Appendix L3
Water Supply Assessment

WATER SUPPLY ASSESSMENT

Rohr/Wohl Specific Plan
City of Chula Vista

April 2024

Sweetwater Authority

Prepared by
Sweetwater Authority Staff

Water Supply Assessment

Rohr/Wohl Specific Plan
City of Chula Vista

Sweetwater Authority
505 Garrett Avenue
Chula Vista, CA 91910
www.sweetwater.org

TABLE OF CONTENTS

List of Figures

List of Tables

List of Appendices

1 Introduction

The City of Chula Vista (Chula Vista) is currently preparing an Environmental Impact Report (EIR) in accordance with the California Environmental Quality Act (CEQA), for the Rohr/Wohl Specific Plan (the Project), with Chula Vista serving as the CEQA Lead Agency for the EIR. The Project meets the definition of a "Project" as described in California Water Code Section 10912(a)(6) as it is a mixed-use project that may include under allowed uses a proposed commercial office building with more than 250,000 square feet of floor space. As such, a Water Supply Assessment (WSA) pursuant to Senate Bill (SB) 610 is required for the project.

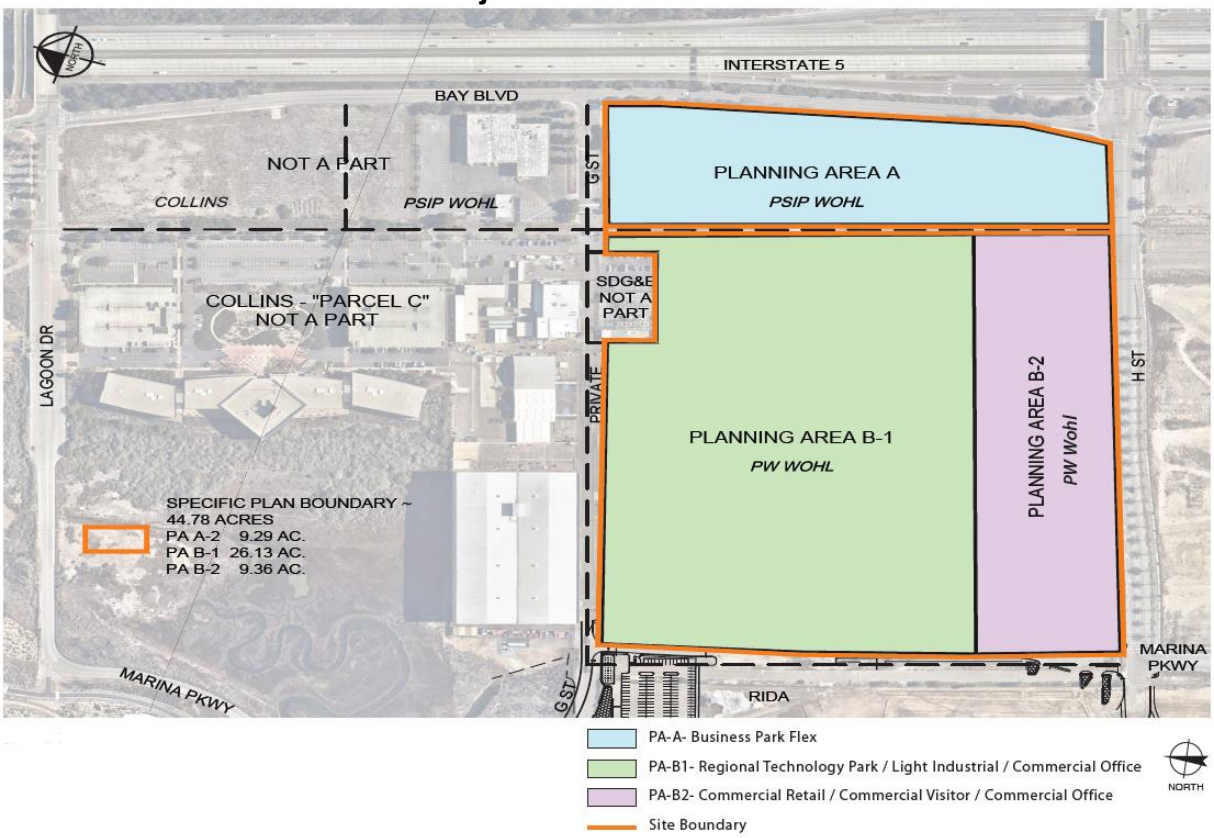
The Project is divided into three separate planning areas (as seen on Figure 1):

- Planning Area A encompasses 9.29 acres along the easterly portion of the Project site nearest Bay Boulevard. Land uses for this area are considered Business Park Flex, and may consist of research and development, e-commerce, light and custom manufacturing, engineering design services, breweries, maker spaces, and retail uses to complement the primary use.

- Planning Area B-1 consists of 26.13 acres of Regional Technology Park/Light Industrial/Commercial Office uses along the majority of the northwest of the Project site. Possible uses include manufacturing, processing, warehousing and storage, e-commerce distribution, light industrial research parks, office administration facilities, research and development laboratories, and limited warehousing, medical and health care clinics, travel agencies, insurance agencies, copy centers, retail uses to complement the primary use. Planning Area B-1 is currently planned to contain 463,750 square feet of building space for the aforementioned uses.

- Planning Area B-2 includes 9.36 acres of Commercial Retail/Commercial Visitor/Commercial Office uses along the H Street frontage of the project site. Possible uses include shopping facilities, major service-oriented uses, food uses, retail uses that are designed to serve the city or regional as a whole, lodging, restaurants, service stations, and other activities for the convenience, welfare, or entertainment of the traveler. Uses may also include medical and health care clinics, travel agencies, insurance agencies, copy centers, and retail uses to complement the primary use. A conceptual site use was used to perform the demand analysis in his study as outlined in Section 5.

Figure 1
Project Site Overview



Source: Third Submittal Draft of the Rohr/Wohl Specific Plan

2 Identification of the Public Water Provider

In accordance with California Water Code (CWC) Section 10912(c), Sweetwater Authority is the "public water system" for the area in which the Project is proposed. As such, Chula Vista, as the Lead Agency for CEQA, requested that Sweetwater Authority prepare a WSA. This request along with a 30-day extension from Chula Vista to prepare the WSA are attached in Appendix A. The WSA is intended to be used by Chula Vista in their evaluation of the Project under the CEQA process.

Sweetwater Authority was formed by the condemnation of a private water company that served the cities of Chula Vista and National City, and a portion of the County of San Diego. The condemnation suit was filed by the South Bay Irrigation District (SBID) and the City of National City on May 10, 1968, and was finalized on August 30, 1977. SBID and the City of National City formed Sweetwater Authority by the Joint Powers Agreement of February 1, 1972. The Agreement was amended and re-adopted on July 22, 1977. Sweetwater Authority was formed pursuant to the provisions of Article 1, Chapter 5, Division 7, Title 1, of the Government Code of the State of California.

Sweetwater Authority is empowered by the Joint Powers Agreement to acquire, own, lease, operate, manage, maintain, and improve the water system.

SBID was formed in March 1951, under the Irrigation Law of California (Division 11, Section 20500 of the CWC), and includes the western area of the City of Chula Vista and the unincorporated area of Bonita within and adjacent to the Sweetwater River Valley. It also overlaps small segments of the cities of National City and San Diego. On May 1, 1990, SBID transferred ownership of the water system, including all of the property deeds and easements to Sweetwater Authority. The City of National City is part of the urbanized South Bay region of the San Diego metropolitan area located on the San Diego Bay. Incorporated in 1887, National City is the second oldest city in the County of San Diego. SBID and the City of National City are member agencies of the San Diego County Water Authority (CWA).

3 Previous Water Supply Assessments

Sweetwater Authority has prepared previous WSAs for other projects in Chula Vista, in consultation with CWA and the City of National City pursuant to Public Resources Code Section 21151.9, and CWC Sections 10631, 10657, 10910, 10911, 10912, and 10915 referred to as SB 610, and Business and Professions Code Section 11010. SB 610 amended State law, effective January 1, 2002, to improve the link between information on water supply availability and certain land use decisions made by cities and counties. The previous WSAs prepared for projects in the near vicinity of the Project and reviewed by Sweetwater Authority in preparation of this WSA are:

1. WSA for the City of Chula Vista Palomar Gateway District Specific Plan (February 22, 2012)
2. WSA for the Port of San Diego Chula Vista Bayfront Master Plan (Updated July 12, 2006)
3. WSA for the City of Chula Vista Urban Core Specific Plan (June 8, 2005)

4 Urban Water Management Plan

Sweetwater Authority prepares an Urban Water Management Plan (UWMP) every five years, in accordance with CWC Sections 10610 through 10656 of the Urban Water Management Planning Act (Act), which were added by Statute 1983, Chapter 1009, and became effective on January 1, 1984. The Act, which was Assembly Bill (AB) 797, requires that every urban water supplier providing water for municipal purposes to more than 3,000 customers, or supplying more than 3,000 acre-feet of water annually, shall prepare and adopt an UWMP in accordance with the pre-described requirements.

The Act requires urban water suppliers to file plans with the California Department of Water Resources (DWR) describing and evaluating reasonable and practical efficient water uses, reclamation, and conservation activities. As required by law, Sweetwater Authority's UWMP includes projected water supplies required to meet future demands. Sweetwater Authority prepared UWMPs in 1985, 1990, 1995, 2000, 2005, 2010, 2015, and 2020, and filed those UWMPs with DWR.

By enacting Senate Bill 606, Assembly Bill 1668, and most recently updated with Senate Bill 1157, the state has established regulations that require urban water providers throughout California to set new permanent water use targets for their service areas. In addition, pursuant to the mentioned legislation the state has established standards for outdoor residential water use and performance standards for distribution system water loss, as summarized below:

- A standard for indoor residential water use of 55 gallons per person per day until January 1, 2025; 47 gallons per person per day from 2025 until January 1, 2030; and reducing to 42 gallons per person per day beginning in 2030.
- A standard for outdoor residential water use (to be determined) based upon a community's climate and the amount of landscaped area.
- Sweetwater Authority's assigned standard for apparent water loss is 8.0 gallons per connection per day (issued August 22, 2023).

There are no immediate impacts to Sweetwater Authority customers from SB 1157, SB 606 and AB 1668. Therefore, these future requirements do not impact the Project at this time.

The adopted 2020 UWMP did not specifically account for the water demands associated with the Project, as those were not known to Sweetwater Authority at that time; however, the 2020 UWMP did consider a demand analysis on land use type through the year 2045, based on the General Plans from the land use agencies within Sweetwater Authority's service area. Therefore, in accordance with CWC section 10910(c)(3), and Government Code section 66473.7(a)(2), this WSA includes a discussion of whether Sweetwater Authority's total projected water supplies, available during normal, single dry, and multiple dry water years during a 20-year projection, would meet the projected water demand associated with the proposed project, in addition to Sweetwater Authority's existing and planned future uses, including agricultural and manufacturing uses. Applicable information from Sweetwater Authority's 2020 UWMP has been used in the preparation of this WSA.

5 Water Demands

5.1 Project Demand Analysis

Sweetwater Authority's water system provides water service to approximately 190,000 consumers within the City of National City, a portion of the City of San Diego, and the SBID, which consists of a portion of the City of Chula Vista and a portion of unincorporated County of San Diego known as Bonita. Sweetwater Authority's service area covers 32 square miles and contains approximately 33,370 service connections. In addition, the water system has emergency interconnections to three water agencies: Otay Water District, the City of San Diego, and the California American Water Company. At the present time, there are no plans for expansion of Sweetwater Authority's service area.

Projected demands for years 2025 through 2045 were calculated using projected population and multiplying the population by a per capita demand in terms of gallons per capita per day (GPCD). The basis for population projection and per capita demand follows the methodology used in Sweetwater Authority's 2020 UWMP. As with the 2020 UWMP, a per capita demand of 90 GPCD was estimated, which represents the average demand in Sweetwater Authority's service area from 2010 through 2020. This five-year period included both wet and dry years. Although reduction in per capita demand below 90 GPCD has been observed in recent years, the 90 GPCD rate is considered to be a realistic anticipation of future water demands under a variety of hydrologic conditions and taking into consideration long-term water savings.

5.1.1 Climate

Climate conditions within the service area are characteristically Mediterranean along the coast, with mild temperatures year-round. The majority of the service area is within two miles of the San Diego Bay. However, the Bonita area and the reservoirs are located farther inland, and experience slightly hotter summers and colder winters. More than 80 percent of the region's rainfall occurs in the period from December through March. Average annual rainfall is approximately 9.5 to 11 inches per year at the Sweetwater Reservoir based on records dating back to 1915. Climate data is included in Table 5-1, and consists of the 131-year Sweetwater Reservoir average monthly rainfall, and Sweetwater Reservoir's average monthly high temperature based on records dating back to 1961. Average monthly evapotranspiration (ETo) data was obtained from the California Irrigation Management Information System (CIMIS) website for the Otay Lakes Station.

Table 5-1
Climate Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Avg precip (in.)	2.14	2.16	1.91	0.83	0.36	0.07	0.05	0.06	0.19	0.60	1.05	1.89
Avg temp (ºF)	69.8	69.6	70.3	72.8	73.8	77.1	82.7	85.3	83.7	80.0	74.6	69.1
ETo (in.)	2.30	2.79	4.08	4.96	5.51	6.01	6.44	6.14	4.90	3.92	2.83	2.15
Source: CIMIS data for Otay Lakes Station												

5.1.2 Population

Population and housing growth data for Sweetwater Authority's service area was obtained from the SANDAG 2050 Regional Growth Forecast Series 14 Model for years 2025 through 2045. The projections predict that Sweetwater Authority's service area will increase in population by approximately 13% from 2024 to 2045, which represents an annual growth rate of less than 1% per year. These estimates do not include potential increases in population due to the Project as this is a development that is not proposing housing, but do include other redevelopment projects identified in Chula Vista's Vision 2020 General Plan, the Port's Chula Vista Bayfront Master Plan, and National City's Downtown Specific Plan and Westside Specific Plan.

Population projections are shown in Table 5-2 and are the same as those calculated for Sweetwater Authority's 2020 UWMP.

Table 5-2
Projected Population

	2024	2025	2030	2035	2040	2045
Current and Projected Population	207,816	209,332	214,059	218,774	228,433	234,668

5.1.3 Demand Assessment

Table 5-3 shows the historical and projected water demands by use sector through 2045. The projected water demands below were calculated using the population estimates in Table 5-2 and multiplying them by 90 GPCD. These estimated water demands per sector include water estimates for non-revenue water. Non-revenue water is the amount of water that is not accounted for in Sweetwater Authority's water usage, such as water used for firefighting purposes, water lost through water leaks, and water not accounted for due to discrepancies in water meter accuracy.

Table 5-3
Historical and Projected Potable Water Demands
(Not including the Project)
(acre-feet)

Water Use Sectors	2017	2018	2019	2020	2025	2030	2035	2040	2045
Single-Family [1]	6,517	6,796	6,250	6,443	8,026	8,208	8,389	8,759	8,998
Multi-Family [1]	5,508	5,549	5,359	5,525	6,883	7,037	7,192	7,510	7,715
Commercial [2,3]	3,526	3,649	3,582	3,692	4,599	4,703	4,807	5,019	5,156
Industrial	84	79	78	81	101	104	106	111	114
Institutional/ Governmental	1,201	1,387	1,128	1,162	1,448	1,480	1,513	1,580	1,623
Agricultural Irrigation	0	0	0	0	0	0	0	0	0
Other [4]	14	32	36	38	47	49	50	52	53
Total	**16,850**	**17,492**	**16,433**	**16,941**	**21,104**	**21,581**	**22,057**	**23,031**	**23,659**
	FY16/17	**FY17/18**	**FY18/19**	**FY19/20**					
Water Loss[5]	**1,184**	**625**	**163**	**-2**					

Notes:
1. Residential includes domestic and irrigation for single-family, multi-family, and mobile homes.
2. Commercial includes domestic and irrigation for businesses and golf courses.
3. Prior to Fiscal Year 1991-92, commercial included mobile homes and apartments. Beginning in Fiscal Year 1991-92, mobile homes and apartments have been included in residential.
4. "Other" included construction meters and golf courses through Fiscal Year 1989-90. Subsequent to Fiscal Year 1989-90, "Other" only includes construction meters.
5. Water Losses or Non-Revenue water are reported each fiscal year in an audited report. As these are quantities associated with the system and are addressed with system maintenance, and they are exhibiting a declining trend, they are not projected based on population as demands are. This is consistent with the 2020 UWMP.

The Project consists of three different planning areas and the estimated demands for each planning area are shown in Table 5-4a, and are presented in terms of water use sector in Table 5-4b. Based on correspondence from the Project Applicant's representative, Planning Area B-1 is planned to open in 2026, Planning Area B-2 is planned to open in 2028, and Planning Area A includes renovations to the existing building that are in progress. As any reconstruction of Planning Area A is outside the horizon of this assessment, it was agreed that estimated additional demand from Planning Area A correspond with the demands of a building that was half industrial and half office and a floor area ratio of 0.5, resulting in a daily demand of approximately 20,900 gallons.

The demands in Table 5-4a for year 2025 were developed by Sweetwater Authority based on project areas provided by the Project Applicant's representative. Water demand was based on the Yards at the Bay Rohr Wohl Specific Plan Water Report prepared by Dexter Wilson Engineering, Inc., dated August 14, 2023 ("Water Report";

see Appendix B), which used the Water Agencies' Standards Design Guidelines Table 4-1-2. An alternative demand estimating method was evaluated using land-use-based duty factors identified in Sweetwater Authority's 2020 Water Distribution System Master Plan; however, the estimated demands resulting from said Table 4-1-2 as modified by the Water Report were determined to be more conservative than those resulting from using the duty factors. Since the Project is expected to be built out by 2030, calculated demands for 2030 were carried over to years 2035, 2040, and 2045 since no new demands will be anticipated after the year 2030.

Table 5-4a
Rohr/Wohl Specific Plan Projected Water Demands by Planning Area

Planning Area[1]	Acres	Land Use [Water Use Sector] [1]	Building Area (square-feet)	Water Use [2] (gal/net-ac/day)	Projected Water Demand (acre-feet/year)[3]				
					2025	2030	2035	2040	2045
A[4]	**9.29**	Business Park Flex [Commercial/Industrial]	202,336	4,500	23.4	23.4	23.4	23.4	23.4
B-1	**26.13**	Building 1 (Office) [Commercial]	10,400	5,000	-	1.3	1.3	1.3	1.3
		Building 1 [Industrial]	69,420	6,000	-	10.7	10.7	10.7	10.7
		Building 2 (Office) [Commercial]	16,640	5,000	-	2.1	2.1	2.1	2.1
		Building 2 [Industrial]	86,090	6,000	-	13.3	13.3	13.3	13.3
		Building 3 (Office) [Commercial]	10,400	5,000	-	1.3	1.3	1.3	1.3
		Building 3 [Industrial]	98,000	6,000	-	15.1	15.1	15.1	15.1
		Building 4 (Office) [Commercial]	16,224	5,000	-	2.1	2.1	2.1	2.1
		Building 4 [Industrial]	156,576	6,000	-	24.2	24.2	24.2	24.2
B-2	**9.36**	Retail 1 [Commercial]	19,448	6,500	-	3.3	3.3	3.3	3.3
		Retail 2 [Commercial]	7,049	6,500	-	1.2	1.2	1.2	1.2
		Retail 3 [Commercial]	7,387	6,500	-	1.2	1.2	1.2	1.2
		Retail 4 [Commercial]	18,326	6,500	-	3.1	3.1	3.1	3.1
		Office [Commercial]	7,387	5,000	-	0.9	0.9	0.9	0.9
		Hotel (Footprint) [Commercial]	20,900	7,000	-	3.8	3.8	3.8	3.8
		Hotel (Levels 2-4) [Commercial]	62,700	7,000	-	11.3	11.3	11.3	11.3
Total Proposed Demand					**23.4**	**118.3**	**118.3**	**118.3**	**118.3**
A Existing[4]	**9.29**	Existing Building [Industrial]	282,004	-	-	-	-	-	-
B-1/B-2 Existing	**35.49**	Existing Buildings [Industrial]	(766,837)	4,000	(78.9)	(78.9)	(78.9)	(78.9)	(78.9)
Total Existing Demand Removed					**(78.9)**	**(78.9)**	**(78.9)**	**(78.9)**	**(78.9)**
PROJECT NET ADDITIONAL DEMAND					**(55.5)**	**39.4**	**39.4**	**39.4**	**39.4**

Notes:
1. Based on the Third Submittal Draft of the Rohr/Wohl Specific Plan document and the Yards at the Bay Rohr Wohl Specific Plan Water Report prepared by Dexter Wilson Engineering, Inc., dated August 14, 2023.
2. Based on the Water Agencies' Standards Design Guidelines Table 4-1-2 in accordance with and as modified by said Water Report. This approach was determined to yield more conservative than using duty factors identified in Sweetwater Authority's 2020 Water Distribution System Master Plan.

3. Based on correspondence with Project applicant's representative, Planning Area A includes renovations to the existing building that are in progress, Planning Area B-1 is planned to open in 2026, and Planning Area B-2 is planned to open in 2028
4. Based on correspondence Project Applicant's representative, Planning Area A includes renovations to the existing building that are in progress, but which will intensify water demand for that area beyond what was contemplated in the 2020 UWMP. As any reconstruction of the site is outside the horizon of this assessment, it was agreed that estimated additional demand from Planning Area A correspond with the demands of a building that was half industrial and half office and a floor area ratio of 0.5 resulting in a daily demand of approximately 20,900 gallons. Based on the definition of Business Park Flex in the Rohr/Wohl Specific Plan, the water demand is split between the Commercial and Industrial Sectors.

