjudication) and compliance with the SGMA. **Figure 6-4** shows the Beaumont Basin Adjudicated Area in relation to the DWR Bulletin 118 groundwater subbasins.

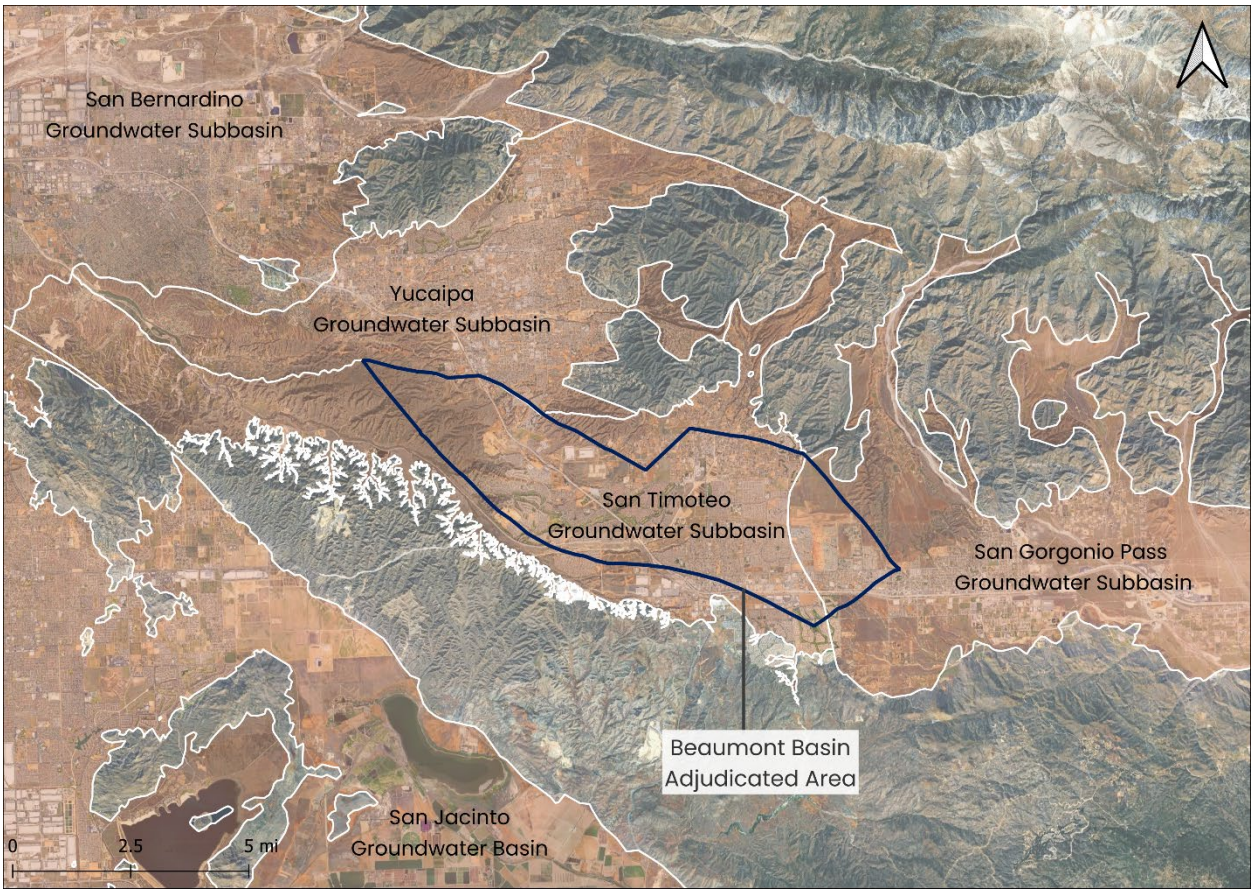


FIGURE 6-4: BEAUMONT BASIN ADJUDICATED AREA BOUNDARY RELATIVE TO DWR BULLETIN 118 SUBBASINS

There are three groundwater sustainability agencies (GSAs) in the San Gorgonio Subbasin. The Desert Water Agency acts as the exclusive GSA of the easternmost edge of the San Gorgonio subbasin but that GSA lies outside the SGPWA service area. Verbenia GSA covers one square mile in the eastern portion of the subbasin – the San Gorgonio Pass GSA encompasses the remainder – both of those GSA's are within the SGPWA service area boundary. Additionally, the Yucaipa GSA is located in the northwestern part of the SGPWA service area A characterization of each GSA and relevant groundwater management frameworks are provided in both Chapter 2 and Chapter 3.

6.3.6.2 SGPWA Groundwater Storage

SGPWA stores imported water supplies in the Beaumont Basin and anticipates storing water in additional basins as appropriate agreements and operating protocols are developed. In 2025, SGPWA's total stored water in the Beaumont Basin was approximately 2,518.6 acre-feet.

SGPWA entered into the Beaumont Basin Watermaster Groundwater Storage Agreement ("Agreement") in 2018, consistent with its storage allocation under the Beaumont Basin Adjudication. The Agreement allows SGPWA to store up to 10,000 acre-feet of water in the Beaumont Basin. Although the Agreement has no expiration date, the Beaumont Basin Watermaster may unilaterally terminate it with 180-day written notice. There is no indication that termination is anticipated. Accordingly, the ability to store up to 10,000 acre-feet is assumed into the future. **Table 6-20** summarizes SGPWA's groundwater storage accounts in 2025.

TABLE 6-20: SGPWA STORED GROUNDWATER (ACRE-FEET)

Calendar Year 2025			
Agency/Party to the Judgment	**Beginning**	**Ending**	**Change**
San Gorgonio Pass Water Agency	1,595	2,519	924

SGPWA will continue to store water supplies in each groundwater basin to the extent allowed by applicable agreements and basin conditions. Additional groundwater storage may occur in the Yucaipa, San Timoteo, and San Gorgonio Groundwater Basins as infrastructure and operational constraints allow water supplies to be conveyed to these basins.

6.3.6.3 Recycled Water

SGPWA does not directly produce or supply recycled water. However, the Agency is a key supporter of projects designed to augment and diversify the regional water supply portfolio. The Region's recycled water supplies are provided by local retail agencies, and these resources are integral to any comprehensive assessment of regional water assets due to the interconnected nature of the system (e.g., SGPWA's imported water becomes recycled water developed by local retailers). A description of regional recycled water activities for retailers within the SGPWA area is provided in Chapter 3.

Although SGPWA does not manage recycled water facilities, incorporating recycled water output into the regional supply portfolio is essential for navigating the evolving regulatory landscape impacting the Agency and local retail agencies.

6.3.6.4 Desalination Opportunities

The California UWMP Act requires discussion of potential desalinated water opportunities [Water Code §10631(g)]. Groundwater, generally, is considered excellent across the SGPWA service area, thus limiting the utility of desalination facilities. However, certain areas of the service area are impacted by total dissolved solids, presenting an opportunity for individual

retail agencies to develop and operate relevant facilities. YVWD, for example, has plans to expand its recycled water portfolio through the addition of desalted recycled wastewater for non-potable uses. Additional brackish groundwater are available in parts of the Agency service area, however, given their depth and lack of necessity, such supplies, and desalinated water in general, are not considered viable nor does SGPWA have plans to develop such supplies over the planning horizon.

6.3.6.5 Total Water Supplies

SGPWA has sufficient imported water assets to meet the service area demands in coordination with the retail suppliers it serves and their various water assets and facilities. As described previously, regionally secured water assets include a viable mix of acquired supplies, including long-term SWP Contract water, reliable long-term supplemental water agreements, and considerable future supply portfolio augmentation in Sites Reservoir and the DCP. These imported supplies supplement native groundwater and recycled water to provide regional reliability and resiliency. Importantly, SGPWA's imported water that is not consumed, recharges the groundwater basins and is integral to the reuse operations in the service area. In other words, SGPWA's water is used multiple times throughout its service area. Short-term transfer and exchange activities also shore up supplies to meet long-term demands and provide economic benefits to the Agency and the Region. These short-term transfer activities are one of the principal Agency strategies that supports tactical supply management that benefits all retail agencies and groundwater sustainability activities. In addition, these short-term actions can lead to long-term water supply opportunities displayed by the contract with the City of Ventura. SGPWA proactively manages imported supply by meeting long-term demands for the Region. As noted in individual water asset subsections, some agreements expire during this RUWMP planning horizon. SGPWA anticipates renewing or replacing these assets, while maximizing short-term transfer opportunities in coordination with retail agencies to augment recharge and expand storage opportunities.

A summary of SGPWA's imported water supply portfolio is shown in **Table 6-21**. SGPWA does not anticipate providing all the supplies through the collective water assets that it controls, but it will work closely with the retail agencies and other interests to manage water assets so that the regional water supplies can meet the projected regional water demands.

TABLE 6-21: SGPWA IMPORTED WATER SUPPLY PORTFOLIO SUMMARY

Source	Annual Amount	Description
State Water Project – Table A	17,300	Maximum Table A contract amount; actual allocations vary (54% average in the 2025 DCR)
State Water Project – Article 56	Variable	Stored SWP allocation in San Luis Reservoir (~2,200 acre-feet average in storage 2015-2025)
State Water Project – Article 21	Variable	Intermittent SWP surplus water when available
State Water Project – Ventura Table A	10,000	Maximum Table A contract amount; actual allocations vary (54% average in the 2025 DCR)
Nickel Water	1,700	Highly reliable in all year types
Yuba Accord Water	300	Dry year water
Short-term Water Transfers	Variable	Opportunity-based (recent transfers ~3,000 acre-feet per year)
Sites Reservoir	Variable	Store water in favorable hydrologic conditions, deliver as needed, primarily in dry years (~10,000 acre-feet per year average)

6.3.7 Water Quality

This section focuses on the quality of State Water Project supplies imported into the Region and recharged into the various portions of the groundwater basins and adjudicated areas throughout the San Gorgonio Pass Region. The discussion of groundwater quality is included in Chapter 3.

Water quality is a critically important consideration in the SGPWA service area. Because all local consumer water supplies rely on blended groundwater sources, the SGPWA plays a vital role in resource management by delivering imported surface supplies to recharge regional groundwater basins. SGPWA provides imported State Water Project water supplies to the groundwater basins in its service area

The water quality of imported surface water conveyed through the California Aqueduct is monitored by the DWR Division of Operations and Maintenance. DWR maintains 16 continuous water quality monitoring stations located throughout the SWP and data collected from these stations is regularly uploaded to the California Data Exchange Center (CDEC). The parameters for monitoring SWP water quality include electrical conductivity, water

temperature, turbidity, pH, and fluorescence. SWP water quality changes as the water moves from the precipitation and snowmelt runoff to its termination areas in Southern California. As such, the water quality measurements at each station are important for purposes of tracking water quality constituents in the SWP system.

Of the 16 water quality monitoring stations, "Devil Canyon Afterbay" is located closest to San Gorgonio Pass Water Agency's turnouts. **Figure 6-5** shows the measured publicly available electroconductivity since 2015. **Figure 6-6** shows the measured publicly available temperature information since 2015, and **Figure 6-7** shows the measured publicly available turbidity at Devil Canyon since 2015. **Figure 6-8** shows pH at Devil Canyon since 2015. Finally, **Figure 6-9** shows fluorescence at Pacheco Pumping Plant since 2015. SWP water quality, based on the illustrated figures, falls within normal parameters.

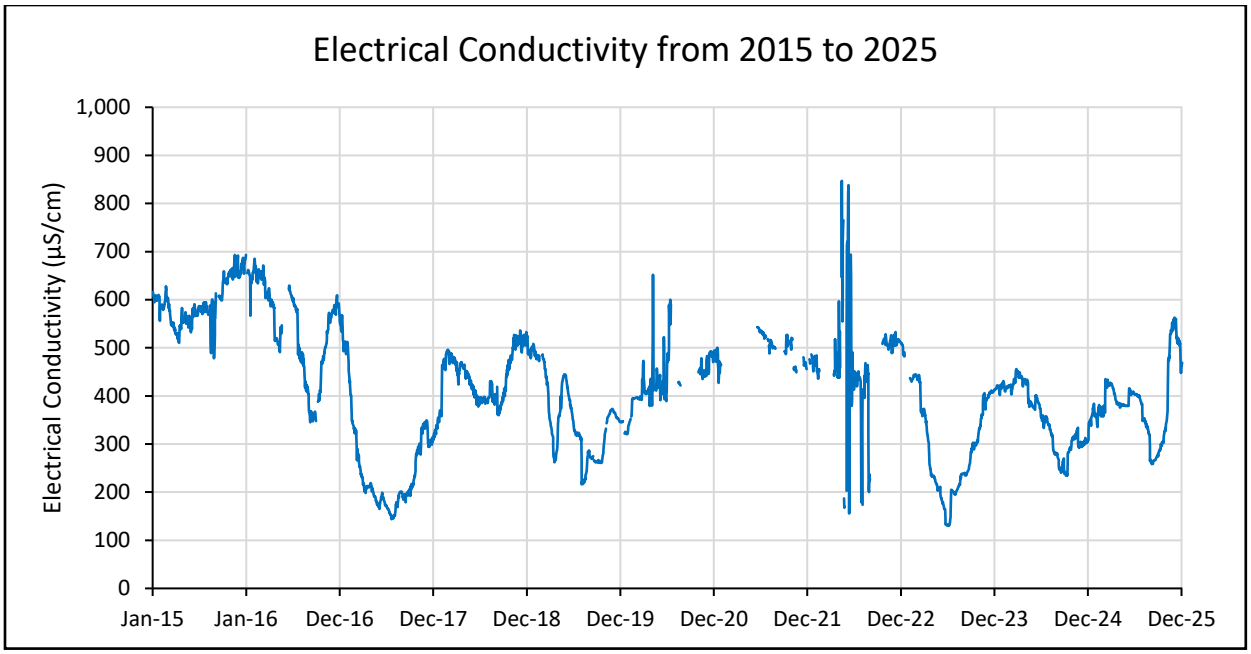


FIGURE 6-5: DEVIL CANYON ELECTRICAL CONDUCTIVITY (2015-2025)

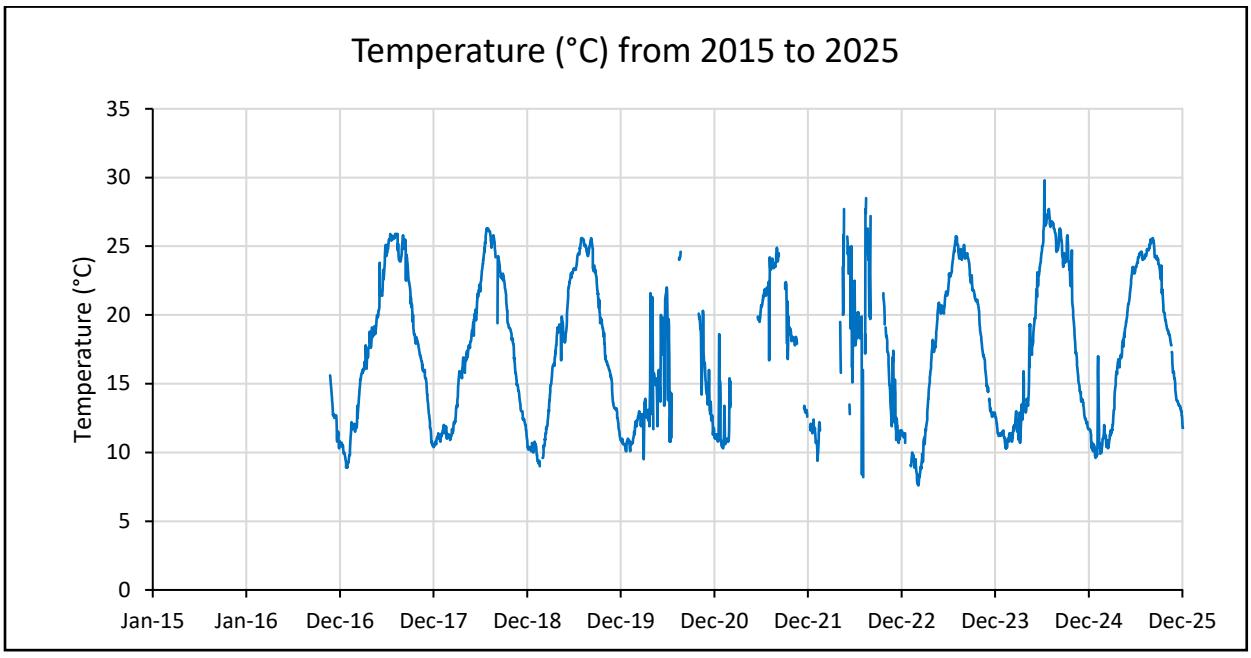


FIGURE 6-6: DEVIL CANYON WATER TEMPERATURE (2015-2025)

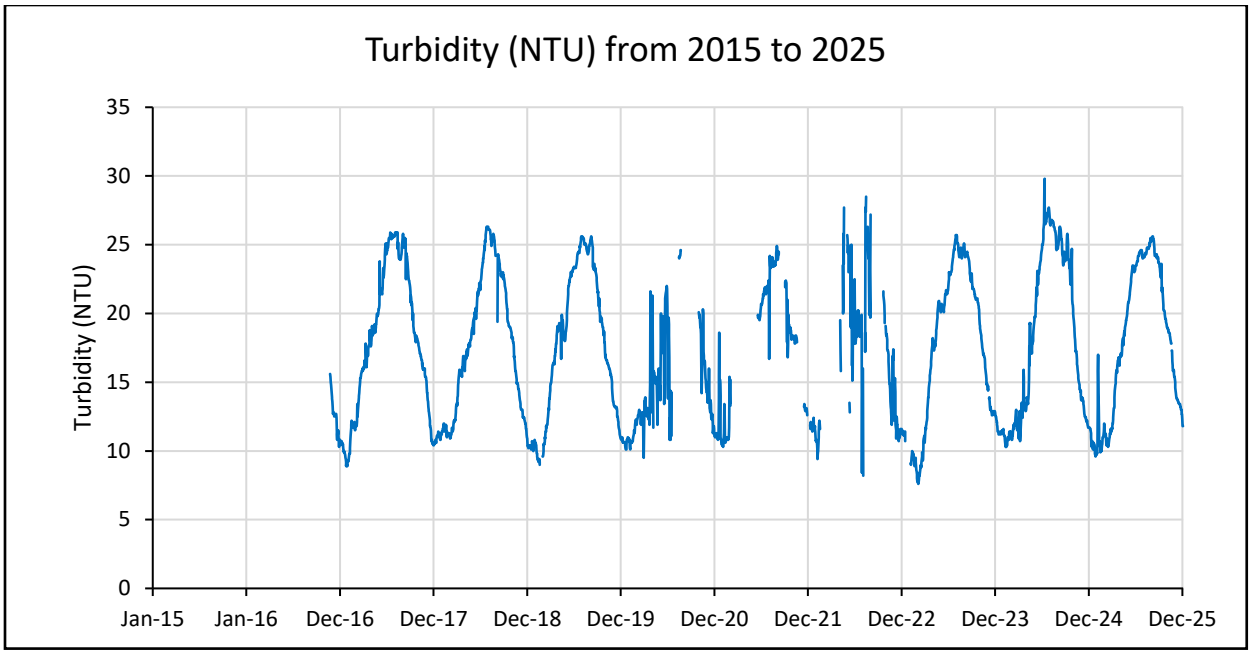


FIGURE 6-7: DEVIL CANYON TURBIDITY (2015-2025)

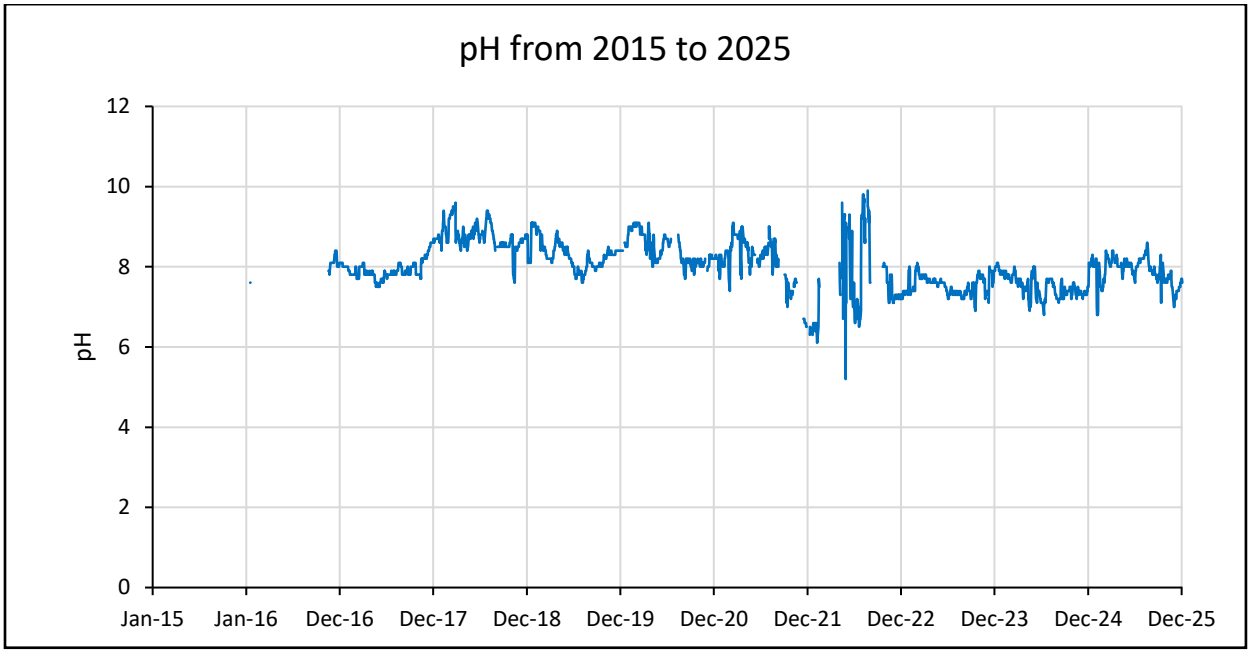


FIGURE 6-8: DEVIL CANYON PH (2015-2025)

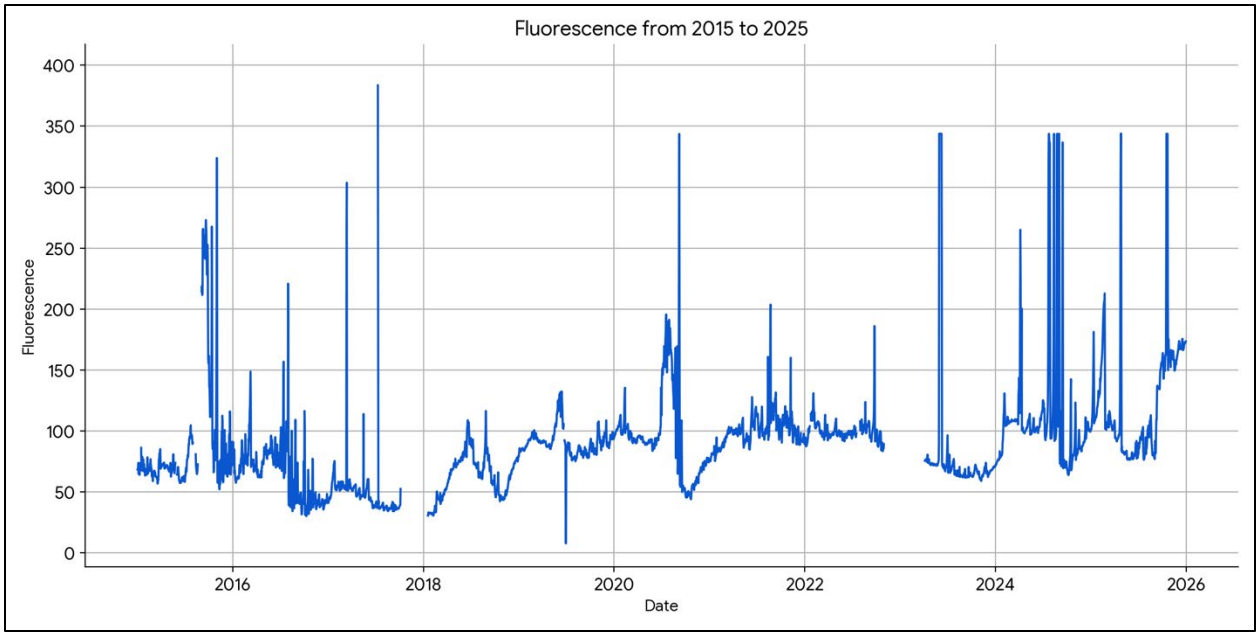


FIGURE 6-9: PACHECO PUMPING PLANT FLUORESCENCE (2015-2025)

Section 6.4
Water Use Characterization

Understanding water use characteristics throughout the Region is fundamental to enabling the San Gorgonio Pass Water Agency to manage its water supplies in a reliable and cost-effective manner. As described in the previous section and Chapter 2, SGPWA imports water supplies to the Region to support the urban, rural, industrial, recreational, and other users. A characterization of regional water use can be found in Chapter 4, with key points summarized below.

Because SGPWA's wholesale service area boundary is equivalent to the regional boundary described throughout this RUWMP, the water use characterization applicable to SGPWA's wholesale planning is identical to the regional water use characterization presented in Chapter 4. In 2025, total regional water use was approximately 28,200 acre-feet per year (AFY), with the four large retailers (Beaumont-Cherry Valley Water District, South Mesa Water Company, City of Banning, and Yucaipa Valley Water District) collectively accounting for roughly 24,900 AFY, or approximately 88 percent of regional demand. Regional water use is projected to grow to approximately 30,800 AFY by 2030 and reach approximately 38,600 AFY by 2050, driven primarily by population growth in the Beaumont and Banning areas. Due to the Region's high desert climate, demand forecasts do not differ materially between normal and dry conditions, as users in the service area do not rely on precipitation for irrigation. Chapter 4 presents the current and projected water use and climate change considerations, while Regional demand management measures are detailed below.

6.4.1 Demand Management Measures

SGPWA has implemented a broad set of demand management measures (DMMs) to promote efficient use of water resources and support long-term regional water supply reliability. Because SGPWA functions primarily as a wholesale water supplier, State Water Project contractor, and regional groundwater management agency, its DMMs differ from those implemented by retail water suppliers. SGPWA does not generally provide direct retail water service or regulate day-to-day customer water use within the service areas of participating urban water retail suppliers. Instead, SGPWA's DMMs focus on regional conservation coordination, public education and outreach, technical support, water use

efficiency programs, regional supply planning, and management of imported and stored water supplies.

SGPWA's DMMs are implemented in coordination with participating retail agencies, small water systems, rural domestic users, and other regional water users. These efforts complement the retail-level DMMs described in the individual retailer chapters of this RUWMP and help provide a consistent regional framework for water conservation, efficient water use, and long-term reliability planning.

SGPWA will continue to implement and refine its DMMs to support efficient water use, regional water supply reliability, and compliance with applicable State requirements. Additional information regarding SGPWA's foundational, recent, and planned DMM activities is provided in the following subsections.

SGPWA's foundational DMMs remain generally consistent with those described in the 2020 UWMP and continue to serve as the basis for regional conservation and water use efficiency efforts. These measures include metering of imported water deliveries, public education and outreach, conservation program coordination and staffing support, distribution system asset management for SGPWA-owned facilities, and wholesale supplier assistance.

6.4.1.1 Metering

As a wholesale supplier, SGPWA does not deliver water directly to end-users or maintain a traditional metered distribution system. Instead, SGPWA replenishes regional groundwater basins by recharging imported surface water at several locations throughout its service area, as detailed in Chapter 3. While SGPWA meters imported water deliveries at the turnouts, comprehensive water usage data is captured by the Region's retail water agencies, who maintain metered connections for all individual service connections.

6.4.1.2 Public Education and Outreach

SGPWA prioritizes public outreach as a cornerstone of its conservation strategy. Through its website, the Agency offers free access to regional and national resources such as 'Save Our Water' and 'EPA WaterSense.' These digital assets are complemented by hands-on community engagement, including a public demonstration garden, social media campaigns, and dedicated school education programs designed to promote sustainable water use throughout the service area.

The Agency also hosts free regional community workshops focused on outdoor irrigation and drought-resistant landscaping. These waterwise planting workshops, offered in partnership with the Inland Empire Resource Conservation District (IERCD) and local parks and recreation agencies, are led by UC Master Gardeners and cover topics including recommended drought-resistant plants for the Region, proper installation techniques, water-efficient irrigation options, plant grouping based on watering needs, and pruning and care. Workshops

are hosted at accessible community venues throughout the service area, such as in Beaumont and Banning, and are open to the public at no cost.

6.4.1.3 Water Conservation Program Coordination and Staffing Support

The SGPWA has partnered with the IERCD to manage a robust Water Conservation education program since 2014. The program is tailored for students in kindergarten through 12th grade in the Region's three school districts. Using a physical tabletop groundwater model, purchased by the Agency, IERCD educates students on local groundwater, the water cycle, groundwater recharge, the source of their water supply, and the volume required for daily activities and food production. Each session runs approximately 50 to 60 minutes and incorporates a hands-on activity. Schools may schedule the program at no cost through the IERCD.

6.4.1.4 Distribution System Asset Management

SGPWA imports water into the Region for recharge to the local groundwater basins as described in Chapter 2 and Chapter 3. Systems are operated in a manner that meets regulatory requirements and, where appropriate, use Supervisory Control and Data Acquisition ("SCADA") to remotely monitor and manage facilities.

6.4.1.5 Wholesale Supplier Assistance

SGPWA supports its retail agencies efforts for implementing conservation programs and strategies through collaboration and coordination with other managers and community leaders. SGPWA is working on a more formalized supplier assistance program to help assure the retailers have the needed tools and support to continue water conservation efforts. These new efforts will be vital to helping the Region meet forthcoming water use objectives imposed under California Water Code §10609 et seq.

In addition to coordination with its primary retail agencies, the Agency administers a Small Water Systems Program to assist smaller water retailers with modernizing their water infrastructure. Through a contract with the California Rural Water Association, SGPWA provides technical support for a range of improvements. These include:

- Leak detection
- Water main replacements
- Water reservoir siting and construction
- Source capacity studies
- Needs assessment studies

- Valve replacements
- Asset management plans
- GIS water system mapping
- Production well siting and construction

The Agency also operates a "Gap Funding" program that provides short-term loans to small water systems to enable them to accept grant awards that require upfront payment prior to reimbursement. SGPWA has also pursued funding for a turf removal program targeted at local homeowners' associations. Although the Agency was not awarded the grant it applied for, turf removal remains a conservation priority that SGPWA has sought to advance since the previous urban water management plan.

6.4.1.6 Recent DMM Activities

Since the 2020 UWMP, SGPWA has continued to implement regional conservation, education, and coordination activities. These efforts have included continued public outreach, regional conservation messaging, coordination with participating retail agencies, support for conservation programs, and development of updated regional planning analyses through the 2025 RUWMP.

6.4.1.7 Planned DMM Activities

SGPWA will continue implementing DMMs that reflect its wholesale and regional water management role. Planned activities include continued coordination with participating retail agencies, ongoing public education and outreach, support for regional conservation programs, continued measurement and accounting of imported and stored supplies, and maintenance of SGPWA-owned facilities needed to support long-term regional water supply reliability.

Section 6.5
Water System Reliability and Drought Risk Assessment

SGPWA's water system reliability and drought risk assessment findings are presented in Chapter 5. The reliability analysis is informed by the SGPWA-specific supply and operational information presented in this chapter, including imported water supply availability and reliability considerations and managed groundwater storage described in Section 6.3. These SGPWA-specific inputs are combined with the regional supply characterization presented in Chapter 3 and the regional water use forecast presented in Chapter 4 to evaluate regional reliability under the UWMPA-required considerations. Chapter 5 integrates these assumptions to satisfy the applicable water system reliability and drought risk assessment requirements, including the Five-Year Drought Risk Assessment, normal year, single dry year, and five consecutive dry year analyses through 2050.

The results demonstrated in Chapter 5 demonstrate that the San Gorgonio Pass Region's water supply portfolio is capable of meeting the water uses in the Region in normal, single dry, and five consecutive dry years from 2025 through 2050.

Section 6.6
Water Shortage Contingency Plan

This Water Shortage Contingency Plan (WSCP) addresses the requirements in California Water Code (CWC) Section 10632 of the Urban Water Management Planning Act (The Act). The WSCP is incorporated into the 2025 Regional Urban Water Management Plan (RUWMP) and used by San Gorgonio Pass Water Agency (SGPWA or Agency) to respond to water shortage contingencies in the SGPWA service area as they may arise.

SGPWA was established in 1961 by the California State Legislature through the San Gorgonio Pass Water Agency Act. The Agency is a wholesale water agency that sells water to retail water agencies within its service area to reduce groundwater overdraft in the San Gorgonio Pass Water Agency service area. **Figure 6-10** shows the SGPWA service area boundary and the retail agencies.

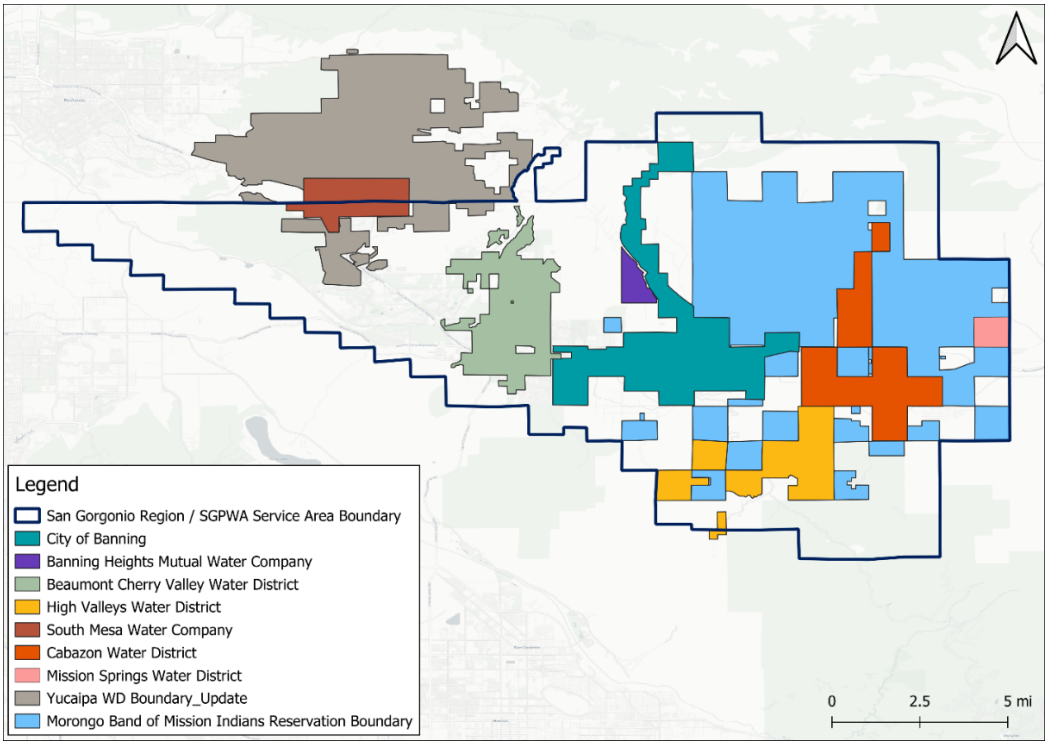


FIGURE 6-10: WATER SERVICE AREA AND RETAIL AGENCIES

The San Gorgonio Pass is located between the San Bernardino Mountains on the north and the San Jacinto Mountains on the south, connecting the San Bernardino Valley on the west to the Coachella Valley on the east. The retail agencies are the direct purveyor of water service to retail customers. As such, SGPWA relies on a coordinated approach to water shortage management with the retail water agencies within its service area. SGPWA's efforts in Water Shortage Contingency Planning are focused on maintaining and augmenting groundwater supplies in order to mitigate against extended drought conditions and catastrophic water outages. And because SGPWA is a wholesale urban water supplier, elements that pertain only to retail water suppliers are not addressed in this WSCP. This chapter will address all aspects of SGPWA's WSCP actions and address specific outage scenarios that SGPWA's water management actions alleviate.

Section 10631 of the Urban Water Management Plan Act lists the following required elements for wholesale water purveyors:

1. An analysis of water supply reliability
2. Procedures for conducting an annual water supply and demand assessment
3. Six standard water shortage levels corresponding to progressive ranges of up to 10, 20, 30, 40, and 50 percent shortages and greater than 50 percent shortage and the shortage response actions that align with the defined shortage levels.
4. Communication protocols and procedures
5. A description of legal authorities
6. A description of financial consequences
7. Re-evaluation and improvement procedures
8. Special Water Feature Distinction (10632(b))
9. Plan Adoption, Submittal, and Availability

This WSCP is a stand-alone plan, that may be adopted independently from the UWMP and may be amended or refined and readopted as needed over coming months and years independently from the UWMP.

6.6.1 Water Supply Reliability Analysis

The Agency provides water to retail agencies within its service area under its water rights and contracts. SGPWA is one of 29 State Water Project Contractors (Contractors) that have access to water supplies derived from the State Water Project (SWP). As a Contractor, the

Agency is responsible for paying its share of the debt service on the State Water Project. While most of this construction occurred in the 1960s and 1970s, it is still going on today with both capital projects and major operation and maintenance projects throughout the SWP service area. The East Branch Extension, the pipeline that brings State Project Water into the Agency's service area, was completed in 2003. The State Water Project supplies are discussed in significant detail in Section 6.3.