Table 5-4b
Rohr/Wohl Specific Plan Projected Water Demands by Water Use Sector

Water Use Sector	Project	Building Area (square-feet)	Projected Water Demand (acre-feet/year)				
			2025	2030	2035	2040	2045
Commercial	Proposed	298,029	**11.7**	**43.3**	**43.3**	**43.3**	**43.3**
Industrial	Removed	(766,837)	(78.9)	(78.9)	(78.9)	(78.9)	(78.9)
	Proposed	511,254	11.7	75.0	75.0	75.0	75.0
	Net	**(766,837)**	**(67.2)**	**(3.9)**	**(3.9)**	**(3.9)**	**(3.9)**
PROJECT NET ADDITIONAL DEMAND			**(55.5)**	**39.4**	**39.4**	**39.4**	**39.4**

Revised water demands for Sweetwater Authority's service area including the Project are shown in Table 5-5. The total water demands associated with the Project were not specifically included in any of Sweetwater Authority's previous UWMPs. In addition, the total water demands have not been specifically included in CWA's 2020 UWMP. However, the water demands from the previous industrial site use have been accounted in the mentioned documents. Therefore, the increase in water demand from the Project net of the existing use was used in this analysis. Further, additional demands from the Project can be met by purchasing additional water from CWA and/or by further developing Sweetwater Authority's local sources.

Table 5-5
Historical and Projected Potable Water Demands
(Including the Project)
(acre-feet)

Water Use Sectors	2017	2018	2019	2020	2025	2030	2035	2040	2045
Single-Family [1]	6,517	6,796	6,250	6,443	8,026	8,208	8,389	8,759	8,998
Multi-Family [1]	5,508	5,549	5,359	5,525	6,883	7,037	7,192	7,510	7,715
Commercial [2]	3,526	3,649	3,582	3,692	4,611	4,746	4,850	5,062	5,199
Industrial	84	79	78	81	34	100	102	107	110
Institutional/ Governmental	1,201	1,387	1,128	1,162	1,448	1,480	1,513	1,580	1,623
Agricultural Irrigation	0	0	0	0	0	0	0	0	0
Other [5]	14	32	36	38	47	49	50	52	53
Total	**16,851**	**17,494**	**16,435**	**16,941**	**21,049**	**21,620**	**22,096**	**23,070**	**23,698**

Notes:
1. Fiscal Year July 1 through June 30
2. Residential includes domestic and irrigation for single-family, multi-family, and mobile homes.
3. Commercial includes domestic and irrigation for businesses and golf courses.
4. Prior to Fiscal Year 1991-92, commercial included mobile homes and apartments. Beginning in Fiscal Year 1991-92, mobile homes and apartments have been included in residential.
5. "Other" included construction meters and golf courses through Fiscal Year 1989-90. Subsequent to Fiscal Year 1989-90, "Other" only includes construction meters.

6 Demand Management Measures

Sweetwater Authority recognizes water conservation as a priority in its water use planning to manage water demand. The long-term goal of Sweetwater Authority's water use efficiency program is to achieve and maintain water conservation goals for various use categories that are reasonable for that category. Specific objectives of Sweetwater Authority's water use efficiency program are:

- Eliminate wasteful practices in water use
- Continue to develop information on both current and potential water conservation practices
- Ongoing, timely implementation of conservation practices
- Public information and education activities to spread knowledge of efficient water use techniques and devices

Sweetwater Authority started a water conservation program in 1990. Initial efforts included a long-term public information program and cooperation with the conservation efforts of CWA. The water conservation program expanded significantly during the 1987-1992 drought, and the backbone of a long-term efficiency program was formed. Since that time and including the 2014-2017 drought, Sweetwater Authority has

continued to revamp the conservation program by developing a variety of innovative and effective approaches to demand management.

Water use efficiency programs are developed and implemented on the premise that water conservation increases water supply by reducing the demand on available supply, which is vital to the optimal use of the region's supply resources. Sweetwater Authority actively participates in countywide and regional demand management programs through CWA and Metropolitan Water District of Southern California (Metropolitan). As a member of CWA, Sweetwater Authority benefits from regional programs performed on behalf of its member agencies. Sweetwater Authority also participates in water use efficiency programs operated on a shared-cost basis among CWA, Metropolitan, and their member agencies.

The vast majority of water savings results from the installation of residential and commercial Ultra Low Flow Toilets (ULFT), High Efficiency Toilets (HET), and High Efficiency Washers (HEW). In 2008, Sweetwater Authority shifted emphasis towards more water efficient landscaping and commercial appliances. These programs continue to evolve. The resulting savings in supply from these programs and State mandated water conservation measures directly relates to additional available water in the San Diego region for beneficial use within CWA's service area, including Sweetwater Authority. In partnership with CWA, and local land use agencies, Sweetwater Authority's water use efficiency efforts are expected to grow and expand.

Sweetwater Authority's fiscal year 2023-24 adopted budget includes just over $101,000 for water use efficiency education and customer incentive programs, which complement the regional conservation programs available to Sweetwater Authority customers. These programs also reduce local and imported water demand.

Demonstrating its commitment to conservation, Sweetwater Authority officials became an original signatory to the *Memorandum of Understanding (MOU) Regarding Urban Water Conservation in California*, which created the California Urban Water Conservation Council (CUWCC) in 1991 in an effort to reduce California's long-term water demands. As defined in the MOU*,* one of several water conservation Best Management Practices (BMP) was "a policy, program, practice, rule, regulation or ordinance or the use of devices, equipment or facilities which meets either of the following criteria: (a) An established and generally accepted practice among water suppliers that results in more efficient use or conservation of water; (b) A practice for which sufficient data are available from existing water conservation projects to indicate that significant conservation or conservation related benefits can be achieved; that the practice is technically and economically reasonable and not environmentally or socially unacceptable; and that the practice is not otherwise unreasonable for most water suppliers to carry out."

From the time Sweetwater Authority became a signatory in 1991 until the BMPs were terminated in 2014, Sweetwater Authority made implementation of the CUWCC BMPs

for water conservation a foundational element of its demand management programs, and a key component in its water resource management strategy. In 2014, sections of the California Water Code were significantly modified to address new demand management measures, technologies, and approaches to water use efficiency. These revisions have been incorporated into Sweetwater Authority's water use efficiency programs and resulting demand management measures. The current demand management measures implemented by Sweetwater Authority are described below.

6.1 Water Waste Prevention

The following water waste prohibitions are designed to encourage efficient water use within the region, and provide a method for meeting demand reduction goals, should an extended water shortage occur.

Regional - The County of San Diego enforces several state and local ordinances requiring water conservation, to assure available water resources are put to beneficial use for all citizens of the county. California Plumbing Code, Section 402, requires the installation of water conserving fixtures in new construction. Section 67.101 of the County's Code of Regulatory Ordinances simply prohibits water waste: "No person shall waste or cause or permit to be wasted any water furnished or delivered by any agency distributing for public benefit any water dedicated to or provided for public use within the unincorporated territory of the county of San Diego."

In addition, the State Legislature determined in the Water Conservation in Landscaping Act (Government Code sections 65591 et seq.) that the State's water resources are in limited supply. The Legislature also recognized that while landscaping is essential to the quality of life in California, landscape design, installation, maintenance, and management must be water efficient. Land use agencies including the cities and counties are required by the Act to enforce California's Model Water Efficient Landscape Ordinance, or a similar ordinance which is at least as effective.
For property within the County of San Diego, the County's Landscaping Ordinance (Title 8, Division 6, Chapter 7) meets this requirement, and the County's Water Efficient Landscape Design Manual requires efficient irrigation uses (including rain sensors), transitional zones, use of native plantings, restriction on turf, use of mulch, the preservation of existing vegetation and natural features, and the use of reclaimed water when available.

Agency - Resolution 14-18, passed on September 24, 2014, adopted Sweetwater Authority's drought response plan. During emergency conditions such as drought or catastrophic interruption in service where additional water use restrictions are necessary, Sweetwater Authority's drought response plan established a four-level drought response plan allowing for water use cutbacks up to 40% or more, and established an allocation method of rationing water during drought levels. The plan set customer guidelines for water conservation.

Sweetwater Authority's drought response plan was subsequently revised multiple times from 2014 through 2021 in response to state activities and mandates. The current drought response plan, which includes six response levels allowing for water use cutbacks up to 50% or more, was adopted on June 9, 2021 with Resolution 21-13, attached in Appendix C. Also, on June 9, 2021, Sweetwater Authority's Governing Board adopted the Water Shortage Contingency Plan, which outlines guidelines for response actions by Sweetwater Authority and customer guidelines for compliance with water conservation mandates.

Local - Within the City of Chula Vista, landscape water efficiency is regulated through the City of Chula Vista Landscape Water Conservation Ordinance (Chapter 20.12). The general purpose of this chapter is to establish water use standards for landscapes in Chula Vista that implement the landscape design requirements established by the Water Conservation in Landscaping Act.

6.2 Metering

All service connections located within Sweetwater Authority's service area are metered. Sweetwater Authority requires the installation of water meters on all new services throughout its distribution system and bills by volume of water metered.

6.3 Conservation Pricing

Sweetwater Authority's rate structure is developed under a cost-based methodology. In addition, the structure contains features that encourage water conservation. For details regarding the design and composition of Sweetwater Authority's water use rates, please refer to the 2023 Rate Study prepared by NBS, dated September 2023, which can be found at the following link, https://www.sweetwater.org/466/Rate-Study.

Through adoption of Resolution 23-20 by Sweetwater Authority's Governing Board, Sweetwater Authority's current water rates became effective January 1, 2024. Current water rates can be found at: https://www.sweetwater.org/DocumentCenter/View/1157/Rates-and-Rules-Supplement.

6.4 Public Education and Outreach

Wholesale Agency Assistance Program **–** This demand management measure applies only to wholesale agencies. CWA provides conservation-related technical support and information to its member agencies, and manages regional programs on behalf of its member agencies. Sweetwater Authority, CWA, and Metropolitan share funding for some conservation incentives.

Public Information Programs – Sweetwater Authority promotes water conservation in coordination with the Water Conservation Garden, local land use agencies, neighboring water agencies, CWA, and Metropolitan. Regional activities include: public service announcements, demonstration gardens, conservation strategy meetings, water awareness month activities, water efficiency workshops, and landscape water use

classes and contests. Sweetwater Authority independently distributes public information through its website, social media accounts, bill inserts, on-hold telephone messages, annual Consumer Confidence Report, newsletters, news releases, brochures, keynote speakers, facility tours, video library, and participation in year-round special events and community festivals. Sweetwater Authority participates in regional drought, conservation, and environmental stewardship public outreach programs including the WaterSmart programs, the WaterSense Program from the Environmental Protection Agency, Climate Change Workgroups, and city Clean-Green programs.

- *Literature-Brochures*. Sweetwater Authority provides brochures and literature on a variety of water conservation topics including gray water, lawn watering, WaterSmart, California Friendly and Naturescape gardening, drip irrigation, leak detection, and general household conservation tips. These are made available to residents through a literature rack at Sweetwater Authority's Administration Office and website, through individual and group mailings, through online and electronic media, and through distribution at public appearances by Sweetwater Authority Board members and staff.

- *Newsletters/Brochures*. Sweetwater Authority publishes a consumer newsletter, "On Tap" quarterly, incorporating conservation tips and programs. Brochures are developed and distributed to deal with specific conservation issues and to provide detailed information on drought response measures. When appropriate, drought information is provided in English and Spanish and bulk mailed to all physical addresses in Sweetwater Authority's service area.

- *Personal Letters and Emails*. Sweetwater Authority sends a personalized letter or email to notify consumers of reported or observed water waste on their property. These documents are sent to elicit cooperation in Sweetwater Authority's efforts to use water efficiently, and are sent with information regarding appropriate conservation materials, such as a lawn-watering guide, leak detection information, or general conservation tips.

- *Speakers Bureau*. Sweetwater Authority staff are available to address civic and community groups, clubs, associations, and other organizations on a wide variety of water issues. Speakers provide conservation handouts to interested audience members at these appearances. The Sweetwater Authority speakers' bureau is promoted through involvement in civic groups.

- *Committees*. Sweetwater Authority maintains a permanent Legislative Affairs and Communications Committee to provide assistance and suggestions to staff regarding water awareness issues. This committee can be convened as needed to provide assistance and suggestions to staff regarding conservation issues and address consumer concerns resulting from water reduction allocations.

- *Exhibits and Related Materials*. Sweetwater Authority is an agency member of the Water Conservation Garden at Cuyamaca College. This garden promotes water conservation, has over 5 acres of displays, and offers a variety of water conservation educational programs. Sweetwater Authority also participates in local business and community fairs to distribute water-saving devices, conservation literature, and to answer consumer questions face-to-face. Sweetwater Authority also partners with neighboring water agencies to put on water conservation public awareness events, including water-efficiency technology expos and landscape contests.

  Sweetwater Authority partners with the Living Coast Discovery Center to provide displays featuring the relationship of good water stewardship to environmental sustainability. Sweetwater Authority also promotes sustainable water practices and water conservation through partnerships with the City of Chula Vista's Green programs, Climate Change Initiatives, and Naturescape Program.

- *News Relations*. Sweetwater Authority provides formal press releases and feature story information to local print and television reporters, as well as to trade and special interest publications.

- *Advertising*. Sweetwater Authority has purchased advertising or content space in local newspapers, and chamber publications to promote water conservation and understanding of water issues. Sweetwater Authority regularly monitors and posts on various social media platforms and strategically purchases social media ads. to increase message exposure.

School Education Programs – Since 1991, Sweetwater Authority has had an active school education program, which includes water conservation messages. Sweetwater Authority currently has two partnerships to educate students in its service area. The Hydro Station is a partnership with the Chula Vista Elementary School District and Otay Water District. In this experience, more than 4,000 fifth grade students per year visit Sweetwater Authority's Richard A. Reynolds Groundwater Desalination Facility and learn about careers in the water industry.

In 2018, Sweetwater Authority established a partnership with Olivewood Gardens located in National City. This program sees 2,500 students per year and curriculum includes information on water efficiency and the safety of drinking tap water.

Sweetwater Authority provides funding for the Water Conservation Garden's Ms. Smarty Plants school programs and assemblies. These activities are fact-filled and engage students in water conservation, their relationship with ecosystems and inspire critical thinking skills related to the efficient use of water. Programs meet or exceed CA State Standards and Next Generation Science Standards. E-STEAM and Common Core are incorporated.

Sweetwater Authority also participates in CWA's countywide education programs. CWA offers students from kindergarten through high school, a wide array of educational opportunities including water testing kits, and computer programs.

- *Junior and Senior High School Education Programs*. Sweetwater Authority hosts an annual High School Photo Contest with schools in its service area. The winning photos are selected and displayed at the Bonita Museum and Cultural Center. Cash prizes are awarded to the students.

- *Mini-Grant Program for Local Schools*. Sweetwater Authority provides mini-grants to teachers for the development and presentation of water-based lessons, to assist with providing conservation demonstration gardens at local school sites, and to host use of San Diego County's Splash Science Lab and Green Machine at local schools.

6.5 System Loss Programs

System Water Audits, Leak Detection, and Repair – Sweetwater Authority's system water audits, leak detection, and repair programs contribute to better water management and reduction in real and apparent water loss.

- *Water Audits*. Sweetwater Authority conducts annual water audits of its water distribution system, which comply with the requirements of SB 555 and subsequent AB 1414, to identify real (physical) and apparent (non-physical) system water losses. Sweetwater Authority also conducts a monthly assessment of its distribution system for unbilled and non-revenue water loss. Using these comparisons, Sweetwater Authority can evaluate the need for implementation of a formal water loss reduction program. System loss is determined by comparing total water use with total water production. Sweetwater Authority's 12-month average water loss was 2.2% as calculated in the fiscal year 2022-23 audit.

- *Leak Detection*. A Supervisory Control and Data Acquisition (SCADA) system was installed in the distribution system in 2001, and is used to monitor water flow throughout the system. Rapid changes in water quantity and/or pressure at any of the monitoring points within the system are immediately evaluated and addressed when they are identified. A leak detection survey was performed on approximately 105 miles of pipeline within the distribution system in December 2023. A total of 53 leaks were identified on water mains, service laterals and system appurtenances. All the leaks that were identified were repaired shortly after they were identified

- *Water System Improvements*. Routine and preventative maintenance is performed on the distribution system. In addition, Sweetwater Authority implements a capital improvement program to maintain and renew transmission, distribution, and storage facilities.

- *Facility Inspection*. Critical facilities, including pump stations and valve vaults, are inspected bi-weekly. Other distribution facilities are inspected weekly. As part of Sweetwater Authority's preventative maintenance program, each system valve is exercised at least every three years, and each fire hydrant is visually inspected and maintained every one to two years.

- *Meter Maintenance and Replacement Program*. A 15- to 20-year repair/replacement program covers every service meter within Sweetwater Authority system. Meters sized between ⅝-inch and 2-inch are volumetrically tested and replaced as needed. Consumer meters sized at 3-inches and larger are calibrated and maintained annually.

- *Water Theft*. Sweetwater Authority monitors incidents of water theft, and has the ability to charge up to three times the water service rate when it is determined that water theft has occurred.

6.6 Water Conservation Coordinator

Sweetwater Authority first designated a Conservation Coordinator in 1991. During this same year, Sweetwater Authority used three temporary staff positions to handle the increased volume of conservation-related activities caused by the drought. In June 1992, a Water Conservation – Information Specialist staff position was created. In 2023, the Water Efficiency Program was relocated to the Public Affairs section. Sweetwater Authority currently has a Principal Public Affairs Representative and a Public Affairs Representative – Bilingual who manage and administer the Water Efficiency Program.

6.7 Other Demand Management Measures

Residential Programs – The following programs are available to Sweetwater Authority's residential customers to reduce residential water use and improve water use efficiency.

- *Water Survey Programs for Single-Family and Multi-Family Residential Consumers***.** The WaterSmart Checkup Program is free to both single-family and multi-family residential consumers and has been available since 1995. The program helps consumers learn how to save water in their own homes, which in turn saves the consumers money. The survey is customized to the property and may include a review of landscaping, outdoor irrigation system, indoor use, identification of indoor leaks, educational materials, information about other water conservation programs, and free faucet aerators and low-flow showerheads. An irrigation surveyor may perform a meter leak detection test, check the irrigation system, suggest seasonal adjustments for a consumer's individual water schedule, check the soil to ensure that watering coincides with moisture absorption, discuss proper lawn maintenance, and offer low water use landscape information.

- *High-Efficiency Washing Machine Rebate Program*. Since 2000, Sweetwater Authority has participated in CWA's rebate program. New technology in washing machine design provides for more efficient water use and savings. Residential and commercial consumers have taken advantage of the up to $185 rebates to replace their standard top-loading washers with low-water use, energy-efficient models. The current rebate is $135. Prior to March 10, 2004, high-efficiency washers had water efficiency factor values of 9.5 or less. With greater availability of ultra-high efficiency washers, rebates are now limited to machines with an integrated water factor of 3.7 or less. The integrated water efficiency factor is determined by the amount of water it takes to wash a cubic foot of laundry. The lower the efficiency factor, the greater the water efficiency of the clothes washer.

- *Residential Toilet Replacement Program***.** Since 1991, Sweetwater Authority has participated in regional Ultra Low Flow and High Efficiency Toilet voucher and/or rebate programs offered by CWA and Metropolitan. The current program offers rebates to multi-family residential consumers who have purchased water efficient devices to replace older, less efficient units. Since 1992, toilets manufactured in the United States must comply with 1.06 gallons per flush (gpf) maximum flow. Toilets with consistently lower water use continue to be developed. Beginning in 2008, rebates are only available for high efficiency and dual flush toilets to encourage customers to install toilets that have met more rigorous water efficiency standards.

- *Carwash Rebates.* Sweetwater Authority customers are eligible to receive a reimbursement of up to $10 in the form of a bill credit for up to 4 washes per year. Carwashes must be located within Sweetwater Authority's service area and the carwash provider must reclaim and recycle their water.

- *Leak Repair Rebates.* Sweetwater Authority customers are eligible to receive up to a $100 rebate for services or parts related to the repairing of leaks and/or the installation of devices to replace leaking fixtures. The rebate is available for residential and commercial customers.

Large Landscape Conservation Programs and Incentives – From 1991 to 2004, large landscape (defined as landscape with one acre or more) irrigation surveys were available to consumers at no charge through the *Professional Assistance for Landscape Management (PALM*) program, sponsored by CWA. Using methodology developed by the Irrigation Training and Research Center at California Polytechnic State University at San Luis Obispo, the surveyor performs catch can tests, makes numerous soil and plant observations, and calculates ETo based irrigation schedule.

Beginning in 2005, residential and commercial consumers with large landscapes (initially defined as over 2,000 square feet) are eligible to receive the following services at no charge through the programs sponsored by Sweetwater Authority, CWA, Metropolitan, and DWR. These programs are available for limited durations and

routinely adjusted in response to participation levels and overall verifiable water savings achieved:

- *Turf Replacement Program.* Customers can receive a rebate for replacing turf with sustainable landscaping features through this program sponsored by CWA and Metropolitan.

- *Water Use Surveys*. Audits are available at no charge to residential and commercial consumers with a minimum of 1 acre of irrigated landscaping. Site audits include a review of irrigation conditions, watering schedule, and sprinkler distribution uniformity by a trained technician. Landscape area measurement and water use recommendations are provided.

- *Weather-Based and Soil Moisture Sensor Irrigation Controllers*. Rebates are available to residential and commercial consumers with irrigated landscaping for weather-based irrigation controllers to retrofit old timers, and/or to add soil moisture sensors to an existing compatible irrigation controller.