SGPWA's service area has a current population approaching 120,000 people, which is expected to grow to over 187,000 by 2050. SGPWA's service area demand analysis includes both the population assessment and relevant land use information provided by each retail provider. The SGPWA service area demands are set to increase from approximately 28,800 acre-feet per year in 2025 to over 39,400 acre-feet per year in 2050. These demands are discussed in detail in Chapter 4.

SGPWA has sufficient supplies available to supplement the regional water supply portfolio and meet regional demands through 2050. These supplies include SWP supplies, other acquired supplies, and stored water both within the SWP system and groundwater storage within and outside the SGPWA service area. In concert with the regional supplies available to local agencies, SGPWA supplies improve water supply reliability for the retail agencies in dry year conditions. Accordingly, SGPWA service area has reliable water supplies available to contribute to meeting normal, single dry, and five consecutive dry year regional water demands through 2050.

6.6.2 Annual Water Supply and Demand Assessment Procedures

The WSCP describes SGPWA's procedural methodology for managing shortages and developing its Annual Water Supply and Demand Assessment (Annual Assessment). The Annual Assessment will be submitted to DWR by July 1 each year with the first Annual Assessment due July 1, 2022. The Annual Assessment examines SGPWA's anticipated water reliability for the current year and one additional dry year to determine what, if any, water shortage stages may be triggered during the required period. The Annual Assessment will be used by SGPWA decision-makers to prepare for and initiate implementation of any needed response actions, as well as to inform customers, the general public, interested parties, and local, regional, and state government entities to prepare for such required actions, if necessary.

6.6.2.1 Analytical and Decision-making Processes

The Agency plans to conduct its Annual Assessment according to the following timeline and process:

By February 1 Initial data collection, analysis, and coordination with retail agencies

By March 1 Preliminary Draft Annual Assessment subject to internal review

By April 1 Draft Annual Assessment and results briefing of Agency decision-makers

By May 1 Approval of Annual Assessment to the Agency decision-makers

By June 1 Public Release of Annual Assessment and Public Notifications

By June 15 Submit Annual Assessment to DWR in advance of July 1 deadline

The Agency will prepare its Annual Assessment using the following key data and analytical methods:

1. Prepare supply estimates for each water source for the analysis period.
2. Update unconstrained regional demand and estimate anticipated actual water use for the analysis period.
3. Update infrastructure assessment, including estimated water supply availability for the analysis period.
4. Identify and quantify any locally applicable factors that may influence or disrupt supplies during the analysis period.

For the purposes of conducting the Annual Assessment, the Agency's definition of "dry year" mimics characteristics of 2014-2015 water year.

6.6.2.2 Submittal Procedure

SGPWA anticipates submitting its Annual Assessment to DWR via the online portal by June 15 each year, but in no case later than July 1 each year. At the time of the DWR submittal, the Agency will also notify all retail water agencies, the public, and other stakeholders concerning the results of the Annual Assessment and where it is available for review.

6.6.3 Six Standard Water Shortage Stages and Shortage Response Actions

The WSCP requires both wholesale and retail water suppliers to adopt six water shortage stages, which correspond to progressively severe water shortage conditions (up to 10%, 20%, 30%, 40%, 50%, and greater than 50% shortage) as compared to the normal reliability condition. These water shortage stages have been standardized to allow for a consistent regional and statewide approach to conveying the relative severity of water supply shortage conditions. Changes in supply availability will trigger an appropriate water shortage stage. SGPWA will then implement the response actions as specified below in accordance with the powers incorporated in its enabling legislation.

The WSCP is required to identify locally appropriate shortage response actions that align with the defined shortage stages and include demand reduction actions, supply augmentation actions, system operational changes, and mandatory prohibitions against specific water use practices that are in addition to state-mandated prohibitions and appropriate to the local conditions. For each response action the WSCP is to provide an estimate of the extent to which the gap between supplies and demand will be reduced by implementation of the action.

SGPWA has grouped the actions to be taken during a water shortage condition into the six stages, providing flexibility to address water shortages up to and in excess of the 50 percent shortage level condition. The following is an overview of the staged response the Agency could follow during a given water shortage condition including sequential Stages (1-6) based on shortage severity, relative supply conditions for each stage, and percent shortage reduction levels. SGPWA will adopt the six standard water shortage stages for this 2025 WSCP as shown in **Table 6-23**.

TABLE 6-22: SHORTAGE STAGES AND RESPONSE ACTIONS

Shortage Stage	Shortage Percentage	Shortage Response	
1	Up to 10%	• Access Stored Supplies, as needed • Access Flexible Supplies, as needed • Implement Voluntary Demand Reduction	• 0-100% met by Storage • 0-100% met by Flexible Supplies • 0-10% met by communicating voluntary demand reduction
2	10%-20%	• Access Stored Supplies, as needed • Access Flexible Supplies, as needed • Implement Voluntary Demand Reduction	• 0-100% met by Storage • 0-100% met by Flexible Supplies • 0-20% met by communicating voluntary demand reduction
3	20%-30%	• Access Stored Supplies, as needed • Access Flexible Supplies, as needed • Implement Voluntary Demand Reduction	• 0-100% met by Storage • 0-100% met by Flexible Supplies • 0-30% met by communicating voluntary demand reduction
4	30%-40%	• Access Stored Supplies, as needed • Access Flexible Supplies, as needed • Implement Voluntary Demand Reduction	• 0-100% met by Storage • 0-100% met by Flexible Supplies • 0-30% met by communicating voluntary demand reduction
5	40%-50%	• Access Stored Supplies, as needed • Access Flexible Supplies, as needed • Implement Voluntary Demand Reduction	• 0-100% met by Storage • 0-100% met by Flexible Supplies

Shortage Stage	Shortage Percentage	Shortage Response	
			• 0-30% met by communicating voluntary demand reduction
6	More than 50%	• Access Stored Supplies, as needed • Access Flexible Supplies, as needed • Implement Voluntary Demand Reduction	• 0-100% met by Storage • 0-100% met by Flexible Supplies • 0-30% met by communicating voluntary demand reduction

Stage 1 (up to 10% shortage) – When Stage 1 is implemented, voluntary water conservation is encouraged. The drought situation is explained to the public and governmental bodies. SGPWA explains the possible subsequent water shortage stages in order to forecast possible future actions for the retail agencies. The activities performed by SGPWA during this stage may include, but are not limited to:

- Implementation of all Voluntary Water Conservation Measures to a level addressing up to 10% water conservation savings.
- Public information campaign consisting of distribution of literature, speaking engagements, website updates, bill inserts, and conservation messages printed in local newspapers.
- Educational programs in area schools.
- Access stored supplies to address supply deficits, as needed.
- Access alternative water supplies to address supply deficits, as needed.

Stage 2 (11 – 20% shortage) – When Stage 2 is implemented, voluntary water conservation is strongly encouraged. SGPWA coordinates actions with regional retail water purveyors. The drought situation is explained to the public and governmental bodies. SGPWA explains the possible subsequent water shortage stages in order to forecast possible future actions for the customer base. The activities performed by SGPWA during this stage may include, but are not limited to:

- Implementation of all Voluntary Water Conservation Measures to a level addressing up to 20% water conservation savings.
- Public information campaign consisting of distribution of literature, speaking engagements, website updates, bill inserts, and conservation messages printed in local newspapers.
- Educational programs in area schools.
- Access stored supplies to address supply deficits, as needed.

- Access alternative water supplies to address supply deficits, as needed.

Stage 3 (21 – 30% shortage) – When Stage 3 is implemented voluntary water conservation is strongly encouraged and demand reduction measures are repeatedly communicated. SGPWA coordinates actions with regional retail water purveyors and emphasizes SGPWA's ability to assist with supply re-allocation. The seriousness of the drought situation is explained to the public and governmental bodies. SGPWA explains the possible subsequent water shortage stages in order to forecast possible future actions for the customer base. The activities performed by SGPWA during this stage may include, but are not limited to:

- Implementation of all Voluntary Water Conservation Measures to a level addressing up to 30% water conservation savings.
- Aggressive public information campaign consisting of distribution of literature, speaking engagements, website updates, bill inserts, and conservation messages printed in local newspapers.
- Educational programs in area schools.
- Access stored supplies to address supply deficits, as needed.
- Access alternative water supplies to address supply deficits, as needed.

Stage 4 (31 – 40% shortage) – When Stage 4 is implemented voluntary water conservation is strongly encouraged and demand reduction measures are repeatedly communicated. SGPWA coordinates actions with regional retail water purveyors and assesses opportunities for supply reallocation among participating retail water purveyors. The seriousness of the drought situation is explained to the public and governmental bodies. SGPWA explains the possible subsequent water shortage stages in order to forecast possible future actions for the customer base. The activities performed by SGPWA during this stage may include, but are not limited to:

- Implementation of all Voluntary Water Conservation Measures to a level addressing up to 30% water conservation savings.
- Aggressive public information campaign consisting of distribution of literature, speaking engagements, website updates, bill inserts, and conservation messages printed in local newspapers.
- Educational programs in area schools.
- Access stored supplies to address supply deficits, as needed.
- Access alternative water supplies to address supply deficits, as needed.

Stage 5 (41 – 50% shortage) – When Stage 5 is implemented voluntary water conservation is stressed to all regional purveyors and demand reduction measures are repeatedly communicated. SGPWA coordinates actions with regional retail water purveyors and assesses opportunities for supply reallocation among participating retail water purveyors.

The dire situation caused by the water shortage is explained to the public and governmental bodies. SGPWA explains the possible subsequent water shortage stages in order to forecast possible future actions for the customer base. The activities performed by SGPWA during this stage may include, but are not limited to:

- Implementation of all Voluntary Water Conservation Measures to a level addressing up to 30% water conservation savings.
- Aggressive public information campaign consisting of distribution of literature, speaking engagements, website updates, bill inserts, and conservation messages printed in local newspapers.
- Educational programs in area schools.
- Access stored supplies to address supply deficits, as needed.
- Access alternative water supplies to address supply deficits, as needed.

Stage 6 (greater than 50% shortage) – When Stage 6 is implemented voluntary water conservation is stressed to all regional purveyors and demand reduction measures are repeatedly communicated. SGPWA coordinates actions with regional retail water purveyors and assesses opportunities for supply reallocation among participating retail water purveyors. The emergency situation caused by the water shortage is explained to the public and governmental bodies. SGPWA explains conditions leading to supply reductions to all retail purveyors. The activities performed by SGPWA during this stage may include, but are not limited to:

- Implementation of all Voluntary Water Conservation Measures to a level addressing up to 30% water conservation savings.
- Aggressive public information campaign consisting of distribution of literature, speaking engagements, website updates, bill inserts, and conservation messages printed in local newspapers.
- Educational programs in area schools.
- Access stored supplies to address supply deficits, as needed.
- Access alternative water supplies to address supply deficits, as needed.

6.6.3.1 Supply Augmentation Actions

The following water supply augmentation actions may be used as response actions for the appropriate Water Shortage Stage. SGPWA may access its stored water sources in various locations inside and outside its service area. This storage occurs as carryover water in the State Water Project as well as groundwater storage within the SGPWA Service Area and outside the SGPWA boundary. These stored supplies may be transferred or exchanged with other purveyors that can assist in providing water supplies to SGPWA's service area. In

addition, SGPWA will work with DWR to access supplies that may be made available in the statewide conveyance systems. Last, SGPWA may take additional supply augmentation actions that become available during the identified water shortage condition like acquiring water from other entities through transfers or exchanges that may be delivered into SGPWA's water system.

6.6.3.2 Operational Changes

The following water system operational changes may be used as response actions for the appropriate Water Shortage Stage. SGPWA may use its water storage and conveyance facilities to expedite water acquisitions, transfers, and exchanges that may alleviate identified water shortage conditions for retail agencies. SGPWA will assess the utility associated with full operational capacity at its conveyance, spreading, and storage facilities and coordinate operational actions with retail agencies that will help address water shortage conditions. Moreover, where operational flexibility exists in SGPWA's turnout from the East Branch of the State Water Project, SGPWA may exercise operational options to facilitate water shortage mitigation actions.

6.6.3.3 Emergency Response Plan for Catastrophic Water Shortages

This section identifies actions to be undertaken by SGPWA to prepare for, and implement during, a catastrophic interruption of water supplies. A catastrophic interruption could result from natural and man-made events that causes a water shortage severe enough to trigger a Stage 1-6 water supply shortage condition. In addition, SGPWA's State Water Project water supplies are conveyed through the California Aqueduct system operated by DWR, which has several emergency plans to address catastrophic outages. This section addresses the catastrophic outage scenarios and relevant actions that SGPWA will undertake should a catastrophic outage occur.

Earthquakes are an issue of concern in the San Gorgonio Pass Region. The San Andreas Fault passes through San Gorgonio Pass Water Agency's Service Area and an earthquake on that fault could significantly impact water service and infrastructure. The California Department of Water Resources DWR has noted that an earthquake could damage the California Aqueduct conveyance system through structural damage or electrical failures which could potentially halt water deliveries to SGPWA. In short, an earthquake may create regional turmoil that could impact local infrastructure or cause power outages for extended periods of time.

DWR has a contingency California Aqueduct outage plan for restoring the California Aqueduct to service should a major break occur because of an earthquake or other catastrophic reason. DWR estimates that a major break in the California Aqueduct would take approximately four months to repair. Although extended water supply shortages may manifest for SGPWA's imported water supplies, the retail agencies and SGPWA have

alternative water supplies available to meet fundamental customer demands. Retail agencies have access to managed groundwater throughout the SGPWA Service Area and SGPWA continues to store water supplies that could be used to meet crisis conditions. Local effects of a catastrophic outage on local water systems may require additional cooperative efforts among regional water purveyors.

In addition to earthquakes, the SWP could experience other emergency outage scenarios. Past examples include slippage of aqueduct side panels into the California Aqueduct near Patterson in the mid-1990s, the Arroyo Pasajero flood event in 1995 (which also destroyed part of Interstate 5 near Los Baños), Flood damage to the East Branch of the Aqueduct in 2015, and various subsidence and leakage repairs needed along the Main Branch and East Branch of the Aqueduct since the 1980s. All of these outages were short-term in nature (on the order of weeks to several months), and DWR's Operations and Maintenance Division worked diligently to devise methods to keep the Aqueduct in operation and continue SWP deliveries while repairs were made. Thus, the SWP contractors generally experienced no interruption in total annual deliveries but local actions to mitigate the outage were implemented.

It is important to note that nearly all of SGPWA's SWP imported supply is used to replenish groundwater recharge facilities. These groundwater augmentation efforts insulate regional purveyors against an outage of the SWP system. Combining this stored water with other stored supplies by the local retail agencies as well as the existing groundwater supplies in the Region, SGPWA and its retail member agencies may sustain water supplies in a catastrophic outage of the SWP delivery systems. Even an interruption in SWP supplies for several months would not provide any immediate threat to potable water deliveries from groundwater production wells.

The area's water sources are generally of good quality, and no insurmountable problems resulting from industrial or agricultural contamination are foreseen. If contamination did result from a toxic spill or similar problematic event, the contamination would be isolated and should not significantly impact the total water supply in the Region. In addition, such an event would be addressed in the retailers' emergency response plan.

6.6.3.4 SWP Emergency Outage Scenarios

There are numerous events which could result in significant outages and potential interruption of service. Examples of possible nature-caused events include a levee breach in the Delta near the Harvey O. Banks Pumping Plant, a flood or earthquake event that severely damages the Aqueduct along its San Joaquin Valley traverse, or an earthquake event along either the West or East Branches. Such events could impact some or all SWP contractors south of the Delta.

The response of DWR, SGPWA, and other SWP contractors to such events would be highly dependent on the type and location of any such event. In typical SWP operations, water

flowing through the Delta is diverted at the SWP's main pumping facility, located in the southern Delta, and is pumped into the California Aqueduct. During the relatively heavier runoff period in the winter and early spring, Delta diversions generally exceed SWP contractor demands, and the excess is stored in San Luis Reservoir. SWP California Aqueduct terminal reservoirs, such as Pyramid and Castaic Lakes, are also replenished during these periods. During the summer and fall, when diversions from the Delta are generally more limited and less than contractor demands, releases from San Luis Reservoir are used to make up the difference in deliveries to contractors. The SWP share of maximum storage capacity at San Luis Reservoir is 1,062,000 AF.

SGPWA receives its SWP deliveries through the East Branch of the California Aqueduct. The other contractors receiving deliveries from the East Branch are Metropolitan Water District, Antelope Valley-East Kern Water Agency, Palmdale Water District, Mojave Water Agency, Crestline-Lake Arrowhead Water Agency, San Gabriel Valley Municipal Water District, San Bernardino Valley Municipal Water District, Desert Water Agency, Little Rock Irrigation District, and Coachella Valley Water District. The East Branch has two terminal reservoirs, Silverwood Lake and Lake Perris, which were designed to provide emergency storage and regulatory storage (i.e., storage to help meet peak summer deliveries) for several of the East Branch contractors. However, SGPWA does not have contract rights to storage capacity in those reservoirs. In addition to SWP storage south of the Delta in San Luis and the terminal reservoirs, a number of contractors have stored water in groundwater banking programs in the San Joaquin Valley and more recently along the East Branch, and many also have surface and groundwater storage within their own service areas.

Three scenarios that could impact the delivery to SGPWA of its SWP supply or other supplies delivered to it through the California Aqueduct are described below. For each of these scenarios, it was assumed that an outage of six months could occur. SGPWA's ability to meet demands during the worst of these scenarios is presented following the scenario descriptions.

Scenario 1: Levee Breach near the Sacramento-San Joaquin Delta

DWR has estimated that in the event of a major earthquake in or near the Delta, regular water supply deliveries from the SWP could be interrupted for up to three years, posing a substantial risk to the California business economy. Accordingly, a post-event strategy has been developed which would provide necessary water supply protections. The plan has been coordinated through DWR, the Army Corps of Engineers (Corps), Bureau of Reclamation, California Office of Emergency Services (Cal OES), the Metropolitan Water District of Southern California, and the State Water Contractors. Full implementation of the plan would enable resumption of at least partial deliveries from the SWP in less than six months.

DWR Delta Flood Emergency Management Plan ("Emergency Pathway"). DWR has developed the Delta Flood Emergency Management Plan to provide strategies for a response to Delta

levee failures, which addresses a range of failures up to and including earthquake-induced multiple island failures during dry conditions when the volume of flooded islands and saltwater intrusion are large. Under such severe conditions, the plan includes a strategy to establish an emergency freshwater pathway from the central Delta along Middle River and Victoria Canal to the export pumps in the south Delta. The plan includes the pre-positioning of emergency construction materials at existing and new stockpiles and warehouse sites in the Delta, and development of tactical modeling tools (DWR Emergency Response Tool) to predict levee repair logistics, water quality conditions, and timelines of levee repair and suitable water quality to restore exports. The Delta Flood Emergency Management Plan has been extensively coordinated with state, federal and local emergency response agencies. DWR, in conjunction with local agencies, the Corps and Cal OES, regularly conduct simulated and field exercises to test and revise the plan under real time conditions.

DWR and the Corps provide vital Delta region response to flood and earthquake emergencies, complementary to an overall Cal OES structure. Cal OES is preparing its Northern California Catastrophic Flood Response Plan that incorporates the DWR Delta Flood Emergency Management Plan. These agencies utilize a unified command structure and response and recovery framework. DWR and the Corps, through a Delta Emergency Operations Integration Plan, would integrate personnel and resources during emergency operations.

Levee Improvements and Prioritization. The DWR Delta Levees Subvention Program has prioritized, funded, and implemented levee improvements along the emergency freshwater pathway and other water supply corridors in the central and south Delta region. These efforts have been complementary to the DWR Delta Flood Emergency Management Plan, which along with use of pre-positioned emergency flood fight materials in the Delta, relies on pathway and other levees providing reasonable seismic performance to facilitate restoration of the freshwater pathway after a severe earthquake. Together, these two DWR programs have been successful in implementing a coordinated strategy of emergency preparedness for the benefit of SWP and CVP export systems. Moreover, levee improvements along the pathway and Old River levees consisting of crest raising, crest widening, landside slope fill and toe berms, meet the needs of local reclamation districts and substantially improve seismic stability to reduce levee slumping and create a more robust flood-fighting platform. Many urban water supply agencies have participated or are currently participating in levee improvement projects along the Old and Middle River corridors.

Scenario 2: Complete Disruption of the California Aqueduct in the San Joaquin Valley

The 1995 flood event at Arroyo Pasajero demonstrated vulnerabilities of the California Aqueduct (the portion that traverses the San Joaquin Valley from San Luis Reservoir to Edmonston Pumping Plant). Should a similar flood event or an earthquake damage this portion of the California Aqueduct, deliveries from San Luis Reservoir could be interrupted for

a period of time. DWR has informed the SWP contractors that a four-month outage could be expected in such an event. SGPWA's assumption is a six-month outage.

Arroyo Pasajero is located downstream of San Luis Reservoir and upstream of the primary groundwater banking programs in the San Joaquin Valley. Assuming an outage at a location near Arroyo Pasajero that resulted in the California Aqueduct being out of service for six months, supplies from San Luis Reservoir would not be available to those SWP contractors located downstream of that point. This would include SGPWA.

Scenario 3: Complete Disruption of the East Branch of the California Aqueduct

The East Branch of the California Aqueduct begins at a bifurcation of the California Aqueduct south of Edmonston Pumping Plant, which pumps SWP water through and across the Tehachapi Mountains. From the point of bifurcation, the East Branch is an open canal. If a major earthquake (an event similar to or greater than the 1994 Northridge Earthquake) were to damage a portion of the East Branch, deliveries could be interrupted. The exact location of such damage along the East Branch would be key to determining emergency operations by DWR and the East Branch SWP contractors. Specifically, SGPWA's turnout on the system could be impacted. For this scenario, it was assumed that the East Branch would suffer a single-location break and deliveries of SWP water from north of the Tehachapi Mountains or of contractor water stored in groundwater banking programs in the San Joaquin Valley would not be available. It was also assumed that Silverwood and Perris dams would not be damaged by the event and that water in Silverwood and Perris Lakes would be available to the East Branch SWP contractors.

In any of these three SWP emergency outage scenarios, DWR and the SWP contractors would coordinate operations to minimize supply disruptions. Depending on the particular outage scenario or outage location, some or all of the SWP contractors south of the Delta might be affected. But even among those contractors, potential impacts would differ given each contractor's specific mix of other supplies and available storage. During past SWP outages, the SWP contractors have worked cooperatively to minimize supply impacts among all contractors. Past examples of such cooperation have included certain SWP contractors agreeing to rely more heavily on alternate supplies, allowing more of the outage-limited SWP supply to be delivered to other contractors, and exchanges among SWP contractors, allowing delivery of one contractor's SWP supply or other water to another contractor, with that water being returned after the outage was over.

Of these three SWP outage scenarios, the scenario of an East Branch outage along with no delivery of stored water from Silverwood Lake presents the worst-case scenario for SGPWA. In this scenario, SGPWA and retail agencies would continue to rely solely on local managed groundwater supplies (native water, natural recharge, return flow, and stored imported water).

Seismic Risk Assessment and Hazard Mitigation Plan

Beginning January 2020, CWC Section 10632.5 mandates urban water suppliers 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. This requirement can be met by submittal of a copy of the most recent adopted local hazard mitigation plan (LHMP) or multi-hazard mitigation plan under the federal Disaster Mitigation Act of 2000 (Public Law 106-390) if the local hazard mitigation plan or multi-hazard mitigation plan addresses seismic risk. SGPWA intends to submit a copy of the Riverside County Multi-Jurisdictional Hazard Mitigation Plan (April 2023, updated May 2025), which addresses Countywide seismic risk including in the Agency's services area. This Hazard Mitigation Plan is currently being updated and may be adopted before the next Urban Water Management Plan cycle in 2030.

The fundamental hazards identified in this plan include Earthquake, Flood, Pandemic Flu, Wildfire, Drought, and other significant natural and man-made hazards. The HMP addresses vulnerabilities associated with these hazards, financial issues that impact implementation of the HMP, and provides a comprehensive mitigation strategy. Accordingly, the HMP is incorporated by reference into SGPWA's WSCP.

6.6.4 Communication Protocols

SGPWA will engage in specific communication protocols in developing and implementing the WSCP to inform the Regional Water Purveyors and neighboring public agencies of water shortage conditions. SGPWA will seek to engage customers and provide notice with locally relevant actions that further the water shortage response actions. These locally relevant actions to may include:

- Publishing information on SGPWA's website.
- Coordinating through direct correspondence with Retail Agencies on water supply management
- Preparing social media posts to communicate SGPWA actions.
- Advertising actions on other local audio and video media.
- Coordinating voluntary and mandatory water shortage condition activities with other public agencies.

Taken together, these communication actions will result in a more effective implementation of SGPWA's WSCP.

6.6.5 Legal Authorities

SGPWA is a wholesale water agency formed under the "San Gorgonio Pass Water Agency Act" set forth in CWC Appendix 101-1 et seq. and is empowered to implement and enforce its WSCP and water shortage response actions as specified in Section 101-15(m) states as follows:

To restrict the use of agency water during any emergency caused by drought, or other threatened or existing water shortage, and to prohibit the wastage of agency water or the use of agency water during such periods, for any purpose other than household uses or such other restricted uses as may be determined to be necessary by the agency; to prohibit the use of such water during such periods for specific uses which the agency may from time to time find to be nonessential.

In addition, the Agency is able to exercise general powers granted to water distributors in CWC §§ 350-359 and 375-378. Riverside County and cities within the County and the Agency's service area have adopted water conservation ordinances. CWC §350 authorizes the governing body of a distributor of a public water supply to declare a water shortage emergency whenever it finds and determines that the ordinary demands and requirements of water consumers cannot be satisfied without depleting the water supply of the distributor to the extent there would be insufficient water for human consumption, sanitation, and fire protection. If necessary, the Agency shall declare a water shortage emergency in accordance with CWC section 350. Upon a finding of such an emergency condition, the distributor can adopt such regulations and restrictions on the delivery and consumption of water as will conserve the water supply for the greatest public benefit, with particular regard to domestic use, sanitation, and fire protection (CWC §353). The regulations and restrictions remain in force and effect until the supply of water available for distribution within such area has been replenished or augmented, and restrictions may include the right to deny new service connections and discontinue service for willful violations (CWC §355 and §356). SGPWA also coordinates and shall continue to coordinate with other special districts, cities, and counties within its service area for possible proclamation of a "local emergency" under California Government Code, California Emergency Services Act (Article 2, Section 8558).

6.6.6 Financial Consequences of WSCP

The SGPWA does not experience unusual financial consequences of water shortage conditions. The water shortage conditions result in some lost revenue due to the lack of water sales to retail agencies, but these conditions are anticipated as part of the Agency's ongoing financial considerations. Accordingly, SGPWA does not anticipate unusual financial consequences for implementing its WSCP.

6.6.7 Re-evaluation and Improvement Procedures

SGPWA will continually review and assess its procedures for implementing the WSCP. Specifically, SGPWA will use the monitoring and reporting protocols identified above as a quality assurance and quality control measure to understand the effectiveness of water shortage activities. These re-evaluation and improvement procedures will include developing reports, memoranda, and presentations that assess the effectiveness of water shortage actions and the WSCP. These protocols will be continually assessed and updated by SGPWA management staff.

6.6.8 Special Water Feature Distinction

SGPWA's water shortage response actions focus on health and safety issues and working with retail agencies to manage available supplies. SGPWA will work with the retail agencies on communicating and implementing those agencies' special water feature distinction issues that may arise in a critical water shortage condition.

6.6.9 Plan Adoption, Submittal, and Availability

The WSCP has been adopted, submitted, and is available as required by the Urban Water Management Planning Act. As a stand-alone document, the WSCP is also subject to the following separate adoption, submittal, and availability processes, and whenever it is separately amended or revised in the future. SGPWA has followed all applicable law in adopting the WSCP. The current adopted WSCP shall be available to the following entities in the Agency's service area: Yucaipa Valley Water District, the Beaumont-Cherry Valley Water District, the cities of Banning, Beaumont, and Calimesa, Riverside and San Bernardino counties, South Mesa Water Company, Cabazon Water District, Banning Heights Mutual Water Company, High Valleys Water District, Mission Springs Water District, and the Morongo Band of Mission Indians, and the State Water Contractors within 30 days of its adoption. A copy of the current WSCP is available for public inspection during business hours at 1210 Beaumont Avenue, Beaumont, CA 92223. The current WSCP is posted and available for download here https://www.sgpwa.com/public-documents/.

Section 6.7
Energy Intensity Analysis

Pursuant to CWC Section 10631.2, this sub-chapter would summarize energy use associated with SGPWA's water management operations to the extent such information is readily available. SGPWA's energy reporting differs from a traditional retail water supplier because the Agency does not operate a retail potable water distribution system or deliver water directly to end-use customers. Instead, SGPWA's primary operations consist of importing SWP supplies, conveying water to recharge locations, placing water into groundwater storage, and managing regional water supply reliability.

Due to the unique circumstances of the SGPWA as a wholesale water supplier that receives water delivered by the California Aqueduct East Branch Extension (EBX), there is no energy directly used by SGPWA to produce, treat, or deliver water. DWR uses energy in its SWP facilities. Water flows by gravity from the EBX directly to the SGPWA's recharge basins or by gravity to retail water suppliers. Therefore, no energy intensity is reported in this UWMP.

Chapter 7.0
Beaumont-Cherry Valley Water District
Urban Water Management Plan

TABLE OF CONTENTS

Contents

List of Tables

List of Figures

Section 7.1
Introduction

The Beaumont-Cherry Valley Water District (BCVWD or District) originated in the late 1800s as the Beaumont Land and Water Company, established to support early development in the City of Beaumont and the unincorporated community of Cherry Valley.[1] Located in the San Gorgonio Pass Region between the San Jacinto and San Bernardino Mountains, the District's water service area falls within the Santa Ana River watershed. Initially formed as the Beaumont Irrigation District in 1919 under the Wright Act, as the region urbanized, the agency transitioned from agricultural irrigation to municipal water service.[2] BCVWD has since expanded its water supply through wells in Edgar Canyon and the Beaumont Basin, secured critical water rights, and invested in infrastructure and regional partnerships to meet growing demand. The District also manages watersheds north of Cherry Valley, allowing for stormwater capture and recharge opportunities.

BCVWD serves more than 68,000 residents today with a modern potable water system that includes 24 wells (20 of which are active), 14 reservoirs, non-potable water supply infrastructure, and over 22 million gallons of storage.[3] The District has implemented significant transmission and distribution upgrades, high-capacity wells, and a non-potable water system with the goal of supporting sustainable growth. BCVWD has further ensured long-term water reliability through recharge projects that capture stormwater and non-potable water, along with imported water supply in partnership with San Gorgonio Pass Water Agency (SGPWA) for storage in the Beaumont Basin.

Ensuring a reliable and sufficient water supply remains a critical component of the District's ability to meet the needs of its residents and its commercial, institutional, and industrial (CII) customers now and well into the future. The 2025 Regional Urban Water Management Plan (RUWMP) builds on prior planning efforts and incorporates updated local, regional, and statewide information. Importantly, regional cooperation allows the District to integrate imported supplies, storage, non-potable water, and groundwater resources across agency boundaries. This coordinated regional approach focuses on improving long-term reliability,

---

Figure 7-1: Water Service Area

[2] The District is governed and maintained under California Irrigation District Law, Water Code §20500 et seq.

[3] This includes Well 1A & 2A, which are anticipated to be online in 2026.

responding to regulatory compliance, and managing water operations in the face of climate variability and District growth. This Plan provides a comprehensive framework to guide water resource management decisions, ensuring that BCVWD can adapt to evolving conditions in a sustainable and resilient manner.

This chapter details the Urban Water Management Plan 2025 (UWMP or Plan) for the District's service area. Through participation in the 2025 San Gorgonio Pass Water Agency RUWMP, the District supports coordinated, basin-wide planning. Regional conditions and analysis are presented in the 2025 RUWMP regional chapters, while this chapter focuses on District-specific system characteristics, demands, demand management measures, and reliability.

7.1.1 Background and Purpose

The District has ensured compliance with the Urban Water Management Plan Act (UWMPA) requirements for urban water suppliers through its participation in the 2025 RUWMP and preparation of this retail-specific chapter. [4] The UWMPA requires urban water suppliers to evaluate the adequacy of their water supplies to meet projected demands under average conditions, single-dry years, and multiple dry year scenarios through a 20-year planning horizon. This chapter presents the District's evaluation of these requirements and demonstrates its ability to meet anticipated demands under normal and drought conditions.

The 2025 RUWMP, together with this retail-specific chapter, updates the District's 2020 UWMP and incorporates new data, analyses, and regulatory guidance issued since 2020 by the California Department of Water Resources (DWR) pursuant to the California Water Code (CWC). In addition to satisfying statutory requirements, the RUWMP serves as a comprehensive planning document describing existing and future water supplies, projected water demands, demand management progress, and actions necessary to maintain long-term supply reliability. The regional plan also documents cooperative efforts among participating agencies to efficiently manage shared resources and address future water needs across the Planning Area.

7.1.2 Basis for Plan Preparation

The District operates a Public Water System as described in California Health and Safety Code §116275. The District is also classified as a Retail Urban Water Supplier pursuant to CWC §10617, as it provides water for municipal purposes to more than 3,000 service connections and supplies more than 3,000 acre-feet of water annually. This qualification requires the preparation and adoption of a UWMP every five years. Under CWC §10620(d)(1), these requirements may be satisfied through participation in a RUWMP, which the District has

[4] California Water Code § 10620.

elected to prepare collaboratively. Details of the District's Public Water System are provided in **Table 7-1**.

TABLE 7-1: PUBLIC WATER SYSTEM INFORMATION

Public Water System Number	Public Water System Name	Number of Municipal Connections 2025	Volume of Water Supplied 2025 (AF)
CA3310002	Beaumont-Cherry Valley Water District	22,146	12,927.3

Notes: Total Volume of Water Supplied Includes both Potable and Non-Potable Water

7.1.3 Coordination and Outreach

Preparation of the 2025 RUWMP involved coordination among the participating Urban Water Suppliers in the San Gorgonio Pass Regional Planning Area and the SGPWA, which serves as the region's wholesale water supplier. This coordination ensured consistency in assumptions, methodologies and regional analyses. The District actively participated in this collaborative process through technical meetings, data sharing, and review of draft materials addressing both regional conditions and District-specific operations.

As required by the UWMPA, the District coordinated with nearby agencies during development of this chapter to ensure consistency with related land use and water resource planning efforts, including General Plans, Water Master Plans, and Specific Plans associated with anticipated development.

Consistent with CWC Section 10642, the District encouraged the active participation from a broad cross-section of the community representing diverse social, cultural, and economic interests within its service area during preparation of this chapter. Public notice of the plan's availability and the scheduled public hearing was provided, and a public hearing was conducted prior to adoption to solicit input from customers, stakeholders, and interested parties.

A summary of these notifications is provided in **Table 7-2**, and copies of the notification letters are included in Appendix B.

TABLE 7-2: PUBLIC AND AGENCY COORDINATION

Coordinating Agencies	Coordinate Regarding Demands	Sent Copy of Draft UWMP	Sent 60-Day Notice	Notice of Public Hearing
Cities, Counties, Customers, and Interested Parties				
City of Beaumont	X		X	X
City of Banning	X		X	X
City of Yucaipa	X		X	X
City of Calimesa	X		X	X
California Department of Water Resources			X	X
Yucaipa Groundwater Sustainability Agency (GSA)			X	X
Verbenia GSA			X	X
San Timoteo Subbasin GSA			X	X
San Gorgonio Pass GSA			X	X
San Bernardino County Planning Department			X	X
San Gorgonio Pass Water Agency	X	X	X	X
Yucaipa Valley Water District	X		X	X
South Mesa Water Company	X		X	X
Morongo Band of Mission Indians	X		X	X
Banning Heights Mutual Water Company	X		X	X
Mission Springs Water District	X		X	X
Western Heights Water Company	X		X	X
Riverside County Planning Department			X	X
Beaumont Basin Watermaster	X		X	X
Riverside County LAFCO			X	X
San Bernardino County LAFCO			X	X
Riverside County Flood Control and Water Conservation District			X	X
Cabazon Water District	X		X	X

7.1.3.1 Water Supplier Information Exchange

In accordance with Water Code Section 10631(h), wholesale and retail water suppliers must exchange information regarding projected water supply and demand to facilitate consistent planning assumptions. Since the District receives a portion of its supply from a wholesale agency, this exchange of data and projections is performed as part of regional coordination and SGPWA's planning process.

Compliance with CWC Section 10631 is described in Chapter 1 of this RUWMP.

7.1.3.2 Statutory Requirements for Notice

In compliance with Water Code Section 10621(b), the District notified entities in **Table 7-2** on December 16, 2025 regarding its intent to update and adopt this 2025 RUWMP. The notification was provided more than 60 days prior to the scheduled public hearing, fulfilling statutory requirements. Furthermore, consistent with Water Code Section 10642, the District encouraged public participation by providing notice of the hearing date, time, location, and methods for accessing the draft RUWMP. Notifications were published in local newspapers and sent directly to interested stakeholders to promote inclusive community involvement in the plan's development.

7.1.4 Public Hearing, Adoption, and Submittal

In compliance with Water Code Section 10642, the District held a publicly noticed hearing on June 25, 2026 to review and consider adoption of the 2025 RUWMP and associated WSCP. The hearing provided an opportunity for community members, partner agencies, and regional stakeholders to comment on the proposed Plan. Following public input, the Board of Directors formally adopted the 2025 RUWMP and WSCP by resolution.

Consistent with Water Code Section 10644(a), the adopted Plan was submitted within 30 days to the California State Library, the County, and posted on the District's website. In addition, the District electronically submitted the Plan and all required data tables to the DWR prior to the regulatory deadline of July 1, 2026, thereby completing all statutory submittal requirements.