- *Rotating Irrigation Nozzles*. Rebates are available for rotating irrigation nozzles. Rebates are only available for devices listed on the Qualified Product List, maintained by Metropolitan. No site size minimum applies to this incentive program; however the current rotating nozzle rebate is only available in quantities of 30 or greater per eligible customer.

- *Rain Barrels and Cisterns.* Customers can receive a rebate for installing a rain barrel or cistern to collect rainwater from their roofs, which can be used for irrigation. The rebate amount depends on the size of the rain barrel or cistern installed.

Conservation Programs for Commercial, Industrial, and Institutional (CII) Accounts **–** Sweetwater Authority participates in the Metropolitan's *SoCal Water$mart* program which offers rebates to consumers for water-efficient devices. A limited number of rebates are available for commercial plumbing fixtures (high efficiency toilets, high efficiency ultra-low-flow and waterless urinals, plumbing flow control valves), water efficient medical equipment (dry vacuum pumps, laminar flow restrictors), food service equipment (connectionless food steamers, air cooled ice machines), and HVAC equipment (cooling tower conductivity controllers, cooling tower pH controllers. New rebates are added to the program, and rebate values are adjusted as water savings potentials are validated. The rebates reduce the costs for businesses, and the equipment produces long-term savings in water, sewer, and energy costs.

- *Water Savings Performance Program.* The Water Savings Incentive Program (WSIP) is designed for non-residential customers improving their water efficiency through upgraded equipment or services that do not qualify for standard rebates. WSIP is unique because it provides an incentive based on the measured amount

of water saved. This “pay-for-performance” design lets customers implement custom projects for their sites. Any project that saves at least 10,000,000 gallons of water could qualify. Metropolitan provides this incentive which is pays up to $0.60/1,000 gallons of water saved.

- *Grants.* Sweetwater Authority offers grants of up to $5,000 each for water efficiency projects in the Authority’s service area. Current grant programs are the Savings Through Efficiency Program (STEP) and the Water Efficiency Education Program (WEEP). STEP provides grant funding for commercial, industrial, and institutional customers for equipment retrofits or innovative projects or devices which maximize water use efficiency. WEEP provides grant funds for publicly accessible educational displays, programs, projects, or instructional media that teaches the importance of using water efficiently.

As more and better data are collected over time, the demand management measures are refined and revised based upon the most objective criteria available. Agency-specific implementation schedules and coverage goals are based on industry best practices, standardized criteria, and state requirements.

6.8 Effect of Demand Management Measures on Projected Water Demands

Water conservation as a result of the demand management measures described in this WSA are not accounted for in the projected water demands for the Project and Sweetwater Authority’s service area; therefore, the projected demands are conservative and support the conclusion found in Section 9 of this WSA.

7 Water Supply

Water used in Sweetwater Authority's service area comes from various sources. These sources include local fresh groundwater, brackish groundwater, surface water, and imported water from the Colorado River and the State Water Project. The imported water is delivered by CWA, either purchased from or wheeled by Metropolitan, and is then purchased by Sweetwater Authority. Imported water can either be purchased as treated water or as untreated water, with treatment at Sweetwater Authority’s Robert A. Perdue Water Treatment Plant. Historically since 1955, local sources have met approximately 45 percent of the water needs within Sweetwater Authority’s service area, while the 55 percent balance has been met with imported water. The percentage of local to imported water can vary greatly year-to-year due to local rainfall amounts.

7.1 Local Supply

7.1.1 Surface Water Sources

Sweetwater Authority has a variety of senior water rights on the Sweetwater River which allow it to divert water from the Sweetwater River. These rights include pre-1914 appropriative rights perfected under common law and early California statutes, modern

appropriative rights under the auspices of the State Water Resources Control Board, and rights to enforce restrictive covenants on parcels of land in the Middle Sweetwater River. All of Sweetwater Authority's water rights in the Sweetwater River, including pre-1914 water rights, were previously owned by the SBID, which acquired them in 1977 by eminent domain from California American Water and through license on Loveland Reservoir in March 1985. These water rights transferred to Sweetwater Authority in 1990 when SBID transferred all of its assets to Sweetwater Authority.

Sweetwater Authority owns and operates two storage reservoirs known as Sweetwater Reservoir and Loveland Reservoir, which were constructed in 1888 and 1945, respectively, and are used to divert and retain water from the Sweetwater River. Sweetwater Reservoir has an approximate capacity of 28,079 acre-feet, and Loveland Reservoir has an approximate capacity of 25,387 acre-feet, for a combined capacity of 53,466 acre-feet. The watershed for the Sweetwater River is approximately 230 square miles and both reservoirs are located in this watershed. Sweetwater Reservoir is downstream of Loveland Reservoir and has an adjacent treatment plant capable of producing 30 million gallons of water per day (MGD). Local supply from Sweetwater Reservoir varies from zero to 100 percent depending on local runoff conditions. To make use of the local supply from Loveland Reservoir, Sweetwater Authority releases water through the dam's fixed-cone valve so water can travel downstream through the Sweetwater River and make its way to Sweetwater Reservoir; however, Sweetwater Authority can only transfer water from Loveland Reservoir to Sweetwater Reservoir when river and environmental conditions are optimal. Sweetwater Authority last completed a water transfer from Loveland Reservoir to Sweetwater Reservoir in January 2024.

During wet years when Sweetwater and Loveland Reservoirs are at or near full capacity, they are capable of providing up to a two-year supply to Sweetwater Authority customers. Table 7-1 shows surface water production for the past fifteen fiscal years.

Table 7-1
Surface Water Production from 2008 through 2023

Year	Total Surface Water Produced (acre-feet)	Year	Total Surface Water Produced (acre-feet)
2008	4,390	2016	0
2009	1,733	2017	4,763
2010	7,756	2018	4,002
2011	3,276	2019	5,842
2012	13,068	2020	5,408
2013	11,335	2021	5,116
2014	0	2022	2,945
2015	0	2023	7,930

Note: Local supply from Sweetwater Reservoir for fiscal years ending in 2015 and 2016 was zero due to regional drought conditions.

7.1.2 Groundwater Sources

Sweetwater Authority produces groundwater from the Coastal Plain of San Diego Groundwater Basin (CPSD Basin) identified in the State of California Department of Water Resources (DWR) Bulletin 118 as Basin Number 9-033. Sweetwater Authority adopted an interim groundwater management plan in November 2001 that governs groundwater management until a groundwater management plan could be prepared in accordance with Water Code Section 10750 (AB 3030). The interim groundwater management plan is included as Appendix D. However, in 2014, the State of California passed the Sustainable Groundwater Management Act (SGMA), so instead of preparing an AB 3030 groundwater management plan, which are no longer permitted, in coordination with the City of San Diego, Sweetwater Authority has prepared a Preliminary Groundwater Sustainability Plan (GSP) in 2020 in accordance with SGMA. DWR has designated the CPSD Basin a low priority basin, per section 10722.4 of the CWC. DWR has not identified the CPSD Basin as being subject to critical conditions of overdraft, nor has it been identified as overdrafted, nor has DWR projected that the CPSD Basin will become overdrafted if present management conditions continue. Accordingly, a GSP is not required for the CPSD Basin, but Sweetwater Authority is proactively utilizing SGMA, including the Preliminary GSP to sustainably manage its groundwater resources.

The principal aquifer units of the CPSD Basin include recent alluvium with offshore marine sediment, Quaternary marine and non-marine deposits, and the San Diego Formation (SDF). Although groundwater occurs in the overlying sedimentary deposits, the SDF is the principal aquifer within the basin. The SDF consists of fine-grained to medium-grained sandstone, cobble conglomerate, and mudstone (often described as very fine sandy silt). The formation was deposited during a major late Pliocene marine

transgression. The CPSD Basin is bounded to the east by the La Nacion Fault, to the south approximately by the U.S./Mexico International Border, to the west by San Diego Bay, and to the north by the Mission Valley Basin. Basin recharge is derived from seasonal runoff from precipitation, discharge from the Sweetwater and Loveland Reservoirs, and underflow from the reservoirs.

Within the CPSD Basin, Sweetwater Authority operates the National City Wells, which produce potable groundwater (Total Dissolved Solids [TDS] approximately 600 mg/l) and the Richard A. Reynolds Groundwater Desalination Facility (Desalination Facility) that produces drinking water from brackish groundwater (TDS between 1,600 and 2,500 mg/l). Both well fields pump from the SDF.

The National City Wells consist of three wells: Nos. 2, 3, and 4. Well Nos. 3 and 4 typically operate daily, while the oldest well, No. 2, serves as a backup. Sweetwater Authority has produced an average of 1,900 acre-feet per year from the National City Wells from 1954 to 2023.

The Desalination Facility commenced operation in 1999. The facility was designed to take groundwater from four alluvial wells and five deep SDF wells, located on the north side of the Sweetwater River. A sixth SDF well was later constructed and added to the Desalination Facility. The facility removes the TDS from the brackish groundwater using reverse osmosis technology (R/O). Currently, the alluvial wells are not operated for the following reasons: 1) summertime vegetative distress in the Sweetwater River; 2) surface water influence on the relatively shallow alluvial formation, and 3) the R/O membranes not being approved for surface water treatment by the California Department of Public Health.

Phase I of the Desalination Facility was designed to produce four MGD of drinking water, but the facility was constructed with space to accommodate a Phase 2 expansion. Sweetwater Authority completed a Phase 2 expansion of the Desalination Facility in 2017 and added five additional SDF wells for a total of eleven SDF wells. The Desalination Facility is currently producing approximately 5 MGD. The Desalination Facility has the ability to produce a maximum 7.85 MGD described in the 2020 UWMP, and may produce up to 10 MGD. Additionally, Sweetwater Authority is currently participating in studies with the United States Geological Survey (USGS) to evaluate the SDF aquifer, and to make safe use of the available yield from the aquifer. Groundwater production for the past sixteen fiscal years is shown in Table 7-2.

Table 7-2
Groundwater Production from 2008 through 2023

Year	Total GW Produced (acre-feet)	Source (acre-feet)	
		NC Wells	Desalination Facility
2008	5,904	2,219	3,685
2009	5,049	1,999	3,050
2010	5,573	2,133	3,440
2011	5,633	2,115	3,518
2012	4,754	1,830	2,924
2013	5,260	2,048	3,211
2014	5,110	2,059	3,051
2015	5,089	1,914	3,176
2016	3,329	1,474	1,855
2017	5,909	2,148	3,761
2018	9,456	1,823	7,633
2019	8,461	1,618	6,843
2020	8,832	1,671	7,161
2021	8,278	1,983	6,294
2022	8,319	1,846	6,473
2023	6,497	1,550	4,947

Note: The Desalination Facility was offline for most of the fiscal year ending in 2017 for construction of Phase 2 of the facility, hence, the small production from the Desalination Facility that year.

Table 7-3 shows historical and projected water supplies from local sources only, in 5-year increments since 2008. Historical and projected water supplies from imported sources are shown in Section 7.2 of the WSA.

Table 7-3
Historical and Normal Water Year Projected Local Supplies

Year	Local Supply (acre-feet)			Total Local Supply (acre-feet)
	Sweetwater Reservoir	National City Wells	Reynolds Desal. Facility	
2010	7,756	2,133	3,440	13,330
2015	0	1,914	3,176	5,089
2020	5,408	1,671	7,161	14,240
2025[2]	5,000	1,900	7,600	12,500
2030	5,000	1,900	7,600	12,500
2035	5,000	1,900	7,600	12,500
2040	5,000	1,900	7,600	12,500
2045	5,000	1,900	7,600	12,500

Notes:
1. Local supply from Sweetwater Reservoir for fiscal year ending in 2015 was zero due to regional drought conditions.
2. Projected local supplies for fiscal years ending in 2025 through 2045 are consistent with projections used in Sweetwater Authority's 2020 UWMP. Local Supplies may increase relative to the amounts presented if local supplies are further developed through future projects.

7.1.3 Water Recycling

Sweetwater Authority does not produce or distribute recycled water. Several potential changes in the service area could have significant impacts on the future potable water demands. These include:

- The development of the Chula Vista Bayfront. This planned project will cover approximately 550 acres along San Diego Bay. The land uses being considered include parks and open space. This development will increase the demand for potable water.
- The Joint Recycled Water Intertie Feasibility Study between Otay Water District (Otay) and Sweetwater Authority is in progress to analyze the market demand and feasibility of constructing a recycled water connection between Otay and Sweetwater Authority to distribute recycled water to high-irrigation-use customers in its service area.

7.1.3.1 Otay Water District – Sweetwater Authority Joint Recycled Water Intertie Feasibility Study

In the past, Sweetwater Authority has participated in studies with CWA, Otay, and the City of Chula Vista to analyze potential water recycling plant locations within Sweetwater Authority's service area. However, those past studies determined that implementation of recycled water within Sweetwater Authority's service area was cost prohibitive, but current economic conditions may lead to different conclusions in the latest study. Given the unknown outcome of the mentioned study, the use of recycled water has not been considered in the preparation of this WSA.

7.2 Imported Supply

Sweetwater Authority represents two (City of National City and South Bay Irrigation District) of the 24 member agencies of CWA. Member agency status entitles Sweetwater Authority to directly purchase water from CWA on a wholesale basis. One hundred percent of Sweetwater Authority's imported water is purchased from CWA, a member agency of Metropolitan. The statutory relationships between CWA and its member agencies, and Metropolitan and its member agencies, respectively, establish the scope of Sweetwater Authority's entitlements to water from these two agencies. CWA was organized on June 9, 1944 under the County Water Authority Act for the sole purpose of importing Colorado River water into San Diego County. The imported water, now a combination of Colorado River water, State Water Project water, and conserved water by the Imperial Irrigation District through the Quantification Settlement Agreement of 2003, is sold wholesale to the 24 member agencies of CWA. The member agencies are autonomous and their City Councils or Boards of Directors set local policies and pricing structures.

Imported water delivered by CWA is either purchased from or wheeled by Metropolitan from Metropolitan facilities, located just south of the San Diego/Riverside county line. Metropolitan is a public agency organized in 1928 by a vote of the electorates of 13 Southern California cities. Since its formation, Metropolitan has grown to include 27 member agencies of which CWA is the largest. Metropolitan was formed for the purpose of developing, storing, and distributing water to the residents of Southern California. The historical quantities of water purchased from CWA by Sweetwater Authority are shown on Table 7-4. Projected purchased water supplies are shown in Table 7-5.

Table 7-4
Historical Imported Supplies

Year	Total Imported Water (acre-feet)	Source (acre-feet)	
		Untreated	Treated
2008	7,150	6,961	189
2009	14,292	12,830	1,462
2010	6,855	3,705	3,150
2011	8,738	2,526	7,212
2012	173	173	0
2013	4,694	4,379	315
2014	15,360	13,812	1,548
2015	12,479	12,134	345
2016	14,384	13,348	1,036
2017	6,828	6,495	333
2018	3,073	2,936	137
2019	913	749	164
2020	2,701	2,505	196
2021	3,474	3,369	105
2022	5,735	5,281	454
2023	1,681	1,548	133

Table 7-5
Normal Water Year Projected Imported Supplies

Fiscal Year Ending	Total Imported Water (acre-feet)
2025	6,549
2030	7,120
2035	7,596
2040	8,570
2045	9,198

Note: Projected imported supply values were calculated by adding the projected water demands for the Project shown in Table 5-5 to the projected imported water supplies from Sweetwater Authority's 2020 UWMP.

7.2.1 Metropolitan Water District's 2020 Regional UWMP

Metropolitan's 2020 Regional UWMP was adopted by the Metropolitan Board of Directors on May 10, 2021. The 2020 Regional UWMP provides member agencies, retail water utilities, cities, and counties within its service area with water supply information for purposes of developing local UWMPs, water supply assessments, and written verifications. As part of this process, Metropolitan also used SANDAG's Series 14 Regional Growth Forecast in calculating regional water demands for CWA's service

area, in addition to using the Southern California Association of Governments (SCAG) 2020-2045 Regional Transportation Plan/Sustainable Community Strategy (2020 Regional Transportation Plan). Metropolitan incorporated SANDAG's Series 14 Regional Growth Forecast and the SCAG 2020 Regional Transportation Plan into the 2020 Regional UWMP.

Since the 2015 Regional UWMP update, drier conditions in the Sacramento/San Joaquin Delta (Delta) have persisted, reducing exports from Northern California and prompting dry-year storage reserve and transfer programs with other contractors of the State Water Project and Central Valley Project systems. Metropolitan's 2020 UWMP references the California Delta Conveyance Project (DCP), which replaced the WaterFix and EcoRestore, formerly referred to as the Bay Delta Conservation Plan (BDCP), proposed by state, federal, and local water agencies to make State Water Project system operational improvements, including some related to restoration and protection of the Delta ecosystem and contributing watersheds. The DCP would construct and operate new water distribution facilities that are designed to be more environmentally friendly than the current system configuration. The program would include water delivery upgrades, river flow improvement, and habitat restoration and protection. The DCP arose from direction by Governor Newsom in 2019 and built on work already conducted, whereby DWR rescinded the twin tunnel WaterFix program and finalized a new environmental review and planning process for the DCP, a single tunnel solution to modernize Delta conveyance in December 2023. This approach is consistent with the Governor's April 2019 Executive Order N-10-19 directing state agencies to develop a portfolio of statewide water actions and investments.

The DCP paired with complementary projects that improve water recycling, recharge depleted groundwater reserves, strengthen existing levee protections, and improve Delta water quality will help ensure a resilient water supply for Metropolitan, CWA, and Sweetwater Authority.

Copies of Metropolitan's 2020 Regional UWMP are available at Metropolitan's Administration Office or online at: www.mwdh2o.com.

7.2.2 San Diego County Water Authority's 2020 UWMP

CWA's Board of Directors adopted the CWA's 2020 UWMP on May 27, 2021. The purpose of the report is to provide a statement regarding CWA's supplies and implementation of CWA plans and programs to meet the future water supply requirements of its member agencies. CWA's 2020 UWMP contains documentation on the CWA/Imperial Irrigation District Water Conservation and Transfer Agreement, All American Canal and Coachella Canal Lining Projects. In addition, the Carlsbad Desalination Plant currently is capable of supplying 56,000 acre-feet of desalinated seawater per year to the region. The documentation included in CWA's 2020 UWMP was prepared for use by CWA's member agencies in preparation of local UWMPs, water supply assessments, and written verifications required under state law. Written

verifications required under state law such as this WSA strengthen Sweetwater Authority's verification of water supply reliability.

8 Supply and Demand Assessment

8.1 Normal Year Assessment

Table 8-1 shows the forecasted normal water year projections for Sweetwater Authority's service area, including the Project. The projections show that Sweetwater Authority anticipates having adequate water supplies to meet projected demands through 2045. Demand totals shown in Table 8-1 are the same quantities as the demands shown in Table 5-5.

Table 8-1
Normal Year Supply and Demand Assessment

	2025	2030	2035	2040	2045
Imported Water	8,604	9,081	9,557	10,531	11,159
Surface Water	5,000	5,000	5,000	5,000	5,000
Groundwater	1,900	1,900	1,900	1,900	1,900
Desalinated Groundwater	7,600	7,600	7,600	7,600	7,600
Supply Totals	**21,143**	**21,620**	**22,096**	**23,070**	**23,698**
Demand Totals	**21,143**	**21,620**	**22,096**	**23,070**	**23,698**
Difference	**0**	**0**	**0**	**0**	**0**

8.2 Single Dry Year Assessment

For the single dry year assessment, supplies were calculated by evaluating the availability of each supply. For groundwater from the National City Wells and desalinated water from the Desalination Facility, it is assumed that supplies would be reliable and available at normal levels in a single dry year because groundwater supplies from these facilities are considered drought-proof due to the CPSD Basin not being in an overdraft condition nor being expected to be in an overdraft condition through 2045 due to Sweetwater Authority's sustainable groundwater management practices. For surface water supplies from Sweetwater Reservoir, it is anticipated that 56% of supplies would be available, which is consistent with Sweetwater Authority's 2020 UWMP. Per information from CWA's 2020 UWMP, it is anticipated that imported water would be available to meet demands in a single dry year, which is further verified with information contained in Metropolitan's 2020 UWMP

Based upon modeling performed by CWA, which was confirmed by reviewing local trends in Sweetwater Authority's service area in the 2020 UWMP, demands would increase by 7% in a single dry year; therefore, Sweetwater Authority would purchase additional water supplies from CWA to meet the increased demands. Table 8-2 shows

forecasted single dry year projections for Sweetwater Authority's service area, including the Project. The projections show that Sweetwater Authority anticipates having adequate water supplies to meet projected demands through 2045.

Table 8-2
Single Dry Year Supply and Demand Assessment

	2025	2030	2035	2040	2045
Imported Water	10,222	10,834	11,343	12,385	13,057
Surface Water	2,800	2,800	2,800	2,800	2,800
Groundwater	1,900	1,900	1,900	1,900	1,900
Desalinated Groundwater	7,600	7,600	7,600	7,600	7,600
Supply Totals	**22,522**	**23,134**	**23,643**	**24,685**	**25,357**
Demand Totals	**22,522**	**23,134**	**23,643**	**24,685**	**25,357**
Difference	**0**	**0**	**0**	**0**	**0**

8.3 Multiple Dry Year Assessment

For the multiple dry year assessment, supplies were also calculated by evaluating the availability of each supply. For groundwater from the National City Wells and desalinated water from the Desalination Facility, it is assumed that supplies would be reliable and available at normal levels in multiple dry years because groundwater supplies from these facilities are considered drought-proof due to the CPSD Basin not being in an overdraft condition nor being expected to be in an overdraft condition through 2045 due to Sweetwater Authority's sustainable groundwater management practices. For surface water supplies from Sweetwater Reservoir, estimates were based on the 2020 UWMP, which anticipated 80 percent of normal supplies for the first two years and 56 percent of normal supplies for the latter three years. The CWA's 2020 UWMP indicates that there would be imported supply reliability throughout a multiple dry year period assuming verifiable local supplies, seawater desalination, allocations from Metropolitan, and wheeled supplies from the Quantification Settlement Agreement.