7.1.5 Document Organization

This chapter is organized as follows:

- Section 7.2 Water Service Area, Population, Land Use, Economy, and Demographics
- Section 7.3 Water Supply Characterization
- Section 7.4 Water Use Characterization
- Section 7.5 Water System Reliability and Drought Risk Assessment
- Section 7.6 Water Conservation and Shortage Response

NOTE TO DWR:

The Beaumont-Cherry Valley Water District has prepared this Regional Urban Water Management Plan (RUWMP) primarily as a water resource planning tool to effectively manage water supply, reliability and demand. This RUWMP also satisfies all the requirements of the Urban Water Management Planning Act (UWMPA).

The body of the document provides narratives, analysis and data that DWR requests in its 2025 UWMP Guidebook, including enhancements wherever possible, acknowledging there have been no statutory changes to the Water Code regarding UWMPs since 2020.

To facilitate review by DWR for compliance with the UWMPA, data from the body of the document has been transferred into required DWR submittal tables consistent with the organization of the tables in Appendix E of the 2025 UWMP Guidebook. These tables are separately uploaded to DWR's web portal. This UWMP has been reviewed for adequacy according to the UWMP Checklist as contained in Appendix F in the 2025 UWMP Guidebook.

Section 7.2
Water Service Area and System Description, Population, Land Use, Economy, and Demographics

The Beaumont-Cherry Valley Water District (BCVWD) is located in Riverside and San Bernardino Counties, within the San Gorgonio Pass region of Southern California, a unique corridor situated between the San Bernardino Mountains to the north and the San Jacinto Mountains to the south. This corridor serves as a critical transportation and economic link between the San Bernardino Valley to the west and the Coachella Valley to the east, with Interstate 10 running through the heart of the service area. Elevations within the BCVWD's boundaries range from approximately 2,100 feet above mean sea level (AMSL) in Fairway Canyon to 2,900 feet AMSL in Cherry Valley, and 4,200 feet AMSL in the upper reaches of the SOI, contributing to its distinct climate and hydrologic conditions.

BCVWD's service area encompasses the incorporated City of Beaumont and the unincorporated community of Cherry Valley, covering roughly 28 square miles. The District provides potable and non-potable water service to approximately 22,146 active connections, serving a population of more than 68,000 residents. Its jurisdiction includes a mix of single-family and multi-family residential neighborhoods, commercial corridors, industrial and institutional facilities, and public spaces including schools and parks. While residential customers represent most of the District's water demand, other recognized uses include landscape irrigation, sales to other agencies, groundwater recharge, and agricultural irrigation. These uses are all consistent with categories identified by the Department of Water Resources (DWR) for Regional Urban Water Management Plans.

BCVWD overlies the Beaumont Basin, a key groundwater basin managed under the Beaumont Basin Watermaster, and utilizes wells in Edgar Canyon for supplemental supply. The District coordinates closely with regional partners, including the San Gorgonio Pass Water Agency (SGPWA, or Agency) as well as neighboring agencies such as the City of Banning, City of Calimesa, Yucaipa Valley Water District (YVWD), and South Mesa Mutual Water Company to ensure sustainable water resource management across the San Gorgonio Pass region.

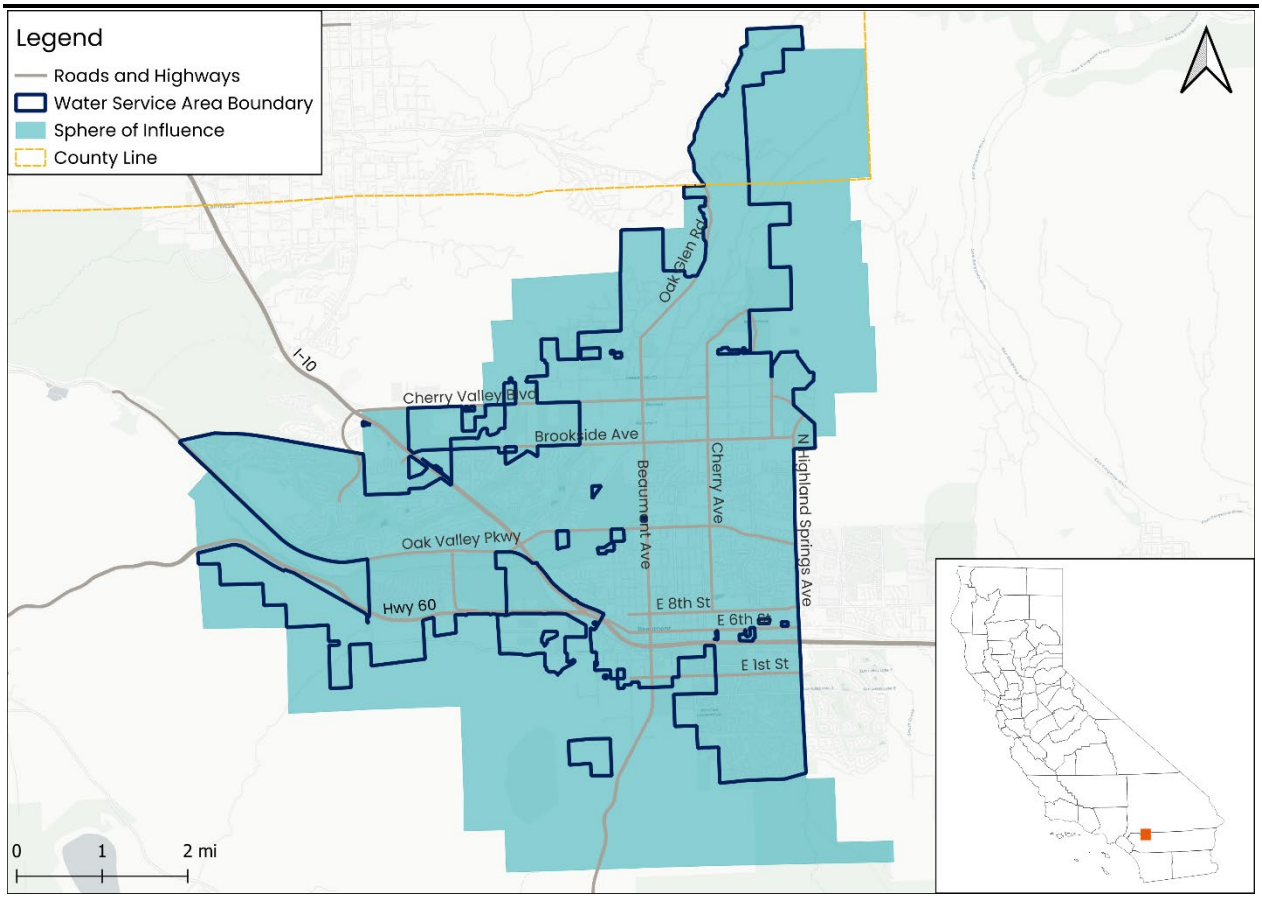


FIGURE 7-1: WATER SERVICE AREA

The District provides water service to approximately 22,146 residential, commercial, irrigation, and institutional/governmental service connections. Much of the development is single-family residential housing and commercial/institutional use. **Table 7-3** shows the number of service connections by customer class for 2020 through 2025 based on BCVWD meter records, representing the mix of customer types and total customer connections since the 2020 BCVWD UWMP.

TABLE 7-3: CUSTOMER WATER SERVICE CONNECTIONS[5]

Customer Class	2020	2021	2022	2023	2024	2025
Single-Family Residential	18,324	18,725	19,423	20,078	20,592	20,695
Multi-Family Residential	162	162	163	178	183	193
Commercial/Institutional-PW	595	598	607	615	659	668
Commercial/Institutional-NPW	3	3	5	7	3	3
Industrial	23	23	23	23	23	23
Landscape Irrigation-NPW	308	314	322	345	232	238
Landscape Irrigation-PW	61	61	63	58	172	173
Agricultural Irrigation	87	87	87	91	86	86
Other	110	111	120	147	134	67
Total	**19,673**	**20,084**	**20,813**	**21,542**	**22,084**	**22,146**

Beaumont-Cherry Valley's water supply services are overseen by the BCVWD Board of Directors, who ensure that the District continues to prioritize responsible water resource management.[6] The Board is made up of five members that are elected by the community, serving four-year terms and rotating member positions each year. These elected members oversee policy implementation, infrastructure upgrades, water conservation programs, and long-term planning.

7.2.1 Service Area Overview

The District's service area spans approximately 28 square miles, with 1,524 acres of watershed land spanning Riverside County and Edgar Canyon. Extending beyond the service area boundary, the District's Sphere of Influence (SOI) spans approximately 37.5 square miles, situated at the foothills of the San Bernardino Mountains. This location creates a unique transition zone between coastal and desert climates. The terrain consists of rolling hills, canyons, and alluvial plains, which influence local hydrology and water management strategies.

7.2.2 Climate and Hydrology

The region experiences a semi-arid Mediterranean climate typical of inland Southern California. BCVWD lies in the heart of the San Gorgonio Pass region which experiences warm,

[5] Connection data is based on BCVWD's meter records.

[6] The District does not provide wastewater services, although it maintains the authority to do so. The City of Beaumont provides wastewater services for the area.

dry summers and mild, wetter winters, with precipitation concentrated in the cooler months and minimal rainfall during summer. Seasonal patterns influence water demand and conservation strategies, as evapotranspiration rates vary throughout the year. These general conditions shape the District's planning efforts, particularly for outdoor water use and landscape irrigation.

Chapter 2 of this RUWMP discusses detailed climate data including historical temperature, precipitation, and evapotranspiration trends for the SGPWA region. It includes comprehensive information applicable to BCVWD, as well as other regional agencies within SGPWA's service area.

7.2.3 Climate Change Considerations

The California Water Code does not prescribe specific climate change planning and management measures for water suppliers; however, urban water suppliers should consider climate change when evaluating water supply availability and customer water use trends. For example, drier conditions or drought can lead to more residential irrigation and increased water use compared to wetter years. Specifically, increased demand during spring and fall months (where in normal years precipitation is adequate) can stress supplies during seasons that historically had more supply availability and flexibility between sources. Additional discussion of climate change considerations are in the RUWMP Chapter 2 and supply sections.

7.2.4 Current and Projected Population, Land Use, Economy, and Demographics

Service area population and land use projections are critical to developing a useful planning framework, as population dynamics and growth are a primary driver on water use. These projections directly influence planning decisions for system supply, delivery, infrastructure, and demand management. Similarly, understanding the District's economic, social, and demographic trends is requisite for water management and planning. This section of the RUWMP addresses these factors to provide a supportable basis for forecasting future water use.

Developing these planning frameworks and growth projections begins with calculating an informed estimate of the District's current service area population, as described below, consistent with DWR requirements. The District serves water to nearly all of the customers within its service area, with the exception of a small number of landowners within its SOI who rely on private wells, local water systems, or receive water through private agreements. Although the District's SOI extends beyond the service area, the difference in population is small, and not considered at this time. One community within the SOI is served by Cherry Valley Mutual Water Company; this population is estimated at several hundred residents and

is not currently served by BCVWD. Should the Cherry Valley Mutual Water Company experience system issues, BCVWD could assume service for this community. Currently, this population is not included in the District's service area population estimates.

7.2.4.1 Current Population and Historic Trends

The current population served by BCVWD is approximately 68,665, which is above the projected 2025 figure of 66,149 outlined in the 2020 BCVWD Urban Water Management Plan (UWMP), indicating growth trends are accelerated compared to what was initially anticipated.

The District serves a rapidly growing region encompassing Beaumont, Cherry Valley, and portions of Calimesa. As early as the 1990s, the area began a transformation from a small foothill community to a thriving suburban service area. Although initially characterized by the cultivation of fruit (namely cherries) and livestock, these agricultural areas and other vacant lands were purchased and developed to meet the demand of buyers seeking affordable housing in the early 2000s. As large master-planned subdivisions were approved and constructed, primarily within the City of Beaumont, the region saw rapid population growth. With most units constructed since 2000, the housing stock in Beaumont is relatively new, including modern plumbing fixtures and appliances that contribute to improved indoor water use efficiency.[7] In contrast, Cherry Valley retains an older housing stock with lower residential densities and limited subdivision development. Growth in Cherry Valley area was, and still is, slower.

Not surprisingly, service connection growth generally aligns with residential development activity. The past three decades saw slow connection growth prior to 2000, followed by a rapid increase in water service connections, particularly single-family residential accounts, coinciding with significant residential development in Beaumont. However, growth slowed temporarily during the late-2000s economic downturn, then resumed at a more moderate but sustained pace following regional economic recovery after 2015. Recent increases in both potable and non-potable connections reflect continued residential infill, expansion of landscaped common areas, and the District's implementation of non-potable irrigation systems.[8]

From 1990 to 2000, the service area population remained modest, rising from approximately 15,630 in 1990 to 17,275 by 2000, showing an increase of about 10.52%, or roughly 165 people per year. The 2000-2010 time period marked exponential growth following regional

[7] City of Beaumont, *Beaumont General Plan 2040* (Beaumont, CA: City of Beaumont, December 2020), Land Use and Community Design Element, Development History and Housing Characteristics.
[8] BCVWD, *2020 Urban Water Management Plan* (2021), and Section 4; City of Beaumont, *Beaumont General Plan 2040*, Land Use Element

development and new housing influx. During this time, the population rose to 43,239 by the end of 2010, more than doubling over the decade and averaging over 2,500 people annually. Growth continued through 2020, reaching 59,258 by the 2020 Census, with a 34.15% increase and average annual gain of approximately 1,600 residents between 2010 and 2020. In recent years, the District has seen a consistent growth rate of approximately 12.8% from 2020 to 2024. The estimated population was 66,841 as of July 2024, maintaining an average annual rate of growth around 3.1%.

Historical population dating back to 1990 is shown in **Table 7-4**. These values align with the District's 2020 UWMP, which sourced data from the U.S. Census Bureau's Census of Population and Housing (2000), and American Fact Finder for Beaumont, CA and Cherry Valley CDP (2000, and 2010, 2015, and 2019).[9] Historical population data for 1995 was sourced from the District's 2013 UWMP Update. The population and growth rate over the past decade is provided in **Table 7-5**, similarly reflecting data reported by the United States Census Bureau for the City of Beaumont and the Community of Cherry Valley. The District estimates the service area population on a 1-year timestep by linearly interpolating data for the years between 2020 and 2024, as well as 2010 and 2020 (respectively). Intermediate year values between census benchmark years and are presented to illustrate general growth trends rather than discrete observed counts.

TABLE 7-4: HISTORICAL POPULATION[10]

1990	1995	2000	2005	2010	2015	2020	2025
15,630	16,464	17,275	25,231	43,239	49,965	59,258	68,665

Over the last decade, the District has experienced notable upward trends in population. As previously discussed, while the population grew slightly between 1990 and 2000, it has since shown significant increase, particularly from 2000 to present. Although the consistency of growth is largely attributed to a linear interpolation of US Census Bureau data between benchmark years, the strong growth rate seen in the District population by year, shown in **Table 7-5**, is reflective of increasing housing availability and regional development.

[9] The US Census Bureau American Fact finder is no longer available; this data can be found at Census QuickFacts (data.census.gov).

[10] BCVWD, 2020 Urban Water Management Plan (2021), and 2023 Urban Water Management Plan Update (2013), using data from U.S. Census Bureau, *QuickFacts: Beaumont city, California; Cherry Valley CDP, California*

TABLE 7-5: POPULATION GROWTH RATE, 2015—2024[11]

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
49,965	51,824	53,682	55,541	57,399	59,258	61,154	63,050	64,945	66,841
5.53%	3.72%	3.59%	3.46%	3.35%	3.24%	3.20%	3.10%	3.01%	2.92%

Population growth within the District's service area has historically tracked and exceeded growth rates projected in prior Urban Water Management Plans. Localized forecasting inputs were considered in coordination with regional partners and the District updated population estimates based on recent census benchmarks and District-specific development and growth trends.

7.2.4.2 Projected Population

To forecast projected service area population as accurately as possible requires consideration of the past growth rate, local economic predictions, and current and projected land uses. The UWMP Act states urban water suppliers "shall coordinate with local or regional land use authorities" regarding land uses that may affect water management planning.[12]

Population projections are developed using historical population trends and current demographic conditions, supplemented by known development information for residential and non-residential projects through the planning horizon. Localized forecasting inputs such as the Beacon Economics projections and the City of Beaumont's 2040 General Plan were also considered to ensure that population estimates reflect anticipated development patterns within the region.[13] Beacon Economics employs a top-down, macro-economically anchored forecasting approach that uses econometric models to capture regional economic drivers, migration dynamics, and local development patterns. The Beaumont 2040 General Plan highlights major planned and approved residential subdivisions which support growth toward Southern California Association of Governments' (SCAG) forecasted full buildout. Consistent with its UWMP water demand planning, the District bases population projections on planned land use development, using projected "Equivalent Dwelling Units", or EDUs, to estimate population growth within the area. Thoroughly discussed in Chapter 7.4, this development-based approach relies on careful tracking of infill projects, commercial and institutional developments, as well as on-going and planned developments. Leveraging the District's coordination with land use authorities and developers, population estimates are refined to reflect the number of units to be constructed per year until project completion based on development plan submittals, the project progress, and construction surveys.

[11] U.S. Census Bureau, *QuickFacts: Beaumont city, California; Cherry Valley CDP, California*

[12] CA Water Code Section 10631(a)

[13] Beacon Economics, 2025, and the City of Beaumont General Plan Update (Beaumont 2040 Plan). 2021.

Furthermore, this development-based approach enables the District to account for recent housing trends, such as homeowners constructing Accessory Dwelling Units (ADUs), and individually consider how anticipated near-term developments might translate into future population impacts. Beyond known developments with supporting documentation, BCVWD anticipates that a certain number of "unknown" developments will be proposed and constructed throughout the planning horizon on parcels identified in land use planning documents.

Translating BCVWD's growth measured in EDUs into population is possible by isolating anticipated residential per-project EDUs on a yearly basis through the planning horizon, calculating the number of dwelling units as an intermediary. Measuring projected growth on a yearly basis requires phasing residential developments – defined as evenly distributing the water demands associated with each project by how much of the project can be reasonably completed each year.[14] From there, translating phased residential water demands into an increase in population is relatively straightforward, using an occupancy rate of 3.21 persons-per-household from Beaumont's 2040 General Plan.[15] However, certain adjustments are necessary to account for varying occupancy rates, as well as instances when water usage doesn't directly correlate with persons-per-dwelling unit. These trends are discussed further in subsection 7.2.4.3, and include:

- Multi-family Occupancy: In terms of water usage, while one "equivalent dwelling unit" generally corresponds to the water usage of one single-family dwelling unit, a single EDU for a multi-family residential development corresponds with nearly two multi-family residential units. Based on BCVWD's capacity fees, multi-family units use approximately 60% of the water that a single-family dwelling unit would. To ensure multi-family occupancy is not underestimated, the population associated with multi-family residences is calculated from the number multi-family residential units, which can be extrapolated by dividing the number of multifamily residential EDUs by 0.6.
- Accessory Dwelling Units (ADUs): BCVWD's population projections include a blanket assumption that approximately 10 ADUs will be constructed per year.[16] Using an

[14] This phasing approach also applies to non-residential projects, although growth in non-residential demands is not directly correlated with an increase in population. Non-residential growth measured on a yearly basis is further examined in Chapter 4.

[15] City of Beaumont. Beaumont General Plan Update (Beaumont 2040 Plan). 2021. https://beaumontca.gov/DocumentCenter/View/36923/Beaumont-GPU_Final-rev-22521

[16] Based on a BCVWD data request, between 2021 and 2025, the City of Beaumont issued 40 ADU building permits; BCVWD anticipates ADU construction to increase throughout the planning horizon.

average occupancy of 1.5 persons-per-dwelling unit, this adjustment results in an additional 15 people per year.[17]

- Infill: Similarly to ADUs, BCVWD anticipates several infill projects of varying sizes to be completed annually, some of which increase the residential density of existing developments. Applying a blanket assumption of 15 EDUs per year, with approximately 80% being multi-family residential infill, the impact on population is estimated to result in an additional 25 people per year.
- Unknown Future Developments: BCVWD maintains a thorough list of not only known future developments, but also unknown future developments that BCVWD anticipates for completion as the service area approaches buildout long-term. To maintain consistency with the demand forecasting methodology presented in Chapter 7.4, BCVWD's forecasted population incorporates the residential growth within 20% of unknown future developments to which this UWMP would provide water service.

Assuming continued growth at a moderate pace, BCVWD's service area population is expected to rise from approximately 68,665 in 2025 to around 103,736 by 2050. Previously, the 2020 UWMP forecasted water demands to be 94,556 acre-feet per year by 2045; the 2025 forecast is slightly lower for that period primarily due to BCVWD's updated forecasting methodology, incorporating ADUs, infill, and unknown development estimates.[18] These estimates also reflect both regional economic drivers and local land use policies that guide suburban expansion within planned boundaries. **Table 7-6** lists the projected populations for 2025-2050 with respective growth rates.

TABLE 7-6: POPULATION FORECAST AND FIVE-YEAR GROWTH RATE

Year	2025	2030	2035	2040	2045	2050
Projected Population	68,665	71,474	76,278	84,015	93,875	103,736
Growth Rate		4.09%	6.72%	10.14%	11.74%	10.50%

(Annual Growth Rate = 1.65%)

Ultimate build-out within the District's service area is governed by adopted General Plan land use designations for the City of Beaumont and applicable County land use policies for Cherry Valley. The City of Beaumont's 2040 General Plan identifies the distribution of residential

[17] Although minimal studies exist regarding occupancy of ADUs in the Southern California region, the SCAG Regional Accessory Dwelling Unit Affordability Analysis borrowed results from a 2018 survey completed in Portland, Oregon, which found that approximately 50% of ADUs are one-person households and 50% are two-person households. https://scag.ca.gov/sites/default/files/2024-05/adu_affordability_analysis_120120v2.pdf?

[18] BCVWD 2020 UWMP, 2021.

densities and mixed-use designations within the City and its SOI, allowing for continued residential growth through a combination of single-family neighborhoods, higher-density residential areas, and mixed-use districts.[19] Buildout capacity is primarily associated with lands already entitled or designated for urban development, while large areas of open space and rural residential land in Cherry Valley are expected to remain at low densities. Although full build-out is not anticipated within the UWMP planning horizon, the build-out population provides an important upper-bound reference for long-term water supply and infrastructure planning beyond 2050.

7.2.4.3 Current and Projected Land Use

The District's land use is influenced by its historical agricultural roots, foothill geography, and a transition toward suburban development across approximately 28 square miles, encompassing Beaumont, Cherry Valley, and sections of Calimesa. Residential neighborhoods dominate current land use, particularly in Beaumont, where single-family subdivisions at suburban densities are the primary land use type. In Cherry Valley and eastern peripheral hill areas, open space and agricultural parcels are dominant.

Over the past 10 years, BCVWD has seen mostly urban land use. There are, however, small patches of agricultural land scattered throughout the service area and slightly concentrated near the northwest of the District's Sphere of Influence (SOI). Based on crop layers provided by the Department of Water Resources (DWR), the primary agricultural land uses include citrus, deciduous fruit and nut, truck nursery and berry crops, grain and hay, and pasture.

The District's service area continues to experience substantial growth driven by residential, commercial, and industrial development. Land use patterns within the service area are expected to evolve significantly, ultimately influencing future water demand. These changes are incorporated into the demand projections presented in Section 7.4 of this RUWMP.

Planned developments that are expected to require BCVWD water service include large-scale industrial logistics centers, mixed-use commercial hubs, and residential communities. Landscaped, but undeveloped, areas within certain projects may require District water service for irrigation and maintenance, while open space or vacant areas that remain in a natural, undisturbed condition will not.

A recent trend impacting existing residential developments is the construction of Accessory Dwelling Units. ADUs are flexible, small-scale housing units constructed within existing neighborhood single-family lots. These units support additional population, providing housing for family members, students, and other renters. These developments tend to increase

[19] City of Beaumont, *Beaumont General Plan 2040*, Tables 3.2a–3.2c; County of Riverside, *General Plan Land Use Element* (September 2021).

housing density outside of major new planned developments. Similarly, infill projects that result in the repurposing of underutilized or vacant land into residential dwelling units will increase density within already-established areas.

Projected land use changes will result in increased water demand for industrial and commercial sectors, while residential growth will continue to drive overall demand. Land availability for new large-scale development remains abundant within the region. BCVWD's planning horizon, aligned with the City of Beaumont's General Plan 2040, anticipates expansion outward into previously undeveloped foothill and agricultural lands within the District's Sphere of Influence. While some natural constraints including slopes and drainage corridors exist, there is no formal urban limit restricting planned suburban growth. **Table 7-7** represents the planned mix of new residential and non-residential connections expected by the District between now and 2050. This information is used in Section 7.4 to forecast future water use needs.

TABLE 7-7: SUMMARY OF KNOWN PLANNED DEVELOPMENTS BY LAND USE TYPE[20]

Development Name	Land Use Type	Residential Units		
		Single-family	Multi-family	Non-Residential (sf)
Tract 32850*	Single-Family Residential	95	-	-
Beaumont Heights	Industrial	-	-	5,146,891
McClure Industrial Bldg	Industrial	-	-	16,581
Beaumont Cross-Dock (Dowling Orchard)	Industrial	-	-	610,000
Legacy Highlands	Industrial	-	-	10,595,850
Lilac Logistics Center	Industrial	-	-	158,112
Beaumont Pointe (Jack Rabbit Trail)	Commercial / Industrial / Institutional	-	-	4,885,994
APN 419-170-034 & -035 Apartments*	Multi-Family Residential	-	66	-
Xenia Apartments	Multi-Family Residential	0	192	-
Aegis Builders Apartments (APN 419-232-039)	Multi-Family Residential	0	15	-
Tract 38879	Single-Family Residential	10	1	-
Tract 38914	Single-Family Residential	19	0	-
Kirkwood Ranch	Single-Family Residential	371	0	-
14201 California Avenue Project	Industrial	-	-	1,037,489
N/w corner of Beaumont Ave & OVP (Commercial Site)	Commercial / Industrial / Institutional	-	-	449,312
Tract 39297 (Jack Van derWoude)	Single-Family Residential	426	160	-
SGPWA Ponds*	n/a	-	-	-
Monte Vista Homes (Tract 38926)	Single-Family Residential	49	0	-
Fairway Canyon Phases 4B and 4C & Schoolsite*	Single-Family Residential	366	-	-
Beaumont Summit Station (Sunnycal Egg Ranch)	Industrial	-	-	2,557,465
Beaumont Village	Commercial / Industrial / Institutional	-	-	557,920
ASM Beaumont*	Industrial	-	-	577,920

[20] The specific details of the land use plans presented in this table are derived from information provided by the City or publicly available project application documents and are subject to change. As of the drafting of this plan, the forecasted demands for some developments have not yet been finalized. For instance, the District anticipates that some single-family residential dwellings estimates may change, or a project may add a multi-family residential component. Future revisions shall be captured in subsequent UWMPs.

Development Name	Land Use Type	Residential Units		
		Single-family	Multi-family	Non-Residential (sf)
AA Fence Warehouse	Industrial	-	-	18,750
Tract 19929	Single-Family Residential	58	0	-
APN 407-150-023 (Self-Storage & Car Wash)	Commercial / Industrial / Institutional	-	-	267,132
APN 405-230-002, -006, -010 (Self-Storage)	Commercial / Industrial / Institutional	-	-	111,945
APN 403-030-023, -024 (2 Single-Family)	Single-Family Residential	1	0	-
APN 401-071-038	Single-Family Residential	1	0	-
APN 405-060-010	Single-Family Residential	24	0	-
Tract 30450 (Moran Properties)	Single-Family Residential	26	0	-
Parcel Map 32344	Single-Family Residential	2	0	-
Parcel Map 37080	Single-Family Residential	3	0	-
Parcel Map 36704	Single-Family Residential	3	0	-
Hisam Baqui (APN 0325-11-124)	Single-Family Residential	4	0	-
Laborde Ranch	Industrial	-	-	2,118,960
Country Club Village	Residential	136	84	-
Beaumont Ridge Apartments	Residential	-	23	
Beaumont Commerce Center*	Mixed Use	-	-	-
Beaumont Youth Wellness Village	Institutional	-	-	73,168

* No data available; provided planning documents unavailable or were insufficient to extract applicable land use information

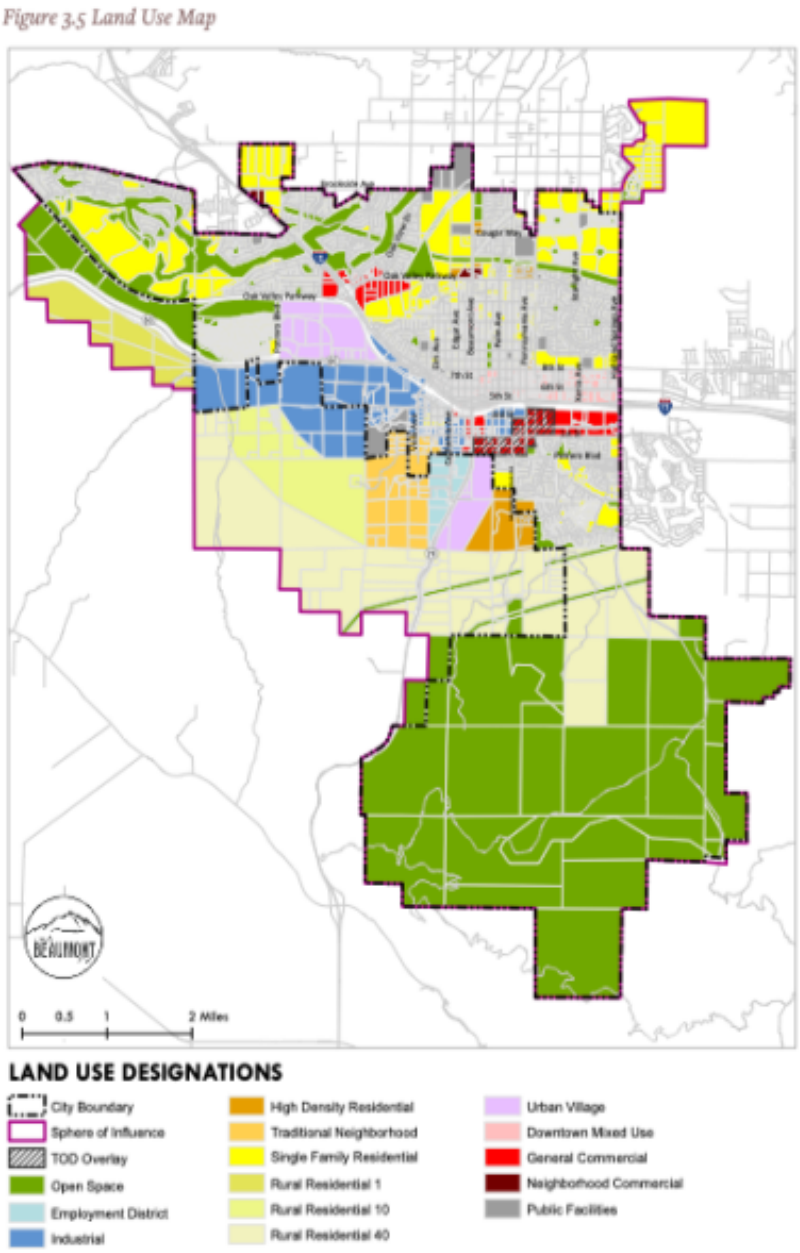


FIGURE 7-2: CITY OF BEAUMONT LAND USE MAP[21]

[21] The County of Riverside General Plan (September 28, 2021) was used to determine the land uses for the unknown development within Cherry Valley, available here: https://planning.rctlma.org/sites/g/files/aldnop416/files/2024-05/Portals-14-Ch03-Land-Use-2019-28-21_0.pdf

7.2.4.4 Economic Trends & Other Social and Demographic Factors

BCVWD's economy reflects rapid growth and diversification aligned with the broader Inland Empire and Riverside County trends. The region's economic base is steadily expanding, as it is grounded in logistics, manufacturing, education, retail, and government services.

Beaumont hosts several major employers, including one Amazon fulfillment center and one distribution center with ~3,600 employees, Beaumont Unified School District with ~1,377 employees, CJ Foods with 660 employees, and Duraplastics Manufacturing with 400 employees.[22] There is also a large retail presence with chains like Walmart and The Home Depot offering employment. Since the preparation of the 2020 UWMP, a 1.8 million square-foot Legs Unitedwear warehouse was constructed in Beaumont, as well as a facility for Perricone Juice. Many of these enterprises contribute to water demand through large site footprints and workforce needs.

As a part of the rapidly growing Riverside County, the county civilian labor force exceeds 1.15 million, with the region experiencing significant post-COVID-19 recovery. The Riverside-San Bernardino-Ontario Metropolitan Statistical Area's (Inland Empire) unemployment rate in late 2025 hovered around 6%, slightly above the national average. The City of Beaumont's unemployment rate was approximately 5.2%, reflecting active job growth. Broader community income data indicates a median household income near $107,118, exceeding the statewide median by approximately 10%.[23]

The service area maintains a relatively young and household-oriented demographic profile, with a median age close to the U.S. mean of about 39 years old and an average household size of 3.2 residents.[24] According to the 2024 US Census, the ethnic composition of the City of Beaumont is predominantly White, followed by Hispanic/Latino, with lower percentages of other races or mixed race, Black or African American, Asian, Native American, and Pacific Islander.

Cherry Valley maintains a semi-rural demographic profile with a median age significantly higher than the national average, reflecting its appeal to retirees. 32.7% of residents in Cherry

---

[22] City of Beaumont Economic Development Department, "Major Employers," available at https://beaumontcabusiness.gov/site-selectors/major-employers. Employee counts are presented as reported by the City and represent a snapshot in time.

[23] U.S. Census Bureau, American Community Survey (ACS) 5-Year Estimates, as reported by Census Reporter, "Beaumont, CA Profile," available at https://censusreporter.org/profiles/16000US0604758-beaumont-ca/.

[24] 2019-2023 data from the U.S. Census for the City of Beaumont.

Valley are aged 65 and older. The average household size is 2.6 persons, and the community is predominantly White, with a similar ethnic demographics as Beaumont.

Consumer prices in Riverside County rose approximately 4.5% each year as of November 2025[25], surpassing the national inflation rate of 2.7%.[26] Housing costs and utilities have been steadily increasing, impacting disposable income and influencing local housing affordability during a period of busy growth. The region's surge in retail and multi-family housing, driven notably by Amazon and other warehouse facilities, has been a significant economic growth factor. These projects require reliable water supply and coordinated infrastructure investment. BCVWD's robust planning, including Water Supply Assessments and Capital Improvement Programs, supports these development needs.

Additional economic trends and social and demographic data for the San Gorgonio Pass region are located in Chapter 2 of this RUWMP.

7.2.5 Delivery System Details

This subsection focuses specifically on BCVWD's potable, non-potable, and groundwater/recharge systems and facilities. The water supplies are described in Section 7.3, with water uses described in Section 7.4.

7.2.5.1 Potable Water System

The District operates a potable water system to provide reliable water service across its service area. The potable system is supplied by a blend of local groundwater production and imported supplies, which are recharged then subsequently re-extracted. The District's supplies are managed to enhance long-term reliability, meet peak demands, and provide fire and emergency storage. A portion of BCVWD's potable supply is produced from a wellfield in Edgar Canyon that intercepts alluvial groundwater associated with Little San Gorgonio Creek. There are 13 wells in Edgar canyon, providing roughly 15-20% of the current District water demand, although this proportion varies with hydrology and operations. This canyon wellfield is tied to the District's backbone transmission grid so that potable water can be conveyed to reservoirs and service zones across the system.

Additional potable water is produced from wells in the Beaumont Basin, an adjudicated groundwater basin managed under the Beaumont Basin Watermaster. The District currently operates and maintains 11 wells within the Beaumont Basin, one of which is designed to serve either potable or non-potable systems as a dual-use well. This well is presently operating in

[25] U.S Bureau of Labor Statistics (BLS), "Consumer Price Index, Riverside Area – November 2025," available at https://www.bls.gov/regions/west/news-release/2025/consumerpriceindex_riverside_20251218.htm.
[26] U.S. Bureau of Labor Statistics (BLS), "Consumer Price Index – November 2025," available at https://www.bls.gov/news.release/archives/cpi_12182025.htm.

the non-potable system. The District also receives imported water through the California State Water Project (SWP). This water is delivered through the San Gorgonio Pass Water Agency and is recharged into the Beaumont Basin at the District's Noble Creek Recharge Facility and SGPWA's Brookside Recharge Facility. This recharge program provides drought resiliency, keeps the Beaumont Basin in balance, and helps ensure more sustainable groundwater practices by storing surplus water during wet years for later use.

The potable distribution system is made up of 14 potable water reservoirs and 11 pressure zones. The potable water reservoirs are strategically located to provide operational storage, meet peak demands, and maintain fire and emergency reserves. The system is designed so that any higher-zone reservoir can supply water to a lower zone during emergencies. Booster pump stations also allow water to be boosted from lower zones to higher zones under normal operations. Pressure-reducing valves and interconnections between zones provide additional redundancy and operational control. Transmission and distribution pipelines range in diameter from 4 inches to 30 inches, creating an extensive grid that connects wells, reservoirs, and booster stations. System operations are monitored and controlled through Supervisory Control and Data Acquisition (SCADA), which provides real-time data on flows, pressures, and water quality. Groundwater entering the potable water system is disinfected to meet all state and federal drinking water standards.