Based on modeling performed by CWA and Sweetwater Authority's 2020 UWMP, this assessment assumes demands would increase by 7% of normal in the first year, 8% of normal in the second and third years and 9% of normal for the fourth and fifth years.

Because the CWA's 2020 UWMP demonstrates that there would be supply reliability for a multiple dry year period, it is anticipated that Sweetwater Authority would purchase additional imported water supplies from CWA to meet demands, which, in conjunction with activation of the Water Shortage Contingency Plan, would result in adequate supply. Therefore, the projections show that Sweetwater Authority anticipates having adequate water supplies to meet projected demands, as shown in Table 8-3.

Table 8-3
Multiple Dry Year Supply and Demand Assessment

		2025	2030	2035	2040	2045
First Dry Year	Imported Water	9,022	9,634	10,143	11,185	11,857
	Surface Water	4,000	4,000	4,000	4,000	4,000
	Groundwater	1,900	1,900	1,900	1,900	1,900
	Desalinated Groundwater	7,600	7,600	7,600	7,600	7,600
	Supply Totals	**22,522**	**23,134**	**23,643**	**24,685**	**25,357**
	Demand Totals	**22,522**	**23,134**	**23,643**	**24,685**	**25,357**
	Difference	**0**	**0**	**0**	**0**	**0**
Second Dry Year	Imported Water	9,232	9,850	10,364	11,416	12,094
	Surface Water	4,000	4,000	4,000	4,000	4,000
	Groundwater	1,900	1,900	1,900	1,900	1,900
	Desalinated Groundwater	7,600	7,600	7,600	7,600	7,600
	Supply Totals	**22,732**	**23,350**	**23,864**	**24,916**	**25,594**
	Demand Totals	**22,732**	**23,350**	**23,864**	**24,916**	**25,594**
	Difference	**0**	**0**	**0**	**0**	**0**
Third Dry Year	Imported Water	10,432	11,050	11,564	12,616	13,294
	Surface Water	2,800	2,800	2,800	2,800	2,800
	Groundwater	1,900	1,900	1,900	1,900	1,900
	Desalinated Groundwater	7,600	7,600	7,600	7,600	7,600
	Supply Totals	**22,732**	**23,350**	**23,864**	**24,916**	**25,594**
	Demand Totals	**22,732**	**23,350**	**23,864**	**24,916**	**25,594**
	Difference	**0**	**0**	**0**	**0**	**0**

		2025	2030	2035	2040	2045
Fourth Dry Year	Imported Water	10,643	11,266	11,785	12,847	13,531
	Surface Water	2,800	2,800	2,800	2,800	2,800
	Groundwater	1,900	1,900	1,900	1,900	1,900
	Desalinated Groundwater	7,600	7,600	7,600	7,600	7,600
	Supply Totals	**22,943**	**23,566**	**24,085**	**25,147**	**25,831**
	Demand Totals	**22,943**	**23,566**	**24,085**	**25,147**	**25,831**
	Difference	**0**	**0**	**0**	**0**	**0**
Fifth Dry Year	Imported Water	10,643	11,266	11,785	12,847	13,531
	Surface Water	2,800	2,800	2,800	2,800	2,800
	Groundwater	1,900	1,900	1,900	1,900	1,900
	Desalinated Groundwater	7,600	7,600	7,600	7,600	7,600
	Supply Totals	**22,943**	**23,566**	**24,085**	**25,147**	**25,831**
	Demand Totals	**22,943**	**23,566**	**24,085**	**25,147**	**25,831**
	Difference	**0**	**0**	**0**	**0**	**0**

9 Conclusion: Availability of Sufficient Supplies

Sweetwater Authority is committed to developing local resources within and outside its service area to offset the region's need for imported water from Metropolitan and CWA. Within its service area, Sweetwater Authority expanded its Desalination Facility in 2017, which reclaims brackish groundwater from the underlying San Diego Formation. Sweetwater Authority is continuing to study the development of recycled water in its service area and Sweetwater Authority continues to collaborate with other agencies that are developing this very important local resource.

Sweetwater Authority, as with other water agencies in the region, continues to rely on imported water from Metropolitan and CWA to bridge the gap between its available local supply and current and future demands within its service area. The CWA's 2020 UWMP identifies projects and programs to help ensure that the existing and planned water users within Sweetwater Authority's service area have an adequate supply. Metropolitan has also prepared and adopted an updated 2020 Integrated Water Resources Plan (IWRP) that outlines strategies for water reliability. Implementation of

these strategies by Metropolitan, CWA, and local water agencies like Sweetwater Authority will assure adequate supply to support growth and redevelopment within the region. However, it should be noted that programs in the updated Metropolitan planning documents require future discretionary decisions by Metropolitan's Board of Directors. Until these programs are fully implemented by Metropolitan to manage current changed conditions and other uncertainties, the San Diego region may be susceptible to potential shortages. Metropolitan, CWA, and Sweetwater Authority do have shortage response plans in place to manage any potential shortages. The plans include shortage response actions, such as dry-year storage withdrawals, voluntary and mandatory water use restrictions, and public outreach. Sweetwater Authority's 2020 Drought Response Plan and Water Shortage Contingency Plan are included in Appendix C. In addition, per capita demands have been decreasing since 2000, and have accelerated since the most recent drought from 2012 through 2016 that led to the implementation of more permanent demand reduction measures such as more efficient water fixtures and the adoption of more drought-tolerant landscaping.

This WSA demonstrates that there will be sufficient water supplies, over a 20-year planning horizon, to meet the projected demands of the proposed Project, in addition to existing and planned future users, including agricultural and manufacturing uses, under normal, single dry-year, and multiple dry-year scenarios.

However, in March 2019, the United States Bureau of Reclamation (Reclamation) and the states dependent on Colorado River water transmitted to the United States Congress plans to alleviate stress on water supplies from the Colorado River. These plans known as the Drought Contingency Plans (DCPs) for the Upper and Lower Basins of the Colorado River were authorized by Congress in April 2019 in the Colorado River Drought Contingency Plan Authorization Act. The DCPs obligate Lower Basin states, of which California is a part, to water supply cutbacks at specified storage levels in Lake Mead retained by Hoover Dam, commit Reclamation to additional water conservation efforts, and coordinate Upper Basin operations to protect Lake Powell storage levels and hydropower generation. Under the Lower Basin DCP, California committed to Colorado River water delivery cutbacks for the first time in history. In June 2023, the states agreed to further reduce allocations temporarily due to prolonged drought in the Colorado Basin; however, the environmental analysis under the National Environmental Protection Act being performed by the United States Bureau of Reclamation is ongoing, and in March 2024, the Lower Basin states jointly submitted an alternative approach for further allocation reductions to the Bureau of Reclamation for consideration.

Due to uncertainty surrounding the reliability of Colorado River water; and the potential for prolonged droughts due to climate change that could last more than the multiple five dry-year scenario required to be analyzed for this WSA, Sweetwater Authority cannot guarantee that at some point in the future, supply of imported water could be diminished from those projected in this WSA, which would impact water availability for the Project.

This WSA does not create a right or any entitlement to water service (CWC § 10914). The WSA is not a commitment to serve the project, but it is a review of Sweetwater Authority's total projected water demands and supplies. Based on presently available information, the WSA and its analyses and conclusions are conditioned in part on the ability of Metropolitan and CWA to continue to supply imported water to meet Sweetwater Authority's needs.

Appendix A

Request from the City of Chula Vista to Prepare a Water Supply Assessment

CITY OF CHULA VISTA

Development Services Department

December 13, 2023

Israel Marquez
Sweetwater Authority
505 Garrett Avenue
Chula Vista, CA 91910

RE: Request for Water Supply Assessment for the Rohr/Wohl Specific Plan Environmental Impact Review (EIR22-0003).

Dear Mr. Marquez,

We have received an application from PSIP Wohl Bay Boulevard, LLC ("Owner" or "Applicant") for the following project:

> Request to amend the Chula Vista Local Coastal Program ("LCP") to adopt the Rohr/Wohl Specific Plan that will amend the existing I-G (General Industrial) zone to three new zoning designations ("Project"), located on a 44.78-acre site, west of Interstate 5, north of H Street, south of G Street, and east of Marina Parkway ("Project Site"). An Environmental Impact Report ("EIR") has been submitted and will be evaluating the impacts of this plan.

We have consulted with each other and have mutually agreed that your public water line (255 Pressure Zone) is a public water system that may provide water service to the Project. We have also mutually agreed that the Project is subject to the water supply assessment requirements of Water Code Sections 10910 – 10912.

Pursuant to Water Code Section 10910, the City of Chula Vista ("Lead Agency") requests Sweetwater Authority to submit a water supply assessment for the Project on or before March 12, 2024, which is within 90 days of the date of this request. We concurrently request the Applicant to state whether the projected water demand associated with the Project was included as part of the most recently adopted Urban Water Management Plan. Please contact me to confirm receipt of this request.

Thank you for your cooperation in this matter. If you have any questions about this request, please contact me at your earliest convenience at (619) 409-5465 or by email at tphilips@chulavistaca.gov.

Sincerely,

D. Todd Philips, Ed.D.
Planning Manager

cc: Desmond Corley, Principal Planner
Arturo Ortuño, Senior Planner

Appendix B

Yards at the Bay Rohr Wohl Specific Plan Water Report by Dexter Wilson Engineering, Inc., dated August 14, 2023

DEXTER WILSON ENGINEERING, INC.

WATER • WASTEWATER • RECYCLED WATER

CONSULTING ENGINEERS

YARDS AT THE BAY
ROHR WOHL SPECIFIC PLAN
WATER REPORT
CITY OF CHULA VISTA

August 14, 2023

2234 FARADAY AVENUE • CARLSBAD, CA • (760) 438-4422

YARDS AT THE BAY
ROHR WOHL SPECIFIC PLAN
WATER REPORT
CITY OF CHULA VISTA

August 14, 2023

Prepared by:
Dexter Wilson Engineering, Inc.
2234 Faraday Avenue
Carlsbad, CA 92008
(760) 438-4422

Job No. 537-023

DEXTER WILSON ENGINEERING, INC.

DEXTER S. WILSON, P.E.
ANDREW M. OVEN, P.E.
NATALIE J. FRASCHETTI, P.E.
STEVEN J. HENDERSON, P.E.
FERNANDO FREGOSO, P.E.
KATHLEEN L. HEITT, P.E.
WILLIAM W. TODD, P.E.

August 14, 2023 537-023

Wohl Property Group
2251 San Diego Avenue, Suite A-247
San Diego, CA 92110

Attention: Michael Knapton, Project Manager

Subject: Yards at the Bay/Rohr Wohl Specific Plan Water Report

Introduction

This letter report provides a water study for the Yards at the Bay project also known as the Rohr Wohl Specific Plan project. The purpose of this report is to supplement and complement the environmental documentation being prepared for this redevelopment site relative to water service.

The Rohr Wohl Specific Plan project site is 44.78 acres located in the City of Chula Vista, California. The site is in the northwest portion of the City; the project site is located west of Interstate 5, north of H Street, south of G Street, and east of Marina Parkway. Figure 1 presents a vicinity map showing the location of the project site.

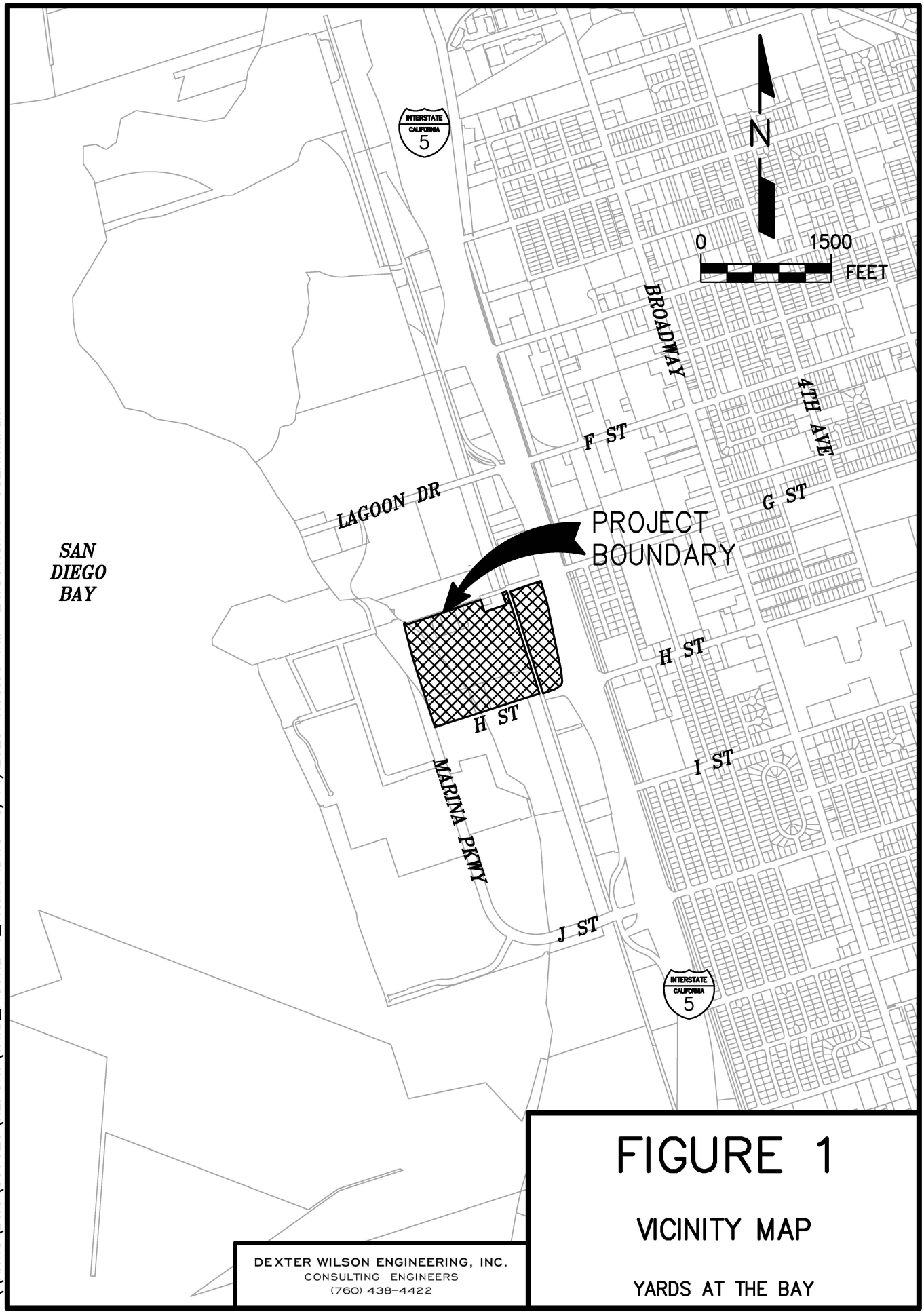


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FIGURE 1

VICINITY MAP

YARDS AT THE BAY

DEXTER WILSON ENGINEERING, INC.
CONSULTING ENGINEERS
(760) 438-4422

Background

The project site is divided into three separate planning areas. The eastern portion of the project site, closest to Interstate 5, between G Street and H Street, is designated as Planning Area A and is 9.29 acres. The largest planning area is Planning Area B-1, which is 26.13 acres. The third planning area is Planning Area B-2, which is located south of B-1 and is 9.36 acres. Figure 2 shows the site plan and the three planning areas.

The subject property consists of developed land occupied by the former Rohr Aircraft Facility. The site was developed with several industrial buildings historically used for manufacturing, warehousing, research and development, and related office uses totaling approximately 1,048,841 square feet. One of the industrial buildings in Planning Area A, known as Building 29 at 795 H Street, was used for research and development, tooling, and warehousing and distribution of aftermarket products until February 2021. Renovations of that building commenced in 2021, including removal of approximately 50,000 square feet of interior mezzanine office space.

Planning Areas B-1 and B-2 were used for manufacturing operations which ceased in approximately 2020. Demolition of the buildings in Planning Areas B-1 and B-2 (totaling approximately 766,837 square feet) commenced in May 2023 in connection with environmental remediation of the site.

Land Uses

Planning Areas A, B-1, and B-2 of the project site are located within the Chula Vista Bayfront Local Coastal Program and currently lie within the General Industrial (I) Zoning and Industrial (I) General Plan land use designations. Land uses in the vicinity of the project site include vacant properties, Collins Aerospace, and Seven Mile Casino to the north; Marina, Chula Vista Harbor, and future development as part of the Chula Vista Bayfront Master Plan to the south; Bay Boulevard and Interstate 5 to the east; and Chula Vista RV Resort and future development site for the Gaylord Pacific Resort Hotel and Convention Center to the west.

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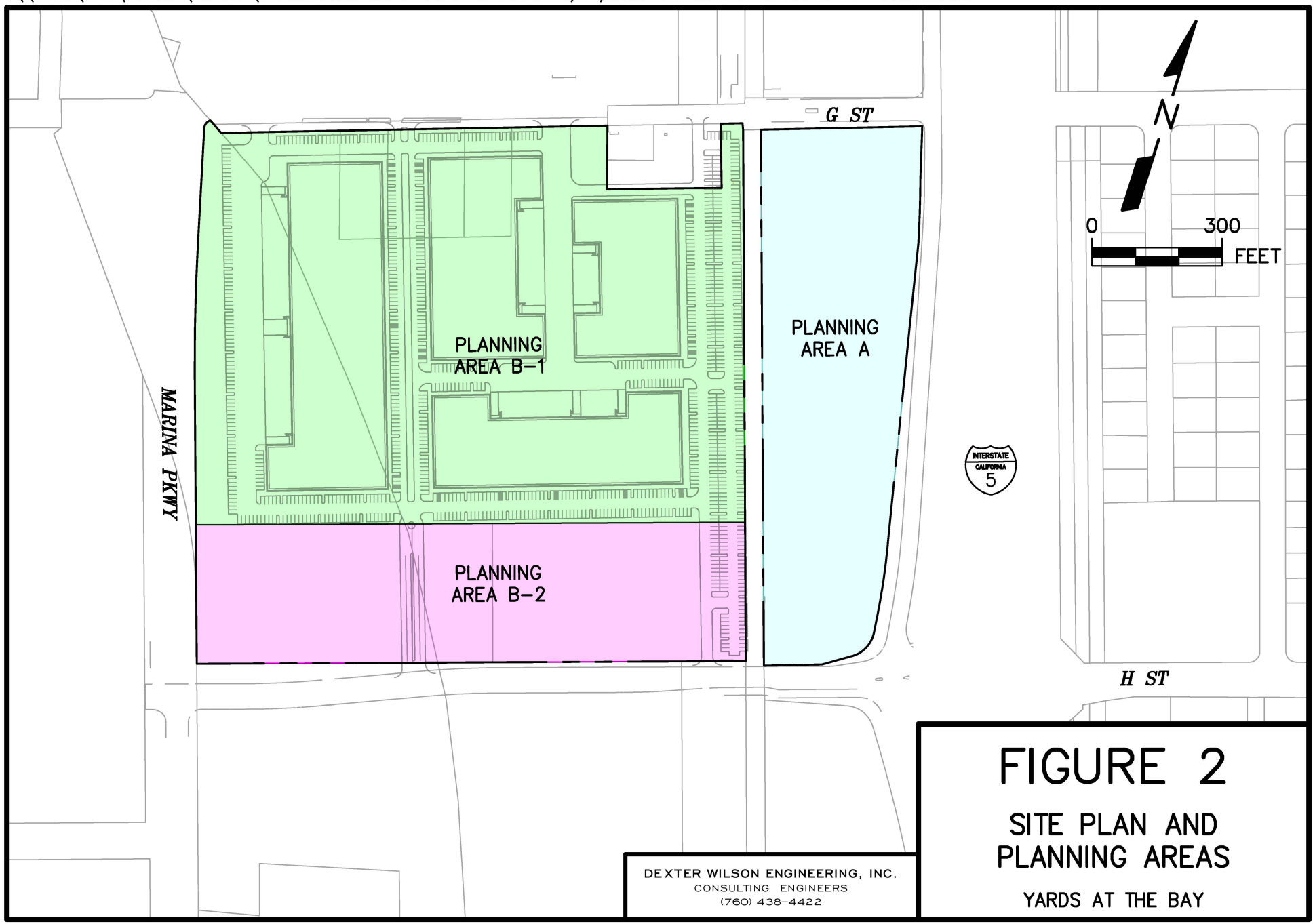

FIGURE 2

SITE PLAN AND PLANNING AREAS

YARDS AT THE BAY

DEXTER WILSON ENGINEERING, INC.
CONSULTING ENGINEERS
(760) 438-4422

Table 1 below summarizes the proposed land uses for the Yards at the Bay site. These land uses will be presented as changes to the current General Industrial Zoning and Industrial General Plan land use by way of the Rohr Wohl Specific Plan document.

TABLE 1
PROPOSED LAND USES FOR PLANNING AREAS

Planning Area	Specific Plan Land Use	Acreage
A	Business Park Flex	9.29
B-1	Regional Technology Park/Light Industrial/Commercial Office	26.13
B-2	Commercial Retail/Commercial Visitor/Commercial Office	9.36

Presently Planning Area A is undergoing renovation and is on a separate track for occupancy of its space. This report will not address the water demand for Planning Area A but will focus on Planning Areas B-1 and B-2.

Existing Water System

Water service to the Yards at the Bay site will be provided by Sweetwater Authority. Figure 3 shows the existing water facilities in the vicinity of the project site. The Sweetwater Authority public water system includes a 12" water line in Bay Boulevard along the east side of the site, a 12" water line in G Street along the north side of the site, and a 16" water line in H Street on the south side of the site.

These existing water lines are within the Sweetwater Authority 255 Pressure Zone system and are connected to the 18 million gallon Bonita Valley Reservoir located east of Interstate 805 and south of Bonita Road.

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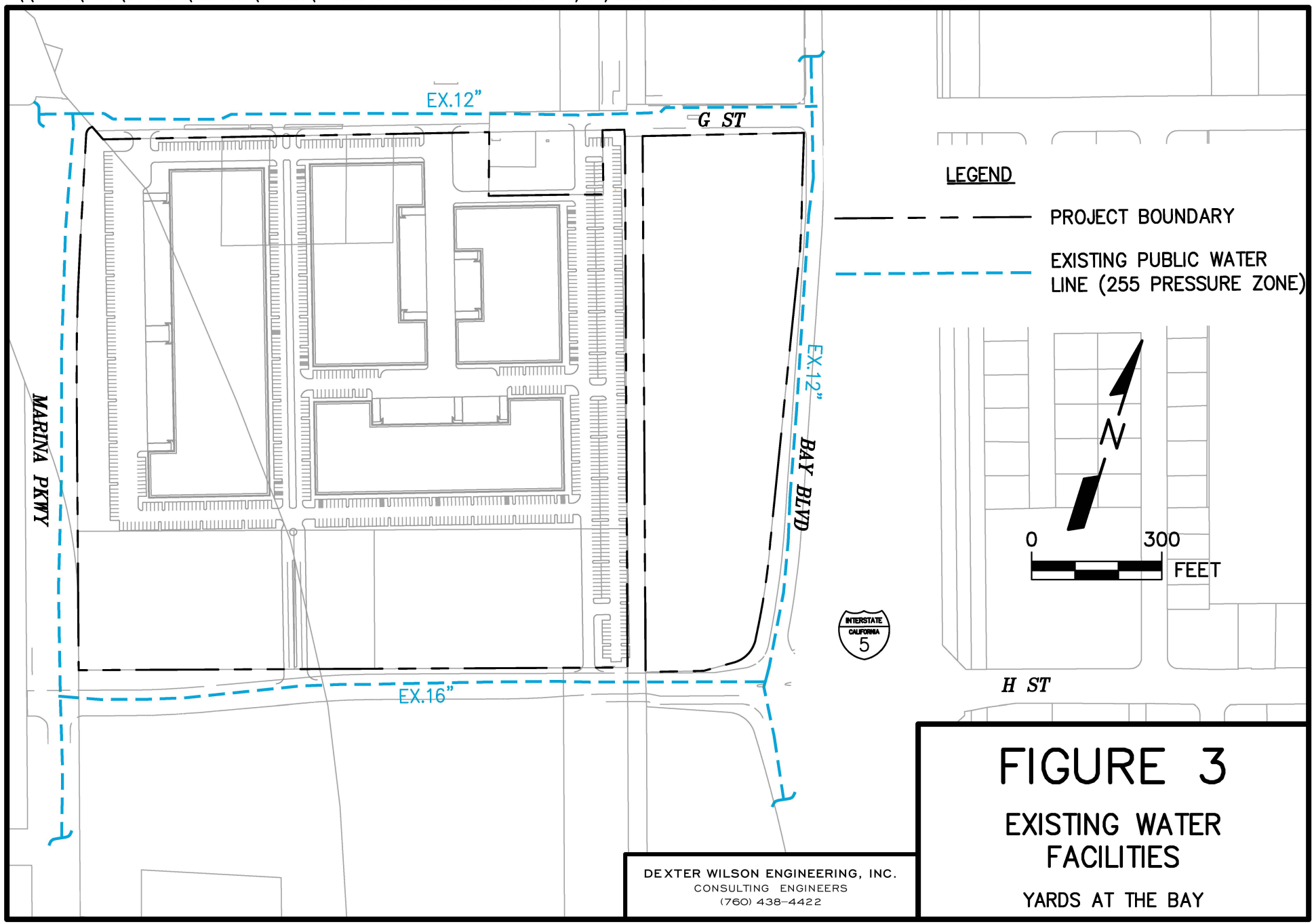

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FIGURE 3

EXISTING WATER FACILITIES

YARDS AT THE BAY

Available Water System Pressure

The project site elevations are expected to range from 10 to 15 feet above sea level. Based on the maximum hydraulic grade line (HGL) of 255 feet for the water service system, maximum static pressures on the project site will range from 104 psi to 106 psi.

Working pressures at the project site are expected to be lower than the maximum static pressures for two reasons. One is that the available hydraulic grade line under typical water system demand conditions will be lower than 255 feet because of the distance between the project site and the reservoir feeding the system. A second reason is that water services to the project will pass through a water meter and backflow preventer; these two items will incur a pressure loss of 15 psi. Thus, the working pressures at the project site will be around 80-85 psi.

When static pressures exceed 80 psi, the California Plumbing Code requires pressure regulating valves at each building supply. Therefore, all buildings within the Yard at the Bay project will be required to have individual pressure regulating valves at each building supply.

Estimated Water Demands for Yards at the Bay

As noted earlier in this report, the land uses proposed for Yards at the Bay will be more defined than simply General Industrial. However, even with the greater definition, it is still unknown what types of uses will ultimately be constructed within the project. Therefore, the water demand estimate for the project site will be presented in two ways. First, we will estimate the water demand based on the Sweetwater Authority standard land uses. This will serve as the low end of the expected water use. Secondly, we will provide an estimate based on a more intensive use of water to accommodate potential higher uses within the project.

Table 2 presents the water demand based on standard Sweetwater Authority water demand factors. These come from the Water Agencies Standards Committee of which Sweetwater Authority is a member.

TABLE 2
YARDS AT THE BAY
WATER DEMAND ESTIMATE

Land Use	Area, sq. ft.	Water Demand Factor, gpd/net ac	Average Water Demand, gpd
Planning Area B-1			
Building 1			
Footprint	79,820		
Office	10,400	5,000	1,194
Industrial	69,420	4,000	6,375
Building 1			
Footprint	102,730		
Office	16,640	5,000	1,910
Industrial	86,090	4,000	7,905
Building 1			
Footprint	108,400		
Office	10,400	5,000	1,194
Industrial	98,000	4,000	8,999
Building 1			
Footprint	172,800		
Office	16,224	5,000	1,862
Industrial	156,576	4,000	14,378
Planning Area B-2			
Retail 1	19,448	5,000	2,232
Retail 2	7,049	5,000	809
Retail 3	7,387	5,000	848
Retail 4	18,326	5,000	2,104
Office	7,387	5,000	848
Hotel			
Footprint	20,900	7,000	3,359
Level 2-4	62,700	7,000	10,076
TOTAL			**64,093**

As noted earlier in this report, the goal of the Yards at the Bay project is to attract business with higher job densities than may be typical of industrial developments. For this reason, we are proposing a modification to the Sweetwater Authority standard water use factors so that the water system planning for Yards at the Bay will accommodate higher intensity uses.

Table 3 below calculates a higher water use. Two water demand factors are being revised. First is the Industrial Water Demand Factor. The standard factor is 4,000 gpd/net acre. This factor is being increased by 50 percent to 6,000 gpd/net acre to account for higher intensity uses within the proposed buildings in Planning Area B-1.

The second area of increased water demand is expected to be in the retail buildings which are part of Planning Area B-2. Typical retail uses are considered to be small specialty shops mixed with coffee shops and maybe a single take-out food establishment. The proposed increased water use factor will take into consideration the potential for a full restaurant and additional coffee shops or craft drink establishments. The increase in the water use factor is 30 percent, from 5,000 gpd/net acre to 6,500 gpd/net acre.

TABLE 3
YARDS AT THE BAY
MODIFIED WATER DEMAND ESTIMATE

Land Use	Area, sq. ft.	Water Demand Factor, gpd/net ac	Average Water Demand, gpd
Planning Area B-1			
Building 1			
Footprint	79,820		
Office	10,400	5,000	1,194
Industrial	69,420	6,000	9,562
Building 1			
Footprint	102,730		
Office	16,640	5,000	1,910
Industrial	86,090	6,000	11,858
Building 1			
Footprint	108,400		
Office	10,400	5,000	1,194
Industrial	98,000	6,000	13,499

TABLE 3
YARDS AT THE BAY
MODIFIED WATER DEMAND ESTIMATE

Land Use	Area, sq. ft.	Water Demand Factor, gpd/net ac	Average Water Demand, gpd
Building 1			
Footprint	172,800		
Office	16,224	5,000	1,862
Industrial	156,576	6,000	21,567
Planning Area B-2			
Retail 1	19,448	6,500	2,902
Retail 2	7,049	6,500	1,052
Retail 3	7,387	6,500	1,102
Retail 4	18,326	6,500	2,735
Office	7,387	5,000	848
Hotel			
Footprint	20,900	7,000	3,359
Level 2-4	62,700	7,000	10,076
TOTAL			**84,718**

Water Availability

The estimated water demand for the Yards at the Bay project is 84,718 gpd average. As noted previously in this report, the project site was actively being used until 2020. Using the standard water demand factor for industrial land use, 4,000 gpd/net acre, and the square footage of the buildings which existing on Areas B-1 and B-2 (766,837 sq. ft.), the existing water demand for Planning Areas B-1 and B-2 is:

766,837 sq. ft. ÷ 43,560 sq. ft./acre x 4,000 gpd/net acre = 70,417 gpd average

Thus, the increase in water demand for the Yards at the Bay project is:

84,718 gpd average - 70,417 gpd average = 14,301 gpd average

14,301 gpd average equals 16.0 ac-ft/year water use

From the Sweetwater Authority's *Water Distribution System 2015 Master Plan*, dated October 2016, the annual water production for the year ending in June 2015 was 19,234 ac-ft. Thus, the additional water demand estimated for the Yards at the Bay project is 0.08 percent of the total water production for the Sweetwater Authority (based on 2015 data). This additional water supply is expected to be accounted for in the typical increase in normal growth in the Sweetwater Authority service area, as well as in the updated projections which Sweetwater Authority makes as part of its 5-year update of its Urban Water Management Plan.

Water Storage

Water storage volume is calculated as one maximum day demand plus fire storage. Fire storage for the Yards at the Bay site is already accounted for in the storage volume in the Sweetwater Authority's system because the existing land use of the project site is Industrial. The 2015 Master Plan identifies the fire storage in the gravity zone system to be based on 5,000 gpm fire flow for four hours. In fact, the Yards at the Bay project will have a lower fire hazard rating than the previous Rohr buildings because of new construction and the installation of fire sprinkler systems in all the new buildings. Therefore, fire water storage for Yards at the Bay is not an issue.

For the increase in water demand of 14,301 gpd, the water storage volume is 21,452 gallons or 0.02 MG. This volume is calculated using a maximum day peaking factor of 1.5 times the average day demand per the 2015 Master Plan Table 4-4 for the gravity fed system.

The 2015 Master Plan notes that the available storage in the gravity zone is 4.9 MG greater than the required storage volume for the water use estimated for 2040. Therefore, there is sufficient water storage for the incremental water demand for the Yards at the Bay project.

Water Transmission

With an existing 12" water line in G Street along the north side of the Yards at the Bay project site, and an existing 16" water line in H Street at the south side of the site, there is sufficient water flow and pressure to develop the project site. This is further supported by hydrant flow tests prepared by Sweetwater Authority. Two tests were conducted, one on the 12" water line in G Street and one on the 16" water line in H Street. These two tests are provided in Appendix A for reference.

The hydrant flow test in G Street shows that a flow of 4,947 gpm can be supplied in the 12" water line with greater than 60 psi residual pressure. The H Street hydrant flow test shows an analysis for 5,000 gpm flow with similar pressure results. This substantiates that a fire hydrant flow requirement of 5,000 gpm is achievable on the Yards at the Bay project site with appropriate fire system looping.

However, the City of Chula Vista Fire Department allows only a 25 percent reduction in the required fire flow for fire sprinklered buildings. Since some of the proposed buildings in Planning Area B-1 may be over 100,000 square feet, consideration may need to be given to the type of construction for these buildings so that the required fire flow does not exceed the ability of the existing water system.

With the ability to modify the type of construction of the larger buildings or configure an onsite fire protection system that will make use of both existing water lines in G Street and H Street, there is no need for offsite water pipeline improvements to provide water service to the Yards at the Bay project site.

Conclusion

Thank you for the opportunity to provide professional engineering services on behalf of the Yards at the Bay project. From a water service perspective, there are no offsite water improvements needed to redevelop the proposed project site with the land uses being proposed as part of the Rohr Wohl Specific Plan. Please do not hesitate to contact us if you have any questions about our evaluations and conclusions.

Dexter Wilson Engineering, Inc.

William Todd for

Andrew Oven, P.E.

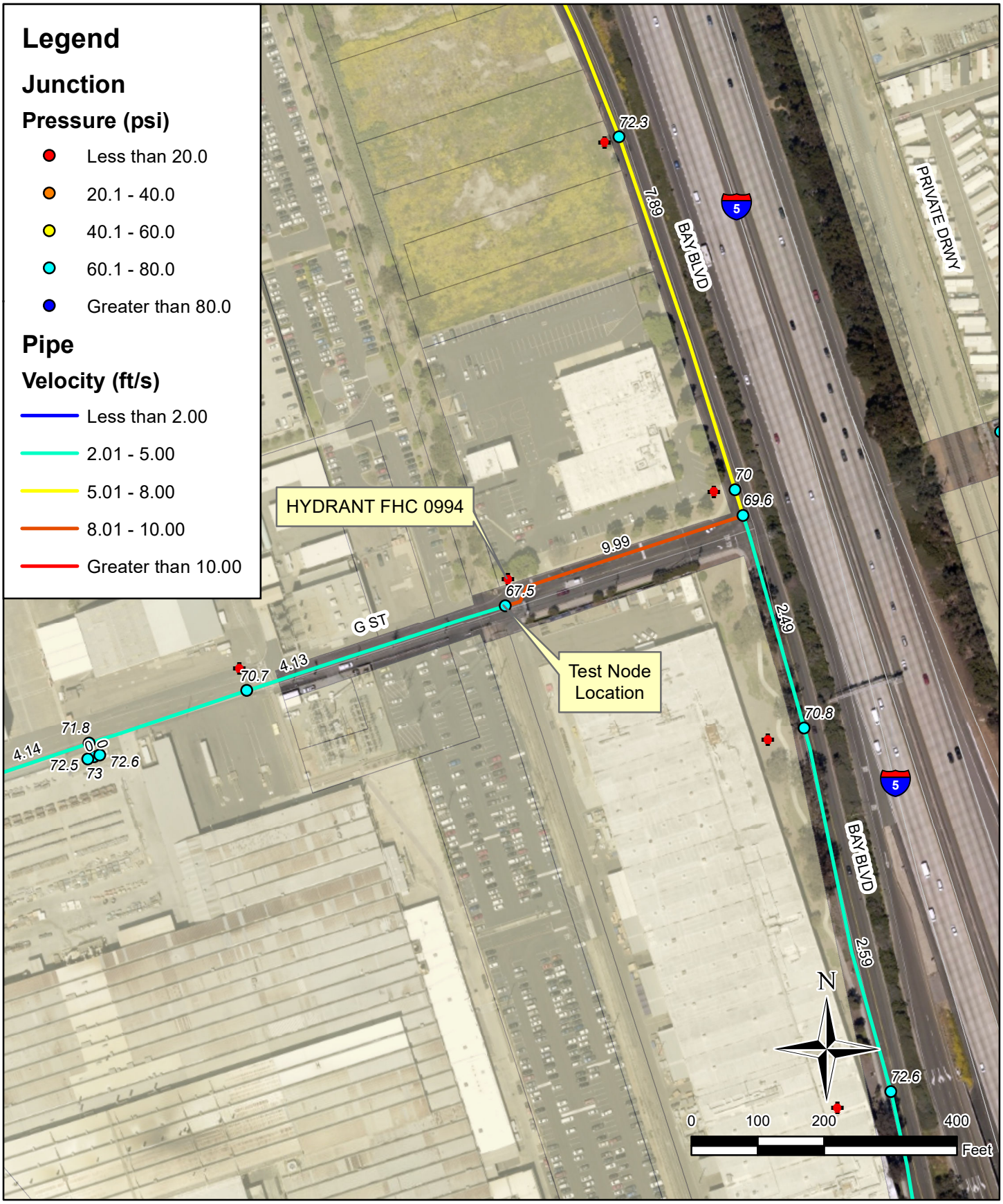
AO:ck:ah

cc: Mark Kestel, Project Design Consultants, a Bowman Company

Attachments

APPENDIX A

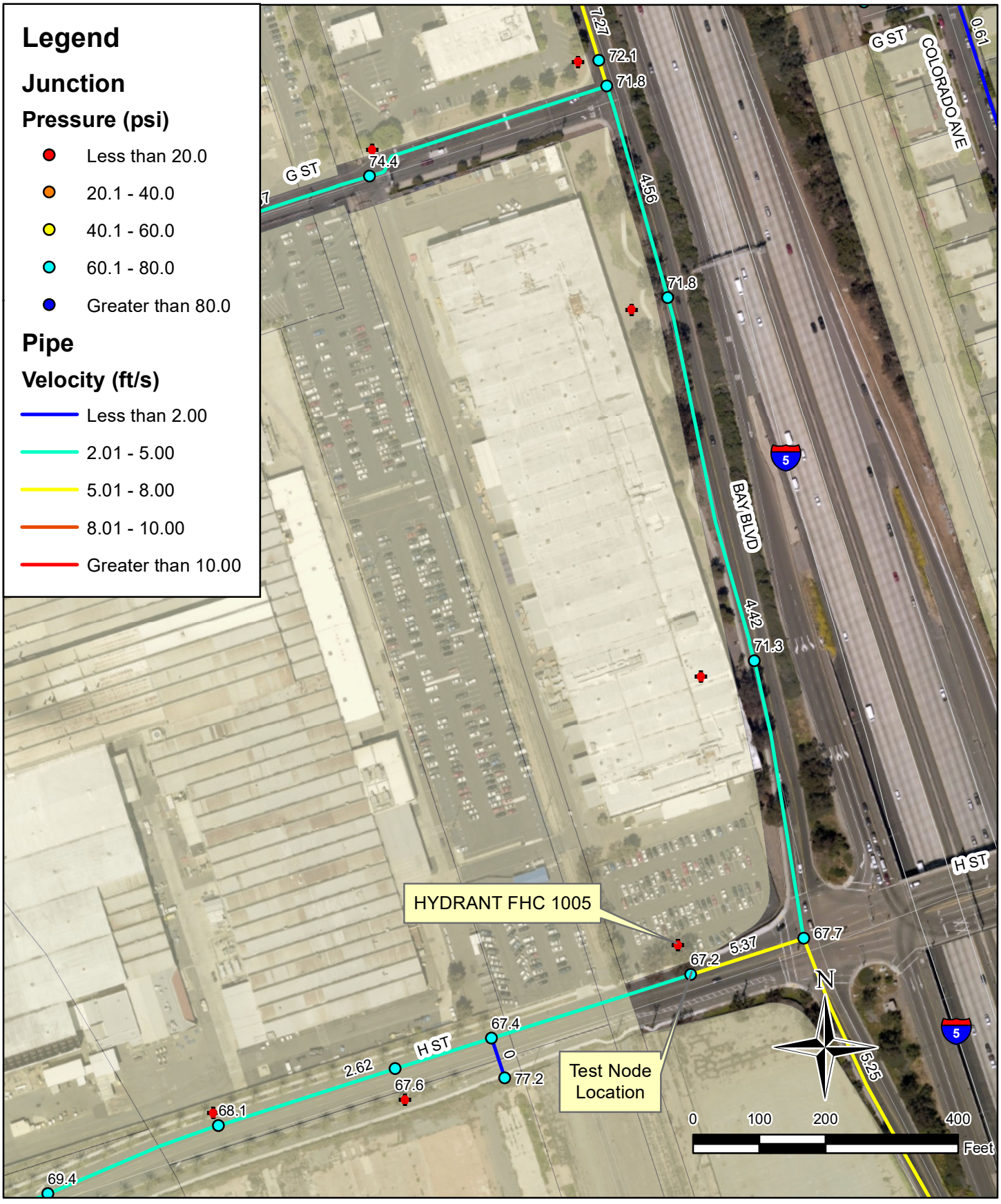
SWEETWATER AUTHORITY HYDRANT FLOW TESTS



G Street & Bay Boulevard - Hydraulic Analysis

4,947 GPM demand was applied to a node at the existing 12-inch AC water main located on the north side of G Street, approximately 380 LF west of Bay Boulevard, Chula Vista. The model was set for maximum day water system demands with a four-hour fire flow starting at 9:00 a.m., with all test results shown at 1:00 p.m.

I:\engr\Gen\Fire Flow\Fire flow Records\Computer Model Flows\G Street & Bay Boulevard Hydraulic Analysis Exhibit.pdf



H Street & Bay Boulevard - Hydraulic Analysis

5,000 GPM demand was applied to a node at the existing16-inch steel water main located on the north side of H Street, approximately 180 LF west of Bay Boulevard, Chula Vista. The model was set for maximum day water system demands with a four-hour fire flow starting at 9:00 a.m., with all test results shown at 1:00 p.m.