The District's potable system is designed and managed to ensure reliability under varied conditions. Conjunctive use of local groundwater and imported SWP recharge, combined with zonal interconnections and storage management practices, allows the District to maintain service during peak demand and emergencies. Future improvements identified by the District in supplemental planning documents include reservoir rehabilitation, booster station upgrades, and continued investment in recharge facilities to support long-term water supply reliability.

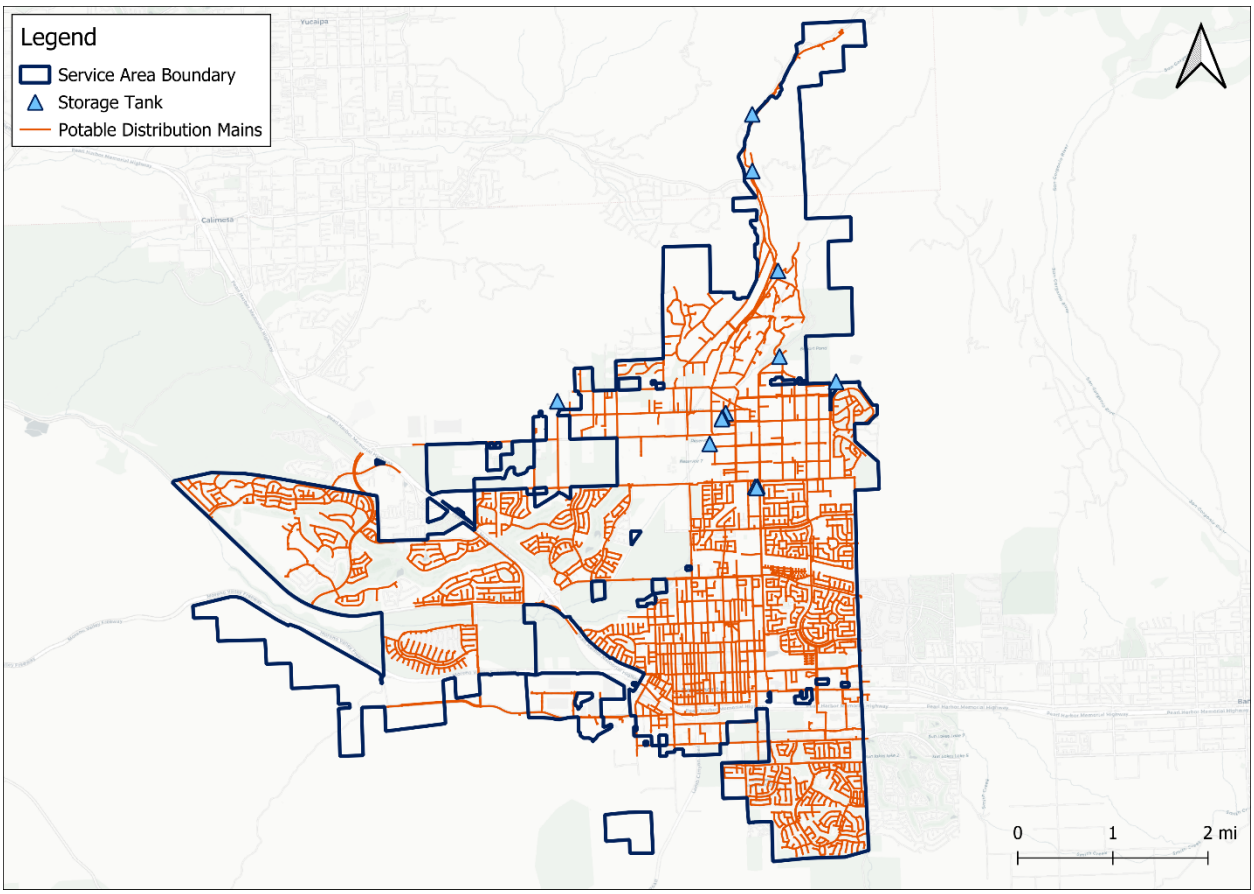


FIGURE 7-3: POTABLE WATER SYSTEM

7.2.5.2 Non-Potable Water System

BCVWD operates a non-potable water system designed to provide irrigation water for landscape and other approved uses throughout its service area, including future recycled water service. The non-potable system consists of more than 40 miles of transmission and distribution pipelines, commonly referred to as "purple pipe" infrastructure, which is dedicated to non-potable water delivery.

The primary use for non-potable water is landscape irrigation in parks, playgrounds, street and highway medians, athletic complexes, and other common areas within residential, commercial, and industrial developments. As new developments are constructed, their facilities are connected to the non-potable water system. This practice reduces the demand on potable water supplies and promotes water conservation.

Currently, the District's non-potable supply comes from Well 26, which serves as the major contributor to this system. Well 26 was integrated into the non-potable system in 2015 and continues to provide groundwater for irrigation purposes.

The non-potable system is also designed for recycled water, although the current supply is not yet treated recycled water. BCVWD and the City of Beaumont are actively working toward implementing recycled water deliveries from the City's wastewater treatment plant. When operational, recycled water will provide a sustainable water source for irrigation and other approved uses, with future capacity expected to reach 2,646 acre-feet per year.

Initial non-potable pipelines were installed in the Three Rings Ranch development around 2000. This development was funded by Community Facilities District (CFD) funds, BCVWD capital, and developer contributions. Over 40 miles of transmission and mainline piping have been installed to date, forming the foundation of the non-potable system.

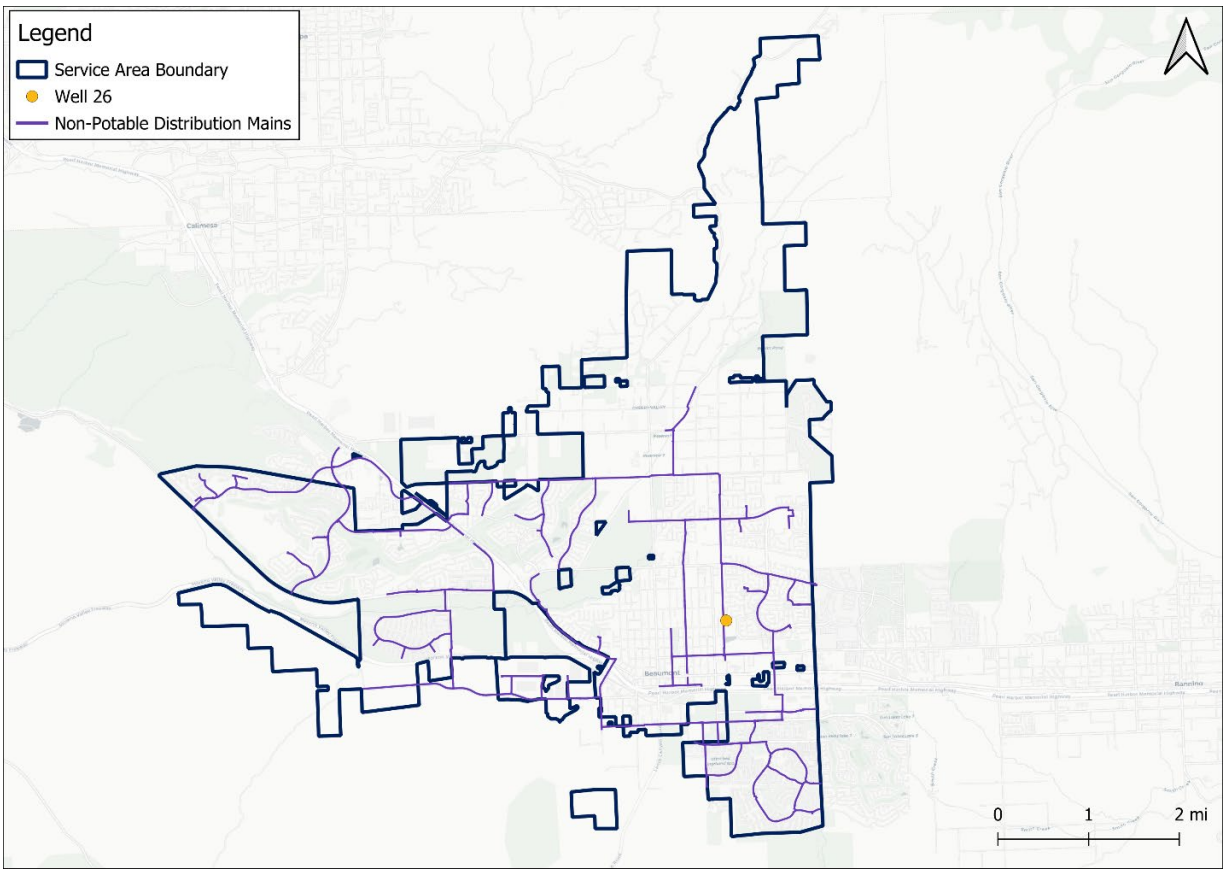


FIGURE 7-4: NON-POTABLE SYSTEM

7.2.5.3 Cross-Connection System

In order to ensure public health and safety, BCVWD requires backflow prevention devices on all commercial, industrial, and institutional (CII) water connections as well as all multi-family connections. Backflow occurs when water reverses direction from a customer's internal plumbing system into the public water supply, potentially introducing contaminants. Prevention devices are installed between the customer's water meter and the first branch in the private plumbing system, and at other cross-connections as needed.

7.2.5.4 Groundwater Supply System

The District relies on groundwater as a primary supply source for both its potable and non-potable needs. Groundwater is produced from the Beaumont Basin, an adjudicated groundwater basin managed under the Beaumont Basin Watermaster. This basin is replenished through natural recharge from local streams and managed recharge programs are operated by the District. Although the District does not currently have any wells in the San Timoteo Basin, there are future plans for potential extraction wells located just south of the Beaumont Basin, within the San Timoteo Basin.

One of the most important natural recharge features in the region is Little San Gorgonio Creek, which originates near Wilshire Peak in the San Gorgonio Mountains and flows through Cherry Valley and Beaumont before joining San Timoteo Wash near Oak Valley Parkway. This creek system contributes to the alluvial aquifers that support the Edgar Canyon wellfield and provides an important source of infiltration during wet years.

BCVWD also implements conjunctive use and groundwater banking strategies to maintain long-term reliability. As mentioned in Section 7.2.5.1, Noble Creek Recharge Facility recharges purchased water from the SWP back into the Beaumont Basin. This facility was constructed in two phases to maximize recharge capacity. Phase I was completed in 2006 at a cost of $16.5 million and provides 8.3 acres of wetted bottom, while Phase II was completed 7 years later in 2013 for $1.5 million and added approximately 14.44 acres of additional recharge area, nearly doubling the facility's capacity.[27] The Noble Creek facility recharges water under contract for the City of Banning, and SGPWA's ponds are also capable of recharge, further supporting regional water sustainability. Through combined efforts of natural recharge, managed recharge, and conjunctive use, the District maintains groundwater levels and ensures a reliable supply for its customers under varying hydrologic conditions.

[27] Beaumont-Cherry Valley Water District, "Noble Creek Recharge Facility," which provides information on facility construction phases, recharge capacity, and use of imported State Water Project supplies, available at https://bcvwd.org/noblecreekrecharge/.

7.2.6 Energy Intensity

California Water Code Section 10631.2(a) codified the requirement that urban suppliers must include information it can readily obtain related to the amount of energy consumed to divert, extract, produce, treat, and deliver water. Referred to as "Energy Intensity Reporting" for urban water suppliers. *Energy Intensity* is defined as: the total amount of energy expended in kilowatt-hours (kWh) by the urban water supplier on a per acre-foot basis to convey water from the location where the urban water supplier acquires the water to its point of delivery (i.e., turnout).

Due to the manner in which water is supplied within the District's various service areas, it is not currently possible to parse out energy use for extraction, treatment, storage, and distribution. This limitation is due to the delivery and treatment facilities operating on single power meters and the use of some gravity-fed storage tanks. As a result, the District employs a Total Utility Approach, which sums the annual net energy consumed for all water management processes, divided by total volume of water (in acre-feet).[28] These processes include diversion, conveyance, placement into storage, treatment, and distribution. These energy processes do not include SWP conveyance through DWR facilities for imported water. The total energy intensity for calendar year 2024 is reported in **Table 7-8**.

TABLE 7-8: CALENDAR YEAR 2024 ENERGY INTENSITY – TOTAL UTILITY APPROACH

Sum of All Water Pumped by BCVWD	
Volume of Water Entering Process (acre-feet)	13,162
Energy Consumed (kWh)	13,036,191
Energy Intensity (kWh/acre-foot)	990

[28] Net energy is used due to solar production not being tracked separate from consumption.

Section 7.3
Water Supply Characterization

7.3.1 Water Supply Sources

The Beaumont-Cherry Valley Water District relies on a diverse and integrated portfolio of water supplies – including local groundwater, imported water, and local surface diversions to recharge basins – to serve customers in the Beaumont and Cherry Valley areas. The backbone of the District's supply is the Beaumont Storage Unit (Beaumont Basin), a large, adjudicated groundwater basin from which BCVWD extracts and banks water under court-approved pumping and storage rights. In addition to adjudicated groundwater, the District utilizes unadjudicated groundwater from Little San Gorgonio Creek (Edgar Canyon) and captures local stormwater and surface water for recharge through percolation ponds located in Edgar Canyon and at the canyon mouth.

To support long-term groundwater reliability, BCVWD augments native supplies with imported water delivered by the San Gorgonio Pass Water Agency. All imported water is recharged to storage in the Beaumont Basin and becomes managed groundwater that is tracked by the Beaumont Basin Watermaster. Imported water is managed by SGPWA and includes California State Water Project (SWP) supplies along with additional contracted supplies that recharge the Beaumont Basin (see Chapter 3). Imported water is recharged at the District's Noble Creek Recharge Facility (NCRF) and SGPWA's Brookside East Recharge Facility, where it is stored in the Beaumont Basin for use during dry periods. The District also supplements its portfolio with additional transferred supplies.

BCVWD further enhances supply reliability through the use of non-potable groundwater for irrigation demands, including parks, schools, golf courses, and landscaped areas. The District continues to expand local supply development through stormwater capture and recharge projects. As hydrologic and regulatory uncertainties continue to affect imported water reliability, recycled water is expected to play an increasing role in reducing potable demand and supporting long-term sustainability.

Overall, BCVWD's diversified water supply portfolio, combining managed groundwater, imported water, and supplemental supplies, provides a resilient foundation for meeting current and future water demands in a region experiencing continued growth and increasing water supply needs.

7.3.2 Groundwater Supplies

Groundwater is the primary water supply source for the District. BCVWD sources pumped groundwater from the adjudicated Beaumont Basin and Edgar Canyon. The District owns and operates 24 groundwater wells, of which 20 are productive.[29] In total, the 20 wells have a production capacity of approximately 27.3 million gallons per day (mgd), not including the capacity shared with the City of Banning. One of the wells, Well 26, is hydraulically capable of serving either the potable or non-potable system; however, the well is primarily operated as a non-potable supply source.

Of the District's 24 wells, thirteen are located in Edgar Canyon, while the remaining eleven pump from the adjudicated Beaumont Basin. These wells are distributed across four primary areas: Upper Edgar Canyon and Middle Edgar Canyon in San Bernardino County, and Lower Edgar Canyon and the Beaumont Storage Unit in Riverside County. The groundwater resources available to BCVWD consist of a combination of native local groundwater and managed groundwater derived from imported water supplies.

7.3.2.1 Beaumont Basin Production and Recharge

Groundwater within the Beaumont Basin is replenished through a combination of natural and managed recharge processes. Natural recharge occurs from infiltration of precipitation and seasonal streamflow within the basin, subsurface inflow and seepage, return flow, stormwater capture, and managed recharge. Recharge includes the percolation of imported supplies delivered via the SWP's California Aqueduct as well as incidental recharge from irrigation return flows and water system losses. A detailed description of the Beaumont Basin, subbasins, aquifer characteristics, adjudication, and management areas is presented in Chapter 3.

Appropriative Production

Under the Beaumont Basin Judgment, groundwater production is governed through an allocation-based system that assigns pumping rights to producers within the adjudicated area. BCVWD is identified as an Appropriative Party and may produce groundwater in accordance with its allocated share of the Basin's safe yield. The amount of groundwater available to BCVWD in any given year may vary and can be supplemented through several mechanisms allowed under the Judgment, including transfers of allocation from other appropriators, use of unused production made available by overlying producers, conversion of overlying rights to appropriative rights, withdrawals from stored groundwater accounts, and development of new yield. This framework provides operational flexibility while ensuring

[29] Three of the wells are shared with the City of Banning, resulting in shared capacity rights.

that total basin production remains within sustainable limits established by the Watermaster. Detailed discussion of the adjudication framework is provided in Chapter 2 of this RUWMP.

The Watermaster, on an annual basis, determines how much groundwater each producer is entitled to extract from the Beaumont Basin without incurring a replenishment obligation. The allocation of unused overlying water is based on their share of the operating safe yield. BCVWD is entitled to 42.51% of the unused production. This Appropriative Water Right has averaged approximately 2,300 acre-feet from 2009 to 2025. Any water the District is entitled to but does not extract may be credited to BCVWD's storage account. BCVWD is permitted to store up to 80,000 acre-feet in the Beaumont Basin.

Multiple components comprise the District's annual water supply from the Beaumont Basin. The Watermaster determines the annual Appropriators' Production Right under the Judgment as the sum of the District's Appropriative Water Right (based on the aforementioned operating yield), plus any water obtained through transfers from overlying producers or other appropriators, withdrawals from the District's storage account, and any new yield created by the District. BCVWD occasionally participates in transfers between appropriators or SGPWA, most recently acquiring 448 acre-feet in 2021. The District most recently used water from its storage account in the dry years of 2021 and 2022, using 7,619 and 8,888 acre-feet respectively.[30]

Since the initiation of recharge operations in 2006, BCVWD has recharged approximately 161,336 acre-feet of imported SWP supplies into the Beaumont Basin.[31] These recharge activities have contributed to the accumulation of stored groundwater, with the District's storage account increasing from approximately 32,267 acre-feet in 2021 to approximately 45,470 acre-feet in 2025. This long-term conjunctive use strategy enhances the reliability and resiliency of groundwater supplies within the basin.

[30] Beaumont Basin Watermaster 2025 Consolidated Annual Report and Engineering Report – Draft. Table 3-9.

[31] Beaumont Basin Watermaster 2025 Consolidated Annual Report and Engineering Report – Draft. Page 3-8.

TABLE 7-9: BCVWD BEAUMONT BASIN WATER STORAGE ACCOUNT (ACRE-FEET)

BCVWD Beaumont Basin Water Storage Account (2025 Watermaster Report, Table 3-9)	
2003	-110.9
2004	-182.8
2005	-406.4
2006	842.5
2007	2,262.2
2008	4,053.7
2009	7,619.8
2010	13,004.9
2011	24,002.8
2012	30,697.3
2013	32,860.3
2014	28,930.4
2015	25,567.6
2016	27,565.9
2017	32,295.8
2018	35,011.7
2019	39,420.8
2020	39,945.9
2021	32,326.5
2022	23,438.4
2023	33,129.4
2024	38,313.3
2025	45,470.00

Imported Water

As the region's wholesale water agency, SGPWA imports water into the adjudicated Beaumont Basin on behalf of its retail agencies to support regional water supply reliability. BCVWD, the City of Banning, and Yucaipa Valley Water District have received imports since 2020, to provide supply resiliency and further bolster their storage account balances in the Beaumont Basin.

The amount of imported water available for recharge operations depends on SGPWA's annual SWP Contract entitlements and the availability of other SGPWA imported water contracts. Some of these entitlements and annual allocations vary based on hydrology and regulatory policy. Refer to Chapter 3 of this RUWMP for more information about SGPWA's SWP Contract and its other long-term and short-term supply sources, including reliability under various hydrologic conditions.

BCVWD uses imported water to supplement its annual production from the Beaumont Basin and also to increase its storage account balance shown in **Table 7-9**. Recharge attributed to BCVWD in the Beaumont Basin using imported supplies has averaged close to 5,000 acre-feet per year since 2006 and the District actively manages these imports to meet annual production and storage goals. **Table 7-10** summarizes the quantities of imported water utilized by the District during the most recent five-year period.

TABLE 7-10: LAST FIVE YEARS OF IMPORTED WATER SUPPLIES (ACRE-FEET) [32]

Year	Imported Supplies
2021	2,500
2022	1,800
2023	18,000
2024	14,000
2025	16,200

The substantial increase in the volume of imported water supplies between 2022 and 2023 in **Table 7-10** can be attributed primarily to DWR's SWP allocations fluctuating relative to dry and wet conditions. Although the District has access to other imported supplies through SGPWA, DWR's 5% SWP allocation in both 2021 and 2022 and 100% allocation in 2023 significantly contributed to the substantial increase in the District's imported supplies. However, this spike

[32] Beaumont Basin Watermaster 2025 Consolidated Annual Report and Engineering Report – Draft. Table 3-9.

in imported water also highlights the District's real-time strategic management of their Beaumont Basin storage account. When surplus SWP water is available, as it was in 2023, the District purchases additional supplies to recharge their Beaumont Basin storage account, enabling it to satisfy demands regardless of hydrologic conditions.

Annual Production from The Beaumont Basin

The District's annual production from the Beaumont Basin includes its Appropriator Production Right and SGPWA imported water used to serve potable and non-potable demand.

Table 7-11 presents the District's appropriative production for the most recent five-year period in accordance with the Beaumont Basin Judgment.

TABLE 7-11: 2021-2025 BCVWD'S BEAUMONT BASIN ANNUAL PRODUCTION (ACRE-FEET)

Year	Beaumont Basin
2021	12,610
2022	12,490
2023	10,213
2024	10,883
2025	10,996

Projected Supply from the Beaumont Basin

Within the adjudicated Beaumont Basin management framework, the District's groundwater production adjusts to meet water demands through the managed groundwater system. Normal-year available supply from the Beaumont Basin can be determined by assessing historical production using the Watermaster's records going back to 2006. The 20-year period historical average of BCVWD production is approximately 10,800 acre-feet per year. This corresponds to average production over a five-year period between 2015 and 2019 that included representative hydrology of dry, wet, and normal years in which the District's pumping also averaged approximately 10,800 per year.

2014 was chosen as a representative single dry year as it was in the middle of a multi-year drought and was also a year in which SGPWA's SWP Contractor allocation was a historic low of 5%. BCVWD production from the Beaumont Basin in 2014 was 10,800 acre-feet which included a withdrawal from storage of approximately 3,900 acre-feet. In 2015 the State was in its fourth year of the same severe drought which saw the lowest imported water totals from SGPWA and the lowest production for BCVWD in the Beaumont Basin over the past 20 years of

record. Total production in 2015 was approximately 9,000 acre-feet which included a withdrawal from storage of approximately 3,400 acre-feet. These dry year values are carried across the five consecutive dry year projection period shown in **Table 7-12**.

As discussed previously, BCVWD has ample stored water to sustain the District through multi-year droughts. The District anticipates continually managing its storage account to remain within its 80,000 acre-feet storage allotment utilizing SGPWA imports, transfers, and potential new yield, as provided for in the Beaumont Basin Judgment.

TABLE 7-12: PROJECTED BEAUMONT BASIN SUPPLIES 2030 (ACRE-FEET)

Year Type		Projected Groundwater Supplies
Normal		10,800
Single Dry year		10,800
Multi-Year Drought	2026 (1st Year)	9,000
	2027 (2nd Year)	9,000
	2028 (3rd Year)	9,000
	2029 (4th Year)	9,000
	2030 (5th Year)	9,000

Using the same basis for normal, single dry, and five dry years, supply is projected in multi-year droughts scenarios for the District's Beaumont Basin supplies across the UWMP planning horizon. The District's managed groundwater system is designed to meet demand, and accordingly production grows in step with projected demands across the planning period. Imported water and water from storage is generally available, even in dry years, to meet the District's annual production needs.

Table 7-13 maintains the conservative dry year assumptions for annual groundwater and recharge supply availability while factoring in added growth trends and future conditions. Demands are described in detail in Section 7.4.

TABLE 7-13: PROJECTED BEAUMONT BASIN SUPPLIES THROUGH 2050 (ACRE-FEET)

Projected Groundwater Supplies		2030	2035	2040	2045	2050
Normal		10,800	11,800	12,700	13,300	13,900
Single Dry year		10,800	11,800	12,700	13,300	13,900
Multi-Year Drought	Year 1	9,000	9,800	10,600	11,100	11,600
	Year 2	9,000	9,800	10,600	11,100	11,600
	Year 3	9,000	9,800	10,600	11,100	11,600
	Year 4	9,000	9,800	10,600	11,100	11,600
	Year 5	9,000	9,800	10,600	11,100	11,600

7.3.2.2 Edgar Canyon (Little San Gorgonio Creek)

The District's second source of local groundwater is obtained from Edgar Canyon. BCVWD operates a total of 13 wells in Edgar Canyon, although some wells serve as standby facilities or have limited production. Groundwater in Edgar Canyon is limited. Most productive units are situated in shallow alluvial valleys and within rock fractures underlying the alluvium. These fractures intersect the canyon and serve as barriers to groundwater movement, effectively subdividing the canyon into multiple subbasins and limiting production volumes of existing wells.

Groundwater depths in Edgar Canyon vary widely, ranging from a few feet below ground surface to approximately 200 feet, depending on location and hydrologic conditions. Thus, the Edgar Canyon groundwater aquifer faces limited production capacity and storage. Total active production capacity is approximately 1,500 gallons per minute (gpm) (about 2.2 million gallons per day), with individual well yields ranging from roughly 50 to 300 gpm.[33] While relatively less productive than the Beaumont Basin's more abundant groundwater

[33] The Edgar Canyon Groundwater Aquifer production capacity ranges depending on hydrologic conditions, generating as low as 900-1000 acre-feet in dry years and upwards of 2000 acre-feet in wet years.

units, BCVWD prefers sourcing groundwater from Edgar Canyon as its wells are less expensive to operate, and water can be conveyed via gravity with no additional pumping.

Due to complex faulting and geologic conditions, past drilling efforts in Edgar Canyon have resulted in a number of low-yield wells and dry holes, further illustrating the constrained nature of the resource. Notably, groundwater levels and production respond quickly to stream flow, resulting in increased supply availability in wet years. Currently, groundwater pumped from Edgar Canyon accounts for about 10 percent of the District's total water supply.

Groundwater production is arbitrarily subdivided into three production areas: Upper Edgar Canyon, Middle Edgar Canyon, and Lower Edgar Canyon (**Table 7-14**).

TABLE 7-14: PRODUCTION AREAS IN EDGAR CANYON

Production Area	County	Description	Well(s)
Upper Edgar Canyon	San Bernardino	From the District's northern boundary (Oak Glen Rd crossed L. San Gorgonio Creek) to the center of Section 2, T1S/R1W (1.5 miles north of County line)	All Edgar Canyon wells except Wells 6, 4A, 5 and RR-1
Middle Edgar Canyon	San Bernardino	From the county line to a point ~0.5 miles north of the county line	Well 6
Lower Edgar Canyon	Riverside	From the mouth of the canyon (Orchard St) to ~1 mile north (upstream) of Well No. 5	Well 4A, 5, RR-1

Note that "Edgar Canyon" is synonymous with "Little San Gorgonio Creek"

BCVWD has maintained long-term records of groundwater production from Edgar Canyon. Over the period of record from 1957 to 2020, average production was approximately 1,900 acre-feet per year (AFY). However, prior to 1983, the District's ability to utilize groundwater supplies from Edgar Canyon was constrained by limited conveyance capacity. The installation of the 14-inch Edgar Canyon Transmission Main in 1983 significantly improved the District's ability to deliver water from Edgar Canyon to Cherry Valley and Beaumont.

Table 7-15 shows the most recent five-year period of groundwater produced from Edgar Canyon.

TABLE 7-15: EDGAR CANYON GROUNDWATER VOLUME PUMPED (ACRE-FEET)

Basin Name	2021	2022	2023	2024	2025
Upper Edgar Canyon	400	400	1,100	1,400	1,200
Middle Edgar Canyon	200	200	100	300	400
Lower Edgar Canyon	500	500	500	500	600
Total	**1,100**	**1,100**	**1,700**	**2,200**	**2,200**

Recent groundwater production data from 2021 through 2025 indicate an average annual production of approximately 1,700 AFY. When combined with the historical record, the updated long-term average production for the 1983 through 2025 period is approximately 2,000 AFY.

Recent drought conditions in 2021 and 2022 resulted in groundwater production of 1,100 AFY. Accordingly, this minimum observed production of 1,100 AFY is used to represent a single dry year condition for planning purposes.

To evaluate groundwater availability during extended droughts, moving averages of consecutive dry years were calculated based on the historical record. As presented in Table 7-3 of the 2020 UWMP, representative average production levels were developed for two- through six-year drought sequences occurring during the late 1983-2020.[34] These historical drought-period averages have been carried forward and are used to characterize groundwater availability under extended dry year scenarios.

Table 7-16 summarizes the District's projected groundwater supplies from Edgar Canyon.

[34] BCVWD 2020 UWMP Table 6-8, Groundwater Extraction Statistics from Edgar Canyon Wells (1983-2020) at p. 6-30.

TABLE 7-16: PROJECTED EDGAR CANYON SUPPLIES 2030 (ACRE-FEET)

Year Type		Edgar Canyon
Normal		2,000
Single Dry year		1,100
Multi-Year Drought	2026 (1st Year)	1,200
	2027 (2nd Year)	1,200
	2028 (3rd Year)	1,300
	2029 (4th Year)	1,300
	2030 (5th Year)	1,400

Table 7-17 shows supply in normal year, single dry year, and five consecutive dry years through 2050.

TABLE 7-17: PROJECTED EDGAR CANYON SUPPLIES THROUGH 2050 (ACRE-FEET)

Edgar Canyon		2030	2035	2040	2045	2050
Normal		2,000	2,000	2,000	2,000	2,000
Single Dry year		1,100	1,100	1,100	1,100	1,100
Multi-Year Drought	Year 1	1,200	1,200	1,200	1,200	1,200
	Year 2	1,200	1,200	1,200	1,200	1,200
	Year 3	1,300	1,300	1,300	1,300	1,300
	Year 4	1,300	1,300	1,300	1,300	1,300
	Year 5	1,400	1,400	1,400	1,400	1,400

7.3.2.3 Overdraft Conditions

Edgar Canyon is not an adjudicated groundwater basin and therefore must be carefully managed. Based on available studies and long-term production records, Edgar Canyon is not considered to be in overdraft, as referenced by average historical groundwater production being approximately 2,000 acre-feet per year, which is consistent with estimated

safe yield values developed by prior studies.[35] Groundwater levels in Edgar Canyon respond to hydrologic conditions, with increased production during wet periods and reduced production during dry periods, but no long-term declining trend indicative of overdraft has been observed.

The Beaumont Basin is an adjudicated groundwater basin and is managed by the Beaumont Basin Watermaster in accordance with the Judgment. Prior to adjudication in 2004, the basin experienced historical overdraft and declining groundwater levels. Since adjudication, the basin has been operated on a safe yield basis, and groundwater levels have generally stabilized with ongoing recharge of imported State Water Project supplies. Recent Watermaster analyses indicate localized groundwater level increases and an overall increase in basin groundwater storage under current management practices.[36]

7.3.2.4 Groundwater Quality

Groundwater produced by the District is obtained from wells completed in the Upper Santa Ana Valley Groundwater Basin and is treated as necessary to meet all applicable federal and state drinking water standards prior to delivery to customers. Water quality within the basin is influenced by natural hydrogeologic conditions as well as localized land use and recharge patterns. The District routinely monitors groundwater quality in accordance with regulatory requirements to ensure the continued safety and reliability of its potable water supply. Generally, the District's water quality is considered excellent. Water quality for groundwater supplies is reported annually in the District's Consumer Confidence Report (CCR), which is available on the District's website.

Table 7-18 presents a summary of groundwater quality constituents based on information reported in the District's 2024 CCR (published July 2025). The table reflects a subset of reported constituents and has been adapted for clarity and relevance to this UWMP.

[35] The estimated safe yield from Edgar Canyon per a San Timoteo Watershed Management Authority (STWMA) 2005 study is 2,600 acre-ft/yr.

[36] Beaumont Basin Watermaster. 2025 Consolidated Annual and Engineering Report (Draft), Section 3.8; and Beaumont-Cherry Valley Water District. 2020 Urban Water Management Plan (Final), Section 6.3.5.

TABLE 7-18: BEAUMONT-CHERRY VALLEY WATER DISTRICT POTABLE WATER QUALITY

Water Quality Standards	Goal Level	Max Level	Range	Amount Detected
Primary Standards				
Chromium (ppb)	50	50	ND - 11.00	3.17
Fluoride (ppm)	1	2	0.23 - 0.64	0.36
Goss Alpha Particle Activity (pCi/L)	0	15	ND - 5.72	1.83
Nitrate as N (ppm)	10	10	1.00 - 4.7	2.83
Chromium, Hexavalent (ppb)	0.02	10	ND - 12	2.97
Trihalomethanes (ppb)	N/A	80	ND - 9.80	2.99
Chlorine (ppm)	4	4	0.70 - 0.90	0.72
Copper (ppm)	0.3	1.3	N/A	ND
Lead (ppb)	0.2	15	N/A	ND
Secondary Standards				
Chloride (ppm)	N/A	500	3.70 - 56.00	10.96
Iron (ppb)	N/A	300	ND - 110.00	18.33
Specific Conductance (uS/cm)	N/A	1,600	310 - 540	395.38
Sulfate (ppm)	N/A	500	11.00 - 56.00	25.18
Turbidity (NTU)	N/A	5	ND - 1.90	0.51
TDS (ppm)	N/A	1,000	73 - 240	234.87
Federal Unregulated Contaminants				
Bicarbonate (ppm)	N/A	N/A	130 – 210	173.27
Calcium (ppm)	N/A	N/A	14 - 47	44.61
Hardness (ppm)	N/A	N/A	110 - 230	172.69
Magnesium (ppm)	N/A	N/A	6.70 - 19.00	14.42
pH (units)	N/A	N/A	7.20 - 8.10	7.76
Sodium (ppm)	N/A	N/A	11.00 - 37.00	20.19

7.3.2.5 BCVWD Facilities for Imported Water

Imported water is conveyed by SGPWA to BCVWD and received at a turnout and metering station located at the terminus of the California Aqueduct East Branch Extension (EBX). A detailed description of the EBX facilities and major conveyance components is presented in

Chapter 2. This turnout, located at Orchard Avenue and Noble Street in Cherry Valley, is metered by DWR before entering BCVWD's distribution system which conveys imported water to the Noble Creek Recharge Facility.

Construction of the Noble Creek Recharge Facility (NCRF) occurred in two phases. Phase 1 – west of Noble Creek Channel – began receiving deliveries of imported water following completion in September 2006. Phase 1 consists of approximately 10.2 wetted acres and had three (3) sets of percolation ponds (2.7 acres, 4.2 acres, and 3.3 acres of wetted area, respectively for ponds 1, 2, and 3). Completed in 2015, Phase 2 added around 17 additional acres of wetted recharge area. Phases 1 and 2 are constructed in "trains," or series of percolation ponds, to allow intermittent wetting and drying.

Recharge of imported water has occurred since September 2006. Through the end of 2023, approximately 161,336 acre-feet of imported water has been recharged. Recharge operations have varied in response to hydrologic conditions and imported water availability. During the 2020 to 2022 drought period, the District relied on stored groundwater supplies to meet demands. In contrast, improved hydrologic conditions in 2023 allowed for increased recharge and replenishment of the District's storage account.

The determined weighted average recharge rate for Phase 1 facilities is 10.3 acre-feet per wetted acre per day. With 10.2 wetted acres, the total recharge capacity of Phase 1, theoretically, is over 100 acre-feet per day. Thus, the annual recharge amount would be more than 36,000 acre-feet per year, or twice the SGPWA's Table A amount. However, this recharge capacity does not accurately reflect the operational constraints of the percolation ponds, which require regular restoration and maintenance to remove silt and percolation potential. Assuming two of the three Phase 1 ponds are operating at any given time, the theoretical recharge capacity would be approximately 20,000 acre-feet per year. Even at reduced capacity, accounting for maintenance, Phase 1 provides 45% more water than SGPWA's Table A amount. In 2025, the District was able to recharge over 20,000 AF of imported water due to robust SWP conditions.

7.3.3 Surface Water

BCVWD relies on a combination of imported and local surface water sources to support groundwater recharge and overall supply reliability. Imported surface water, delivered through the California Aqueduct via the SGPWA, represents the primary source of surface water available to the District. However, this water supply is converted to groundwater upon entering the service area and is captured as groundwater supply.

In addition, local runoff from the surrounding mountainous watersheds, particularly within Edgar Canyon, is captured and managed through diversion and recharge facilities. BCVWD holds pre-1914 water rights associated with these diversions, which allows the District to capture surface flows for beneficial use.

These local and imported surface water supplies are not used directly for potable purposes but are instead utilized to recharge the region's underlying aquifers, thereby augmenting groundwater supplies and supporting long-term conjunctive use operations.

7.3.3.1 Local Diversions

Local surface water does not constitute a meaningful supply to BCVWD. However, the District maintains two active surface water diversions in Edgar Canyon. Both appropriative water rights are pre-1914 appropriations and provide highly variable contributions to the District's supply portfolio.