I:\engr\Gen\Fire Flow\Fire flow Records\Computer Model Flows\H Street & Bay Boulevard Hydraulic Analysis Exhibit.pdf

Appendix C

Sweetwater Authority's Drought Resolution 21-13, 2020 Drought Response Plan, and 2020 Water Shortage Contingency Plan

RESOLUTION 21-13

RESOLUTION OF THE GOVERNING BOARD OF SWEETWATER AUTHORITY AMENDING THE DROUGHT RESPONSE PLAN

WHEREAS, *Sweetwater Authority (Authority) originally adopted its Drought Response Plan in 2008 by Resolution 08-19, and the Authority has subsequently amended its Drought Response Plan from time to time in order to address State Water Resources Control Board regulations, Executive Orders, and other restrictions; and*

WHEREAS, *the California Urban Water Management Planning Act, (Water Code § 10610, et seq. (the Act)), mandates that every urban supplier of water providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually, prepare and adopt, in accordance with prescribed requirements, a Water Shortage Contingency Plan (WSCP) as part of its Urban Water Management Plan (Plan); and*

WHEREAS, *the Authority's WSCP is a detailed plan for how the Authority, an urban water supplier, intends to act in the case of any actual water shortage condition; and*

WHEREAS, *California Water Code Section 375 et seq. authorizes public entities which supply water at retail for the benefit of persons within the service area of the public entity to adopt and enforce water conservation programs to reduce the quantity of water used by water customers for the purpose of conserving the water supplies of such public entity; and*

WHEREAS, *the Authority has adopted such a program by adoption of its Drought Response Plan, due to the persistent and unpredictable water conditions in the State, statutory requirements for water planning, and the declared policy of the State; and*

WHEREAS, *the Authority's Drought Response Plan is established based upon the need to conserve water supplies for the greatest public benefit, increase the efficient uses of water, discourage waste of water, and avoid or minimize the effects of future shortage; and*

WHEREAS, *the Authority's Drought Response Plan enables the Authority to implement its WSCP; and*

WHEREAS, *recent amendments to the Act require the WSCP to contain six water shortage levels based on the water suppliers' water supply conditions; and*

WHEREAS, *the Authority's current Drought Response Plan has only four water shortage levels based on the Authority's water supply conditions; and*

WHEREAS, *in order to make the Drought Response Plan consistent with the WSCP, it is necessary to amend the Sweetwater Authority's Drought Response Plan; and*

WHEREAS, *it is necessary for the Authority to adopt a water conservation program, in the form of its amended Drought Response Plan, in order to conserve the Authority's water supplies.*

NOW THEREFORE BE IT RESOLVED *by the Governing Board of the Authority, as follows:*

SECTION 1. All of the above recitals are true.

SECTION 2. The Governing Board called a public hearing for June 9, 2021 at 6:00 p.m., for the purposes of receiving public comments and protests concerning this Resolution. Notice of the public hearing was given by publication in a newspaper of general circulation within the Authority, as required by law. At the Regular Board meeting, the Governing Board of the Authority reviewed the amendments to the Authority's Drought Response Plan, which are proposed to be adopted to implement the mandatory conservation measures. At the time and place set for the public hearing, this Resolution was considered and the Governing Board heard and considered the comments of all persons appearing at the hearing and all written comments and protests submitted prior to the close of the hearing.

SECTION 3. The Governing Board of the Authority adopts the amended Drought Response Plan, attached as Exhibit "A" to this Resolution, to guide the drought response activities of the Authority until such time as it is replaced by a subsequent Drought Response Plan.

SECTION 4. The Governing Board directs that all documents and other materials constituting the record of proceedings be maintained by the General Manager, or his designee, on file at the Authority, located at 505 Garrett Avenue, Chula Vista, California 91910.

SECTION 5. All previously adopted water conservation measures, including those adopted by Resolution 16-09, under which new emergency short-term and permanent longer-term water conservation regulations were complied with, are hereby rescinded and replaced by this Resolution.

SECTION 6. This Resolution shall become effective as of the date of adoption and shall be posted in three public places within the Authority's boundaries, within ten (10) days after its adoption pursuant to California Water Code Section 376.

***PASSED AND ADOPTED** by the Governing Board of Sweetwater Authority at a regular meeting duly held on the 9th day of June, 2021 by the following vote:*

AYES:	*Directors Calderon-Scott, Castaneda, Martinez, Martinez-Perez, Preciado, Rios, and Sotelo-Solis*
NOES:	*None*
ABSENT:	*None*
ABSTAIN:	*None*

Hector Martinez, Chair

Attest:

Ligia Perez, Board Secretary

RESOLUTION 21-13

Exhibit "A" – Drought Response Plan, dated June 9, 2021

EXHIBIT "A"

SWEETWATER AUTHORITY
DROUGHT RESPONSE PLAN
June 9, 2021

SECTION 1. Declaration of Policy.

California Water Code Sections 350 et seq. permits distributors of a public water supply to declare a water shortage emergency condition and adopt regulations and restrictions of the delivery of water to conserve the water supply for the greatest public benefit with particular regard to domestic use, sanitation, and fire protection.

California Water Code Section 370 et seq. permits the use of allocation-based conservation water pricing to encourage water users to conserve water, increase efficient uses of water, and further discourage waste of water.

California Water Code Sections 375 et seq. permits public entities which supply water at retail for the benefit of persons within the service area of the public entity to adopt and enforce water conservation programs to reduce the quantity of water used by water customers for the purpose of conserving the water supplies of such public entity.

Additionally, the California Urban Water Management Planning Act, (Water Code § 10610, et seq.), mandates that every urban supplier of water providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually, prepare and adopt, in accordance with prescribed requirements, a Water Shortage Contingency Plan (WSCP) as part of its Urban Water Management Plan (Plan). The Sweetwater Authority's (Authority) WSCP is a detailed plan for how an urban water supplier, like the Authority, intends to act in the case of any actual water shortage condition.

The Governing Board of the Authority hereby establishes this Drought Response Plan based upon the need to conserve water supplies for the greatest public benefit, increase the efficient uses of water, discourage waste of water, and avoid or minimize the effects of any future shortage. This Drought Response Plan is also consistent with the Authority's WSCP and enables the Authority to implement its WSCP. Additionally, this Drought Response Plan is in addition to any other regulatory requirements and mandated water use prohibitions enacted by the State of California.

SECTION 2. Findings.

The Governing Board finds and determines that a water shortage could exist based upon the occurrence of one (1) or more of the following conditions:

A) A general extended water supply shortage due to increased demand or limited supplies.

B) The supply and/or distribution of water by the San Diego County Water Authority (CWA) or certain other agencies become inadequate.

C) A major failure of the supply, storage, and distribution facilities of the Metropolitan Water District of Southern California (MWD), the CWA, or Authority occurs.

D) The Governor proclaims a State of Emergency to exist throughout the State of California due to severe drought conditions.

The Governing Board also finds and determines that the conditions prevailing in the San Diego region require that the water resources available be put to maximum beneficial use; the waste or unreasonable use, or unreasonable method of use of water be discouraged; and that the conservation of such water be achieved to the maximum extent reasonable and beneficial use thereof in the interest of the customers of the Authority and for the public welfare.

SECTION 3. Application.

This Drought Response Plan shall apply to all persons who use any water provided by the Authority.

A) This Drought Response Plan is only intended to further the conservation of water. It is not intended to implement any provision of federal, state, or local statutes, ordinances, or regulations relating to the protection of water quality or control of drainage or runoff.

B) Nothing in this Drought Response Plan is intended to limit the ability of the Authority to declare and respond to an emergency, including an emergency that affects the ability of the Authority to supply water.

C) The provisions of this Drought Response Plan do not apply to use of water from private wells or other approved alternate water sources including, but not limited to grey water and rain water catchment systems.

SECTION 4. Authorization.

Unless otherwise specified herein, The Authority's General Manager or a designated representative, is hereby authorized and directed to implement the provisions of this Drought Response Plan.

SECTION 5. Revenue Neutral Water Conservation Pricing Structure.

The Authority may, from time to time, establish a revenue neutral water conservation pricing structure, enabling the Authority to retain current revenue projections while encouraging customer conservation by adopting changes to its inclining block rate structure. The revenue neutral conservation pricing structure would involve changes in water commodity rates and charges in current block rate tiers or the addition of new block rate tiers to encourage conservation by water users. Adoption of any such water conservation pricing structure shall be subject to the requirements of all applicable laws including, but not limited to, Proposition 218.

SECTION 6. <u>Reduction Levels</u>.

The identified water conservation levels specified in this Drought Response Plan enable the Authority to control water use demands, assure reasonable and beneficial use of water, prevent unreasonable use of water within the Authority's service area, and plan and implement water management measures necessary to conserve water in a fair and orderly manner for the benefit of the public.

Water use reduction goals are percentage water reductions from a base (Base). The Base is the annual average of potable water used by all Authority customers during either the immediately preceding period in which no mandatory water use or supply restrictions were implemented, or a specified period aligned with state agency and/or wholesale water supplier's reference period. The Base period will be set by Board declaration and continue until changed by subsequent declaration.

Customer target water allocations (Target Water Allocations) will be established for each property based upon each property's average historic water use during the Base period, less the percentage water use reduction goal to be achieved. When the Governing Board declares a water shortage emergency during a Level 2 – Drought Alert condition, a Level 3 – Drought Alert condition, a Level 4 – Drought Critical condition, a Level 5 – Drought Emergency condition, or a Level 6 – Drought Emergency condition, no customer account shall use more than the Target Water Allocation for that parcel each billing cycle.

Most customers receive their water bills on a bi-monthly basis, or six (6) times a year, therefore a Target Water Allocation will be calculated for each billing cycle. The Target Water Allocation will be printed on each bill for both the current and next billing period. This will allow all customers to see their Target Water Allocation for the next billing cycle. The Target Water Allocation shall be the Base less the percentage of the particular drought level. For example, if a customer has a Base for September bills of 20 HCF and the Drought Level is 4, or 40 percent, then the customer's Target Water Allocation is 12 HCF.

Notwithstanding the below-noted general occurrences that trigger each level of drought response, the Governing Board may consider hydrologic conditions and social, political, and economic indicators and in its reasonable discretion determine the appropriate level of drought response. The Governing Board may consider short term (one year or less) and/or long term (multiple dry year) projected water supply shortfalls to determine appropriate percentage reduction goals. The Governing Board may increase the level of drought response for reasons including but not limited to notification of regional supply reductions, localized emergency events causing a local supply shortage, and/or a State agency or wholesale water supplier imposing mandatory water use restrictions or prohibitions on the Authority or end users.

The six levels of drought are defined as:

A) Level 1 - Drought Watch. *A Level 1 – Drought Watch condition may occur when a water shortage described in Section 2 of this Drought Response Plan requires*

up to a 10 percent water use reduction goal. Authority customers are requested to reduce consumption up to 10 percent from the Base. At this level, the current water pricing structure remains in effect with no imposition of allocation-based conservation water pricing. The General Manager shall declare a Drought Watch condition.

B) Level 2 - Drought Alert. *A Level 2 – Drought Alert condition may occur when a water shortage described in Section 2 of this Drought Response Plan requires up to a 20 percent water use reduction goal. Authority customers are requested to reduce consumption up to 20 percent from the Base and required to comply with water conservation measures. The Governing Board has sole authority to declare a Level 2 Drought Alert condition and may also implement a revenue-neutral water conservation pricing structure. If during a Level 2 condition the Governing Board implements a revenue-neutral water conservation pricing structure, then the Authority's policy titled "Adjustment to Customer's Water Bill" shall be suspended. The Governing Board may additionally declare a water shortage emergency, in the manner and on the criteria provided in Water Code Section 350 et. Seq. and adopt appropriate regulations and restrictions under such authority.*

C) Level 3 - Drought Alert. *A Level 3 – Drought Alert condition may occur when a water shortage described in Section 2 of this Drought Response Plan requires up to a 30 percent water use reduction goal. Authority customers are requested to reduce consumption up to 30 percent from the Base and required to comply with water conservation measures. The Governing Board has sole authority to declare a Level 3 Drought Alert condition and may also implement a revenue-neutral water conservation pricing structure. If during a Level 3 condition the Governing Board implements a revenue-neutral water conservation pricing structure, then the Authority's policy titled "Adjustment to Customer's Water Bill" shall be suspended. The Governing Board may additionally declare a water shortage emergency, in the manner and on the criteria provided in Water Code Section 350 et. Seq. and adopt appropriate regulations and restrictions under such authority.*

D) Level 4 - Drought Critical. *A Level 4 – Drought Critical condition may occur when a water shortage described in Section 2 of this Drought Response Plan requires up to a 40 percent water use reduction goal. Authority customers are requested to reduce consumption up to 40 percent from the Base and required to comply with the water conservation measures set. The Governing Board has sole authority to declare a Drought Critical condition and may also implement a revenue-neutral water conservation pricing structure. If during a Level 4 condition the Governing Board implements a revenue-neutral water conservation pricing structure, then the Authority's policy titled "Adjustment to Customer's Water Bill" shall be suspended. The Governing Board may additionally declare a water shortage emergency, in the manner and on the criteria provided in Water Code*

Section 350 et. Seq. and adopt appropriate regulations and restrictions under such authority.

E) Level 5 – Drought Emergency. *A Level 5 – Drought Emergency condition may occur when a water shortage described in Section 2 of this Drought Response Plan requires up to a 50 percent water use reduction goal. Authority customers are requested to reduce consumption up to 50 percent from the Base and required to comply with water conservation measures. The Governing Board has sole authority to declare a Drought Emergency condition and may also implement a revenue-neutral water conservation pricing structure. If during a Level 5 condition the Governing Board implements a revenue-neutral water conservation pricing structure, then the Authority's policy titled "Adjustment to Customer's Water Bill" shall be suspended. The Governing Board may additionally declare a water shortage emergency, in the manner and on the criteria provided in Water Code Section 350 et. Seq. and adopt appropriate regulations and restrictions under such authority.*

F) Level 6 – Drought Emergency. *A Level 6 – Drought Emergency condition may occur when a water shortage described in Section 2 of this Drought Response Plan requires in excess of a 50 percent water use reduction goal. Authority customers are requested to reduce consumption by more than 50 percent from the Base and required to comply with water conservation measures. The Governing Board has sole authority to declare a Drought Emergency condition and may also implement a revenue-neutral water conservation pricing structure. If during a Level 6 condition the Governing Board implements a revenue-neutral water conservation pricing structure, then the Authority's policy titled "Adjustment to Customer's Water Bill" shall be suspended. The Governing Board may additionally declare a water shortage emergency, in the manner and on the criteria provided in Water Code Section 350 et. Seq. and adopt appropriate regulations and restrictions under such authority.*

SECTION 7. Water Waste Prohibitions and Water Conservation Measures.

These measures are established to encourage all Authority customers to use available water wisely and take all reasonable steps to reduce their water use, are aligned with state imposed end user water waste prohibitions, and are designed to increase the efficiency of water use throughout the service area. Authority customers are to carefully manage indoor and outdoor water use and eliminate water waste. "Use Water Wisely" is the underlying theme designed to achieve a water conservation ethic for all customers, which is especially important during the drought.

A) State Wide Water Waste Prohibitions –*The following practices have been determined by the state to waste water, and are therefore prohibited by end users at all times, including during a Level 1 – Drought Watch condition, Level 2 – Drought Alert condition, a Level 3 – Drought Alert condition, a Level 4 –*

Drought Critical condition, a Level 5 – Drought Emergency condition, and a Level 6 – Drought Emergency condition:

1. *Customers are prohibited from hosing off sidewalks, driveways, or other hardscapes except where necessary to address an immediate health and safety need or to comply with a term or condition in a permit issued by a State or federal agency.*
2. *Customers are prohibited from washing automobiles with hoses not equipped with a shut-off nozzle.*
3. *Customers are prohibited from using non-re-circulated water in a fountain or other decorative water feature.*
4. *Customers are prohibited from watering lawns in a manner that causes runoff.*
5. *Customers are prohibited from watering lawns within forty-eight (48) hours after measurable precipitation.*
6. *Customers are prohibited from irrigating ornamental turf on public street medians with potable water.*

B) Water Conservation Measures – *The following end user water conservation measures are designed to be more restrictive with each drought level, to conserve available supplies for future use.*

In addition to the above noted state water waste prohibitions, the following measures shall apply at all times, including during a Level 1 – Drought Watch condition:

1. *Water should be used reasonably and productively at all times.*
2. *Customers are to repair major water leaks immediately and minor water leaks within twenty-four (24) hours of discovery.*
3. *Customers are encouraged to restrict hose washing of parking areas, tennis courts, patios, or other paved areas to periods of immediate safety or sanitary hazards.*
4. *Customers are encouraged to use an automatic shut-off nozzle when using a hand-held hose for spraying, landscape watering, trailer/vessel washing, or structure washing.*
5. *Customers are encouraged to minimize the application of water to outdoor landscapes in a manner that causes runoff; such that no water flows onto adjacent properties, non-irrigated areas, private and public walkways, roadways, parking lots or structures.*
6. *Customers are encouraged to limit the application of potable water to outdoor landscapes during and within forty-eight (48) hours after measurable rainfall.*
7. *Customers are encouraged to use drip methods or hand irrigation whenever possible and prudent to water landscaped areas, including trees and shrubs that are not irrigated by a landscape irrigation system; limit sprinkler operation to the*

hours of 6:00 p.m. to 9:00 a.m. the following morning, except for the first thirty (30) days necessary to establish a new lawn; and to irrigate no more than three (3) days per week.

8. *Customers are encouraged to use re-circulating systems for landscape and recreational water features.*

The above noted state water waste prohibitions and these additional measures apply during a Drought Alert – Level 2. To the extent any of the following measures conflict with measures in Level 1, the following language will replace the conflicting language in the measures in Level 1.

1. *Customers shall repair major water leaks immediately and minor water leaks within twenty-four (24) hours of discovery.*
2. *Customers are to restrict hose washing of, parking areas, tennis courts, patios, or other paved areas to periods of immediate safety or sanitary hazards.*
3. *Customers must use an automatic shut-off nozzle when using a hand-held hose for spraying, trailer/vessel washing, or structure washing.*
4. *Customers are to use a hand-held hose equipped with a positive shut-off nozzle or bucket to water landscaped areas, including trees and shrubs that are not irrigated by a landscape irrigation system.*
5. *Customers are restricted from watering outdoor landscapes in a manner that causes runoff such that water flows onto adjacent properties, non-irrigated areas, private and public walkways, roadways, parking lots or structures.*
6. *Customers are restricted from applying potable water to outdoor landscapes during and within forty-eight (48) hours after measurable rainfall.*
7. *Customers are to restrict outdoor landscape sprinkler operation to the hours of 6:00 p.m. to 9:00 a.m. the following morning; and to irrigate no more than two (2) days per week, or as otherwise determined by the Governing Board in its reasonable discretion, which may include limitations to specific days of the week.*
8. *Customers are encouraged to limit lawn watering and landscape irrigation using sprinklers to no more than ten (10) minutes per watering station per day. This recommendation does not apply to landscape irrigation systems using water efficient devices, including but not limited to weather-based controllers, drip/micro-irrigation systems and stream rotor sprinklers.*
9. *Stop operating ornamental fountains, decorative water features, and recreational water features unless the water is part of a recirculating system.*
10. *Customers are encouraged to stop filling or re-filling pools, ornamental lakes and/or ponds, except to the extent needed to sustain aquatic life.*

11. *Eating and drinking establishments, or other public places where food or drink are served and/or purchased, are limited to serving drinking water only upon request.*
12. *Operators of hotels and motels other commercial lodging establishments shall offer guests the option of not laundering towels and linens daily, and shall prominently display notice of this option in each guest room using clear and easily understood language.*
13. *Customers are prohibited from irrigating ornamental turf on public street medians with potable water.*
14. *Customers are prohibited from irrigating with potable water landscapes outside newly constructed homes and buildings in a manner inconsistent with regulations or other requirements established by the California Building Standards Commission and the Department of Housing and Community Development.*

The above-noted state water waste prohibitions, measures in Levels 1 and 2, and the following additional measures apply during a Drought Alert – Level 3. To the extent any of the following measures conflict with measures in Levels 1 and 2, the following language will replace the conflicting language in the lower level requirements.

1. *Customers are to restrict residential and commercial landscape irrigation to no more than two (2) days per week, or as otherwise determined by the Governing Board in its reasonable discretion, which may include limitations to specific days of the week.*
2. *Customers are to limit lawn watering and landscape irrigation using sprinklers to no more than ten (10) minutes per watering station per day. This does not apply to landscape irrigation systems using water efficient devices, including but not limited to weather-based controllers, drip/micro-irrigation systems and stream rotor sprinklers.*
3. *Customers shall stop operating ornamental fountains or similar decorative water features with potable water. This prohibition does not apply to decorative fountains and landscape water features which are connected to alternative water sources.*
4. *Customers are encouraged to stop filling or re-filling pools, ornamental lakes and/or ponds, except to the extent needed to sustain aquatic life, provided that such animals are of significant value and have been actively managed within the water feature prior to declaration of a drought response level under this ordinance.*

The above-noted state water waste prohibitions, measures in Levels 1, 2, and 3, and the following additional measures apply during a Drought Critical – Level 4. To the extent any of the following measures conflict with measures in Levels 1, 2 and 3, the following language will replace the conflicting language in the lower level requirements.