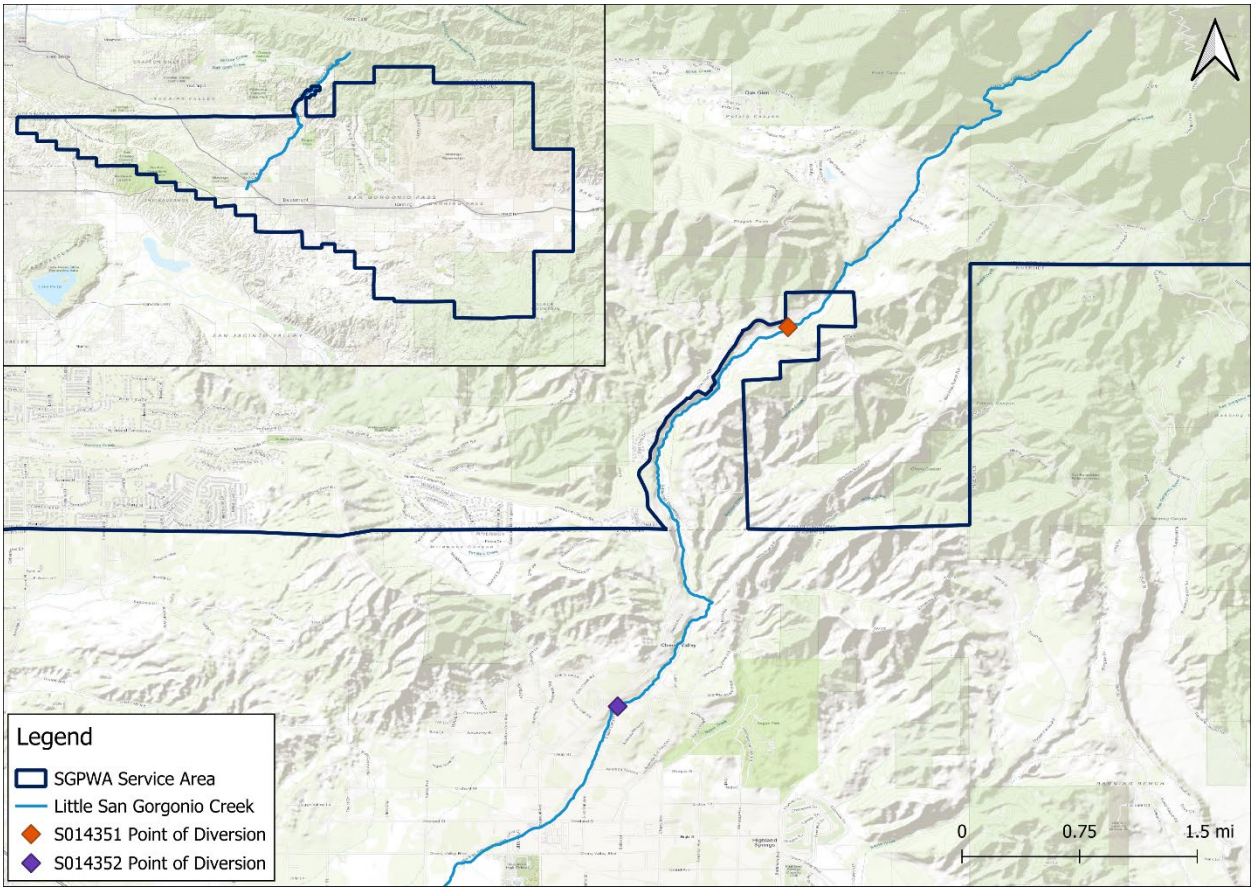


FIGURE 7-4: PRE-1914 DIVERSIONS FROM EDGAR CANYON

TABLE 7-19: BCVWD PRE-1914 WATER RIGHTS

Diversion No.	Priority Date	Point of Diversion	Notes
S014351	1907	SE 1/4 of NE 1/4 of Section 2, T2S, R1W, SB&M	Near upper end of District's property on Little San Gorgonio Creek, identified by a historical wagon axle that serves as a physical marker.
S014352	1894	NW 1/4 of SE 1/4 of Section 22, T2S, R1W, SB&M	Upstream of existing percolation ponds, mouth of Edgar Canyon

These two diversions are used today to direct surface flows from Little San Gorgonio Creek into a series of percolation ponds in Edgar Canyon. Surface flows from Little San Gorgonio Creek are captured and diverted into the percolation ponds, which then recharge the shallow aquifers underlying the canyon.

BCVWD's pre-1914 appropriation, dating back to 1894, provides the District the ability to divert up to 3,000 miner's inches, or approximately 43,440 acre-feet per year for domestic and irrigation uses. Demand has never reached such levels and the watershed's ability to supply such volumes during average water years is questionable. Furthermore, neither diversion right is included in BCVWD's water supply calculations but remain necessary to ensure adequate recharge for the Edgar Canyon wells.

7.3.4 Alternative Water Sources

Alternative water supplies, like stormwater and recycled water, are critical to the long-term sustainability of BCVWD. These non-imported water supplies are essential for building a resilient water asset portfolio in the face of a growing population and mounting hydrological and regulatory uncertainties.

7.3.4.1 Stormwater

Stormwater Capture in Edgar Canyon

Stormwater capture is an important component of BCVWD's local water supply strategy. During storm and high-flow events runoff is diverted to a series of percolation ponds, where it infiltrates and is later recovered through nearby groundwater wells. Occasionally, during exceedingly high stormwater flow events, stormwater flows the entire length of Edgar Canyon. A portion of these flows may be captured by basins located at the mouth of Edgar Canyon. BCVWD retains the right to capture these flows in older percolation ponds, located downstream of newer basins, when high stormwater flows are available. This is important as

SGPWA would be precluded from using the Edgar Canyon percolation facilities during such events, thus freeing up recharge capacity for BCVWD.

Stormwater capture and regular surface diversions from BCVWD's pre-1914 Edgar Canyon appropriations are not to be conflated. Stormwater may be considered additive to Little San Gorgonio Creek diversions, as surface flows typically not present, but only available during high flow events. This is an important distinction as to not double count recharge volumes from both pre-1914 appropriations and stormwater flows used to recharge the underlying groundwater aquifers in the canyon.

Stormwater Capture and Recharge via MDP Line 16 Storm Drain

BCVWD is expanding its ability to capture and recharge local stormwater supplies. In coordination with the Riverside County Flood Control and Water Conservation District, BCVWD is currently completing work on the MDP Line 16 Project, which will enable stormwater recharge at the Phase 2 facilities. The project is projected to provide approximately 200 acre-feet per year (AFY) of additional stormwater recharge capacity under normal hydrologic conditions. As of 2026, the construction of the MDP Line 16 project is considered complete, however, the District has yet to install a water flow measurement device to quantify the volume of water recharged in the ponds using this method. The District intends to install a flow measurement device in the near future.

Table 7-20 summarizes the District's projected stormwater capture through 2030.

TABLE 7-20: PROJECTED STORMWATER CAPTURE THROUGH 2030 (ACRE-FEET)

Year Type		Stormwater Capture
Normal		500
Single Dry year		200
Multi-Year Drought	2026 (1st Year)	200
	2027 (2nd Year)	200
	2028 (3rd Year)	200
	2029 (4th Year)	200
	2030 (5th Year)	200

BCVWD is continuing to expand its ability to capture and recharge local stormwater supplies through operation of the MDP Line 16 facilities and miscellaneous urban runoff basins. Based on historical performance and projected hydrologic conditions, the District estimates

average annual stormwater capture of approximately 500 AFY during normal years and 200 AFY during single dry year and multi-year drought conditions. **Table 7-21** summarizes the District's projected stormwater capture through 2050.

TABLE 7-21: PROJECTED STORMWATER CAPTURE THROUGH 2050 (ACRE-FEET)

Stormwater Capture		2030	2035	2040	2045	2050
Normal		500	500	500	500	500
Single Dry year		200	200	200	200	200
Multi-Year Drought	Year 1	200	200	200	200	200
	Year 2	200	200	200	200	200
	Year 3	200	200	200	200	200
	Year 4	200	200	200	200	200
	Year 5	200	200	200	200	200

In addition to existing stormwater recharge operations, BCVWD has identified several conceptual stormwater capture and recharge opportunities that could further increase local supply reliability in the future. These projects include enhancements to Noble Creek facilities, additional urban runoff capture improvements, and expansion of recharge conveyance infrastructure. Only Phase 2 recharge facilities were enhanced to accommodate stormwater inflows, not Phase 1. Estimated yields for these projects are preliminary and would be subject to future feasibility evaluations, permitting, funding availability, and environmental review. **Table 7-22** summarizes the District's potential stormwater capture projects and associated estimated yields.

TABLE 7-22: POTENTIAL STORMWATER CAPTURE PROJECTS

Project	Brief Description
Soft plug in Noble Creek at BCVWD Groundwater Recharge Facility	High storm flows that would otherwise bypass the spreading basins at the mouth of Edgar Canyon could potentially be captured through installation of a "soft plug" within the lined portion of the Noble Creek channel. Captured flows would be diverted to BCVWD's groundwater recharge facility for percolation and recharge. Only extreme storm events currently extend beyond the canyon. The estimated yield is approximately 500 AFY.

Project	Brief Description
Stormwater Capture Noble Creek	Stormwater flows within Noble Creek could potentially be desilted on approximately 15.7 acres of BCVWD-owned property located upstream of Noble Street and west of Cherry Avenue. Although the site is not directly over the Beaumont Basin, the property could be used for desilting operations, with clarified flows returned to Noble Creek and subsequently recaptured downstream at a soft plug diversion structure for conveyance to the District's recharge facilities. The estimated yield is approximately 400 AFY.
Marshall Creek South of Elm Avenue to I-10	Urban runoff generated from developed areas east of Beaumont Avenue, between Oak Valley Parkway and Brookside Avenue, could potentially be captured within the soft-bottom reach of Marshall Creek through construction of training dikes designed to prevent flows from passing beneath the I-10 bridge. The drainage area is estimated to generate approximately 300 acre-feet of runoff annually, with an estimated recoverable yield of approximately 150 AFY.
Sundance Urban Runoff	Existing basins located near Eighth Street, Cherry Avenue, and Starlight Avenue currently capture runoff from the Sundance development area. These facilities function effectively for stormwater capture; however, improvements to basin percolation performance could further enhance groundwater recharge benefits.

7.3.4.2 Wastewater and Recycled Water

Recycled water for non-potable uses is not currently a component of BCVWD's water supply portfolio; the District would like to receive recycled water, but has not yet executed an Agreement with the City of Beaumont for recycled water. The District has used non-potable water for landscape and golf course irrigation since the early 1990s. Utilization of non-potable supplies for non-potable uses increases the region's water resilience while continuing to reduce potable demand.

Wastewater System

Wastewater reclamation is expected to play an increasing role in securing the District's long-term water supply needs. BCVWD does not currently treat reclaimed wastewater; however, three wastewater reclamation facilities operate in the broader San Gorgonio Pass region. The City of Beaumont Treatment Plant No. 1, located within the BCVWD service area, treats wastewater from the City of Beaumont and the northern Highland Springs area, a small area located in Cherry Valley. The other two plants are the YVWD's Henry Wocholz Water Reclamation Plant and the City of Banning's Wastewater Treatment Facility.

City of Beaumont

The City of Beaumont Treatment Plant No. 1 provides wastewater collection, treatment, and disposal services for the City of Beaumont, including the Highland Springs area of Cherry

Valley. Wastewater is conveyed primarily by gravity to the treatment facility, with supplemental lift stations serving portions of the system.

The treatment plant has undergone significant upgrades in recent years, increasing its permitted capacity from 4 mgd to approximately 6 mgd. Improvements include advanced treatment processes such as membrane bioreactor (MBR) filtration, reverse osmosis (RO), and ultraviolet (UV) disinfection, allowing the production of high-quality recycled water suitable for non-potable reuse and potential groundwater recharge applications. In addition, a brine disposal pipeline connected to the Inland Empire Brine Line (IEBL) was completed to support RO operations. Disinfected effluent is conveyed through a cascade aerator channel into Cooper's Creek, with approximately 1.8 mgd discharged to support environmental habitat requirements.[37]

The remaining treated wastewater represents a potential recycled water supply for use within the BCVWD service area. Two repurposed clarifiers have been converted to provide additional storage and flow equalization capacity for recycled water deliveries to BCVWD. Each recycled water storage tank (clarifiers) has a capacity of 0.5 million gallons.

During periods when recycled water supply exceeds irrigation demand (e.g., winter months), BCVWD may evaluate opportunities to recharge surplus recycled water at a facility, subject to regulatory approval and treatment requirements. Recycled water recharge is consistent with the provisions of the Beaumont Basin Adjudication and represents a potential future component of the District's conjunctive use strategy.

Table 7-23 shows a summary of the wastewater collected within BCVWD's service area in 2025.

TABLE 7-23: RETAIL WASTEWATER COLLECTED AND DISCHARGED WITHIN SERVICE AREA IN 2025

Name of Wastewater Collection Agency	Volume of Wastewater Collected (AF)	Volume of Treated Wastewater Discharged (AF)
City of Beaumont	4,045	3,911

City of Banning

The City of Banning provides wastewater collection, treatment, and disposal services within its service area and also operates a potable water system. The City's existing wastewater treatment facility utilizes secondary treatment processes and disposes of treated effluent

[37] Initial Study/Mitigated Negative Declaration Beaumont-Cherry Valley Water District Recycled Water System Project, SCH 2007081127, June 2007.

through percolation in the alluvial materials along Smith Creek under permits issued by the Colorado River Regional Water Quality Control Board.

The City of Banning has initiated efforts to expand its use of recycled water, including development of infrastructure to convey recycled supplies for non-potable uses such as golf course irrigation. In addition, the City has planned upgrades to its wastewater treatment facilities, including implementation of advanced treatment processes such as a membrane bioreactor system to improve effluent quality and support expanded recycled water use.

While the City of Banning's recycled water program is primarily intended to serve demands within its own service area, there is potential for future regional coordination, including the possible use of surplus recycled water supplies. However, such interconnections are not currently planned and are considered a long-term opportunity rather than a near-term supply source.

Community of Cherry Valley

The community of Cherry Valley primarily relies on on-site wastewater treatment systems (e.g., septic systems), with the exception of the northern Highland Springs area, which is connected to the City of Beaumont's wastewater collection system. As a result, wastewater generated within Cherry Valley is not currently available for centralized treatment or reuse.

Previous planning efforts evaluated the potential for development of a wastewater collection and treatment system within portions of Cherry Valley to reduce groundwater impacts and support recycled water use. BCVWD has the power to provide wastewater collection and treatment services under the Irrigation District Act, but this power was never exercised. No sewer infrastructure is planned at this time.

Accordingly, wastewater generated within Cherry Valley is not considered a viable source of recycled water supply within the planning horizon of this UWMP.

Existing Non-Potable System

BCVWD operates an extensive non-potable water network of 'purple pipe,' consisting of over 40 miles of transmission and distribution pipelines. The system includes a 24-inch diameter backbone pipeline forming a loop around the City of Beaumont, providing operational flexibility and system redundancy. Construction of the non-potable water system began in 2002.

The District's non-potable system operates within multiple pressure zones (generally ranging from approximately 2400 to 2800 hydraulic grade line [HGL] elevations), allowing the system to serve varying elevations throughout the service area. Currently, the higher elevation of 3000 pressure zone is under consideration for future expansion of non-potable service.

The system includes a two-million-gallon non-potable reservoir (in the 2800 Zone) that provides storage and system pressurization. The reservoir is configured to receive multiple

water sources, including potable water, imported SWP supplies, and non-potable groundwater, allowing for a blended non-potable supply depending on availability and demand conditions.

There are approximately 300 active landscape connections receiving non-potable water, with total demand of approximately 1,600 acre-feet in 2023 (and approximately 1,750 acre-feet in 2022). In addition to water supplied to landscape irrigation customers, a relatively small amount, roughly 300 acre-feet, is supplied through construction meters for construction, where applicable. Some construction meters are supplied with potable water where non-potable supplies aren't available.

Currently, the non-potable system is primarily supplied by groundwater from Well 26 and supplemented with potable water when needed. The groundwater pumped by Well 26 is subject to the Beaumont Basin Judgment. Well 26 serves as a dedicated non-potable groundwater source, providing a reliable base supply to the non-potable water system and supporting system pressurization during normal operations. In certain areas, including Tournament Hills and Fairway Canyon, the system is temporarily supported by potable water through interconnections between the potable and non-potable systems. Production from Well 26 is summarized below in **Table 7-24**.

TABLE 7-24: 2021-2025 WELL 26 NON-POTABLE VOLUME PUMPED (ACRE-FEET)

Year	Well 26 Production
2021	1,357
2022	1,262
2023	1,001
2024	1,025
2025	444

Recycled Water Coordination

The City of Beaumont is the sole provider of wastewater collection services within the BCVWD service area, including the northern Highland Springs area of Cherry Valley. The City completed expansion of its wastewater treatment facilities to approximately 6 mgd and is implementing advanced treatment processes, including membrane bioreactor (MBR) and reverse osmosis systems, to produce high-quality recycled water. Adjacent agencies, including Yucaipa Valley Water District (YVWD) and the City of Banning, provide wastewater services in neighboring jurisdictions. YVWD operates an advanced wastewater treatment facility with ultraviolet disinfection and reverse osmosis and maintains an extensive non-

potable water system, while the City of Banning is planning upgrades to its treatment facilities to support future recycled water use.

BCVWD is actively coordinating with the City of Beaumont to secure a long-term recycled water supply for use within the District's non-potable system.

Future Recycled Water and Non-Potable Sources

Future availability of recycled water is expected to provide an additional local supply source to support BCVWD's water supply portfolio beginning in 2030. As recycled water supplies from the City of Beaumont become available, the District expects to expand the use of recycled water within its non-potable system and reduce reliance on potable and groundwater supplies for irrigation demands.

Projected recycled water supply available to BCVWD is based on wastewater flows from the City of Beaumont Wastewater Treatment Plant. Wastewater flows are projected to increase over time with population growth, resulting in increased recycled water production. A constant discharge of approximately 1.8 mgd is required to be released to Cooper's Creek to support environmental habitat needs, with the remaining flow available for recycling. After accounting for an estimated 10 percent treatment and operational loss, recycled water supply is projected to increase from approximately 1,800 AFY in 2030 to approximately 2,500 AFY by 2045, with similar supply expected through 2050. These projections are consistent with planning assumptions presented in the 2022 Non-Potable Water Master Plan, with one major consideration - the water conservation requirements under the "Making Conservation a California Way of Life" legislation may warrant re-evaluation of projections as indoor water use is significantly reduced. For the purposes of this UWMP, BCVWD conservatively assumes that approximately 80% of the recycled water supplies projected in the 2022 Non-Potable Master Plan through 2045 will be reliably available, closely aligning with the percent reduction in indoor water use mandated under this legislation, should the City and the District formalize an agreement.

When agreements and operational infrastructure are finalized, recycled water will be considered a reliable local supply; however, during drought conditions, reduced indoor water use can result in decreased wastewater flows and corresponding reductions in recycled water production. Consistent with the 2020 UWMP, BCVWD assumes that approximately 90 percent of normal recycled water supply would be available during a single dry year and during the first year of a multi-year drought. During extended drought conditions, recycled water supply is assumed to decrease to approximately 85 percent of normal supply due to sustained reductions in wastewater generation. Similarly, reductions in indoor use under the previously mentioned "Making Conservation a California Way of Life" legislation will also influence wastewater generation, reducing the availability of recycled water.

Table 7-25 presents recycled water supply availability under a five-year consecutive drought scenario, assuming recycled water becomes available to the District starting in 2030. **Table**

7-26 presents projected recycled water supply availability under single dry year and extended drought conditions for future planning years through 2050.

TABLE 7-25: PROJECTED RECYCLED WATER SUPPLIES 2030 (ACRE-FEET)

Year Type		Projected Recycled Water Supplies
Normal		0
Single Dry year		0
Multi-Year Drought	2026 (1st Year)	0
	2027 (2nd Year)	0
	2028 (3rd Year)	0
	2029 (4th Year)	0
	2030 (5th Year)	1,530

TABLE 7-26: PROJECTED RECYCLED WATER SUPPLIES THROUGH 2050 (ACRE-FEET)

Projected Recycled Water Supplies		2030	2035	2040	2045	2050
Normal		1,800	2,300	2,400	2,600	2,600
Single Dry year		1,620	2,070	2,160	2,340	2,340
Multi-Year Drought	Year 1	1,620	2,070	2,160	2,340	2,340
	Year 2	1,530	1,955	2,040	2,210	2,210
	Year 3	1,530	1,955	2,040	2,210	2,210
	Year 4	1,530	1,955	2,040	2,210	2,210
	Year 5	1,530	1,955	2,040	2,210	2,210

7.3.4.3 Desalination Opportunities

Desalination of brackish groundwater is a burgeoning resource in California. Several opportunities for brackish groundwater have emerged for BCVWD in other regions and exchange for SWP water. However, desalination facilities in the Beaumont Basin are impractical given the excellent quality of existing groundwater. Generally, brackish desalination is considered when TDS concentrations exceed 1,500 mg/L. But with local

groundwater TDS concentrations only about 250-275 mg/L, the impetus to pursue desalination would not be considered feasible.

7.3.5 Water Transfers and Exchanges

In addition to local groundwater, the District and SGPWA continue to engage in and explore new opportunities to purchase water supplies from other water agencies and sources.[38] The District benefits from SGPWA's various transfers and exchanges; transfers with Ventura and most recently Napa County have provided reliable long and short-term supplies to support the region. Transfer, exchanges, and groundwater banking programs are important opportunities to investigate in order to enhance the long-term reliability of the District's current supplies that are available to meet demands and extended droughts.

7.3.5.1 City of Banning Transfers

The City of Banning maintains agreements with BCVWD to support water recharge and supply reliability, including the recharge of imported water on the City's behalf and the installation of stub-outs across Highland Springs Avenue for both potable and non-potable connections. The City also maintains a 12-inch emergency interconnection with BCVWD at the intersection of Sun Lakes Boulevard and Highland Springs Avenue, which is capable of transferring water to the City during emergencies. This connection was utilized in the summer of 2020 when four City wells were out of operation; prior to that, it had not been used since 2008. In addition, the City has contributed financially to BCVWD in the development of several production wells to support the extraction and conveyance of imported water.

7.3.5.2 South Mesa Water Company Transfers

Historically, BCVWD and South Mesa Water Company (SMWC) have entered into an agreement governing the transfer of surplus water rights from SMWC to BCVWD's storage account within the Beaumont Basin. This arrangement was predicated on the availability of a temporary surplus, which existed from 2004 through 2014 as defined by the basin's Adjudication, for the express purpose of developing storage for water banking and conjunctive use.

During this period, SMWC possessed water supplies that exceeded its operational demands. Consequently, commencing in 2007, SMWC initiated transfers to BCVWD, culminating in a total volume of 13,000 acre-feet. This activity ceased subsequent to 2014, as the temporary

[38] CWC 10631 (d) - Describes the opportunities for exchanges or transfers of water on a short-term or long-term basis.

surplus was no longer in effect. In the future, BCVWD may consider re-initiating transfers with SMWC if conditions are appropriate.

7.3.5.3 Other Transfer Opportunities

The BCVWD has the opportunity to participate in joint projects with other Southern California water agencies, including initiatives for groundwater treatment and desalination. However, BCVWD's current position is that such projects should be undertaken by the SGPWA to enhance its regional water supply. This issue is set against a backdrop of widespread groundwater contamination in Southern California, with many basins adversely impacted by nitrates, high total dissolved solids, volatile organic compounds (VOCs), and perchlorate. Several regional entities, including the Santa Ana Watershed Project Authority and the Chino Basin Desalting Authority, are already constructing or planning facilities to address these contaminants. In this context, BCVWD views transfers and exchanges as highly viable solutions for securing its own long-term water supplies.

The District regularly benefits from SGPWA-managed short- and long-term transfers for imported water. These transfers are an important part of the San Gorgonio Pass Regional portfolio.

7.3.5.4 Emergency Interties

An emergency intertie between BCVWD and the City of Banning has existed since the 1990s. A 12-inch intertie between the two agencies, located at Highland Springs Avenue and Sun Lakes Boulevard, allows for mutual exchanges of water. In recent years, BCVWD and the City of Banning have worked to implement two additional interties along Highland Springs, one at Oak Valley Parkway (Meadowline Way) and one at Starlight Avenue (Atwell Drive).

7.3.6 Future Supply Projects

BCVWD's water supply portfolio consists of a combination of existing groundwater and imported supplies, supplemented by a range of planned and potential future projects intended to improve long-term reliability and resilience.

Several firm (planned) projects are already underway or in advanced planning stages. These include:

- The flow metering component of the Beaumont MDP Line 16 project, which enables diversion of water to the BCVWD recharge facility;
- The connection to the City of Beaumont wastewater water treatment plant, which will provide a significant new non-potable supply;
- Development of advanced treated recycled water, which will further expand reuse capacity;

- Implementation of urban runoff and stormwater capture projects, including recharge basin enhancements; and
- San Timoteo Basin groundwater extraction, which will recover non-potable groundwater from the nearby San Timoteo creek.

In addition, the District is evaluating several potential projects that could further augment supplies, including expanded recycled water recharge and regional partnerships.

SGPWA is a Project Member of Sites Reservoir, a proposed 1,500,000 acre-feet off-stream storage reservoir in Northern California. SGPWA has 14,000 shares, 4,000 of which BCVWD holds pursuant to a 2020 costs and benefits sharing agreement with SGPWA. The Sites supply would be a consequential new supply and storage asset for the San Gorgonio Pass Region. More information about Sites Reservoir is in Chapter 3.

Table 7-27 summarizes the future supply projects currently planned or under consideration in the District's service area.

TABLE 7-27: CURRENT AND FUTURE WATER SUPPLY SOURCES AND PROJECTS

Source / Project	Source Type	Status	Partner Agency	Implementation Timing	Estimated Yield (AFY)	Notes
Current Sources						
Groundwater – Edgar Canyon	Groundwater	Existing (Firm)	—	Existing	—	Primary local supply
Beaumont Basin Storage	Groundwater	Existing (Firm)	—	Existing	—	Stored groundwater
Imported Water (SGPWA)	Imported	Existing (Firm)	SGPWA	Existing	—	Supplemental supply
Future Projects (Planned/Firm)						
Beaumont MDP Line 16	Conveyance / Recharge	Planned (Firm)	RCFC & WCD	2027	250	Diversion to recharge facility
Recycled Water Connection (City of Beaumont)	Recycled	Planned	City of Beaumont	2030	1,963	Non-potable supply

Source / Project	Source Type	Status	Partner Agency	Implementation Timing	Estimated Yield (AFY)	Notes
Advanced Treated Recycled Water	Recycled	Planned	City of Beaumont	2030	300–660 (530 avg)	Advanced treatment + brine line
Urban Runoff Capture	Stormwater	Planned (Firm)	City of Beaumont	~2030	200–545	Recharge basin enhancements
San Timoteo GW Extraction[39]	Groundwater	Planned	City of Beaumont	2035	400–800 (600 avg)	Wastewater percolation recovery
Lower Edgar Canyon Non-Potable GW	Groundwater	Planned (Firm)	—	~2030	420	Nitrate-impacted groundwater
Future Projects (Potential)						
Recycled Water Recharge Expansion	Recycled	Potential	City of Beaumont	TBD	TBD	Subject to agreements and wastewater availability under future conservation levels.
Singleton Basin Groundwater	Groundwater	Potential		TBD	TBD	
Joint Projects / Exchanges	Regional	Potential	Multiple Agencies	TBD	TBD	Regional coordination

[39] Extracting this groundwater is contingent on the City of Beaumont producing and providing recycled water.

Source / Project	Source Type	Status	Partner Agency	Implementation Timing	Estimated Yield (AFY)	Notes
Sites Reservoir	Imported / State	Potential	State of California	2033	10,000 (avg)	State-led project

7.3.7 Climate Change

While the California Water Code does not prescribe specific climate change planning requirements for water suppliers, it recognizes that climate change is appropriate to consider when evaluating drought risk, water supply reliability, and future supply conditions. BCVWD's imported water supplies are provided by the San Gorgonio Pass Water Agency and are primarily used to support groundwater recharge. Accordingly, BCVWD's climate change–related supply considerations are tied to the long-term reliability of State Water Project deliveries available to SGPWA. SGPWA evaluates current and future SWP supply reliability using the California Department of Water Resources' State Water Project Delivery Capability Report (DCR), which incorporates climate change assumptions into projected allocations and system performance. BCVWD relies on this regional assessment when characterizing the reliability of imported supplies in this RUWMP. Further discussion of climate impacts can be found in Section 7.5 and Chapters 2 and 3.

7.3.8 Bay-Delta Plan

The Bay-Delta Water Quality Control Plan Update (Plan) is a pending State Water Resources Control Board (State Board) action that could impact water supplies that connect to the Sacramento-San Joaquin Bay Delta (Delta). Although the Plan has not yet been adopted, the various proposed State Board actions could affect each urban water purveyor's water supply reliability. The Healthy Rivers and Landscapes Program is an alternative to the Plan and provides opportunities for urban purveyors to meet the Plan's aquatic species and water quality objectives through coordinated regional management activities. In addition, the Plan has numerous post-adoption water management activities, such as cold-water storage and management, that are to-be-determined as the Plan is implemented. These to-be-determined management actions could impact how water supplies are made available to each urban purveyor. Finally, the Plan appears to exempt some tributaries and other geographical areas from strict adherence to the Plan or HRL Program that would not affect long-term urban water planning projections.

The water supply reliability projections described in this Urban Water Management Plan update reflect characterizations of water supplies and demands as they exist based upon reasonably available information. Although the Plan, HRL Program, and post-Plan water management adjustments could change UWMP water supply reliability projections, the water

supply implications are not yet suitable for analytical integration into the current water supply reliability projections for this UWMP iteration. Once the Plan or HRL Program is adopted, and post-adoption implementation actions become better known, the projections for urban water supply reliability can be reasonably calculated. It is anticipated that the 2027 through 2030 iterations of Annual Assessments will guide urban purveyors in assessing near term impacts of the Plan on water supply reliability and generate useful information that can be incorporated into the next UWMP update in 2030.

7.3.8.1 Bay-Delta Reliance

BCVWD, in concert with San Gorgonio Pass Water Agency and other regional water purveyors, continues to demonstrate reduced reliance on imported water supplies from the Bay-Delta. This reduced reliance and regional self-sufficiency are attributable to significant advances in reducing potable demand, developing infrastructure for recycled water, and groundwater recharge operations with a region-wide emphasis on water use efficiency. BCVWD's Delta Reliance Assessment is included as Appendix A to this UWMP.

Imported water supplies sourced from the Bay-Delta face an uncertain future. Hydrological and regulatory uncertainty, such as Delta Smelt considerations and the Bay-Delta Water Quality Control Plan, disproportionately impact distal importers like SGPWA. The East Branch Extension of the California Aqueduct is effectively at the "end of the line." This imbues considerable variability in the region's water supply. As such, it is in the best interests of both BCVWD and SGPWA to continue to pursue non-imported supplies, as to reduce the general region's reliance on increasingly uncertain imports.

7.3.9 Water Supply Portfolio Summary

Table 7-28 summarizes BCVWD's water supply assets for 2025 through 2030 in normal, single dry, and five consecutive dry years, incorporating recycled water supplies anticipated to be available in 2030. **Table 7-29** summarizes BCVWD's water supplies through 2050 in normal, single dry, and five consecutive dry years.

TABLE 7-28: BCVWD'S COMBINED WATER SUPPLIES THROUGH 2030 (ACRE-FEET)

Year Type		Combined Water Supplies
Normal		13,300
Single Dry year		12,100
Multi-Year Drought	2026 (1st Year)	10,400
	2027 (2nd Year)	10,400
	2028 (3rd Year)	10,500
	2029 (4th Year)	10,500
	2030 (5th Year)	12,100

TABLE 7-29: BCVWD'S COMBINED WATER SUPPLIES THROUGH 2050 (ACRE-FEET)

Combined Water Supplies		2030	2035	2040	2045	2050
Normal		15,100	16,600	17,600	18,400	19,000
Single Dry year		13,700	15,200	16,200	16,900	17,500
Multi-Year Drought	Year 1	12,100	13,300	14,200	14,900	15,400
	Year 2	12,000	13,200	14,100	14,800	15,300
	Year 3	12,100	13,300	14,200	14,900	15,400
	Year 4	12,200	13,400	14,300	14,900	15,400
	Year 5	12,300	13,500	14,400	15,000	15,500

Section 7.4
Water Use Characterization

7.4.1 Introduction

Developing a thorough understanding of water use enables the District to reliably and cost-effectively manage its water supplies to continue to meet customer needs. This chapter characterizes the District's current and forecasted retail customer water needs, examining how various factors such as seasons, land use classifications, and differing hydrologic conditions impact water use.

A thorough analysis of the District's past and current water use enables realistic water use predictions to be made for the future that consider anticipated growth, new regulations, changing climate conditions, and trends in customer water use behaviors. After individually analyzing each water use sector, information can be aggregated into a comprehensive projection of customer water use that becomes the foundation for integration with the District's water supplies (see Section 7.3) to assess long-term water system reliability (see Chapter 7.5).

As discussed previously in this plan, there have been no legislative changes to the UWMPA since the adoption of the District's 2020 UWMP, however updates to annual water use reporting have been implemented. These include Urban Water Use Objective (UWUO) reports, and monthly drought and conservation reporting to the Safe and Affordable Funding for Equity and Resilience (SAFER) portal that are consolidated annually into an auto-generated Clearinghouse Annual Inventory Report (CAIR).

This Section is organized as follows:

- Current Customer Water Use – This subsection presents data reflecting the District's residential and non-residential customers for 2021 through 2024 as well as the actual 2025 water use and presents the distribution system losses for this same period.
- Compliance with Urban Water Use Objectives and past urban water use efficiency efforts – This subsection documents the derivation of the District's UWUO, comparison to the District's actual water use, UWUO reporting process, and past urban water use efficiency efforts, including the District's 2020 GPCD target.

- Demand Management Measures – This subsection provides a narrative description of each water demand management measure implemented over the past five years and describes the District's planned measures for the foreseeable future.
- Forecasting Customer Use – This subsection presents the derivation and results of future water use forecasts for potable and non-potable water within the District's service area, categorized by existing uses, new known and unknown developments, and estimated distribution system losses. This subsection also quantifies adjustments made to reflect growth trends, estimates the variations in customer water use the District should expect during years with low rainfall, and discusses longer-term climate change considerations.
- Projecting Disadvantaged Community Water Use – This subsection presents the estimated water use necessary to meet lower income households, pursuant to California Water Code §10631.1.

7.4.2 Current Customer Water Use

As described in Subsection 7.2, the District serves potable water to approximately 22,146 customer connections. Under normal circumstances, customers are served potable water derived from multiple sources (see Subsection 7.3), which has been either recharged and subsequently extracted or produced from the District's wells within Edgar Canyon. Information about the District's current customers, their recent and expected water use trends, and the District's on-going demand management efforts targeting this customer use provide a foundational basis for this UWMP's water use forecast to 2050.

7.4.2.1 Customer Water Use: 2021 to 2024

Recent customer water use data can help the District understand water use trends, effects of temporary use restrictions imposed during the most recent prolonged drought and recovery from such temporary restrictions, effects of long-term demand management measures, and other pertinent water use factors relevant to its forecast of future water use. Additionally, the District is required to quantify past customer water use pursuant to Water Code Section 10631(d)(1).

Table 7-30 presents the District's past customer potable water use by customer classification for 2021 through 2024 in acre-feet. The District records potable water use within five primary categories:

- Single-family residential
- Multi-family residential
- Commercial and Institutional
- Industrial
- Landscape Irrigation
- Agricultural Irrigation

The District also records a small quantity of water under "other" which captures a range of small, non-standard uses such as metered construction grading water and street sweeping.

TABLE 7-30: POTABLE CUSTOMER USE: 2021-2024 (VALUES IN ACRE-FEET)

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Single-Family Residential	2021	707	531	542	479	596	719	1,083	852	1,178	855	726	625	8,269
	2022	628	454	558	558	822	683	838	856	1,137	805	761	496	8,097
	2023	582	552	355	257	422	562	990	811	1,125	815	739	523	7,210
	2024	553	486	559	361	290	758	919	950	1,101	727	1,093	688	8,486
Multi-Family Residential	2021	18	38	13	33	13	38	24	41	30	41	16	35	342
	2022	14	27	18	38	16	30	24	41	25	47	18	32	330
	2023	12	48	15	25	10	40	29	41	31	38	22	36	347
	2024	12	39	20	22	11	44	15	54	14	49	22	48	350
Commercial Institutional	2021	83	92	56	88	67	135	120	146	155	146	85	123	1,295
	2022	49	93	61	118	95	121	353	163	143	152	112	106	1,565
	2023	53	105	53	63	54	117	97	152	116	127	120	110	1,167
	2024	71	92	60	62	37	124	90	200	95	160	113	148	1,253
Industrial	2021	15	14	18	10	13	20	16	15	22	22	11	19	195
	2022	9	14	15	20	16	16	15	19	15	21	16	13	187
	2023	17	22	16	15	9	21	30	17	25	20	13	19	224
	2024	9	19	18	10	9	26	12	27	9	23	11	17	188
Landscape Irrigation	2021	14	8	7	11	15	27	28	23	30	28	9	18	218
	2022	5	16	11	19	22	17	32	30	33	28	14	11	237
	2023	7	9	4	7	10	22	34	22	32	19	21	15	204
	2024	14	11	13	4	25	133	75	187	54	143	99	83	839
Agricultural Irrigation	2021	5	0	2	0	5	0	15	0	13	1	5	0	46
	2022	3	0	3	0	6	0	10	0	14	0	10	0	47
	2023	5	0	0	0	2	0	9	0	14	0	4	0	33
	2024	2	0	1	0	1	0	4	0	16	0	14	0	40
Other	2021	12	14	18	33	22	38	33	58	51	22	31	12	345
	2022	20	29	31	29	30	30	37	22	24	13	16	5	285
	2023	9	29	1	3	6	11	5	20	3	4	2	6	98
	2024	5	0	0	0	2	1	4	1	5	8	11	10	49
Total Metered Potable Deliveries	2021	854	696	656	654	731	977	1,320	1,135	1,478	1,117	884	832	11,333
	2022	728	633	695	780	1,007	897	1,310	1,131	1,390	1,067	947	661	11,245
	2023	683	766	444	370	515	774	1,193	1,062	1,346	1,024	922	709	9,807
	2024	667	648	673	459	375	1,086	1,119	1,418	1,295	1,110	1,363	994	11,205

This historical data provides insight into the water use trends across customer categories, the relative ratio of differing customer classifications, as well as seasonal variations. The District measures and reports some data on a bi-monthly metering schedule. Regardless, the data shows that water use in all categories typically peaks during the summer months, corresponding to seasonal conditions. Landscape irrigation demonstrates this trend, with lower usage in winter reflecting conditions where cooler temperatures and low ETo are

generally sufficient to meet the water needs of large landscapes (e.g., parks and play fields). Between use classifications, the District's single-family customer water use is proportionately the highest, consistently comprising nearly 80% of the District's potable water demand. When compared to previous projections, these water use characteristics have remained relatively consistent throughout the last 10 years.