1. *Customers shall stop washing sidewalks, driveways, parking areas, tennis courts, patios, or other paved areas except to address immediate health and safety or to comply with a term or condition in a permit issued by a state or federal agency.*
2. *Customers shall stop hand-washing vehicles. Customers are encouraged to stop washing vehicles except at commercial carwashes that re-circulate (reclaim) water onsite, or by high pressure/low volume wash systems.*
3. *Customers are prohibited from watering outdoor landscapes in a manner that causes runoff such that water flows onto adjacent properties, non-irrigated areas, private and public walkways, roadways, parking lots or structures.*
4. *Customers shall only operate landscape sprinklers between the hours of 6:00 p.m. to 9:00 a.m. the following morning.*
5. *Customers are to restrict residential and commercial landscape irrigation to no more than 1 day per week.*
6. *Customers are to limit irrigation using sprinklers to no more than 10 minutes per watering station per day.*
7. *No new potable water service shall be provided, no new temporary meters or permanent meters shall be provided, and no statements of immediate ability to serve or provide potable water service (such as will serve letters, certificates, or letters of availability) shall be issued, except under the following circumstances:*
    a. *A valid, unexpired building permit has been issued for a project; or*
    b. *A project is necessary to protect the public's health, safety, and welfare; or*
    c. *The applicant provides substantial evidence of an enforceable commitment that water demands for a project will be offset prior to the provision of a new water meter(s) to the satisfaction of the Authority.*

    This provision shall not be construed to preclude the resetting or turn-on of meters to provide continuation of water service or to restore service that has been interrupted for a period of one (1) year or less

The above-noted state water waste prohibitions, measures in Levels 1, 2, 3 and 4, and the following additional measures apply during a Drought Emergency – Levels 5 and 6. To the extent any of the following measures conflict with measures in Levels 1, 2, 3 and 4 the following language will replace the conflicting language in the lower level requirements.

1. *Stop all landscape irrigation except:*
    a. *Crops and landscape products of commercial growers and nurseries*
    b. *Maintenance of existing landscaping necessary for fire protection as specified by the fire marshal of the local fire protection agency having jurisdiction over the property to be irrigated*

c. *Maintenance of existing landscaping for erosion control*

d. *Maintenance of plant materials identified to be rare or essential to the well-being of rare animals*

e. *Maintenance of landscaping within active public parks and playing fields, day care centers, school grounds, cemeteries, and golf course greens, provided that such irrigation does not exceed two (2) days per week*

f. *Watering of livestock*

g. *Public works projects and actively irrigated environmental mitigation projects*

SECTION 8. <u>Mandatory Restrictions</u>.

When customers of the Authority can no longer meet water use reduction goals as defined for any drought level through requested efforts, or when the amount of water supply available to the Authority for service to customers is determined to be inadequate to the extent that there would be insufficient water for human consumption, sanitation and fire protection, the Governing Board may activate by resolution mandatory water use reductions, and/or additional prohibitions or measures in accordance with California Water Code 350 et seq.

SECTION 9. <u>Violations and Penalties</u>.

Any customer who violates a state water waste prohibition at any time, and/or uses, causes to be used, or permits the use of water in violation of this Drought Response Plan during a Level 2 – Drought Alert condition, a Level 3 – Drought Alert condition, a Level 4 – Drought Critical condition, a Level 5 – Drought Emergency condition, or a Level 6 – Drought Emergency condition is guilty of an offense punishable as provided:

A) *Each day that a violation of a prohibited water conservation measure occurs is a separate offense.*

B) *Progressive administrative fines may be levied for each violation as follows:*

1. *First violation of any prohibition - written warning.*
2. *Second violation of any prohibition within one (1) year - $50.*
3. *Third violation of any prohibition within one (1) year - $100.*
4. *Fourth violation of any prohibition within one (1) year - $200.*
5. *Each violation thereafter of any prohibition within one (1) year - $500.*
6. *Any violation occurring more than one (1) year from the previous will be treated as a first violation.*

Customers using more than the Target Water Allocation will be notified of their overage and given one (1) full billing cycle to bring their usage below the Target Water Allocation. Failure to do so may result in the implementation of the following

administrative fines levied as follows, and/or other measures the Authority may determine at a later date:

1. *First and second allocation overage violation - written warning.*
2. *Third violation of any allocation overage within one (1) year - $100.*
3. *Fourth violation of any allocation overage within one (1) year - $200.*
4. *Each violation thereafter of allocation overage within one (1) year - $500.*
5. *Any allocation overage violation occurring more than one (1) year from the previous will be treated as a first violation.*

Should mandatory water use reductions and/or conditions be activated by resolution, any person who willfully uses, causes to be used, or permits the use of water in violation of this Drought Response Plan, adopted by Resolution 21-13 is guilty of an offense punishable as provided herein.

A) Each violation of this Drought Response Plan may be prosecuted as a misdemeanor punishable by imprisonment in the county jail for not more than thirty (30) days or by a fine not exceeding one thousand dollars ($1,000 -U.S.A. currency), or by both, as provided in California Water Code Section 377.

B) Willful violations of mandatory conservation measures which may be put into place during any drought level may be enforced by discontinuing service to the property at which the violation occurs, as provided by California Water Code Section 356 et seq.

C) All remedies provided herein, both civil and criminal, shall be cumulative, and not exclusive.

SECTION 10. <u>Exemptions and Appeals</u>.

In order to encourage the efficient use of water for sanitary, health care, and conservation benefit purposes, specific customer classes are exempted from the water use reduction penalties.

A) An exemption gives specified accounts the allowance not to meet their target conservation goals without monetary penalty.

B) Exemptions are under the discretion of the Authority and can be removed at any time. The Authority has identified and provided an exemption from penalties to water accounts for:

1. *Residential water use that is:*
    a. *Less than or equal to 28 HCF in the bi-monthly billing periods for bills received in July, August, September and October, and 22 HCF for bi-monthly billing periods for bills received all other months during Drought Level 2.*
    b. *Less than or equal to 17 HCF in the bi-monthly billing period during Drought Level 3.*

c. Less than or equal to 11 HCF in the bi-monthly billing period during Drought Level 4.

2. *Related to a medical nature, in order to ensure the health and safety of the general public.*

3. *Commercial establishments that provide an opportunity for conservation by offering services that allow individuals alternative means for completing water dependent tasks.*

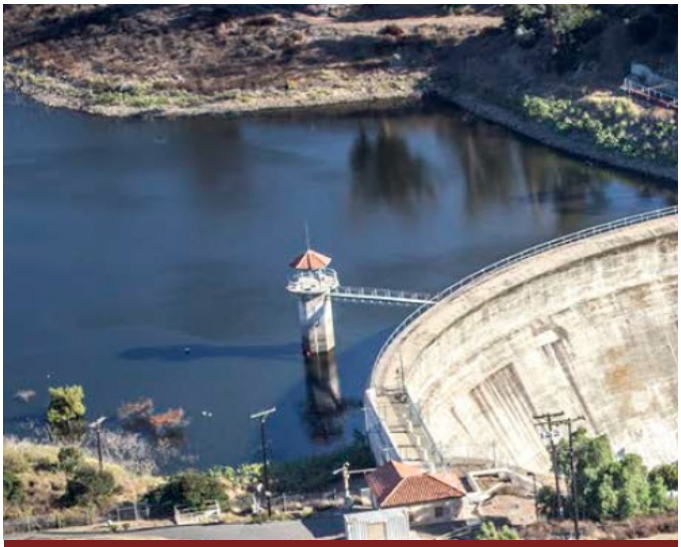
Any customer desiring to initiate a Target Water Allocation Appeal may do so at any time. Any customer desiring to appeal a penalty may do so within two (2) weeks of receipt of the bi-monthly or monthly bill. Any such request must be in writing utilizing the appeal form and filed with the General Manager or his/her designee. Customers shall have the right to appeal the decision of the General Manager or his/her designee to the Governing Board by filing a written appeal within seven (7) days of receipt of the written decision of the General Manager, or his/her designee. The Governing Board may delegate to a committee of its members the authority to consider and rule upon the written appeal.

SECTION 11. Activation and Deactivation.

The Governing Board of Sweetwater Authority hereby directs the General Manager to implement this Drought Response Plan by making appropriate declarations, determinations, and findings necessary and establish a Level 1 – Drought Watch condition. The declaration of any change in a Level 1- Drought Watch condition shall be reported to the Governing Board at its next Regular Meeting. The declaration of a Level 2 – Drought Alert condition, a Level 3 – Drought Alert condition, a Level 4 – Drought Critical condition, a Level 5 – Drought Emergency condition, or a Level 6 – Drought Emergency condition shall be made by the Governing Board, in accordance with the provisions hereof.

Following the declaration of any drought level, the General Manager shall implement the applicable provisions of this Drought Response Plan and make appropriate public announcements and notices. The designated drought response level shall become effective immediately upon announcement, unless otherwise stated at the time of resolution by the Governing Board.

Except for deactivation of a Level 1 – Drought Watch condition, which can be implemented by the General Manager and reported to the Governing Board at its next Regular Meeting, the deactivation of a drought response level shall be by resolution of the Governing Board.



Water Shortage Contingency Plan

Sweetwater Authority

Chula Vista, California

April 13, 2021

Contents

Tables

Acronyms

Authority	Sweetwater Authority
CII	Commercial, Industrial, Institutional
DRP	Drought Response Plan
SDCWA	San Diego County Water Authority
UWMP	Urban Water Management Plan
Water Code	California Water Code
WSCP	Water Shortage Contingency Plan
WSDRP	Water Shortage and Drought Response Plan

Introduction

This Water Shortage Contingency Plan (WSCP) presents Sweetwater Authority's (Authority) detailed proposal for how the Authority will act in the case of an actual water shortage condition.

In 2018, two long-term conservation bills, Senate Bill 606 and Assembly Bill 1668, were signed into law by Governor Jerry Brown, amending portions of the California Water Code (Water Code) related to water shortage contingency planning. The amended Water Code requires agencies to prepare and adopt a WSCP, as part its Urban Water Management Plan (UWMP) that contains the following elements:

1 Annual Water Supply and Demand Assessment Procedures

2 Six Standard Water Shortage Levels

3 Shortage Response Actions

4 Communication Protocols

5 Compliance and Enforcement

6 Legal Authorities

7 Financial Consequences

8 Monitoring and Reporting

9 WSCP Refinement Procedures

10 Special Water Feature Distinction

11 Plan Adoption, Submittal, and Availability

The WSCP will be re-evaluated at least every five years in coordination with the UWMP but could be updated more frequently based on lessons learned, new regulatory requirements, or other factors. This WSCP also discusses steps taken by the Authority's water supply wholesaler, the San Diego County Water Authority (SDCWA), during an extended drought or water emergency event.

1 Annual Water Supply and Demand Assessment Procedures

The amended Water Code requires that urban water suppliers conduct an annual water supply and demand assessment (Annual Assessment), beginning July 1, 2022. The Authority currently submitted monthly reports to the state on water usage and current water shortage contingency levels; however, the Annual Assessment is intended to assess projected water demands and supplies to determine if adequate supplies are available for each current year and one dry year. The annual assessment includes a process for determining water supply reliability and the Authority's ability to utilize shortage response actions should implementation be required.

Each year, the Authority determines its water supply and demand assessment by evaluating total local water supplies (groundwater, desalination, and surface water), as well as the water supply allocation from SDCWA. The Authority then compares total supplies to anticipated water demands for both the current year and one dry year to determine water supply reliability and whether water supply shortages may occur. The Authority will prepare and submit their annual assessment report to the state by July 1 of each year, starting in 2022.

1.1 Decision Making Process

Each year the Authority will use the following steps to determine, and subsequently report to the state, its water supply reliability.

- SDCWA announces member agency allocation determination for current year and any carryover or emergency storage supplies.
- Authority will determine available local supplies, exclusive of imported water supply, and also total available supplies.
- Authority will review known infrastructure constraints (including water quality conditions limiting local sources).
- Authority reviews and estimates current and projected water demands.
- Authority compares supply and demand and determines the water supply reliability for the current year and one dry year.
- Authority prepares and submits Annual Assessment Report to the state.

Evaluation criteria for the Authority's supplies, demands, and water shortage levels will include SDCWA's determination on regional supplies for its member agencies, local groundwater and surface water availability, storage, infrastructure constraints, and recent water demand trends.

1.2 Current and Projected Demands

The Annual Assessment will use the Authority's recent demand data and projections (adjusted by previous year active consumption) which considers demand, weather, population growth, and other influencing factors for the current year and following years.

1.3 Available and Projected Water Supply

The Authority will evaluate the current year available supply and one dry year available supply in its Annual Assessment. The available water supply evaluation will consider hydrological and regulatory conditions. Available supply from each water source will consider local surface water storage and emergency storage allocations, groundwater production from the previous year and potential projected groundwater production, desalinated water production from the previous year and projected production capacities, and imported water supplies as determined by SDCWA. SDCWA considers member agencies' local water supplies first before determining allocations of imported water to each member agency.

1.4 Infrastructure Constraints

The Authority's existing water supply infrastructure includes surface water reservoirs, a water treatment plant and desalination facility, pipelines, storage tanks, pump stations, and groundwater wells. The Authority will evaluate existing water supply and capacities and any constraints for the current year and for one dry year. Infrastructure constraints may consider supply capabilities in the current year, such as shut-downs due to maintenance, construction impacts, and water quality impacts. Once constraints have been identified, the Authority will determine whether the total quantified water supply should be adjusted to account for these identified constraints.

2 Six Standard Water Shortage Levels

This WSCP revises the Authority's stages of action defined in the Authority's 2015 Drought Response Plan (DRP) to define six water shortage levels in response to Water Code revisions. These graduated water shortage levels specify water shortage response actions that the Authority can implement in response to shortages in water supply, as expressed by percentages.

Resolution 16-10 was adopted in 2016 to amend and adopt the Authority's DRP, which contained a four-level drought response strategy that designated voluntary and mandatory consumption reduction methods to achieve a range of demand reduction goals. The Authority WSCP, developed as part of the 2020 UWMP process, redefined and updated the reduction goals, which are summarized in Table 1 and described in detail below:

Table 1. Water Shortage Levels

Water Shortage Level	Percent Reduction
Level 1: Drought Watch Condition (voluntary)	10
Level 2: Drought Alert Condition (mandatory)	20
Level 3: Drought Alert Condition (mandatory)	30
Level 4: Drought Critical Condition (mandatory)	40
Level 5: Drought Emergency Condition (State and Board Declared (mandatory)	50
Level 6: Drought Emergency Condition (State and Board Declared (mandatory)	> 50

3 Shortage Response Actions

Shortage response actions included in this WSCP are a mix of locally appropriate mandatory prohibitions on end use, demand reduction methods, supply augmentation, and operational change measures. Table 2 provides a summary of voluntary and mandatory prohibitions and consumption reduction methods that are implemented within the Authority service area in order to meet mandated water use restrictions. Customers

can select the specific water conservation measures/actions that are most appropriate for their setting; however, customers must abide by water waste prohibitions, water use reductions are mandatory, and monetary penalties may be levied on customers who do not meet reduction goals. The recent Authority Supplement to Sweetwater Authority Rates and Rules, adopted January 13, 2021 under Resolution 21-03, provides a tiered rate structure with increasing water rates for each level of drought response.

Table 2. Restrictions and Prohibitions on End Uses

Stage	Restrictions and Prohibitions on End Users	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
Level 1	Other	Water should be used reasonable and productively at all times.	No
Level 1	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Customers are to repair major water leaks immediately and minor leaks within 24 hours of discovery.	No
Level 1	Other - Prohibit use of potable water for washing hard surfaces	Customers are encouraged to restrict hose washing of paved areas.	No
Level 1	Other	Customers are encouraged to use an automatic shut-off nozzle when using a hand-held hose for irrigation, vehicle, or structure washing.	No
Level 1	Landscape - Restrict or prohibit runoff from landscape irrigation		Yes
Level 2	Landscape - Limit landscape irrigation to specific days	Customers are to restrict irrigation to no more than 2 days per week, which may include limitations to specific days of the week as determined by the Governing Board.	Yes
Level 2	Landscape - Other landscape restriction or prohibition	Customers are encouraged to limit lawn watering and irrigation sprinklers to no more than 10 minutes per watering station per day.	No
Level 2	Water Features - Restrict water use for decorative water features, such as fountains		Yes
Level 2	Other water feature or swimming pool restriction	Customers are encouraged to stop filling or re- filling pools, ornamental lakes and/or ponds, except to the extent needed to sustain aquatic life.	No
Level 2	CII - Restaurants may only serve water upon request		Yes
Level 2	CII - Lodging establishment must offer opt out of linen service		Yes

Stage	Restrictions and Prohibitions on End Users	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
Level 2	Landscape - Other landscape restriction or prohibition	Customers are prohibited from irrigating ornamental turf on public street medians with potable water.	Yes
Level 2	Landscape - Other landscape restriction or prohibition	Customers are prohibited from irrigating with potable water landscapes outside newly constructed homes and buildings in a manner inconsistent with regulations or other requirements established by the California Building Standards Commission and the Department of Housing and Community Development.	Yes
Level 3	Landscape - Limit landscape irrigation to specific days	Customers are to restrict irrigation to no more than 2 days per week, which may include limitations to specific days of the week as determined by the Governing Board.	Yes
Level 3	Landscape - Other landscape restriction or prohibition	Customers are encouraged to limit lawn watering and irrigation sprinklers to no more than 10 minutes per watering station per day.	No
Level 3	Water Features - Restrict water use for decorative water features, such as fountains		Yes
Level 3	Other water feature or swimming pool restriction	Customers are encouraged to stop filling or re- filling pools, ornamental lakes and/or ponds, except to the extent needed to sustain aquatic life.	No
Level 3	CII - Restaurants may only serve water upon request		Yes
Level 3	CII - Lodging establishment must offer opt out of linen service		Yes
Level 3	Landscape - Other landscape restriction or prohibition	Customers are prohibited from irrigating ornamental turf on public street medians with potable water.	Yes

Stage	Restrictions and Prohibitions on End Users	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
Level 3	Landscape - Other landscape restriction or prohibition	Customers are prohibited from irrigating with potable water landscapes outside newly constructed homes and buildings in a manner inconsistent with regulations or other requirements established by the California Building Standards Commission and the Department of Housing and Community Development.	Yes
Level 4	Other - Prohibit use of potable water for washing hard surfaces		Yes
Level 4	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water		Yes
Level 4	Landscape - Restrict or prohibit runoff from landscape irrigation		Yes
Level 4	Landscape - Limit landscape irrigation to specific times	Customers shall only operate landscape sprinklers between the hours of 6 p.m. and 9 a.m.	Yes
Level 4	Landscape - Limit landscape irrigation to specific days	Customers are to restrict residential and commercial landscape irrigation to no more than 1 day per week.	Yes
Level 4	Landscape - Other landscape restriction or prohibition	Customers are to limit irrigation using sprinklers to no more than 10 minutes per watering station per day.	Yes
Level 4	Water Features - Restrict water use for decorative water features, such as fountains		Yes
Level 4	Other water feature or swimming pool restriction	Customers are encouraged to stop filling or re- filling pools, ornamental lakes and/or ponds, except to the extent needed to sustain aquatic life.	Yes
Level 5	Landscape - Prohibit all landscape irrigation		Yes
Level 6	Landscape - Prohibit all landscape irrigation		Yes

CII = Commercial, Industrial, Institutional

3.1 Drought Response Plan

The Authority's established drought levels are explained in the following sections. Table 1 and Table 2 provide a summary of the Authority's drought response levels, which align with the SDCWA Model Drought Ordinance.

According to the SDCWA Model Drought Ordinance:

> *"Triggers that identify the actions required to initiate a certain drought response level are included in the Model Drought Ordinance, which takes into account the relationship between the SDCWA and its member agencies. A certain drought response level may apply when SDCWA notifies its member agencies that a specific consumer demand reduction level is required. Factors that impact the demand reduction level include potential or actual cutbacks from MWD, the amount of member agency local supplies available, and the ability of SDCWA or its member agencies to secure supplemental supplies. Based on an action by the Board and notification from SDCWA, the member agency would declare the appropriate response level and implement water-use restrictions consistent with the declared response level."*

At each stage, the demand reduction measures will be implemented in varying combinations and monitored to ensure the demand reduction goals are met. During normal times, production figures are recorded daily and reported on a monthly basis. During Level 1, totals are reported weekly to the Director of Water Quality and monthly to the General Manager. In Levels 2 through 6, daily production figures will be reported to the Director of Water Quality who compares the weekly production to the target weekly production to verify that the reduction goal is being met and forwards reports to the General Manager. Monthly reports will be sent to the Governing Board. If reduction goals are not met, the General Manager will notify the Governing Board so that corrective action can be taken.

3.1.1 Level 1 Drought Watch

A Drought Watch condition may occur when a program is initiated by the SDCWA, Metropolitan, and/or the SWRCB to reach up to a 10 percent water use reduction goal. Authority customers are requested to reduce consumption up to 10 percent from the base. At this level, the current water pricing structure remains in effect with no imposition of allocation-based conservation water pricing. The General Manager shall declare a Drought Watch condition.

3.1.2 Level 2 Drought Alert

A Drought Alert condition may occur when a program is initiated by the SDCWA, Metropolitan and/or the SWRCB to reach up to a 20 percent water use reduction goal. Authority customers are requested to reduce consumption up to 20 percent from the base and required to comply with water conservation measures. The Governing Board has sole authority to declare a Level 2 Drought Alert condition and may also implement a revenue-neutral water conservation pricing structure. If during a Level 2 condition the Governing Board implements a revenue-neutral water conservation pricing structure,

then the Authority's policy titled "Adjustment to Customer's Water Bill" shall be suspended. The Governing Board may additionally declare a water shortage emergency, in the manner and on the criteria provided in Water Code Section 350 et. Seq. and adopt appropriate regulations and restrictions under such authority.