The District also uses non-potable water to support customer demands. **Table 7-31** provides the historic monthly non-potable deliveries.

TABLE 7-31: NON-POTABLE USE: 2021 TO 2024 (VALUES IN ACRE-FEET)

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Commercial Institutional	2021	0	0	0	0	0	1	0	1	1	1	2	0	6
	2022	0	0	1	0	0	0	2	1	1	1	0	0	7
	2023	0	1	0	1	1	2	3	2	4	2	3	3	22
	2024	0	0	0	0	0	1	0	1	0	1	1	1	5
Landscape Irrigation	2021	137	67	81	77	135	265	233	198	306	173	128	110	1,911
	2022	16	70	86	120	143	114	214	258	291	220	106	94	1,732
	2023	57	34	19	23	101	188	230	204	301	132	172	121	1,582
	2024	14	17	14	4	31	145	95	260	85	200	102	104	1,070
Total Metered Non-Potable Deliveries	2021	138	68	81	77	135	266	234	199	307	174	130	110	1,918
	2022	16	70	87	120	143	114	216	259	292	221	106	95	1,738
	2023	58	35	19	24	102	190	233	206	305	134	175	123	1,604
	2024	14	17	14	4	31	145	95	261	85	201	103	104	1,074

When viewed in relation to potable deliveries, the entire non-potable customer use represents less than 10% of the annual demand upon the District's water supplies. However, categories using non-potable water maintain the same seasonal variation pattern.

Observations of seasonal variation, dominating categories, and utility of non-potable water to serve certain demands provide the District with additional insight necessary for assessing the seasonal reliability of its water supplies. This enables the District to develop successful water management approaches and water shortage contingency response actions with as customer classes and economic trends change, while recognizing that not all historical projections will remain consistent.

7.4.2.2 Customer Use in 2025

Customers served by the District are metered at their connection to the District's potable water distribution system. As of January 1, 2024, for each customer account, the District is required to collect and submit metered delivery values to the State Water Board on a

monthly basis, summarized annually in an auto-generated CAIR Report. This data was formerly submitted as part of the District's annual reporting to the SWRCB Division of Drinking Water and to DWR; although those reports are still required, requirements will be modified by the SWRCB to avoid duplicative reporting.[40] The 2025 actual customer use presented in **Table 7-32** represents the summarized delivery to all the District's potable customers.

TABLE 7-32: POTABLE CUSTOMER WATER USE: 2025 ACTUAL USE (VALUES IN ACRE-FEET)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Single-Family Residential	725	488	653	456	635	583	919	820	1,100	792	910	587	8,668
Multi-Family Residential	14	42	22	34	22	38	22	45	26	39	24	34	363
Commercial Institutional	68	113	78	118	84	150	113	177	132	183	125	143	1,483
Industrial	14	11	16	15	12	18	10	16	13	16	13	12	165
Landscape Irrigation	33	60	23	39	59	80	104	124	101	85	71	31	809
Agricultural Irrigation	5	0	4	0	3	0	11	0	17	0	9	0	48
Other	16	11	3	8	8	10	15	18	10	12	15	7	133
Total Potable Metered Deliveries	**874**	**725**	**799**	**668**	**822**	**879**	**1,193**	**1,200**	**1,398**	**1,129**	**1,168**	**814**	**11,669**

The District's 2025 non-potable deliveries are summarized **Table 7-33**.

TABLE 7-33: NON-POTABLE CUSTOMER WATER USE: 2025 ACTUAL USE (VALUES IN ACRE-FEET)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Commercial/Institutional/Industrial	44	99	36	54	91	138	156	192	161	127	115	43	1,258
Total Non-Potable Metered Deliveries	**45**	**99**	**36**	**54**	**91**	**139**	**156**	**192**	**161**	**127**	**116**	**43**	**1,258**

These summary tables do not include the distribution system losses inherent in a pressurized water delivery system that occur during the District's efforts to treat, store and route the water throughout the extensive distribution system to each customer's connection.

[40] The annual SWRCB report is referred to as the 'electronic Annual Report' or eAR, and the annual DWR report is known as the Public Water System Statistics report.

7.4.2.3 Existing Distribution System Losses

Distribution system water losses (also known as "real losses") are the physical water losses from the District's water distribution system up to the point of delivery to the customer's system (e.g., up to the residential water meter).

Since 2016, the District has been required to quantify its distribution system losses using the American Water Works Association (AWWA) Method.[41] An electronic copy of the audit in Excel format is to be submitted to the DWR by October 1 of each year for the prior year's estimated system losses, using DWR's online submittal tool pursuant to Code of Regulations Section 638.5. Although the AWWA-based audit remains in effect as the primary tool for monitoring distribution system losses, mandated water loss reductions are on the horizon with the SWRCB's April 1, 2023 adoption of volumetric water loss performance standards. Pursuant to Section 966, the SWRCB will require suppliers to reduce real loss by January 1, 2028 to no greater than the real water loss standard calculated in its 2027 audit. After 2028, the District shall assess compliance every three years as an average of recent real losses. Additionally, the District will be required to evaluate apparent losses and submit an inventory of apparent losses should average losses exceed the real water loss standard.

Pursuant to DWR's 2025 recommendations, these distribution system losses are losses reported as part of DWR's Water Loss Audit Program.[42] Due to the time lag associated with AWWA reporting, the 2025 estimate has not been officially submitted to DWR as of the drafting of this UWMP, thus, the District's submittals for the last four years are shown in **Table 7-34**.

TABLE 7-34: DISTRIBUTION SYSTEM LOSS: 2021 THROUGH 2024

2021	2022	2023	2024
2%	2%	3%	6%
		2021-2024 Average =	**3%**

As can be anticipated given the dynamic functions of a pressurized potable water distribution system, the estimated annual distribution system loss as a percentage of water entering the system will vary year-to-year and month to month. On average, however, the District's distribution system loss represents about 3% of the water entering the District's distribution system. This average is used for purposes of forecasting water use to 2045.

[41] Title 23 California Code of Regulations Section 638.1 et seq.

[42] See the Beaumont - Cherry Valley Water District AWWA Worksheet, submitted annually to DWR's WUEdata - Water Audit Report Data (WUEdata - Water Audit Plans).

7.4.2.4 Water Loss Control Standard

The CWC §10608.34 required the State Water Resources Control Board (SWRCB) to develop water loss control and performance standards (Real Water Loss Standards) applicable to urban retail water suppliers. The Real Water Loss Standard for the District was developed using information submitted as part of the District's annual water loss reporting to the State, specifically for the period 2017 through 2020. The resulting Real Water Loss Standard is 48.2 gallons per (active and inactive) service connection per day. The resulting Real Water Loss Standard as an average percent of total water supplied is 7.1%. Using the information from the same period, the average "apparent" water loss averaged 2.0% (of total water supplied). Apparent losses are defined as non-physical losses due to meter inaccuracies, data or billing errors, and unauthorized consumption.[43] The total water loss estimate as a percentage of total water supplied, for purposes of projecting future requirements is 9.1%.

7.4.3 Compliance with Water Use Targets and Objectives

This section examines the District's derivation and compliance with state-mandated water use targets and objectives. The Water Conservation Act of 2009, also known as SB X7-7, introduced water conservation targets that served as a valuable measure of progress through 2020. Water use efficiency regulations have since been updated and refined by Senate Bill 606 and Assembly Bill 1668, guiding the calculation of "urban water use objectives", as well as the District's annual reporting on these objectives starting in 2023.

7.4.3.1 Compliance with 2020 Urban Water Use Target

SB X7-7, also known as the Water Conservation Act of 2009, introduced sustainable water use and demand reduction legislation requiring the District to make incremental progress in reducing per-capita water use. Specifically, urban water retailers were tasked with achieving a 10% reduction in per capita water use by December 31, 2015, and a 20% reduction by December 31, 2020. Beyond 2020, although reporting on compliance is no longer required, this target remains valuable as a baseline for the District to measure progress on achieving water efficiency goals.

The District's 2015 GPCD interim target was established in the 2015 UWMP as 272 GPCD, whereas the District's actual retail per capita water use in 2015 was 180, demonstrating compliance with this target. In 2020, the District's 2020 final water use target was calculated to be 242 gpcd. The District's calculation of their 2020 actual GPCD used the following methodology:

[43] Title 23 CCR §980; §700.1

Gross water, defined as the total potable water pumped by the District, represents both the customer deliveries and the distribution system losses. After accounting for transfers to Banning, this value divided by the District's estimated population in 2020, resulted in a compliance value of 188 GPCD. Because this value was less than the District's 242-gpcd target, the District was determined to be in compliance with CWC Section 10608.24(b).

Although not required by the Act, in 2025, the District was determined to have an actual GPCD of 134, calculated using the same methodology presented above. Moving forward, the District shall maintain compliance with its 2020 GPCD target for urban water management planning purposes.

7.4.3.2 Urban Water Use Objective Compliance

In 2018, the California Legislature passed Senate Bill 606 and Assembly Bill 1668, directing the SWRCB to adopt standards to encourage more efficient urban water use. This legislation, known as "Making Conservation a California Way of Life," was adopted in 2024, establishing individualized Urban Water Use Objectives (UWUOs) for each urban retail water supplier. In contrast to the SB X7-7 per-capita targets, this legislation functions as a water budget tailored to a supplier's service area, considering residential indoor use, residential and commercial outdoor use based on local evapotranspiration and irrigable landscape area, water loss, and bonus incentives for potable reuse. In addition to the volumetric UWUO, the regulation establishes performance measures for commercial, industrial, and institutional (CII) sectors. The standards become progressively more stringent through 2040. Compliance with efficiency-based UWUOs aligns with both the District's Demand Management Measures (DMMs) detailed in Section 7.4.3 below, and the adaptive management strategies outlined in the District's Water Shortage Contingency Plan (WSCP) in Chapter 7.6.

In each of the first three reporting years, the District submitted required annual reports to the SWRCB demonstrating that actual water use remained below its calculated UWUO, confirming compliance in 2023, 2024, and 2025.

7.4.4 Demand Management Measures

Pursuant to California Water Code Section 10631(e), the District needs to provide a narrative discussion of the water demand management measures it has implemented, is currently implementing, and plans to implement. The historic and on-going measures can help the District understand the effectiveness of managing existing customer uses so as to help guide refinements, emphasis or augmentation that will help position the District to maintain compliance with applicable water use targets.

To date, the District's overall water management efforts have resulted in significant and long-term water conservation savings. During the 2021 to 2022 drought (characterized by 5% SWP allocations), the District's residents showed tremendous ability to temporarily reduce water

usage and many of the efforts have had long-term viability, providing on-going savings well into the future. The District is also a member of the California Urban Water Conservation Council (CUWCC) successor organization, California Water Efficiency Partnership (CalWEP).

The District's demand management measures are highlighted in this subsection.

7.4.4.1 Foundational Demand Management Measures

This subsection describes the foundational demand management measures (DMMs) that underpin the District's operations and customer deliveries. These particular DMMs represent adopted ordinances, policies, and long-standing budgeted conservation programs.

Water Waste Prevention Ordinances

Wasteful water is prohibited in the District's service area as recognized in Part 15-1 of the District's Rules Governing Water Service. These fundamental prohibitions align with state-mandated requirements. These regulations are enforced according to a series of warnings/penalties. Resolution No. 2016-05, adopted by the BCVWD Board of Directors, prohibits various wasteful activities, including washing cars unless the hose has a shutoff valve, irrigating within 48 hours of a rain event, and use of non-recirculating fountains.

Metering

All water service connections in the BCVWD's service area are metered, including construction water taken from hydrants, street sweeping trucks, and vactor truck water. The District has recently implemented an Automatic Meter Reading System (AMR) program to replace existing meters, including automatic meter infrastructure (AMI) to provide customers with immediate access to real time water usage, including leak alerts.

Conservation Pricing

The District's water rate structure is set to generate the necessary funds to efficiently operate the District's water system and maintain reliable water supplies while encouraging the efficient use of water. Consistent with the District's Regulations Governing Water Service, customer bills include a fixed meter charge based on meter size and a commodity charge based on the volume of water used, with commodity rates structured in increasing tiers for single-family residential customers and class-specific rates for multi-family, commercial, irrigation, construction, and non-potable uses. In addition to base rates, the District applies pass-thru charges reflecting the SCE Power Charge and SWP importing fee.

During drought conditions, the District may activate drought surcharge rates under its Water Shortage Contingency Plan, which impose additive per-unit surcharges that escalate with

higher shortage stages to reinforce conservation behavior.[44] Together, the tiered pricing structure, drought surcharges, and the District's advanced metering program will continue to help customers manage their water use under both normal and dry year conditions. The District's 2020 Water Financial Plan and Utility Rate Study further refines service costs based on each ratepayer's respective usage.

Public Education and Outreach

The District engages its customer base by educating new customers requesting water service about water conservation, as well as providing grab-and-go water conservation literature in-person and online, with a multitude of resources to the community for conserving water accessible through the District website. The San Gorgonio Pass Water Agency, of which the District is a member, promotes water conservation at local schools.

When recycled water becomes available, BCVWD plans to provide educational presentations to new students to educate them about water conservation and the recycled water system.

Programs to Assess and Manage Distribution System Real Loss

The District's water loss assessment and management program includes annual water audits and ongoing leak detection and repair through their Capital Facilities Replacement Program. This includes ongoing meter calibration, leak detection in water distribution lines, and prompt replacement of all leaky meters. The District's activities include:

- Annual water audit and water balance
- Proactive leak identification and repair
- Using a calibrated computer model to test hydrant flows

Water Conservation Program Coordination and Staffing Support

Rather than one full-time water conservation coordinator, the District's customer service representatives provide water conservation information, in line with BCVWD's overall reduced staff levels. Regionally, opportunities identified by BCVWD for water conservation are encompassed by San Gorgonio Pass Water Agency's water conservation program.

7.4.4.2 Other Demand Management Measures

The District also implements several other demand management measures beyond those required by DWR for retail suppliers that have a significant impact on water use.

[44] Beaumont-Cherry Valley Water District. *Regulations Governing Water Service, Part 5: Charges.* Adopted December 10, 2025. Beaumont, CA

Conversion to Recycled Water

BCVWD is continuing its efforts with the City of Beaumont to produce recycled water and include it as part of the District's water supply portfolio. Currently, the District has over 40 miles of non-potable water transmission and distribution pipelines in place serving approximately 300 landscape connections. The non-potable water system can be supplemented with potable water as needed to meet demands. BCVWD seeks to expand recycled water use in the service area; negotiations with the City of Beaumont are ongoing to receive recycled water from their treatment facility. This conversion to recycled water helps relieve the strain from the potable water system and provides a sustainable supply of local water.

Since 2020, the District has converted multiple potable systems to non-potable uses, recently constructing a non-potable pressure reducing station (2600 pressure zone - 2400 pressure zone) to prepare for the receipt of recycled water when it becomes available from the City of Beaumont.

7.4.4.3 Recent DMM Activities

The District has continued to promote and implement water conservation actions. Highlights of the District's recent actions and conservation measures include:

- Providing flyers and brochures in publicly available spaces
- Providing water conservation educational presentations, explaining the non-potable water system
- Respond to over 100 service calls per year and fixing leaks in the distribution system saving more than 7 million gallons

7.4.4.4 Planned DMM Activities

In addition to ongoing water conservation commitments, the District will continue to evaluate the need for additional programs and actions necessary to achieve water use objectives in compliance with California Water Code Section 10609.20. Resources will be dedicated in the District's budget for demand management activities which will help comply with these future water use objectives. Special consideration will be taken regarding changing urban water use patterns in the service area as well as the configuration of anticipated new residential customers to ensure use remains efficient.

7.4.5 Forecasting Customer Water Use

Forecasting future water demands begins with an understanding existing customer demands and trends, recognizing the additional customers expected through growth, and considering

the factors that will influence the water use of both existing and new customer well into the future – especially factors that directly affect the efficiency of water use.

Pursuant to California Water Code 10610.4(c), an urban water supplier "*shall be required to develop water management plans to actively pursue the efficient use of available supplies*." One challenge from this directive is reflecting how the pursuit of efficient use is best represented in the forecast water uses that are the cornerstone of good planning. As required by the Act, the future water uses of both existing customers and those added over the 25-year planning horizon should reflect the "efficient use" of water.

7.4.5.1 Representative Current Water Use

The actual monthly potable and non-potable customer water use data for 2021 through 2025 is shown on **Table 7-30 through Table 7-33**. As mandated by the state, this monthly water use information is also reported as part of the District's SAFER reporting, in their Annual Assessments, and to demonstrate compliance with UWUO.

Using this information, a representative "current" water use by existing customers can be estimated. Developing this estimate requires acknowledging how and why actual use varies slightly year-to-year. This estimate is influenced by a variety of factors, from the timing of spring rain events affecting landscape irrigation demand to changing customer water use patterns following the Covid-19 pandemic. In addition to accounting for some of these variations, the District also has a desire to conservatively assure long-term water system reliability, as described in Chapter 7.5.

For this UWMP, an approximation of the District's actual potable and non-potable water use for 2025 was used to conservatively represent current conditions, given its above-average water use. Although non-potable demand is anticipated to change in the coming years, representing the maximum contract demand accounts for a range of possibilities, as described further below. The result is a proxy for "current" water use for each customer classification, which allows a baseline from which to estimate the future use of these existing customers.

This target total 'current water demand' was then estimated using customer-type demand factors and 2025 connection by classification (see Table 7-3) to generate a comparable estimate. This representative water use for current conditions provides the foundation for estimating the future needs of these existing customers. **Table 7-35** provides the representative monthly and annual current water use, not including distribution system losses.

TABLE 7-35: REPRESENTATIVE CURRENT WATER USE - 2025 (ACRE-FEET)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Potable Use	874	725	799	668	822	879	1,193	1,200	1,398	1,129	1,168	814	11,669
Non-Potable Use	45	99	36	54	91	139	156	192	161	127	116	43	1,258

7.4.5.2 Factors Affecting Future Customer Use

There are multiple factors that affect the forecasted future customer use, including State and local landscape regulations, building code requirements, other water-use mandates, and new housing developments. These factors are incorporated into determining appropriate per-dwelling unit or per customer connection water demand values for use in forecasting future water needs. Relevant characteristics of the factors are described here.

Water Conservation Objectives

In response to multi-year drought conditions, Governor Brown issued Executive Order B-37-16 in May 2016 entitled "Making Water Conservation a California Way of Life." In May 2018, when Governor Brown signed SB 606 and AB 1668 into law, additional statutory requirements were imposed above and beyond the 20 percent by 2020 target reflected in the 2009 legislation. The District also met this mandated target. As described in RUWMP section 4.2.2, in order to demonstrate compliance with its Urban Water Use Objective, efforts to increase water use efficiency and ultimately to reduce water demands of existing and future water users are and will continue to be of high priority to the District.

Requirements in California Building Code

Beginning in January 2010, the California Building Standards Commission adopted the statewide mandatory Green Building Standards Code (hereafter the "CAL Green Code") requiring the installation of water-efficient indoor and outdoor infrastructure for all new projects after January 1, 2011. The CAL Green Code was incorporated as Part 11 into Title 24 of the California Code of Regulations and was updated in 2016, 2019, and 2022. Revisions to the CAL Green Code in 2019 modified sections to direct users to MWELO regulations contained in other regulatory sections.[45]

The CAL Green Code applies to the planning, design, operation, construction, use and occupancy of every newly constructed or remodeled building or structure. All new residential and non-residential customers must meet the water use requirements of the CAL Green

[45] The 2019 updated sections to direct CAL Green code users to Title 23 of the California Code of Regulations to allow Title 23 to be the sole location of MWELO requirements.

Code as well as the outdoor requirements described by MWELO. The CAL Green Code's requirements generally manifest through: (1) installation of plumbing fixtures and fittings that meet the 20 percent reduced flow rate specified in the CAL Green Code, or (2) by demonstrating a 20 percent reduction in water use from the building "water use baseline."[46] Future customers are expected to satisfy one of these two requirements through the use of appliances and fixtures such as high-efficiency toilets, faucet aerators, on-demand water heaters, or other fixtures as well as Energy Star and California Energy Commission-approved appliances.

California Model Water Efficient Landscape Ordinance and County Ordinance

DWR's Model Water Efficient Landscape Ordinance (MWELO) governs new development and retrofitted landscape water efficiency standards. All retail water suppliers or counties are required to adopt the MWELO or enact their own provisions that are equal to or more restrictive than the MWELO provisions.[47] Both the City of Beaumont and Riverside County have adopted Water Efficient Landscape Requirements Ordinances but reflect outdated versions of MWELO.[48][49] The most recent MWELO update in January of 2025 repealed several sections and added a distinction in compliance options for new construction projects between 500 and 2,500 square feet of landscape area and those with 2,500 square feet or more of landscape area.[50]

The MWELO provides a methodology to calculate total water use based upon a given plant factor and irrigation efficiency or sets forth the Maximum Applied Water Allowance ("MAWA")

---

[46] See CAL Green Code. For Residential construction, Section 4.303.1 provides the residential water conservation standard and Table 4.303.2 identifies the infrastructure requirements to meet this standard. Table 4.303.1 and Worksheets WS-1 and WS-2 are to be used in calculating the baseline and the reduced water use if Option 2 is selected. For non-residential construction, Section 5.303.2.3 provides the water conservation standard as well as the baseline and reduced flow rate infrastructure standards. Note that Worksheets WS-1 and WS-2 incorporate both residential and non-residential fixtures, yet the water use is still to be analyzed by "building or structure" as specified in Chapter 1, Section 101.3.

[47] The City of Beaumont and Riverside County maintain landscape ordinances, available in their respective municipal and county codes, continually updated to reflect DWR directives.

[48] City of Beaumont, California, *Code of Ordinances*, Title 17, Chapter 17.06, "Water-Efficient Landscape Requirements," § 17.06.030, https://library.municode.com/ca/beaumont/codes/code_of_ordinances?nodeId=TIT17ZO_CH17.06LAST_17.06.030WAEFLARE

[49] Riverside County, California, *Code of Ordinances*, Title 17, Chapter 17.276, "Water Efficient Landscape Requirements," https://library.municode.com/ca/riverside_county/codes/code_of_ordinances?nodeId=TIT17ZO_CH17.276WAEFLARE

[50] CCR Tit. 23, Div. 2, Ch, 2.7, Sec. 491.2

formula to use if project landscaping details are lacking. Additionally, if using the plant factor basis, the MWELO requires the landscape design plan to delineate hydrozones (based upon plant factors) and then to assign a unique water use value for each hydrozone (low, medium, high).[51]

Prohibition on Non-Functional Turf

In 2023, the Legislature determined that the use of treated, potable drinking water for irrigating decorative or aesthetic landscaping that serves no recreational or public use is inefficient and inconsistent with state water conservation and climate resilience objectives.[52] Under CWC §10608.12(m), "nonfunctional turf" (NFT) is defined as "a ground cover surface of turf located in a recreational use area or community space. Turf enclosed by fencing or other barriers to permanently preclude human access for recreation or assembly is not functional turf". This definition explicitly excludes cemeteries, parks, sports fields, and lawns that are regularly used for recreation or community gathering.[53]

The prohibition on NFT applies primarily to commercial, industrial, institutional, and municipal properties, as well as common areas maintained by homeowners' associations and common interest developments[54]. Importantly, residential lawns are exempt from this regulation.[55] Potable water may continue to be used to maintain the health of trees and other perennial, non-turf landscaping, and where irrigation is necessary to address immediate public health or safety concerns. For example, potable irrigation may be allowed where discontinuation would compromise fire prevention or fuel reduction efforts, dust control, or other measures needed to protect human health and safety.

Implementation of the NFT provisions is phased over several years and may be enforced at the local level by public water systems, cities, and/or counties.[56] Non-compliance of the NFT provisions may result in civil penalties imposed on property owners, or other locally defined enforcement actions.

Initial compliance begins in 2026, with progressively broader property categories subject to the prohibition through 2030 and beyond, including later deadlines for properties located in

[51] CCR Tit. 23, Div. 2, Ch. 2.7, Secs. 490.2
[52] In 2025 provisions of Assembly Bill 1572 were codified into the California Water Code.
[53] CWC §10608.12
[54] Per Civil Code §4100, common interest developments are defined as community apartment projects, condominium projects, planned developments, and stock cooperatives.
[55] Coachella Valley Water District overview on Non-Functional Turf https://www.cvwd.org/653/Non-Functional-Turf
[56] CWC §10608.14

disadvantaged communities.[57] In 2026, public water systems are required to update local ordinances and customer policies to reflect the new restrictions.

The following timeline outlines the dates set forth by the CWC and corresponding requirements:

- **By January 1, 2027**: Public water systems must update local ordinances, regulations, or policies to reflect NFT requirements and must notify customers.
- **Beginning January 1, 2027:** State properties owned or leased by the Department of General Services will no longer be allowed to irrigate NFT with potable water. In addition, all potable irrigation of NFT will be prohibited for local governments, public agencies, public water systems[58], as well as municipal and institutional properties. Revised water systems ordinances and customer communications must be in effect statewide.
- **Beginning January 1, 2028**: All potable irrigation of NFT will be prohibited statewide for all other commercial and industrial properties.
- **Beginning January 1, 2029**: All potable irrigation of NFT will be prohibited for multifamily residential properties, excluding disadvantaged communities. This limitation also applies to common areas of homeowners' associations and similar entities.
- **June 30, 2030:** Commercial, industrial, and institutional property owners with more than 5,000 square feet of irrigated area must begin certifying compliance to the State Water Resources Control Board. Certification is required every three years thereafter (through 2039).
- **June 30, 2031:** Owners of HOA and common-interest development properties with more than 5,000 square feet of irrigated common area must begin certifying compliance. Certification is required every three years thereafter (through 2040).

Metering, Volumetric Pricing, and Water Budgets

California Water Code section 525 requires water purveyors to install meters on all new service connections after January 1, 1992. California Water Code Section 527 requires water purveyors to charge for water based upon the actual volume of water delivered if a meter has been installed. This action alone is not expected to substantially reduce water use. However, it is anticipated that the retail billing system will encourage and help maintain

[57] Per CWC 10608.12 (l), "disadvantaged community" means a community with an annual median household income that is less than 80 percent of the statewide annual median household income.
[58] Per CWC §10608.14(a)(5), properties owned by public agencies, local governments, and public water systems located in a disadvantaged community have an implementation date beginning January 1, 2031.

reasonable use (e.g., through implementation of a tiered rate structure and/or water budgets), so that individual customer water demands are reasonably not expected to increase over time.

Local Ordinances Pertaining to Water Use

It is anticipated that future codes and restrictions will have an effect at reducing consumption even further. Codes and ordinances which will reduce consumption, but are not considered in the demand projections, including:

- The City of Beaumont's Municipal Code Chapter 17.06 (Landscaping Standards): This ordinance intends to reduce outdoor potable and non-potable water use for new developments by limiting the installation of natural turfgrass and generally restricting non-recreational or non-functional turf irrigation. These standards, in coordination with broader Riverside County landscape requirements, are expected to significantly reduce outdoor water demand associated with new single-family residential development and common landscaped areas.[59]
- BCVWD Resolution 2016-05: This resolution rescinded the prior twice-per-week landscape irrigation schedule established under Resolution 2015-05, but maintained a broader set of conservation and water-waste prohibitions from the District's May 18, 2016 Drought Emergency Water Conservation Regulations intended to prevent unreasonable water use and promote efficient conservation practices.[60]
- Riverside County's Ordinance No. 859 (Water Efficient Landscape Requirements): This ordinance establishes standards for the design, installation, and maintenance of landscaping in new and rehabilitated residential, commercial, and industrial developments to reduce outdoor water use and prevent water waste.[61]

Anticipated Development

Thoroughly assessing the impact of recently completed or to-be-completed developments throughout the planning horizon is an important part of estimating future customer use. The District anticipates progress on multiple residential, industrial, and commercial developments throughout the planning horizon, previously presented in Table 7-7. Beyond specific developments, the District has identified certain trends in water usage that are incorporated

[59] City of Beaumont, *Beaumont Municipal Code*, Chapter 17.06, "Landscaping Standards," https://library.municode.com/ca/beaumont/codes/code_of_ordinances?nodeId=TIT17ZO_CH17.06LAST
[60] Beaumont-Cherry Valley Water District, Resolution No. 2016-05 (Beaumont, CA: Beaumont-Cherry Valley Water District, 2016).
[61] Riverside County Board of Supervisors, Ordinance No. 859.3: Water Efficient Landscape Requirements Ordinance (Riverside, CA: County of Riverside, July 21, 2015). https://rivcocob.org/sites/g/files/aldnop311/files/migrated/wp-content-uploads-2009-10-859.3.pdf

into its forecasted demands. For instance, water demands have decreased over time on a per-household basis with the increase of Active Adult (55+) communities and small lot size residential developments making up a higher portion of the overall land use mix. On the other hand, the District is also experiencing increased housing density, supported by the development of infill projects and Accessory Dwelling Units (ADUs).

Considering the implications of growth on compliance with the requirements of Senate Bill 606 and Assembly Bill 1668, the District is prioritizing conservation and demand-reduction efforts, such as installing efficient water systems and low water-use landscaping. Additionally, the District's increased customer base and associated water demands shall be accounted for in the calculation of their urban water use objectives.

7.4.5.3 Customer Water Use Forecast

The following subsections detail the assumptions used to forecast customer water use and gross water needs for the District's water service area, separated into the needs of (a) existing customer future water use, (b) new customer future water use based on known developments, (c) new customer future water use based on unknown developments, and (d) various District-wide water use trends beyond specific developments. Additional context about the District's demand factor methodology as well as an analysis of buildout conditions are also presented in this subsection.

Equivalent Dwelling Unit (EDU) Methodology

Importantly, BCVWD measures existing water use and forecasts future customer water use using a standardized demand factor, expressed in terms of equivalent dwelling units (EDUs). An EDU represents the amount of water used by a single-family household without an accessory dwelling unit, providing a way to compare the relative demand each development places on the District's water system. Historically, Section 5 of the BCVWD Rules and Regulation defined EDUs as 580 gallons per day, equivalent to 0.65 acre-feet per year, per EDU.

This standardized definition has since been refined by an analysis of potable water demand initiated by BCVWD in 2019. Accounting for commercial and institutional demands associated with the analyzed residential tracts, and aligning with the findings of the 2015 Capacity District fee nexus study conducted by SGPWA, the 2020 UWMP used a revised demand factor of 0.546 AF/EDU/yr, or 487 gallons per day.

Considering factors discussed previously affecting future customer use, such as water conservation trends, a relative increase in active adult communities, and more stringent landscape ordinances, this demand factor has decreased. For this UWMP, a new EDU demand factor can be calculated by averaging the water use of single-family households between 2020 and 2025, equaling 440 gal/day, or 0.493 acre-feet per residential dwelling unit per year

at the residential connection. Using an average occupancy of 3.21 people per household, this value corresponds to 137 gpcd for residential use.[62]

To maintain conservative projections, this UWMP applies the following factors:

- 0.65 AFY/EDU/yr for all EDUs constructed prior to 2018
- 0.546 AF/EDU/yr for all EDUs constructed between 2018 and 2024
- 0.493 AF/EDU/yr for all EDUs constructed after 2024

Existing Customer Future Use

To adequately analyze the reliability of water systems and conservatively estimate future use (see Section 7.5), the District analyzed existing demand data for 2025 as a representative annual customer demand. While existing customers may actively or passively conserve water, either by modifying their behaviors or water use, or purchasing appliances and fixtures that simply use less water, they may also maintain their use as-is. Holding the current use as a constant for all existing customers into the future will provide a conservative number that can be re-evaluated prior to the 2030 UWMP and compliance with forthcoming water use objectives.[63]

Although EDUs are closely tied to single-family water usage, associated water demands for multi-family, commercial, industrial, institutional/governmental, and "other" sectors can be proportionally projected under the assumption that changes in these demands occur proportionally to changes in single-family residential demand. As single-family development increases, corresponding growth in commercial, institutional, and industrial uses is expected to support that development. Multi-family demand is also anticipated to increase.

New Customer Future Use – Known Developments

As detailed in Chapter 7.2, and more specifically in Section 7.4.5.3, the District anticipates continued growth related to various new residential and non-residential developments that will result in an increased demand placed upon the District's water supplies. Measured in EDUs, the forecasted water demand associated with each known development anticipated to begin construction within the planning horizon can be quantified. These developments and their forecasted demands are shown on **Table 7-36**. The locations of these developments are shown in **Figure 7-5** and **Figure 7-6** further below, denoted as "Known Development".

[62] City of Beaumont. Beaumont General Plan Update (Beaumont 2040 Plan). 2021.

[63] Per California Water Code Section 10609.20, urban water suppliers shall calculate a water use objective composed of, among other factors, aggregated efficient indoor water use based upon standards of no more than 55 gpcd.

TABLE 7-36: KNOWN NEW DEVELOPMENTS AND FORECASTED DEMANDS[64]

Project Description / Title	Land Use	Estimated Potable Water Consumption (EDUs)	Estimated Non-Potable Water Consumption (EDUs)	Anticipated Construction
Tract 32850	Single-Family Residential	95	40	2030
Beaumont Heights	Industrial	120	343	2030
McClure Industrial Bldg	Industrial	3	-	2026
Beaumont Cross-Dock (Dowling Orchard)	Industrial	11	11	2027
Legacy Highlands	Industrial	484	499	2035
Lilac Logistics Center	Industrial	4	18	2040
Beaumont Pointe (Jack Rabbit Trail)	Commercial / Industrial / Institutional	226	173	2028
APN 419-170-034 & -035 Apartments	Multi-Family Residential	43	2	2027
Xenia Apartments	Multi-Family Residential	120	5	2027
Aegis Builders Apartments (APN 419-232-039)	Multi-Family Residential	9	1	2030
Tract 38879	Single-Family Residential	7	-	2028
Tract 38914	Single-Family Residential	19	-	2028
Kirkwood Ranch	Single-Family Residential	371	-	2036
14201 California Avenue Project	Industrial	48	65	2031
N/w corner of Beaumont Ave & OVP (Commercial Site)	Commercial / Industrial / Institutional	44	6	2028
Tract 29267 (Jack Van derWoude)	Single-Family Residential	522	-	2036
SGPWA Ponds		-	-	2027
Monte Vista Homes (TR 38926)	Single-Family Residential	46	-	2028
Fairway Canyon Phases 4B and 4C & Schoolsite*	Single-Family Residential	366	-	-
Beaumont Summit Station (Sunnycal Egg Ranch)	Industrial	232	140	2034
Beaumont Village	Commercial / Industrial / Institutional	3,099	-	2039
ASM Beaumont	Industrial	22	13	2032

[64] As of the drafting of this plan, the forecasted demands for certain developments have not yet been finalized. For instance, the District anticipates that some potable demands (in EDUs) may change, or some projects may add a non-potable component. Subsequent UWMPs shall present updated demands accordingly.

Project Description / Title	Land Use	Estimated Potable Water Consumption (EDUs)	Estimated Non-Potable Water Consumption (EDUs)	Anticipated Construction
AA Fence Warehouse	Industrial	1	1	2028
Tract 19929	Single-Family Residential	46	-	2038
APN 407-150-023 (Self-Storage & Car Wash)	Commercial / Industrial / Institutional	11	-	2032
APN 405-230-002, -006, -010 (Self-Storage)	Commercial / Industrial / Institutional	1	-	2028
APN 403-030-023, -024 (2 Single-Family)	Single-Family Residential	2	-	2031
APN 401-071-038	Single-Family Residential	7	-	2036
APN 405-060-010	Single-Family Residential	23	-	2038
Tract 30450 (Moran Properties)	Single-Family Residential	26	-	2036
Parcel Map 32344	Single-Family Residential	2	-	2039
Parcel Map 37080	Single-Family Residential	3	-	2041
Parcel Map 36704	Single-Family Residential	3	-	2039
Hisam Baqui (APN 0325-11-124)	Single-Family Residential	4	-	2031
Laborde Ranch	Industrial	53	50	2032
Country Club Village	Residential	186	97	2035
Beaumont Ridge Apartments	Residential	24	2	2028
Beaumont Commerce Center	Mixed Use	332	111	2035
Beaumont Youth Wellness Village	Institutional	55	-	2030

As shown in **Table 7-37**, individual developments were phased to reflect the portion of each project (in EDUs) that can realistically be completed by a given construction date, drawing on developer input and historical build-out trends. While annual EDU totals may shift as projects are revised or delayed, this phased scaling forms the basis for the District's service area demand forecast. Note that due to phasing, not all developments will be completed within the planning horizon.

TABLE 7-37: CUMULATIVE NEW DEMANDS FOR KNOWN DEVELOPMENTS (IN EDUS)

	2030	2035	2040	2045	2050
Cumulative New Potable EDUs	740	1,590	2,740	3,630	4,440
Cumulative New Non-Potable EDUs	350	970	1,470	1,540	1,570
Total	**1,090**	**2,560**	**4,200**	**5,170**	**6,010**

On average, the District anticipates adding approximately 177 new potable EDUs per year and 63 non-potable EDUs per year. In total, the approximate 228 EDUs added annually within its service area is a reasonable estimate of the District's market assimilation rate for developments that can reasonably be completed within the planning horizon.[65]

The District's non-potable demands are supplied by non-potable groundwater, imported water, and planned supplies from the City of Beaumont's wastewater treatment plant, which is capable of providing recycled water. Not included in this non-potable landscape irrigation demands are the demands of Tukwet Canyon Golf Course (267 AFY) and Oak Valley Greens Golf Course (178 AFY), as these golf courses rely upon groundwater and their overlying rights associated with the Beaumont Basin. However, if unused recycled water is available, BCVWD may supply advance treated recycled water to the golf courses or another available recharge location to recharge with the appropriate permits.

New Customer Future Use – Unknown

The District also anticipates serving a portion of Unknown Future Developments, or projects that are not yet formally proposed but likely to occur within areas the District has identified as probable growth zones (shown in **Figure 7-5** and **Figure7-6**, denoted as Unknown Developments). Incorporating these developments into the forecast serves two purposes: it produces a conservative planning baseline, and it enables the District to provide Water Supply Assessment coverage under CEQA as individual projects are proposed.

[65] For reference, the 2020 UWMP previously forecasted a market assimilation rate of 460 EDUs per year between 2025 and 2045

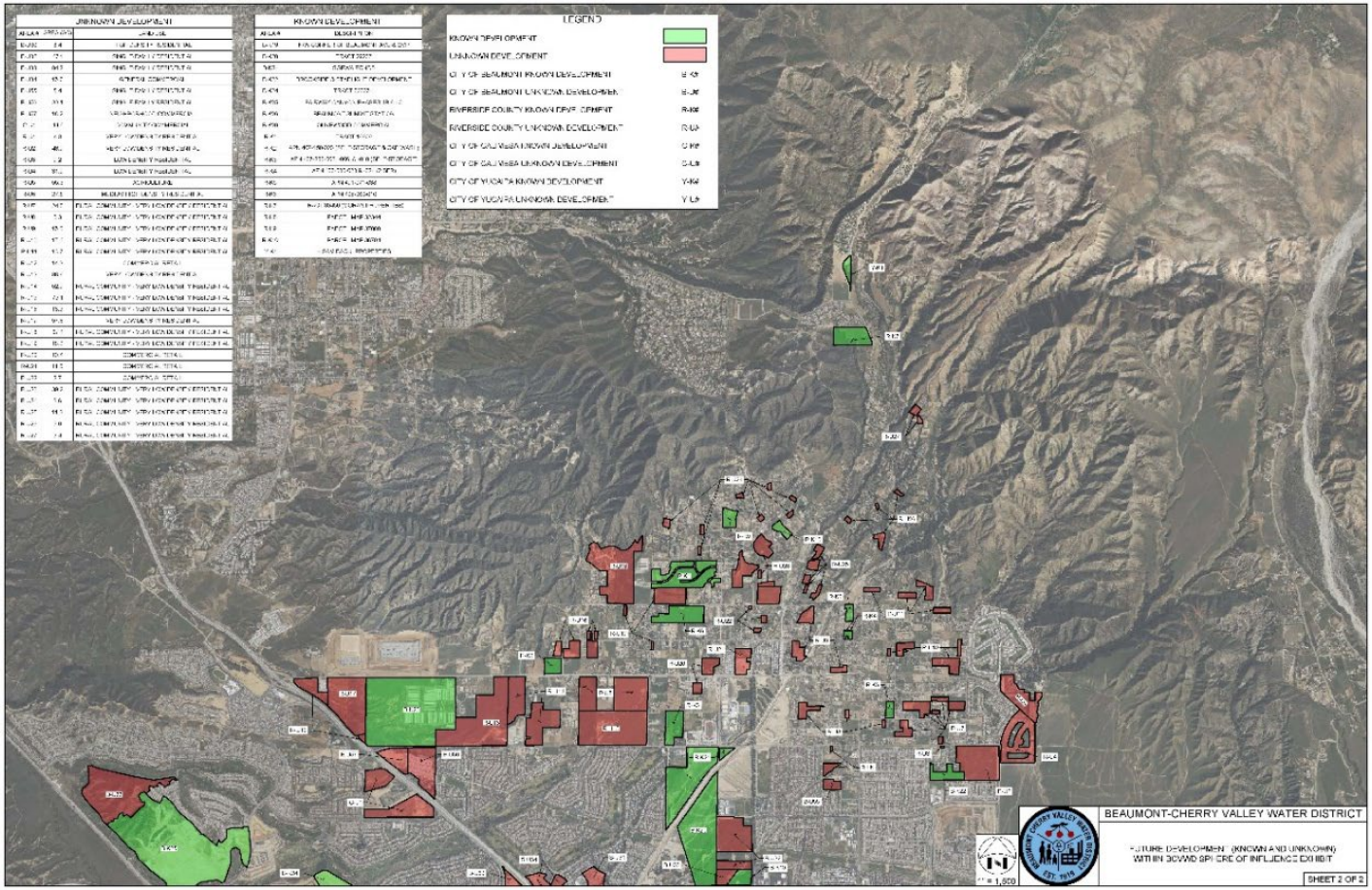


FIGURE 7-5: FUTURE DEVELOPMENT (KNOWN AND UNKNOWN) WITHIN BCVWD SPHERE OF INFLUENCE

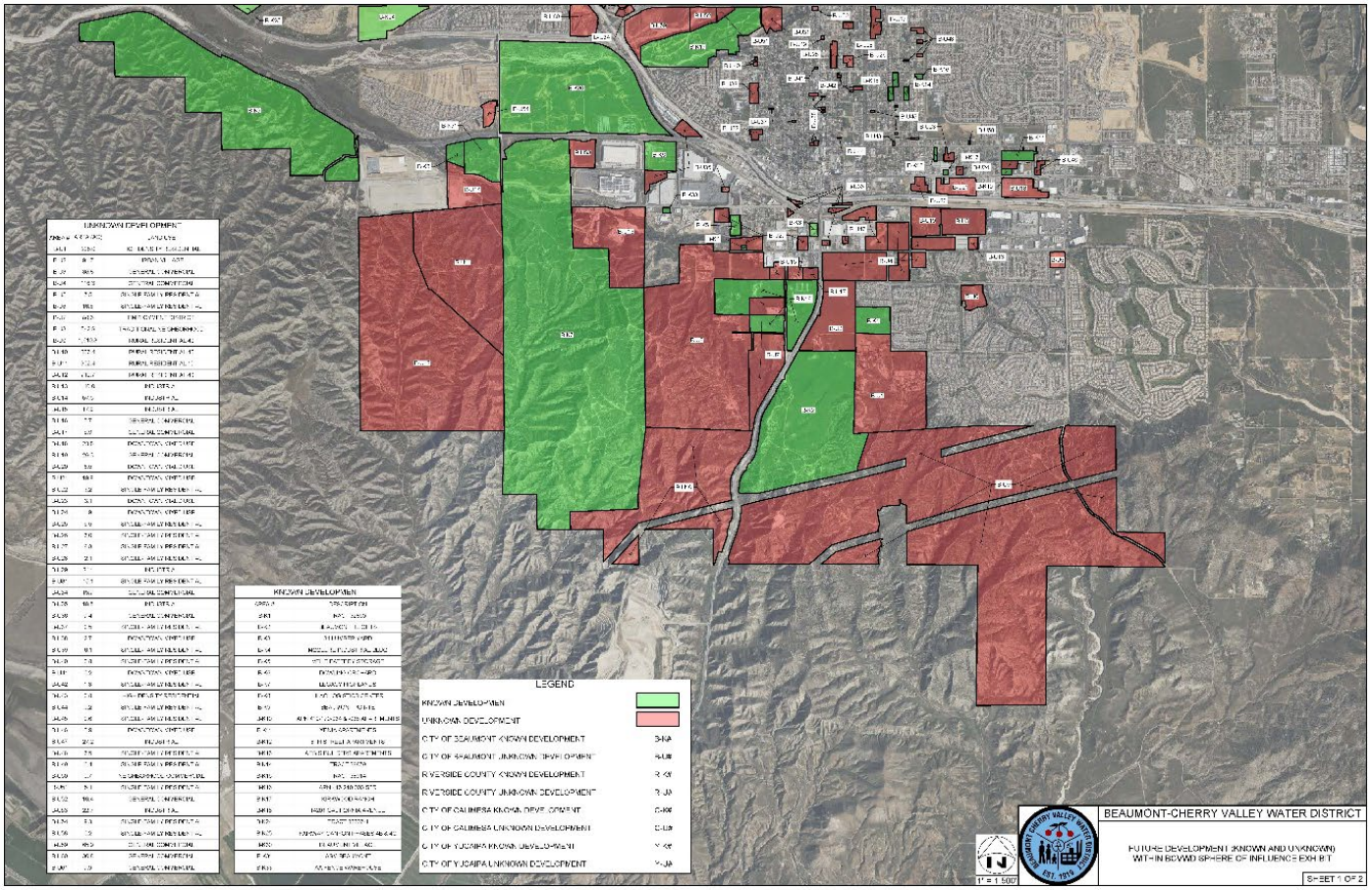


FIGURE 7-6: FUTURE DEVELOPMENT (KNOWN AND UNKNOWN) WITHIN BCVWD SPHERE OF INFLUENCE

Although specific projects within Unknown development areas have not yet been identified, the District has classified lands likely to be developed by their anticipated land use type and assigned corresponding water demands based on observed historical trends and expected land use mix. While the ultimate buildout timeline remains uncertain, quantifying these potential future demands allows the District to plan for the infrastructure and water supply capacity needed to serve them. For this 2025 UWMP, the District has chosen to incorporate the demands of approximately 20% of these Unknown Future Developments into its overall water demand forecast.

Overall potable and non-potable demands associated with Future Unknown Developments, scaled to match the growth rate and phasing of the District's known future demands, are presented in **Table 7-38**. Note that these demand values are not directly integrated into the District's 2025 demand forecast and are provided for reference purposes only.

TABLE 7-38: CUMULATIVE NEW DEMAND FOR UNKNOWN DEVELOPMENTS (IN EDUS, WHERE 1 EDU=440 GPD)

	2030	2035	2040	2045	2050
Cumulative New Potable EDUs	2,280	4,900	8,440	11,200	13,690
Cumulative New Non-Potable EDUs	210	440	760	1,010	1,240
Total	**2,480**	**5,340**	**9,200**	**12,210**	**14,930**

The 20% of these unknown future potable and non-potable demands that are incorporated into the overall demand forecasts (in **Table 7-40**) are presented in **Table 7-39**.

TABLE 7-39: CUMULATIVE NEW INTEGRATED DEMAND FOR UNKNOWN DEVELOPMENTS (IN EDUS, WHERE 1 EDU=440 GPD)

	2030	2035	2040	2045	2050
Cumulative New Potable EDUs	460	980	1,690	2,240	2,740
Cumulative New Non-Potable EDUs	40	90	150	200	250
Total	**500**	**1,070**	**1,840**	**2,440**	**2,990**

New Customer Future Use – Adjustments

This subsection describes the other components included in the District's potable adjustments presented in **Table 7-40**, capturing growth trends that fall outside the major demand categories previously considered.

- Accessory Dwelling Units (ADUs): BCVWD assumes approximately 10 ADUs will be constructed per year, translating to approximately 14 EDUs every five years.[66][67]
- Infill Development: BCVWD anticipates approximately 15 EDUs of infill projects to be constructed per year, or 75 EDUs every five years.
- Construction Water: Metered water use associated with active construction and street sweeping was carried forward from the 2020 UWMP at a comparable rate of between 300 and 350 acre-feet per year, projected to ramp down over the planning period as development activity tapers.
- Groundwater Recharge: Quantities of imported raw water banked into BCVWD's Beaumont Basin storage account for use during dry periods was also maintained from the 2020 UWMP. These quantities represent planned recharge above and beyond BCVWD's normal Adjudication replacement obligations and are not operational demands.

Altogether, potable adjustments account for additional water demands beyond existing customer uses or new development-based forecasts.

7.4.5.4 Summary of Forecast Water Use

Based upon the estimated water use of the existing and new customers, the District anticipates an increase in potable water use over the planning horizon while also reflecting non-potable uses consistent with historical levels. **Table 7-40** presents the resulting customer water use forecast. This characterization is important when evaluating the District's water service reliability as detailed in Chapter 7.5.

[66] As presented in Chapter 7.2, ADUs are estimated to have an average occupancy of 1.5 persons per unit, amounting to just below half (47%) of the District's average occupancy of 3.21. When also considering the lack of outdoor usage, demonstrating similar water use patterns as a multi-family unit, (60% of one EDU), the water usage associated with one ADU is approximately 28% of one single-family EDU. (0.47*0.6=0.28)

[67] Based on a BCVWD data request, between 2021 and 2025, the City of Beaumont issued 40 ADU building permits; BCVWD anticipates ADU construction to increase throughout the planning horizon.

[67] Although minimal studies exist regarding occupancy of ADUs in the Southern California region, the SCAG Regional Accessory Dwelling Unit Affordability Analysis borrowed results from a 2018 survey completed in Portland, Oregon, which found that approximately 50% of ADUs are one-person households and 50% are two-person households. https://scag.ca.gov/sites/default/files/2024-05/adu_affordability_analysis_120120v2.pdf?

TABLE 7-40: FORECAST FUTURE WATER USE (VALUES IN ACRE-FEET PER YEAR)

Classification		2030	2035	2040	2045	2050
Existing	Single-family Residential	8,670	8,670	8,670	8,670	8,670
	Multi-family Residential	360	360	360	360	360
	Commercial	1,490	1,490	1,490	1,490	1,490
	Industrial	170	170	170	170	170
	Landscape and Other	2,240	2,240	2,240	2,240	2,240
New	Single-family Residential	450	970	1,670	2,220	2,710
	Multi-family Residential	20	40	70	90	110
	Commercial	70	160	270	360	440
	Industrial	10	20	40	50	60
	Landscape and Other	230	600	930	1,030	1,110
Customer Water Use Subtotal		13,710	14,710	15,910	16,680	17,360
Potable Adjustments (ADUs, Infill, Construction Water)		390	440	480	480	520
Distribution System Water Loss		410	450	490	510	530
Non-Potable Groundwater Recharge		1,000	1,000	1,000	1,000	1,000
Total Production		**15,510**	**16,600**	**17,880**	**18,670**	**19,410**

Since the preparation of the 2015 UWMP, BCVWD anticipates that the build-out population will be higher than previously predicted, occurring after 2045. For forecasting purposes in the 2025 UWMP, the District conservatively assumes buildout occurring beyond 2050. Using data provided by the District, the forecasted water demands associated with each unknown development contributing to the District reaching buildout conditions can be quantified, presumably occurring within the planning horizon. The District anticipates these new residential and non-residential elements will be built in accordance with all applicable building codes including the previously discussed Cal Green Code and relevant District ordinances.

7.4.5.5 Dry Year Adjustments

The demand forecasts presented in the prior subsection represent expected water needs under normal hydrologic conditions. To credibly forecast potential maximum future water

use, the forecasted normal-year water uses must be modified to reflect anticipated increases in demand during drier conditions.

Conservative modifications to the forecasted normal year water use to more likely reflect use conditions during drier and dry years are warranted to help adequately address water service reliability in Chapter 7.5. For purposes of this RUWMP, the following adjustment is made:

- Single dry year: Landscape irrigation needs would increase to reflect the generalized earlier start of the landscape irrigation season due to limited rainfall, warmer temperatures, and high Eto in the single driest year. Since this increase only applies to the outdoor portion of a customer's forecast use, an adjustment factor of 5% is applied to the total normal-year forecasts to conservatively reflect the expected increase in demand for water for landscaping.
- Multiple dry years: During multiple dry years, although demands are also expected to increase similarly to a single dry year, the District anticipates that customer water use will reflect reasonable water conservation measures, effectively averaging to track the District's normal-year forecasts.

These values are reflected in tables provided for the Drought Risk Assessment and Annual Reliability Assessment presented in later subsections.

7.4.5.6 Climate Change Considerations

Including climate change analysis into a water use analysis will assist the District in understanding the potential effects on long-term reliability, which in turn, allows the District to proactively begin planning appropriate responses. For example, hotter and drier weather may lead to an increased demand in landscape irrigation, especially during spring and fall months, increasing the pressure on water supplies that may have availability restrictions during these periods.

This potential is reflected in the consideration of the single dry year increase of 5% that is used for the water service reliability analysis, as discussed previously. Whether the elevated single dry year water forecast becomes more akin to the "normal" demand will become more apparent as the District continues to assess monthly water use trends throughout its service area.[68]

[68] A closer assessment of the correlation of monthly water use by customer type to rainfall and temperature will help the District improve water use forecasts to assure the effects of climate change are adequately being reflected in water service reliability analyses.

7.4.6 Projecting Disadvantaged Community Water Use

Pursuant to CWC §10631.1, retail suppliers are required to include projected water use for lower income households in their 2025 UWMPs. Per California Health and Safety Code §50079.5, a lower income household has an income below 80 percent of area median income (AMI), adjusted for family size.

To characterize the lower income household population within BCVWD's service area, the District relied on the City of Beaumont's General Plan Housing Element, adopted in September 2022.[69] The household income analysis relies on data from the U. S. Department of Housing and Urban Development's Comprehensive Housing Affordability Strategy (CHAS) dataset, which compiles and standardizes data from the U.S. Census Bureau's American Community Survey to support local housing and affordability analysis. According to the most recently available CHAS data, there are approximately 12,750 total households in the City of Beaumont, which comprises a significant portion of BCVWD's service area.[70] Of these, about 33%, or 4,195 households, earn less than 80 percent of AMI and qualify as lower income.

For purposes of projecting future water use associated with lower income households, 33 percent of BCVWD's total single-family and multi-family residential connections are presumed to represent lower income households. This proportion has been applied uniformly across BCVWD's projected residential demand figures, as presented in **Table 7-41**.

TABLE 7-41: ESTIMATED LOW-INCOME WATER USE FORECAST (ACRE-FEET)

	2030	2035	2040	2045	2050
Total Potable Residential Use	9,500	10,040	10,770	11,340	11,850
Low Income Residential Use	3,130	3,310	3,550	3,740	3,910
% of Total Potable	33%	33%	33%	33%	33%

[69] https://beaumontca.gov/DocumentCenter/View/37946/Adopted-Housing-Element-Update

[70] Although growth in Cherry Valley area generally does not follow the same trends as the City of Beaumont, low-income water use was estimated using the same 33% to provide a conservative estimate.

Section 7.5
Water System Reliability and Drought Risk Assessment

This chapter provides the BCVWD's water system reliability findings as required under Water Code §10635 and provides reliability information that may be used in completing an annual supply and demand assessment pursuant to Water Code §10632.1.

Assessing water service reliability is the fundamental purpose in preparing this 2025 UWMP. Water service reliability reflects the District's ability to meet the water needs of its customers, including end-use customers and retail urban suppliers, with water supplies under varying conditions. BCVWD's UWMP considers the reliability of meeting customer water use by analyzing plausible hydrological, regulatory, and climate variability, as well as other factors impacting the District's water supply and water use. This reliability assessment looks beyond BCVWD's previous capabilities and considers what could be reasonably foreseen in the future.

This chapter synthesizes the details embedded in Chapters 7.3 and 7.4 and provides a rational basis for future decision-making related to supply management, demand management, and project development. The Five-Year Drought Risk Assessment, Long-Term Service Reliability, and an overview of the Annual Reliability Assessment are presented in this chapter.

Based on current planning assumptions and projected supply availability, BCVWD expects to maintain sufficient supplies through 2050 under modeled reliability scenarios.

7.5.1 Five Year Drought Risk Assessment

The Drought Risk Assessment (DRA) requires a methodical assessment of water supplies and water uses under an assumed drought period lasting five consecutive years.

To adequately assess the monthly variability associated with the District's surface water supplies, BCVWD prepared an independent assessment of the water supplies and demands for its system. This assessment also considers system constraints, such as climate change,

legal constraints associated with the Beaumont Groundwater Basin Adjudication, and the regulatory and contractual limitations on imported water. Historical drought conditions in the San Gorgonio Pass region include the multi-year droughts occurring between 2012-2016, and more recently between 2021-2022 which provide the empirical basis for BCVWD's dry year supply assumptions. Climate change projections suggest increasing frequency and severity of drought in Southern California, potentially reducing SWP deliveries and increasing outdoor irrigation demand. Regulatory considerations include the ongoing Beaumont Basin Adjudication, which establishes legal limits on groundwater extraction, and potential future changes to SWP operations or Delta regulations that could further constrain imported water availability. These considerations may also influence the near-term management of BCVWD's water asset portfolio.

As discussed in Chapter 3, and Section 7.3, the DWR Draft Delivery Capability Report for 2025 served as the basis for defining shortage conditions for SWP delivery assumptions, and the Beaumont Basin Adjudication and associated Watermaster Report informed annual groundwater availability and District storage capacity.

Currently, BCVWD has access to various groundwater, surface water, stormwater supplies, each with unique attributes that affect reliability under various hydrological, regulatory, and climate conditions. The reliability of each water supply source under a variety of conditions is discussed in detail in Section 7.3; a summary of key findings is provided here. Beaumont Basin groundwater is considered highly reliable at its adjudicated safe yield under most, if not all, conditions. Regulatory and hydrologic factors often restrict SWP Table A allocations. However, even during dry years, SGPWA maintains a diverse portfolio of imported supplies that help support the region's demands. SGPWA's portfolio also includes alternative supplies such as short and long-term transfers and investment in large scale projects such as Sites Reservoir and the Delta Conveyance Project. BCVWD addresses potential deficits by leveraging its robust storage account, and extracting groundwater banked in the Beaumont Basin.

The Basin's large storage capacity and relatively high percolation and recharge rates allow BCVWD and its neighboring agencies to bank imported water when available during both wet and dry periods and draw upon those reserves during drought, insulating the District against severe water use restrictions. At the end of 2025, BCVWD had approximately 45,470 AF in storage.[71] Looking into the future, the District is building towards having approximately 3-5 years of water supply, leveraging its 80,000 acre-feet of allowed storage to bolster resiliency in drought years. Taken together, BCVWD's water supply portfolio is considered reliable under normal, dry, and extended drought conditions. BCVWD's water supply portfolio, as well as its

[71] Beaumont Basin Watermaster 2025 Consolidated Annual Report and Engineering Report – Draft. Table 3-9.

banking capabilities, creates a water management structure that requires careful consideration of applicable hydrological, regulatory, and contractual variability. Nevertheless, BCVWD has organized and coordinated its water portfolio management to ensure water supply reliability in the event of a sustained drought.

Table 7-42 below shows BCVWD's DRA, integrating all of its supplies for 2026 through 2030 as described in Chapter 7.3 and reflecting the dry year unconstrained water uses described in Chapter 7.4. Any difference in dry year supplies presented in Section 7.3 and supplies presented in the following tables can be attributed to meeting additional demands with managed groundwater stored in the District's Beaumont Basin storage account.[72] As the table shows, BCVWD has surplus water assets available under its current water management system.

TABLE 7-42: FIVE-YEAR DROUGHT RISK ASSESSMENT (ACRE-FEET)

Five-Year Drought	2026	2027	2028	2029	2030
Supply	14,100	14,000	14,500	15,000	15,500
Demand	14,100	14,000	14,500	15,000	15,500
Difference	0	0	0	0	0

During multi-year droughts, BCVWD will be able to extract sufficient supplies of managed groundwater annually from their Beaumont Basin storage account or acquire imported supplies to ensure supply sufficiency and support growing demand across the UWMP planning horizon, while maintaining significant banked groundwater.

7.5.2 Long-Term Service Reliability

The Urban Water Management Planning Act directs urban water suppliers to analyze water supply reliability in a normal, single dry, and five consecutive dry years over a 20-year planning horizon. Reflecting 2025 UWMP Guidebook recommendations, the following subsections describe the long-term water service reliability through a 25-year planning horizon, including the next UWMP cycle.

7.5.2.1 Long-Term Service Reliability

BCVWD's long-term service reliability reflects the recommended 25-year planning horizon anticipating a normal, single dry, and five consecutive dry years from 2025 through 2050.

[72] Reference Table 7-9, Beaumont Basin Water Storage Account

BCVWD's water portfolio enables it to reliably serve its current and future customers; the reliability of individual sources and potential future sources are discussed in Chapter 7.3, along with regional augmentation from SGPWA in Chapter 3.

Supplies imported from SGPWA are managed to support the demands of urban water suppliers within the region, strategically accounting for hydrologic and economic conditions. During wet periods, for example, BCVWD augments supplemental water at lower cost to build surplus storage, while during dry periods the District draws upon its banked groundwater reserves (discussed in Section 7.3). By maintaining significant banked supplies and engaging SGPWA for imported water, BCVWD insulates itself against dry year restrictions.

As shown in **Table 7-40** (in Section 7.4), a portion of BCVWD-purchased imported water is designated as "non-potable groundwater recharge." This line item, approximately 1,000 AFY above the volume of imported water needed to meet demands, contributes to BCVWD's 45,470-acre-foot storage balance (as of 2025). Since 2020, BCVWD has increased its banked water by approximately 5,600 AF, providing a reserve for drought periods when SWP supplies are insufficient.

Importantly, BCVWD could face a situation in which demands exceed imported supplies due to increased water use during dry years. This trend is largely driven by heightened outdoor irrigation, where potable and non-potable supplies compensate for the reduction in precipitation that normal-year and wet-year conditions provide. Given that BCVWD is located in a region with below-average annual precipitation, the District's outdoor irrigation demands already reflect low-water-use and drought-tolerant landscaping practices. To maintain a conservative assessment, a 5% adjustment factor is applied only to BCVWD's single dry year demands, and the first dry year in a multi-year drought. Typically, within these years, customers have already irrigated with more water to offset their need due to the dry conditions. However, because BCVWD has historically implemented effective demand management and water conservation measures, the remaining years within a multi-year drought scenario reflect normal-year usage levels, stabilized by demand management, as forecasted in Section 7.4. This temporary demand fluctuation, outlined in **Table 7-43**, is also evident in **Table 7-44** over 5-year increments.

Normal and Single Dry Conditions 2030-2050

BCVWD's future water supplies in normal and single dry conditions reflect the same hydrological and regulatory criteria described in previous sections. In normal years, supplies are generally constrained only by their express limiting features, such as an annual allocation or contractual limit. In dry years, additional hydrological and regulatory issues may constrain the availability of water. However, future water supplies grow alongside demands over time; this is due to BCVWD's careful management of its imported supplies in conjunction with its

banked groundwater. As seen in **Table 7-43**, this yields no surplus supplies, with groundwater drawn only as needed.

As previously discussed, demands during normal conditions through 2050 tend to reflect typical anticipated uses, whereas demands through 2050 increase during dry conditions to reflect increased water usage for outdoor irrigation. Future water demands are generally predicted to increase as land uses and populations within BCVWD's boundaries grow.

Table 7-43 shows the normal year supplies and demands on an annual timestep from 2030 through 2050.

TABLE 7-43: NORMAL AND SINGLE DRY YEAR WATER SUPPLY AND DEMAND THROUGH 2050 (ACRE-FEET PER YEAR)

Normal Year	2030	2035	2040	2045	2050
Supply	15,500	16,600	17,900	18,700	19,400
Demand	15,500	16,600	17,900	18,700	19,400
Difference	0	0	0	0	0
Single Dry Year	**2030**	**2035**	**2040**	**2045**	**2050**
Supply	16,300	17,400	18,800	19,600	20,400
Demand	16,300	17,400	18,800	19,600	20,400
Difference	0	0	0	0	0

Five Consecutive Dry Years 2030-2050

The District defines drought conditions lasting five consecutive years as conditions in which BCVWD faces restrictions in accessing certain water sources within its supply portfolio due to hydrological and regulatory limitations on its water rights and water supply contracts, specifically SGPWA imported supplies.

As previously discussed, demands for five consecutive dry years consider historical trends in water usage in drought conditions by BCVWD's customers, such as increased outdoor irrigation during dry conditions, complemented by the contrasting influence of demand management implemented by the District. Throughout the planning horizon, the gradual increase in demands also accounts for reasonable water conservation measures as a result of improved efficiencies in indoor fixtures, management of outdoor landscape irrigation, and a general awareness of the value of long-term water conservation at the consumer level. In addition, the future dry conditions reflect increased land use and populations that would rely upon available supplies.

During multi-year droughts in the future, BCVWD will be able to extract between 3,000-4,000 AF annually from their Beaumont Basin storage account or acquire imported water to ensure supply sufficiency and support growing demand across the UWMP planning horizon, while maintaining significant banked groundwater. In previous multi-year droughts, such as in 2021 and 2022, the District was able to extract upwards of 8,000 acre-feet from storage with significant stored supplies leftover.

Table 7-44 below shows the annual water supply and demand conditions for BCVWD's service area in five consecutive dry years from 2030 through 2050.

TABLE 7-44: FIVE CONSECUTIVE DRY YEARS WATER SUPPLY AND DEMAND THROUGH 2050 (ACRE-FEET PER YEAR)

		2030	2035	2040	2045	2050
Year 1	Supply	16,300	17,400	18,800	19,600	20,400
	Demand	16,300	17,400	18,800	19,600	20,400
	Difference	0	0	0	0	0
Year 2	Supply	15,500	16,600	17,900	18,700	19,400
	Demand	15,500	16,600	17,900	18,700	19,400
	Difference	0	0	0	0	0
Year 3	Supply	15,500	16,600	17,900	18,700	19,400
	Demand	15,500	16,600	17,900	18,700	19,400
	Difference	0	0	0	0	0
Year 4	Supply	15,500	16,600	17,900	18,700	19,400
	Demand	15,500	16,600	17,900	18,700	19,400
	Difference	0	0	0	0	0
Year 5	Supply	15,500	16,600	17,900	18,700	19,400
	Demand	15,500	16,600	17,900	18,700	19,400
	Difference	0	0	0	0	0

7.5.3 Annual Reliability Assessment

Each year, the District considers current supply and demand conditions and performs an annual water supply and demand assessment (AWSDA) pursuant to California Water Code §10632.1 to evaluate real-time or near-term circumstances that are different than the DRA scenario. This assessment evaluates actual current water supply and use conditions for a prescribed 12-month forecast (July through the following June). Procedures for conducting the Annual Assessment are contained in the District's Water Shortage Contingency Plan. The District has historically conducted the assessment as required by the California Water Code

and will continue this planning exercise to provide a reliability assessment for then-current conditions regarding supplies and expected (unconstrained) demands.

7.5.4 Water Supply Reliability Summary

The District has a dynamic water supply portfolio capable of meeting the water demands in its service area in normal, single dry, and five consecutive dry years from 2025 through 2050 with strategic management of its supply portfolio. Meeting future District demands will rely on the ongoing prudent management of its Beaumont Basin storage account and continuing to invest in supply resiliency projects while maximizing the extensive imported supply portfolio of San Gorgonio Pass Water Agency.

Section 7.6
Water Shortage Contingency Plan

Water shortage contingency planning is a strategic planning process to prepare for and respond to water shortages. This Water Shortage Contingency Plan (WSCP) addresses the requirements in Water Code Section 10632 of the Urban Water Management Planning Act (The Act). The WSCP is incorporated into the 2025 Regional Urban Water Management Plan (RUWMP) and is used by Beaumont-Cherry Valley Water District (BCVWD, or District) to respond to water shortage contingencies as they may arise. The WSCP addresses possible conditions in which the water supply available to customers of the District is insufficient to meet the normally expected customer water use at a given point in time due to drought, regulatory action constraints, and natural and man-made disasters. This WSCP describes the District's strategy for allocating water during such water supply shortages, while assuring customers that it will meet the minimum health and safety requirements of a drinking water purveyor at all times. The District's water shortage contingency planning includes (six) staged responses to a water shortage, such as a drought, that occurs over a period of time, as well as catastrophic supply interruptions, which occur suddenly.

The District's Water Shortage Contingency Plan (WSCP) can be created separately from the UWMP and amended as needed without amending the corresponding UWMP. However, the most current version of the WSCP must be included as part of the UWMP when the UWMP is submitted to DWR.

7.6.1 Water Supply Reliability Analysis

Previously discussed in Chapter 7.3, the District currently obtains its potable and non-potable water supply from multiple sources: Edgar Canyon, groundwater from the Beaumont Basin, and purchased imported water from the SWP and other water transfers/exchanges with other retailers/agencies. In the future, the District plans to utilize recycled water from the City of Beaumont to meet most of the landscape irrigation demands, which are currently served with potable water. The District also intends to supplement its supply with captured and recharged stormwater. On average, Beaumont Basin groundwater makes up 70 - 80% of the District's total water supply, with the rest coming from Edgar Canyon, and reallocated unused overlier rights from the adjudicated Beaumont Basin.

Due to the variability of the SWP's available supplies, the District typically recharges imported water to its storage account in the Beaumont Basin during periods when supply exceeds the demands in the SGPWA service area. BCVWD's storage account allows storage of up to 80,000 AF. At the end of 2025, BCVWD had 45,470 AF in its storage account.

An analysis of the reliability of the above-described sources during normal (average) and extended dry periods was presented in depth in Chapter 7.5. The results of the water supply reliability analysis demonstrate that the District can sufficiently meet the projected demands in the case of the drought or other emergency.

7.6.2 Annual Water Supply and Demand Assessment Procedures

Each water supplier is now required to submit an Annual Water Supply and Demand Assessment (Annual Assessment) as of July 1, 2022.

7.6.2.1 Decision-making Processes

The WSCP describes the District's procedural methodology for managing shortages and conducting its required Annual Assessment. The Annual Assessment that is to be submitted to DWR every year would be brought to the BCVWD Board of Directors (the Board) prior to submittal for DWR consideration. BCVWD will assess each year's imported and local supplies as well as potable and non-potable demands based on its final SWP allocation, additional available imported water exchanges or transfers through SGPWA, climate, and local groundwater conditions, as determined by the Beaumont Basin Watermaster.

Based on the foregoing, BCVWD will assess the water shortage level for that year and determine the most appropriate response action(s) to encourage water conservation among its customers. BCVWD will ensure that the Annual Assessment will be submitted to the Board to allow adequate time for review and comment prior to the required DWR submittal date of July 1st (or 14 days after notification of final SWP Allocation, whichever is later), for the assessment.

7.6.2.2 Data Inputs and Methodologies

As required by the Water Code, the District will evaluate its available water supply reliability assuming current conditions for that year, as well as a single dry year. The data inputs and methodologies which will be used to formulate a recommendation regarding the District's supply reliability and any necessary response actions are included below:

- Water Supply: The District will analyze groundwater production records and final SWP allocations available for the current year, and compare projected supplies to historical averages.

- Unconstrained Demands: The District will analyze consumption data for the current year, and based on supply assess whether any or which shortage response action(s) are appropriate to encourage water conservation. For the upcoming year the District will utilize data from the 2025 UWMP update, as well as any newly available data regarding water consumption and population growth to project anticipated unconstrained demands.
- Single Dry Year Demands: Similarly, the District will compare current year consumption data with historical demand data for a single dry year, and project demands for the upcoming year.
- Infrastructure: The District will assess the current operating conditions of its wells and booster pumps, and recharge facilities and determine whether any maintenance will be scheduled or would likely be scheduled for the upcoming year. The District would coordinate any findings from analysis for available supplies with potential shortfalls in groundwater production if maintenance is required.
- Legislative action: The District will take action as required by Governor declaration or other legislative action to implement their WSCP as needed, regardless of water storage levels.

7.6.3 Six Standard Water Shortage Stages

The District proposes a six-stage plan of action in the event of an extended drought condition or loss of supply. The action levels for each stage are presented in the subsections that follow, and the water supply reduction stages are provided in **Table 7-45 through Table 7-50**. These stages could be implemented as a result of BCVWD water shortages, including reduction in imported water allocation and associated water placed previously in storage by BCVWD (i.e. conjunctive use drought and emergency water supply), or mandatory water conservation targets by the Governor's office.

TABLE 7-45: WSCP ACTIONS TO REDUCE CUSTOMER USE - STAGE 1

Potential Shortage - Voluntary Reduction: Savings up to 10%
Up to 10% reduction in normal, "long term" water supply (including conjunctive use water in storage); response actions includes voluntary public demand reduction of 10%, and community outreach encouraging conservation.

TABLE 7-46: WSCP ACTIONS TO REDUCE CUSTOMER USE - STAGE 2

Minor Shortage - Mandatory Reduction: Savings up to 20%
Up to 20% reduction in normal, "long term" water supply (including conjunctive use water in storage); includes any actions from Shortage Level 1. Response actions include mandatory 10% reduction - Increased public outreach, restaurants serve water upon request, lodging must offer opt out of linen services

TABLE 7-47: WSCP ACTIONS TO REDUCE CUSTOMER USE - STAGE 3

Moderate Shortage - Mandatory Reduction: Savings up to 30%
Up to 30% reduction in normal, "long term" water supply (including conjunctive use water in storage); response actions includes any actions from Shortage Levels 1 and 2. Response actions include mandatory 20% reduction - limit landscape irrigation to certain number of days per week

TABLE 7-48: WSCP ACTIONS TO REDUCE CUSTOMER USE - STAGE 4

Severe Shortage - Mandatory Reduction: Savings up to 40%
Up to 40% reduction in normal, "long term" water supply (including conjunctive use water in storage); response actions includes any actions from Shortage Levels 1, 2 and 3. Response actions include mandatory 25% reduction - limit irrigation of lawns to once a week except for lawns and turf irrigate with recycled water, restrict water use for decorative water features, limit filling of pools only to cases where appropriate cover is in place

TABLE 7-49: WSCP ACTIONS TO REDUCE CUSTOMER USE - STAGE 5

Critical Shortage - Mandatory Reduction: Savings up to 50%
Up to 50% reduction in normal, "long term" water supply (including conjunctive use water in storage); response actions includes any actions from Shortage Levels 1 - 4. Response actions include mandatory 30% reduction - prohibiting filling of swimming pools, washing of automobiles only limited to facilities using recycled water, prohibiting potable water use for construction activities, industrial water users required to reduce water use (food processing, concrete mixing plant)

TABLE 7-50: WSCP ACTIONS TO REDUCE CUSTOMER USE - STAGE 6

Extreme Shortage - Mandatory Reduction: Savings greater than 50%
Greater than 50% reduction in normal, "long term" water supply (including conjunctive use water in storage); response actions includes any actions from Shortage Levels 1 - 5. Response actions include mandatory 30% reduction - prohibit landscape irrigation except for irrigation with use of recycled water, industrial water users required to further reduce water use (food processing, concrete mixing plant)

These stages and the percent reductions in demand are based on BCVWD's experience during the state mandated water conservation program targets comparing 2025 with a similar period in 2015, where BCVWD was able to reduce consumption by 24.3% for the period May 2015 through April 2016. This was done through the restrictions in Board of Directors Resolution 2015-05, which limited watering to two days per week due to mandatory reductions in the District's demands of 36% (when compared to 2013 water usages).

In establishing the "Stages," BCVWD has the advantage of the Beaumont Basin, its large storage capacity for banked water, and BCVWD's 80,000 AF storage account. BCVWD currently has 45,470 AF in storage. BCVWD's plan is to purchase additional imported water (when available in advance of annual need (i.e., conjunctive use purchases)) over the amount needed to meet annual demands to add to the storage account balance each year, including making up for any shortfall(s) that may occur during dry years. This results in a conjunctive use activity and hence the averaged annual water supply approach outlined herein and as identified in **Table 7-45 through Table 7-50**, above.

7.6.4 Shortage Response Actions

The WSCP is required to identify locally appropriate shortage response actions that align with the defined shortage stages and include demand reduction actions, supply augmentation actions, system operational changes, and mandatory prohibitions against specific water use practices that are in addition to state-mandated prohibitions and appropriate to the local conditions.

7.6.4.1 Stages of Shortage Response Actions

The District has identified shortage response actions to be implemented during each of the six sequential stages and corresponding water shortage conditions. These actions are based on specific hydrological and regulatory conditions and the fundamental need to meet water service requirements within the District's service area. Moreover, the shortage response actions provide the District with some flexibility to address dynamic water shortage conditions while protecting the District against extreme conditions where supplies are drastically reduced beyond 50%. The following is an overview of the staged response actions

the District could follow during a given water shortage condition based on shortage severity, relative supply conditions for each stage, and percent shortage reduction levels.

Shortage Level 1 (Potential Shortage - Voluntary Reduction) occurs when:

- Up to a 10% reduction in normal (average), "long-term" averaged supply occurs
- Imported water supplies (SWP allocation and other imported supplies) averages approximately 48% of regional annual supply requirements (water orders) over a two-year (or longer) period

The District declares a water shortage and imposes voluntary water conservation. In this shortage level, the District shall notify all its customers that water use reduction is highly encouraged. The District will recommend a voluntary 10% water use reduction based on an established base year to be determined by the District at the time Stage 1 is implemented. At the same time, the District shall implement its own public awareness program to encourage the efficient use of water. This will be accomplished by bill stuffers, website information, and social media postings.

Shortage Level 2 (Minor Shortage - Mandatory Reduction) occurs when:

- Up to a 20% reduction in normal (average), "long-term" averaged supply occurs
- Imported water supplies (SWP allocation and other imported supplies) averages between a minimum of 38% up to 48% over a three-year (or longer) period.

During Stage 2, all efforts to encourage conservation would remain in effect, however a 10% reduction in demand would be mandatory. Public outreach continues to occur, however an increase in public awareness is achieved through coordination with the City of Beaumont, Riverside County, and SGPWA. In addition, restaurants are required to only serve water to patrons upon request, and lodging facilities must allow guests to opt out of linen services.

Shortage Level 3 (Moderate Shortage - Mandatory Reduction) occurs when:

- Up to a 30% reduction in normal (average), "long-term" averaged supply occurs
- Imported water supplies (SWP allocation and other imported supplies) averages between a minimum of 28% up to a 38% over a three-year (or longer) period

Restrictions up to Shortage Level 3 will still be mandatory. At this point, the District will initiate water restrictions similar to Resolution 2015-05 and require a 20% reduction in demand from an established base year. In this stage, the District will impose restrictions similar to Resolution 2015-05: but limit lawn watering to two times per week (assigned days based on street address) and no filling of new swimming pools. Topping off swimming pools is permitted. No new construction meters will be approved. Use of recycled or non-potable water for construction activities will be encouraged. The District may adopt financial

incentives to encourage efficient water use. Public awareness programs will expand to schools.

Shortage Level 4 (Severe Shortage - Mandatory Reduction) occurs when:

- Up to a 40% reduction in normal (average), "long-term" averaged supply occurs Imported water supplies (SWP allocation and other imported supplies) averages between a minimum of 18% and 28%, over a three-year (or longer) period

Restrictions up to Shortage Level 4 will still be mandatory. In this shortage level, the District will impose restrictions similar to Resolution 2015-05 to require a 25% reduction in demand, but make more stringent including limiting lawn watering to once a week except for lawns and turf irrigated with non-potable water. No filling of swimming pools; topping off swimming pools may be permitted. Hand watering of plantings is permitted two days per week if using a hose with a shut-off nozzle. Restrict water use for decorative water features. The District may adopt financial incentives to encourage efficient water use. Stricter enforcement penalties will be developed. At this Stage, the District will appoint a Water Conservation Advisory Committee.

This committee will comprise of officials from the District, the City of Beaumont, and the Cherry Valley community. Public awareness in schools will continue. District staff will work with high water using commercial/retail and industrial facilities to develop programs to reduce water use.

Shortage Level 5 (Critical Shortage - Mandatory Reduction) occurs when:

- Up to a 50% reduction in normal (average), "long-term" averaged supply occurs, or
- Imported water supplies (SWP allocation and other imported supplies) averages between a minimum of 8% up to 18%, over a four-year (or longer) period

Restrictions up to Shortage Level 5 will still be mandatory. In this shortage, the District will impose restrictions similar to Resolution 2015-05 but prohibit lawn watering except for lawns and turf irrigated with non-potable water. No filling of swimming pools; topping off only permitted on covered pools. Hand watering of plantings is permitted one day per week, if using a hose with a shut-off nozzle. Washing of automobiles limited only to facilities using non-potable water. Use of potable water for construction will be prohibited; only non-potable water may be used for construction activities, as determined by the Board of Directors. Trucking non-potable or recycled water may be necessary for grading and construction activities. The District will adopt financial incentives to encourage efficient water use. Stricter enforcement penalties will be developed. The Water Conservation Advisory Committee will continue to function. This committee will comprise of officials from the District, the City of Beaumont, and the Cherry Valley community. Public awareness in schools will continue. District staff will work with high water using commercial/retail and industrial facilities to develop programs to reduce water use.

Shortage Level 6 (Extreme Shortage - Mandatory Reduction) occurs when:

- A greater than 50% reduction in normal (average), "long-term" averaged supply occurs, or
- Imported water supplies (SWP allocation and other imported supplies) averages less than 8%, over a four-year (or longer) period

Restrictions up to Shortage Level 6 will still be mandatory. In this shortage level, the District will impose restrictions similar to Resolution 2015-05. No topping off swimming pools. Use of potable water for construction will be prohibited; only recycled or non-potable water may be used for construction activities, as determined by the Board of Directors. Trucking non-potable or recycled water may be necessary for grading and construction activities. "Will serve" letters or annexations will not be approved by the Board of Directors. The District will adopt financial incentives to encourage efficient water use. Stricter enforcement penalties will be developed. The Water Conservation Advisory Committee will continue to function. This committee will comprise of officials from the District, the City of Beaumont, and the Cherry Valley community. Public awareness in schools will continue. District staff will work with high water using commercial/retail and industrial facilities to develop programs to further reduce water use.

7.6.5 Impacts of Shortage Level Response Actions

For each response action the WSCP is to provide an estimate of the extent to which the gap between supplies and demand will be reduced by implementation of the action. **Table 7-51** below quantifies the percent of demand reduction for each shortage response action in relation to its associated shortage taken.

TABLE 7-51: DEMAND REDUCTION ACTIONS

Shortage Level	ID	Demand Reduction Actions	Expected Relative Impact	Penalty or Enforcement
1	1.1	Applying any water to outdoor landscapes in a manner that causes runoff such that water flows onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, or structures is prohibited.	Low	No
	1.2	Using any water in a fountain or other decorative water feature is prohibited, unless the water recirculates.	Low	No
	1.3	Applying water to driveways, sidewalks, concrete or asphalt is prohibited unless to address immediate health and safety needs. Reasonable pressure washer or water broom use is permitted.	Low	No
	1.4	Spray irrigation of outdoor landscapes during and within 48 hours after rainfall of 0.10 inches or more is prohibited.	Low	No

Shortage Level	ID	Demand Reduction Actions	Expected Relative Impact	Penalty or Enforcement
	1.5	Using a hose to wash a vehicle, windows, or solar panels is prohibited unless an automatic shut-off nozzle or pressure washer is used.	Low	No
	1.6	Broken sprinklers shall be repaired within five business days of notification by agency, and leaks shall be repaired as soon as practical.	Low	No
	1.7	Draining and refilling private swimming pools is discouraged, unless necessary for health and safety or leak repair.	Low	No
	1.8	Hotels will provide guests with the option of choosing not to have towels and linens laundered daily.	Low	No
	1.9	District shall engage in customer billing messages to encourage conservation.	Low	No
2	2.1	Outdoor water use is prohibited during daylight hours for spray irrigation except for leak checks or with an agency approved alternative conservation plan.	Medium	Yes
	2.2	Restaurants can serve water only on request.	Low	Yes
	2.3	Lodging establishments must offer opt out of linen service.	Low	No
	2.4	District shall encourage use of non-potable water for construction, if available.	Low	Yes
	2.5	District shall reduce outdoor water budget by 10%.	Medium	Yes
	2.6	District shall Expand Public Information Campaign offering water use audits to educate customers.	Medium	No
3	3.1	Outdoor water use is allowed a maximum of three days a week for spray irrigation (i.e. Monday, Wednesday, and Friday).	High	Yes
	3.2	Drip or subterranean irrigation is allowed seven days per week, during non-daylight hours.	Medium	Yes
	3.3	Decorative ponds, non-irrigation system golf course water hazards, fountains, and other waterscape features are not to be filled or replenished.	Low	Yes
	3.4	No filling of swimming pools or landscaping ponds unless necessary for health and safety or leak repair.	Low	Yes
	3.5	Commercial car washes must use recycled water or recirculating water systems.	Medium	Yes
	3.6	District shall encourage County, City, Homeowners Associations (HOAs) and other enforcement agencies to suspend code enforcement and fines for brown turfgrass areas and to otherwise comply with new State laws regarding limitations on such enforcement.	Low	Yes

Shortage Level	ID	Demand Reduction Actions	Expected Relative Impact	Penalty or Enforcement
	3.7	District shall expand its public outreach to HOAs regarding water conservation on common use areas and other HOA-owned facilities that utilize water (i.e. splash pads, etc.).	Medium	No
	3.8	District shall implement water use audits targeted to key customers to ensure compliance with directives.	Medium	No
	3.9	District shall consider the implementation of drought surcharges.	High	No
4	4.1	Outdoor water use is allowed for a maximum of two days a week for spray irrigation (i.e. Monday, Thursday).	High	Yes
	4.2	No new turf landscaping shall be installed.	N/A	Yes
	4.3	District shall consider expanding the implementation of drought surcharges.	High	Yes
	4.4	District shall Expand Public Information Campaign (i.e. school and HOA outreach).	Medium	No
	4.5	Reduce Outdoor Water Budget by 25%.	Medium	Yes
5	5.1	Prohibit use of potable water for construction and dust control.	Medium	Yes
	5.2	Watering turfgrass is prohibited.	High	Yes
	5.3	Prohibit vehicle washing except at facilities using recycled or recirculated water.	Low	Yes
	5.4	Pools - Allow filling of swimming pools only when an appropriate cover is in place.	Medium	No
	5.5	Water Features - Restrict water use for decorative water features, such as fountains.	Medium	No
	5.6	Moratorium or Net Zero Demand Increase on New Connections	High	Yes
6	6.1	The Agency will implement mandatory rationing.	High	Yes
	6.2	Outdoor water use is prohibited.	High	Yes
	6.3	Restaurants must use disposable cups, plates, and utensils.	Medium	No
	6.4	Watering of livestock is permitted as necessary.	Medium	No

7.6.5.1 Supply Augmentation

TABLE 7-52: SUPPLY AUGMENTATION

Shortage Level	Supply Augmentation Methods and Other Actions	Shortage Gap Reduction	Additional Explanation or Reference
All	Expand Public Information Campaign	Low	
All	Improve Customer Billing	Low	Provide use comparisons
All	Other Actions (describe)	5-10%	Continue to work with to install drought tolerant, low water using plantings
2 - 6	Stored Emergency Supply	25-50%	BCVWD has the ability to withdraw groundwater from its storage account in the Beaumont Basin.
2-5	Other Purchases	5-10%	Work with SGPWA to obtain additional imported water supply

- Expand Public Information - BCVWD should work with SGPWA and the other retailers in the San Gorgonio Pass to develop a consistent, region-wide message that could include regular articles in the local newspapers, displays at major events, low water using garden workshops, etc. Expand into the schools and service clubs. Work with the high-volume water users in the commercial/retail/industrial area to determine if there are water reduction opportunities.
- Improved Customer Billing - Continue providing customers with their historic usage for the past year in graphical format (bar charts) with target levels for water conservation. Provide data on other typical customers in the District's service area.
- Rebates for Irrigation Efficiency Improvements - BCVWD should work with SGPWA to provide rebates to improve irrigation efficiency including drip systems and smart controllers. Replacement of spray nozzles with rotating nozzles reduces water consumption significantly and prevents overspray.
- Rebates for Turf Replacement - BCVWD should work with SGPWA to provide rebates to convert turf areas to low water using drought tolerant plantings.
- Other Methods Not on DWR's List:
    - Work further with the City of Beaumont, County of Riverside, and developers to install drought tolerant, low water using plantings in common areas and street medians. Reduce turf and planted areas in new home construction.
    - Work with the City and HOA's to evaluate the potential for converting existing street median and common area turf areas to drought tolerant, low water using plantings.

- Upon its availability, begin using recycled water for landscape irrigation. This method has the greatest potential for reducing potable water use in the BCVWD service area.
- Restrict construction water use to non-potable water.
- Implement more tiers in the rate structure to reflect the cost for purchase of imported water as a result of higher use.

7.6.6 Operational Changes

One of the water conservation measures that can be used to reduce water loss is implementing automatic meter readings. With the use of automatic meters, water leaks would be easy to locate as the water meter would continuously run throughout the night. This knowledge would allow District staff to inform the residents of the situation and further actions could then be taken to fix the leak and ultimately, conserve water. All water service connections in the BCVWD's service area are metered; BCVWD has recently implemented an Automatic Meter Reading System (AMR) program to replace existing meters, including automatic meter infrastructure (AMI).

The District currently does not perform extensive main flushing or any hydrant flow testing; there is minimal need to adjust District operations to conserve unmetered water.

7.6.7 Emergency Response Plan

The most recently published Emergency Response Plan (ERP) is from 2011. Currently (2025), District staff is in the process of updating this ERP to define procedures for modern emergencies, as well as assessing the District's plan for responding to catastrophic water supply interruption. The 2011 ERP defines the procedures that District staff is to complete in the case of various emergencies including, but not limited to:

- Medical Emergencies
- Flooding
- Snow/Ice Damage
- Earthquakes
- Tornados

The District performs routine maintenance and assessment of the operating conditions off all its facilities, in order to ensure minimal opportunities for supply shortages or supply interruptions. As the District continues to grow, it will continue to refine its maintenance procedures to continue to provide reliable supplies to its customers.

7.6.8 Seismic Risk Assessment and Mitigation Plan

7.6.8.1 BCVWD Facilities

The center of the District's service area is located approximately 8 to 10 miles south of the San Andreas Fault. If a major earthquake were to occur along the San Andreas Fault in the Pass area, many of the BCVWD's facilities could be affected.

In order to minimize possible damage due to a significant earthquake, the District's Cherry Tanks, Upper Edgar Tank, Taylor Tank, the Vineland Tanks and the Hannon Tank are all equipped with flexible connectors (EBBA Iron Flex-tends) for movement during an earthquake. Upper Edgar, Cherry Tank III, Vineland II and III, and Taylor Tank are all anchored to their ring wall foundation and have been designed to resist seismic shaking. These are all relatively new tanks constructed since the year 2000 and designed and constructed to recent AWWA standards. These tanks should be capable of resisting significant earthquake shaking. BCVWD's other tanks were designed according to AWWA standards in effect at the time they were constructed; but over time the design standards have improved and become more stringent. The greatest vulnerability will be with the older steel tanks located in the northern part of the District's service area in Cherry Valley.

Experience with other earthquakes, e.g., Landers, magnitude 7.3 (1992), has shown steel water tanks survive but do suffer some minor structural damage. Observations of some of the water tanks showed the inlet/outlet piping sheared off and some "elephant footing" of the side wall occurred but the tanks remained intact. This is what would be expected with BCVWD's older tanks. The newer tanks should survive with little or no damage. The older tanks should be able to be put back into service within a week, if not sooner.

Wells and well pumps could be damaged during a very severe earthquake, but they should be able to be returned to service within a month depending on the availability of replacement parts and equipment to repair the pumps.

Piping breaks could be expected to occur, but these can be repaired quickly. BCVWD has an inventory of repair clamps, fittings and pipe as well as staff and equipment to make these repairs.

BCVWD has also constructed emergency "interties" at various locations along Highland Springs Road so that water can be supplied in either direction between the City of Banning and BCVWD.

7.6.9 Communication Protocols

The communication protocol procedure currently relies on the 2011 ERP. After BCVWD has completely assessed the situation and determined that further actions are to be put into

effect, coordinating with the public and other entities are the next steps to be taken. In the near future, BCVWD will use the Annual Assessment that is to be reported to DWR as a tool to address each year's supplies and demands to help determine the appropriate response. In the most recent drought, all BCVWD residents were mailed letters informing them of the issues and the steps that need to be taken to conserve water. For future emergencies, the residents will be emailed the water conservation letters along with their bill to reduce costs. The public information that is to be sent out will be a notice informing them of the situation (e.g. the shortage level the District is currently in), the steps that BCVWD is taking to conserve water, and the steps that each resident should follow to do their part in reducing the water demand.

The District is also actively providing information on its website for public consumption to inform customers of ways to reduce consumption, as well as to update them in the case of an emergency as determined by the State or by the Board of Directors.

7.6.10 Compliance and Enforcement

BCVWD does not have a standard enforcement procedure during "normal" supply years, however, does have a plan that adjusts rates during drought declarations and also for enforcing water conservation measures during the periods of a drought. BCVWD is currently in the process of converting over standard water meters to automatic meters. This would allow District staff to determine what residents may have water leaks and address the issues in a timely manner. It would also allow District staff to enforce the demand reduction actions that require residents to only water on certain days of the week. The severity of the enforcement would increase as the Shortage Levels increase. Many of the water reduction actions such as requiring customers repair leaks in a timely manner and restricting water use for decorative fountains would require further actions by the District to enforce. To enforce demand reduction actions and accommodate customer appeal and exemption requests, customers can submit an appeal on the District's website. The repercussions that are to take place are listed below under Legal Authorities for first-, second-, and third-time offenders.

7.6.11 Legal Authorities

BCVWD has provisions within its Rules and Regulations to establish charges for excessive water use. Currently, the District's rate structure includes a fixed meter (service) charge based on meter size, billed bimonthly, and a tiered commodity charge based on volumetric consumption. For single-family residential customers, the commodity rate is structured in three tiers: Tier 1 (0–16 HCF), Tier 2 (17–34 HCF), and Tier 3 (35+ HCF), with the unit price increasing with each tier. Multi-family residential customers are billed at a single flat commodity rate. Non-residential customers are billed at class-specific commodity rates. In addition to base commodity rates, all customers are subject to pass-through charges reflecting SCE power costs and SGPWA importation costs, which may be adjusted by the

District upon 30 days' notice. BCVWD could increase these charges, initiate consumption surcharges for excessive use to cover the additional cost of imported replacement water, and/or provide for additional tiers upon proper notification and following the procedures established by Proposition 218. This is not something that can be done on short notice, however.

BCVWD has "water waster" provisions in Part 15 of its Rules and Regulations.

> "15-1 PROHIBITION OF WATER WASTER - No person, firm, or corporation shall use, deliver, or apply waters received from this District in any manner that causes the loss, waste, or the applications of water for unbeneficial purposes. Within the meaning of this Regulation, any waters that are allowed to escape, flow, and run into areas which do not make reasonable beneficial use of such water, including but not limited to streets, gutters, drains, channels, and uncultivated lands, shall be presumed to be wasted contrary to the prohibitions of these Rules and Regulations.

1. Upon the first failure of any person, firm, or corporation to comply, this District shall serve or mail a warning notice upon any person determined to be in violation of these Rules and Regulations.

2. Upon the second failure of any person, firm, or corporation to so comply, the water charges of any such consumer shall be doubled until full compliance with these Rules or Regulations has been established to the satisfaction of the Board of Directors of the District.

3. Upon the third failure of any person, firm, or corporation to so comply, the District shall terminate water service to any connection through which waters delivered by the District are wasted in violation of these Rules and Regulations."

In Resolution 2016-05, there was a list of financial penalties for violation of the water restrictions in the Resolution.

- Upon the first failure of any person, firm, or corporation to comply, the District shall serve or mail a warning notice upon any person determined to be in violation of the District's Rules and Regulations.
- Upon the second failure of any person, firm, or corporation to so comply, the water charges of any such customer shall be doubled until full compliance with the District's Rules and Regulations has been established to the satisfaction of the Board of Directors of the District.
- Upon the third failure of any person, firm, or corporation to so comply, the District shall terminate water service to any connection through which waters delivered by the District are wasted in violation of the District's Rules and Regulations.

In the event that water supply conditions require it, BCVWD shall declare a water shortage emergency condition in accordance with Chapter 3 (commencing with Section 350) of Division 1 of the California Water Code. BCVWD shall also coordinate with the City of Beaumont and Riverside 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.

7.6.12 Water Shortage Contingency Resolution

Resolution No.----------

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE BEAUMONT-CHERRY VALLEY WATER DISTRICT (DISTRICT) ADOPTING WATER USE RESTRICTIONS TO PROTECT THE WATER SYSTEM AND RATEPAYERS OF BEAUMONT-CHERRY VALLEY WATER DISTRICT

WHEREAS, the District's Operations Policies and Procedures Manual, Part III, Section 1.E., District Emergency Declaration allows the General Manager, in consultation with the Board of Directors President, the ability to declare a "District Emergency" with ratification by the Board of Directors within fourteen days (14) at a regular, special or emergency Board meeting; and

WHEREAS, the District is experiencing water shortages of significant impact which results in a District emergency relating to water supply, therefore;

NOW THEREFORE, BE IT RESOLVED by the Board of Directors that full support is given to the General Manager to make the appropriate recommendations which may include increased restrictions on watering days and hours, restrictions on washing vehicles, etc., restrictions on large water users, restrictions on flushing of water lines, restrictions on the filling of swimming pools, and increases in the current penalties for not complying with water conservation restrictions for the duration of the emergency, and urge full support and cooperation from the ratepayers of the District.

ADOPTED this ___ day of _____, _____, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

ATTEST:

_____

Director _____, President of the Board of Directors of the Beaumont-Cherry Valley Water District

_____

Director _____, Secretary to the Board of Directors of the Beaumont-Cherry Valley Water District

7.6.13 Financial Consequences of WSCP

The Act requires an analysis of the impacts of implementation of this WSCP and likely financial consequences to the District. This section addresses aspects of revenue reduction, expense increases, and additional costs that may arise, and identifies financial response actions.

BCVWD has established water rates that support its on-going operation and maintenance activities, as well as the capital projects required to provide a safe and reliable water supply to its customers.

Consistent with the District's Regulations Governing Water Service, customer bills include a fixed meter charge based on meter size and a commodity charge based on the volume of water used, with commodity rates structured in increasing tiers for single-family residential customers and class-specific rates for multi-family, commercial, irrigation, construction, and non-potable uses. In addition to base rates, the District applies charges reflecting the SCE Power Charge and SWP importing fee.

Importantly, water rates are tied to the District's customers' normal water consumption activities, which will be reduced through voluntary or mandatory water conservation by customers. Thus, in times of shortage, the District will experience revenue reductions. BCVWD will also experience an increase in expenses resulting from augmented communication actions, increased enforcement activities, and the administration of water shortage management actions identified in the WSCP. Not only will there be costs for materials and time from permanent staff, but additional staff may need to be hired to assist in implementing the Water Shortage Contingency Plan. Staff will regularly monitor the identified and anticipated revenue and expenditure impacts and recommend appropriate responses. To offset revenue losses, the District has a drought surcharge policy in place, shown in **Figure 7-7.**

5-1.5 DROUGHT SURCHARGES

In the event that the District activates its Water Shortage Contingency Plan (WSCP), water supply drought rates may be applied as approved by the Board of Directors. Customers will be notified in advance of the below surcharges. Drought rates are generally triggered by the declaration of a specific water shortage by the California Department of Water Resources, or alternatively by the District's Board of Directors.

The Surcharge Rate below is additive to the current Commodity Charge, per unit of water, at the date of adoption. The Surcharge Rate in effect is dependent on the drought stage declared.

	Stage 1	Stage 2	Stage 3	Stage 4
Reduction in Use	10%	20%	30%	40%
Surcharge	$0.17	$0.36	$0.60	$0.92

FIGURE 7-7: BCVWD DROUGHT SURCHARGE POLICY

Although the District is proposing 6 Shortage Levels as part of the WSCP, the existing drought surcharges can still be applied. For example, "Stage 1" in the District's drought surcharges policy correlates to a 10% reduction in use; the drought surcharge identified would be applied to Shortage Level 1 previously described in this section.

7.6.14 Monitoring, Reporting, and WSCP Refinement Procedures

When the higher Shortage levels are declared, the demand will be closely monitored by District staff on a month-to-month basis to compare the projected water reduction with the actual values. Compliance monitoring and tracking for WSCP measures during shortage stages includes the use of production data, AMR/AMI data, enforcement tracking, and reporting procedures, consistent with Water Code 10632(a)(3) and 10632(a)(6). If the District staff finds that the demand reduction actions are not meeting the projected volumes, it will be reassessed and brought to the Board to determine if a higher Shortage Level should be put into effect. There will need to be a few months in between announcing the different shortage levels as it is expected to take some time before the results are shown, however, District staff will be monitoring it closely.

7.6.15 Special Water Feature Distinction

In **Table 7-51**, swimming pools are separate and distinct from "water features." Water features include decorative ponds, water hazards on golf courses, artificial waterfalls, and fountains. Golf course water hazard ponds that serve as irrigation reservoirs or balancing ponds, supplied with private wells are not covered by BCVWD's water restrictions. BCVWD water restrictions do not apply to water features supplied by private wells.

Stock ponds for animal watering are not covered under the swimming pool or water feature restrictions. Recycled and non-potable water may be used without restriction in water features and ponds if approved for use.

7.6.16 Plan Adoption, Submittal and Availability

The District's WSCP was adopted following the same process as the District's 2025 UWMP. Both the WSCP and the UWMP were adopted by the Board of Directors, submitted to DWR for review, and implemented.

The District scheduled a public hearing for review of the 2025 UWMP, which included the WSCP, on June 25, 2026. The District made the adopted WSCP available to the public on the District's website no later than 30 days after it was adopted. The District will notify the public of any amendments made to the adopted WSCP.

Appendix A
San Gorgonio Pass Region Delta Reliance

This Appendix provides the Delta Reliance assessment for the San Gorgonio Pass Water Agency (SGPWA or Agency) and the RUWMP participating retail water service agencies located within the San Gorgonio Pass Region. The retail agencies covered by this RUWMP assessment include: Beaumont-Cherry Valley Water District (BCVWD), the City Banning, as well as the Riverside County portions of Yucaipa Valley Water District and South Mesa Water Company, and indirectly High Valley Water District, Cabazon Water District, and Mission Springs Water District. Several of these retail agencies are subject to the minimum threshold requirements of the Urban Water Management Planning Act (UWMP Act) and work with SGPWA on managing regional water supplies as described more thoroughly in the 2025 RUWMP. Other entities that are not currently subject to the UWMP Act but may be subject to the UWMP Act in the future and that rely upon water supplies derived from SGPWA's are also considered in this assessment.

A.1 Delta Reform Act and Certification of Consistency

The Delta Reform Act of 2009 required state and local agencies to prepare a written certification of consistency with Delta Plan policies before initiating a covered action in the Delta.[54] The written certification of consistency must be submitted to the Delta Stewardship Council and include detailed findings as to whether the covered action is consistent with applicable Delta Plan policies.[55] The submitted certification of consistency may be appealed by any person and the Delta Stewardship Council may grant the appeal to address

[54] California Water Code section 85057.5.
[55] California Water Code section 85225.

contested issues.[56] In short, water suppliers that anticipate participating in a proposed covered action must comply with the requirements of the Delta Reform Act.

Proposed covered actions may include a conveyance facility or a new diversion that involves transferring water through, exporting water from, or using water in the Delta. For urban purveyors that may participate in a proposed covered action, should provide information in their Urban Water Management Plans (UWMP) that can be used to demonstrate consistency with the Delta Plan. Specifically, the urban purveyors need to demonstrate consistency with Delta Plan Policy WR P1 – Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (WR P1).57 WR P1 subsection (a) states that:

> *Water shall not be exported from, transferred through, or used in the Delta if all of the following apply*:
>
> *(1) One or more water suppliers that would receive water as a result of the export, transfer, or use have failed to adequately contribute to reduced reliance on the Delta and improved regional self-reliance consistent with all of the requirements listed in paragraph (1) of subsection (c);*
>
> *(2) That failure has significantly caused the need for the export, transfer, or use; and*
>
> *(3) The export, transfer, or use would have a significant adverse environmental impact in the Delta.*

WR P1 subsection (c)(1) further defines what adequately contributing to reduced reliance on the Delta means in terms of (a)(1) above. WR P1 subsection (c)(1) states:

> *Water suppliers that have done all the following are contributing to reduced reliance on the Delta and improved regional self-reliance and are therefore consistent with this policy*:
>
> *(A) Completed a current Urban or Agricultural Water Management Plan (Plan) which has been reviewed by the California Department of Water Resources for compliance with the applicable requirements of Water Code Division 6, Parts 2.55, 2.6, and 2.8;*

[56] California Water Code section 85225.10-85225.25.
[57] Cal. Code Regs., tit. 23 section 5003.

(B) Identified, evaluated, and commenced implementation, consistent with the implementation schedule set forth in the Plan, of all programs and projects included in the Plan that are locally cost effective and technically feasible which reduce reliance on the Delta; and

(C) Included in the Plan, commencing with 2015, the expected outcome for measurable reduction in Delta reliance and improvement in regional self-reliance. The expected outcome for measurable reduction in Delta reliance and improvement in regional self-reliance shall be reported in the Plan as the reduction in the amount of water used, or in the percentage of water used, from the Delta watershed. For the purposes of reporting, water efficiency is considered a new source of water supply, consistent with Water Code section 1011(a).

The analysis in this RUWMP Appendix includes all of the elements described in WR P1(c)(1) that need to be included in a water supplier's UWMP to support a certification of consistency for a future proposed covered action.

A.2 Expected Outcomes for Reduced Delta Reliance and Regional Self Sufficiency

The expected outcomes for this Delta reliance and improved regional self-reliance assessment were developed using guidance described in Appendix C of DWR's Urban Water Management Plan Guidebook 2025, issued in January 2026 (Guidebook 2025), which generally reflected the guidebook issued in March 2021 (Guidebook 2020). The data used in this assessment represent the total regional efforts of SGPWA and the retail agencies and were developed as part of a region-wide coordination process to prepare the 2025 Regional Urban Water Management Plan (RUWMP). **Table 1** shows the expected outcomes for reduced Delta reliance within the SGPWA Region.

TABLE 4: EXPECTED OUTCOMES FOR REDUCED RELIANCE ON THE DELTA

Year	**2015**	**2020**	**2025**	**2030**	**2035**	**2040**	**2045**	**2050**
Total Water Supplies from the Delta Watershed	34.6%	32.0%	26.0%	23.3%	21.3%	19.4%	17.6%	16.0%
Change in Water Supplies from the Delta Watershed	-17.5%	-20.0%	-26.1%	-28.8%	-30.8%	-32.7%	-34.5%	-36.0%

The methodology for demonstrating reduced reliance on the Delta is consistent with DWR's Guidebook 2020 and Guidebook 2025. SGPWA calculated its expected outcomes for reduced Delta reliance by measuring its current and anticipated water use against a baseline condition. SGPWA chose 2015 normal water year as its baseline. Data for the 2010 baseline were taken from relevant regional planning documents. SGPWA then assessed its Delta Reliance against the 2010 baseline for years 2015 through 2050.

The analysis uses normal water year demands to assess the supplies that would be used in the future. In addition, because WR P1 considers water use efficiency savings as a source of supply, prior to the UWMP Act water conservation mandates (e.g. 20% by 2020) and more recent requirements that help support water use efficiency quantification in the Region.[58] **Table 2** shows the Region's water demands without water use efficiency and the reported water use efficiency.

[58] In 2018, the California Legislature passed Senate Bill 606 and Assembly Bill 1668, directing the SWRCB to adopt standards to encourage more efficient urban water use. This legislation, known as "Making Conservation a California Way of Life," was adopted in 2024, establishing individualized Urban Water Use Objectives for each urban retail water supplier. In contrast to the SB X7-7 per-capita targets, this legislation functions as a water budget tailored to a supplier's service area, considering residential indoor use, residential and commercial outdoor use based on local evapotranspiration and irrigable landscape area, water loss, and bonus incentives for potable reuse. In addition to the volumetric UWUO, the regulation establishes performance measures for commercial, industrial, and institutional sectors. The standards become progressively more stringent through 2040.

TABLE 5: DEMANDS WITHOUT WATER USE EFFICIENCY

Total Service Area Water Demands (Acre-Feet)	**2015**	**2020**	**2025**	**2030**	**2035**	**2040**	**2045**	**2050**
Water Demands with Water Use Efficiency	21,671	27,200	28,200	30,800	33,200	35,500	37,200	38,600
Reported Water Use Efficiency	9,370	6,298	7,798	9,294	10,661	12,698	15,994	19,611
Water Demands without Water Use Efficiency	31,041	33,498	35,998	40,094	43,861	48,198	53,194	58,211

SGPWA and the participating retail urban water suppliers must also report the expected outcomes for measurable improvement in regional self-reliance. Given water management within the SGPWA Region as described throughout the 2025 RUWMP, **Table 3** shows the expected outcomes for supplies contributing to regional self-reliance for the Region as a whole.

The data presented in this section demonstrate the expected outcomes for reduced Delta reliance and regional self-sufficiency. The information has been noticed and presented in accordance with applicable law.

TABLE 6: SUPPLIES CONTRIBUTING TO REGIONAL SELF-RELIANCE

Water Supplies Contributing to Regional Self-Reliance	**2015**	**2020**	**2025**	**2030**	**2035**	**2040**	**2045**	**2050**
Water Use Efficiency	9,400	6,300	7,800	9,300	10,700	12,700	16,000	19,600
Local Surface Water Supplies	1,000	1,000	0	1,000	1,000	1,000	1,000	1,000
Water Recycling	0	100	100	2,900	3,700	4,700	5,100	5,100
Conjunctive Use Projects	9,900	16,000	19,400	18,300	19,900	21,200	22,500	23,900
Water Supplies Contributing to Regional Self-Reliance	20,244	23,372	27,256	31,452	35,219	39,556	44,552	49,569
Service Area Water Demands without Water Use Efficiency	**2015**	**2020**	**2025**	**2030**	**2035**	**2040**	**2045**	**2050**
Service Area Water Demands without Water Use Efficiency	31,041	33,498	35,998	40,094	43,861	48,198	53,194	58,211
Change in Regional Self Reliance (Acre-Feet)	**2015**	**2020**	**2025**	**2030**	**2035**	**2040**	**2045**	**2050**
Water Supplies Contributing to Regional Self-Reliance	20,244	22,772	26,656	30,752	34,519	38,856	43,852	48,869
Change in Water Supplies Contributing to Regional Self-Reliance	309	2,837	6,721	10,816	14,583	18,920	23,917	28,933
Percent Change in Regional Self Reliance	**2015**	**2020**	**2025**	**2030**	**2035**	**2040**	**2045**	**2050**
Water Supplies Contributing to Regional Self-Reliance	65.2%	68.0%	74.0%	76.7%	78.7%	80.6%	82.4%	84.0%
Change in Water Supplies Contributing to Regional Self-Reliance	17.3%	20.0%	26.1%	28.8%	30.8%	32.7%	34.5%	36.0%