3.1.3 Level 3 Drought Alert

A Drought Alert condition may occur when a program is initiated by the SDCWA, Metropolitan and/or the SWRCB to reach up to a 30 percent water use reduction goal. Authority customers are requested to reduce consumption up to 30 percent from the base and required to comply with water conservation measures. The Governing Board has sole authority to declare a Level 3 Drought Alert condition and may also implement a revenue-neutral water conservation pricing structure. If during a Level 3 condition the Governing Board implements a revenue-neutral water conservation pricing structure, then the Authority's policy titled "Adjustment to Customer's Water Bill" shall be suspended. The Governing Board may additionally declare a water shortage emergency, in the manner and on the criteria provided in Water Code Section 350 et. Seq. and adopt appropriate regulations and restrictions under such authority.

3.1.4 Level 4 Drought Critical

A Drought Critical condition may occur when a program is initiated by the SDCWA, Metropolitan, and/or the SWRCB to reach up to a 40 percent water use reduction goal. Authority customers are requested to reduce consumption up to 40 percent from the base and required to comply with the water conservation measures set. The Governing Board has sole authority to declare a Drought Critical condition and may also implement a revenue-neutral water conservation pricing structure. If during a Level 4 condition the Governing Board implements a revenue-neutral water conservation pricing structure, then the Authority's policy titled "Adjustment to Customer's Water Bill" shall be suspended. The Governing Board may additionally declare a water shortage emergency, in the manner and on the criteria provided in Water Code Section 350 et. Seq. and adopt appropriate regulations and restrictions under such authority.

3.1.5 Level 5 Drought Emergency

A Drought Emergency condition may occur when a program is initiated by the SDCWA, Metropolitan, and/or the SWRCB to reach up to a 50 percent water use reduction goal. Authority customers are requested to reduce consumption up to 50 percent from the base and required to comply with water conservation measures. The Governing Board has sole authority to declare a Drought Emergency condition and may also implement a revenue-neutral water conservation pricing structure. If during a Level 5 condition the Governing Board implements a revenue-neutral water conservation pricing structure, then the Authority's policy titled "Adjustment to Customer's Water Bill" shall be suspended. The Governing Board may additionally declare a water shortage emergency, in the manner and on the criteria provided in Water Code Section 350 et. Seq. and adopt appropriate regulations and restrictions under such authority.

3.1.6 Level 6 Drought Emergency

A Drought Emergency condition may occur when a program is initiated by the SDCWA, Metropolitan, and/or the SWRCB to reach in excess of a 50 percent water use reduction goal. Authority customers are requested to reduce consumption by more than 50 percent from the base and required to comply with water conservation measures. The Governing Board has sole authority to declare a Drought Emergency condition and may also implement a revenue-neutral water conservation pricing structure. If during a Level 6 condition the Governing Board implements a revenue-neutral water conservation pricing structure, then the Authority's policy titled "Adjustment to Customer's Water Bill" shall be suspended. The Governing Board may additionally declare a water shortage emergency, in the manner and on the criteria provided in Water Code Section 350 et. Seq. and adopt appropriate regulations and restrictions under such authority.

3.2 Determining Water Shortage Reductions

In addition to the restrictions and prohibitions implemented under the WSCP, the Authority implements consumption reduction methods to reduce demands to achieve the needed or required water use reductions. Table 3 provides the consumption reduction measures implemented by the Authority.

Table 3. Consumption Reduction Methods

Stage	Consumption Reduction Methods by Water Supplier	Additional Explanation or Reference
All Levels	Expand Public Information Campaign	N/A
All Levels	Provide Rebates on Plumbing Fixtures and Devices	
All Levels	Provide Rebates for Landscape Irrigation Efficiency	
All Levels	Offer Water Use Surveys	
All Levels	Reduce System Water Loss	
Levels 2 through 6	May Implement or Modify Drought Rate Structure or Surcharge	
Levels 4 through 6	Moratorium or Net Zero Demand Increase on New Connections	
Levels 2 through 6	Other	When the Board declares a water shortage emergency, Sweetwater will establish water allocations for each property based on each property's average historic water use during the Base period, less the percentage water use reduction goal to be achieved.

3.3 Catastrophic Supply Interruption Planning

3.3.1 SDCWA Water Shortage and Drought Response Plan

The SDCWA, in conjunction with its member agencies, developed a Water Shortage and Drought Response Plan (WSDRP) in 2006, which was subsequently updated in 2012, to guide water shortage and drought management activities in the event the region faces supply shortages due to drought conditions. The goal of the WSDRP is to provide a balanced, flexible, and systematic approach to identifying regional actions necessary to reduce water shortage impacts. The WSDRP includes three stages: voluntary supply management, supply enhancement, and mandatory cutbacks. During each of the stages, the SDCWA may implement voluntary or mandatory drought contingency measures to prepare and respond to drought conditions. The 2012 update to the WSDRP revised the regional supply allocation methodology for guiding decisions when normal demands cannot be met.

The WSDRP also includes provisions whereby the SDCWA would implement and utilize supplies governed by the Emergency Storage Project during a prolonged drought or other water shortage situation where imported and local supplies do not meet 75 percent of the SDCWA's member agencies urban demands. The Emergency Storage Project is a system of reservoirs, pipelines, and other facilities designed to store and move water around San Diego County in the event of a natural disaster. A natural disaster, such as an earthquake, could potentially disrupt water service in San Diego, especially because the pipelines that carry imported water to San Diego County from the Metropolitan Water District cross several major fault lines. The Emergency Storage Project was designed to provide 90,100 AF of stored water for emergency purposes to meet the region's needs through at least 2045.

3.3.2 Authority Drought Response Plan

The response levels and water use reduction goals in the Authority's WSCP are similar to those stipulated in the SDCWA Model Drought Response Ordinance, and therefore similar to those of other agencies in the San Diego region. However, due to consistently low water demands within the Authority's service area compared to other parts of the region, the Authority's plan may differ from others in that it makes an effort to recognize and reward past conservation efforts of local customers. For example, during initial water shortage response levels, Authority customers are encouraged to achieve water savings goals through self-directed actions using a variety of potential conservation methods, instead of being penalized for non-compliance with mandatory water use restrictions.

For use during emergency conditions, such as drought or catastrophic interruptions in service where additional water use restrictions are necessary, the Authority has developed a six-level DRP in this WSCP allowing for water use cutbacks up to 50 percent or more, and has established an allocation method of rationing water during drought levels.

3.3.3 Authority Emergency Response Plan

A Vulnerability Assessment was completed for the Authority in 2003 that quantitatively identified the critical facilities and vulnerabilities of the Authority's water system. Though

the Vulnerability Assessment addressed issues related to terrorism, the findings can be applied to a regional power outage, earthquake, or other natural disasters as the same scenarios (e.g., loss of critical pump stations) were used to assess damage. Because the Vulnerability Assessment specifically points out system area weaknesses that could be used against the system and this UWMP is a publicly-available document, it is not included nor is any part of it reproduced in this UWMP.

The Authority's Emergency Response and Recovery Plan was updated in September 2020, subsequent to the Vulnerability Assessment, and complies with Section 1443 (b) of the Safe Drinking Water Act, as amended by the Public Health Security and Bioterrorism Preparedness Act of 2002. The plan has been designed for conformance with Homeland Security Presidential Directive 5 of the National Incident Management System and Government Code Section 8607 of the Standardized Emergency Management System and should be used in conjunction with state and local emergency plans. The Emergency Response and Recovery Plan is too large to include as an appendix or to reproduce in this UWMP; however, a summary of portions relevant to the UWMP is provided below.

The Emergency Response and Recovery Plan was designed to prepare the Authority for a planned response to emergency situations associated with natural disasters, technological incidents, and national security emergencies in, or affecting, the Authority's facilities and service area. The plan describes the following:

- The Authority's emergency management organization which is required to assist in mitigating any significant emergency or disaster
- Authorities, policies, responsibilities, and procedures that are required to protect the health and safety of customers, personnel, and facility property
- Operational concepts and procedures associated with field response to emergencies, Emergency Operations Center activities, and the recovery process
- Implementation of the National Incident Management System for use within the United States, along with the Standardized Emergency Management System for use within the San Diego County operational area, regional, and state systems
- Multi-agency and multi-jurisdictional coordination, particularly between the Authority and local, state, and federal agencies in emergency operations
- Pre-event emergency planning as well as emergency operations procedures

Detailed procedures, including action plans, are addressed in the Emergency Response and Recovery Plan for extensive power or communications failure; water treatment failure at the Perdue Plant; imported water supply failure; structure failure of Authority's storage, pumping, and transmission facilities; physical, biological, or radiological contamination; natural disaster, bombs, and explosions; and reservoir controlled releases.

4 Communication Protocols

The Authority, along with SDCWA and other member agencies, regularly engage in communication and outreach with the public on water supplies, water efficiency, and

water conservation. Updated communication plans are necessary should supply conditions change as the Authority is required to implement stages of the WSCP.

The Authority communicates and coordinates with SDCWA during normal water supply scenarios and will continue to coordinate with SDCWA during drought conditions or times of limited water supply allocations to provide consistent communication and messaging to its customers. The communication protocol will align with strategies developed by SDCWA for each water shortage level, as presented in the SDCWA WSCP.

4.1 Strategies for Communication

During normal water supply conditions, the Authority will continue to promote water conservation tactics and water efficiency programs using standard ongoing communication protocols. When water shortage levels are triggered, the Authority will increase communication to reduce water use using methods that include measures within the Authority's conservation program and as outlined in Table 4.

Table 4. Communication Outline

Water Shortage Level	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Demand Reduction Target	Up to 10%	Up to 20%	Up to 30%	Up to 40%	Up to 50%	Over 50%
District Communications	Update messaging to reflect conditions, district response, and needed actions from the public; coordinate with other agencies as appropriate	Update campaign and messaging to generate immediate actions/behaviors by public; coordinate with other agencies as appropriate	Update campaign and messages to raise awareness for more severe water-saving actions/behaviors by public; coordinate with other agencies as appropriate	Update campaign and messages to raise awareness for more severe and higher level water-saving actions/ behaviors by public; coordinate with other agencies as appropriate	Update campaign and messages to reflect extreme or emergency condition and likely focus water use on health/safety need; coordinate with other agencies as appropriate	Update campaign and messages to reflect extreme or emergency condition and likely focus water use on health/safety need; coordinate with other agencies as appropriate
		Include increased conservation messaging on website and in standard outreach efforts.	Update elected officials, other key civic and business leaders of shortage	Conduct specialized outreach to reduce discretionary outdoor water use while minimizing landscape damage.	Promote available water assistance resources for vulnerable populations; specialized outreach to affected industries	Promote available water assistance resources for vulnerable populations; specialized outreach to affected industries
	Promote available rebates, classes, and workshops	Actively promote available rebates, classes, and workshops	Actively promote available rebates, classes, and workshops	Actively promote available rebates, classes, and workshops	Actively promote available rebates, classes, and workshops	Actively promote available rebates, classes, and workshops
		Targeted outreach to high water users	Outreach to key homeowner association building managers and landscape companies about restrictions and need for increased conservation	Specialized outreach and assistance to homeowners, landscape professionals, large-scale water users and high water users	Consider alternate emergency homepage	Implement emergency homepage
		Targeted outreach to specific customer classes	Targeted outreach to specific customer classes	Targeted outreach to specific customer classes	Targeted outreach to specific customer classes	Targeted outreach to specific customer classes

The Authority promotes water conservation in coordination with the Water Conservation Garden, neighboring water agencies, the Water Authority, and Metropolitan. Regional activities include: public service announcements, demonstration gardens, conservation strategy meetings, water awareness month activities, water efficiency workshops, and landscape water use classes and contests. The Authority independently distributes public information through its website, social media, bill inserts, on-hold telephone messages, annual Consumer Confidence Report, newsletters, news releases, brochures, keynote speakers, classroom presentations, facility tours, video library, and participation in year-round special events and community festivals. The Authority participates in regional drought, conservation, and environmental stewardship public outreach programs including the 20 Gallon Challenge, WaterSmart programs, Climate Change Workgroups, and city Clean- Green programs.

4.2 Catastrophic Communication

In the event of a natural disaster, infrastructure failure, or other situation that requires regional water use to be quickly prioritized for or limited to essential public health and safety needs, the Authority will immediately deploy or enhance appropriate communication strategies and tactics from WSCP Levels 1-6 as needed, and will consider additional strategies and tactics to reflect the need for urgent, emergency-driven water conservation.

5 Compliance and Enforcement

Penalties for violators of the drought response levels include notification followed by implementation of drought penalties consistent with Water Code Sections 377 and 356.

- Any customer who uses, causes to be used, or permits the use of water in violation of this DRP during a Level 2 – Level 6 condition is guilty of a punishable offense. Violations of mandatory water waste prohibitions may be enforced through progressive administrative fines levied for each violation.
- Customers will be given one full billing cycle to come into compliance with target water allocations associated with each drought reduction stage. Failure to correct violations will result in administrative fines being levied.
- Should mandatory water use reductions and/or conditions be activated by resolution, any person who willfully uses, causes to be used, or permits the use of water in violation with the DRP is guilty of an offense punishable as follows: Each violation may be prosecuted as a misdemeanor offense punishable by imprisonment in the county jail for not more than 30 days, or by a fine not exceeding 1,000 dollars, or by both. Willful violations may be enforced by discontinuing service to the property at which the violation occurs.
- The Supplement to Sweetwater Authority Rates and Rules, effective January 1, 2021, provides a tiered rate structure with increasing water rates for each level of drought response. The Authority's water rates were most recently increased in January 2021. The commodity rate for all water used increases as Levels 2 through

6 of the DRP are initiated by the Governing Board to achieve mandatory water use reductions. Drought rates for the commodity charges set forth in the Schedule of Water Rates shall only be implemented if the Authority is in a declared drought Level 2 through 6 and the Governing Board adopts a resolution that makes the following findings and determinations: (1) the Authority has and/or will experience significant losses in revenues due to reductions in the amount of purchased water during the specified drought Level; (2) it is necessary to implement the drought rates to offset the impact of current and/or future revenues losses during the specified drought Level; (3) without the implementation of the drought rates there will be insufficient revenue to recover its costs of providing services.

Table 5 describes that penalties and charges that are levied when customers use excess water beyond the Target Water Allocation established for each property served by the Authority. As its service area is entirely metered, the Authority is able to accurately track water usage and consumption reduction through meter readings to ensure that consumption is in line with consumption reduction targets.

Table 5. Penalties and Charges

Penalties or Charges	Stage When Penalty Takes Effect
Progressive administrative fines for violating water waste prohibitions	Level 2
Financial and/or legal penalty for violating Target Water Allocations	Level 2
Drought Pricing – Implementation of the *Supplement to Sweetwater Authority Rates and Rules*	Levels 2-6

6 Legal Authorities

The Authority has the legal authority to implement and enforce its WSCP. California Constitution Article X, Section 2 and Water Code Section 100 states that water must be put to beneficial use, the waste or unreasonable use or unreasonable method of water use shall be prevented, and the conservation of water is to be exercised with a view of the reasonable and beneficial use thereof in the interest of the people and the public welfare. Sections of Water Code Chapter 3 commencing with Section 350 of Division 1, provide the authority for the governing body of a water agency to declare a water shortage and adopt and enforce water conservation restrictions (Water Code Sections 350-359, 375-378.0). If necessary, the Authority shall declare a water shortage emergency in accordance with Water Code Chapter 3 of Division 1. Once having declared a water shortage, the Authority is provided with broad powers to implement and enforce regulations and restrictions for managing the water shortage. For example: Water Code section 375(a) provides:

> *Notwithstanding any other provision of the law, any public entity which supplies water at retail or wholesale for the benefit of persons within the service area or area of jurisdiction of the public entity may, by ordinance or resolution adopted by a majority of the members of the governing body after holding a public hearing*

upon notice and making appropriate findings of necessity for the adoption of a water conservation program, adopt and enforce a water conservation program to reduce the quantity of water used by those persons for the purpose of conserving the water supplies of the public entity.

Water Code Section 375(a). Water Code Section 375(b) permits the Authority to set prices to encourage water conservation.

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

Pursuant to these authorities, the Authority's WSCP prohibits waste and imposes water conservation requirements, including six stages of water shortage conditions and conservation requirements for each stage. The stages are consistent with Water Code Section 10632(a)(3) and include the declaration of a water shortage emergency as appropriate in compliance with Water Code Section 350.

The Authority's General Manager is authorized and directed to implement the WSCP provisions to implement and enforce its shortage response actions identified herein.

The Authority shall coordinate with its service area cities that receive water supply services, for the possible proclamation of a local emergency under California Government Code, California Emergency Services Act (Article 2, Section 8558).

7 Financial Consequences

Section 10632(a)(8) of the Water Code requires a description of the financial consequences of, and responses for, drought conditions, including a description of potential revenue reductions and expense increases associated with activated shortage response actions and mitigation actions needed to address associated revenue reductions and expense increases as described in the Shortage Response Actions, as well as the cost of compliance with Chapter 3.3 (commencing with Section 365) of Division 1.

The Authority's revenue is directly related to sales of water. A reduction in water use throughout the service area in response to drought conditions would result in an associated reduction in revenues. The Authority's rate structure, which was revised in January 2021 with the adoption of Resolution No. 21-03, has a stable ratio of fixed to variable costs in order to buffer against the variability in use. Single-family residential commodity rates, which include SDCWA surcharges, are tiered per 100 cubic-feet of water to require high water users to pay higher rates. Commercial, industrial, institutional, government, landscape, construction and agricultural rates are fixed volumetric rates. Fixed fees include bi-monthly meter fees.

The Authority anticipates that capital outlay would be reduced to keep a surplus of revenues for each stage of drought response described above. During a drought, both revenues and expenses are reduced. For example, a reduction in water use would have a corresponding reduction in the Authority expenditures for the treatment and distribution of the water supply at the Perdue Plant. Because revenues decrease faster than

expenses, however, reductions in capital outlay are necessary. The Authority's policy has been to account for revenue from surcharges separately, and to use those monies only for water conservation activities or projects which explore or develop new water supplies.

To mitigate the financial impacts of a water shortage, the Authority has established drought pricing in the Supplement to Sweetwater Authority Rates and Rules. Initiated at Level 2, the Supplement to Sweetwater Authority Rates and Rules provides a tiered rate structure with increasing water rates for each level of drought response to provide needed revenue during periods of limited water deliveries.

8 Monitoring and Reporting

The Authority monitors how effective the combination of shortage response actions is in each water shortage level through metered customer demand data. The Authority's water supplies are metered prior to entering the distribution system and at individual customer connections. The Authority will compare meter data with water use in prior months and during non-drought years to determine specific percentage goals for water consumption associated with the drought response levels have been achieved. If the goals are not being met, the Authority may choose to implement additional shortage response actions. The Authority also reports total monthly production and water use to the SWRCB.

9 WSCP Refinement Procedures

The WSCP will be re-evaluated at least every five years in coordination with the Urban Water Management Plan update, but the frequency of the re-evaluations could increase based on Authority needs. Re-evaluations will be based on lessons learned, new statutory requirements, continued local supply development, or other factors.

10 Special Water Feature Distinction

The Authority's 2015 DRP and this WSCP evaluate decorative and recreational water features separately from pools or spas. However, the Authority does not currently serve recycled water for use in recreational or decorative water features.

11 Plan Adoption, Submittal, and Availability

A virtual, video conference public hearing, conducted by the Authority, was held on June 9, 2021. Members of the public were able to participate via a webinar link or telephone connection to listen and/or view the meeting proceedings and provide public comments and input on the draft WSCP. Following adoption of the WSCP, the Authority will submit the plan to DWR and, no later than 30 days after filing the WSCP, the Authority will make the WSCP available to the public.

Appendix D

Sweetwater Authority's Resolution 01-19 and Interim Groundwater Management Plan

RESOLUTION 01-19

RESOLUTION OF THE GOVERNING BOARD OF SWEETWATER AUTHORITY ADOPTING AN INTERIM GROUNDWATER MANAGEMENT PLAN

WHEREAS, *Sweetwater Authority and its predecessors have been engaged in groundwater management activities associated with the Authority's groundwater projects in the Sweetwater Valley (Department of Water Resources Basin Number 9-17) and the San Diego Formation for over one hundred and thirty-two years, and*

WHEREAS, *the Governing Board of Sweetwater Authority, by approval of Budget Project Number 99-21A approved funding of the preparation of a Groundwater Management Plan, and*

WHEREAS, *Sweetwater has plans to contract with an engineering consultant to work with staff to prepare a formal Groundwater Management Plan pursuant to Water Code Section 10750 et seq. (AB 3030), and*

WHEREAS, *the Governing Board wishes to memorialize it's existing groundwater management activities as an interim Groundwater Management Plan,*

NOW, THEREFORE, BE IT RESOLVED *by the Governing Board of Sweetwater Authority that, the attached Interim Groundwater Management Plan is adopted to guide the groundwater management activities of Sweetwater Authority until such time as it is replaced by a subsequent Groundwater Management Plan under Water Code Section 10750 et Seq. (AB3030) or other statutes.*

PASSED AND ADOPTED *at a regular meeting of the Governing Board of Sweetwater Authority held on this 9th day of November, 2001 by the following vote, to wit:*

AYES:	*Directors Doud, Jarrett, Pocklington, Waters, Welsh, Wolniewicz, and Wright*
NOES:	*None*
ABSENT:	*None*
ABSTAIN:	*None*

Margaret Cook Welsh

Margaret Cook Welsh, Chair

Attest:

Marisa Farpón-Friedman

Marisa Farpón-Friedman, Secretary

Sweetwater Authority Draft Interim Groundwater Management Plan

A. Interim Plan

This interim groundwater management plan shall govern the groundwater management activities of the Sweetwater Authority until a subsequent Groundwater Management Plan is adopted by the Sweetwater Authority Governing Board.

B. Groundwater Management Area Boundaries

Sweetwater Authority shall engage in groundwater management in the area of the Sweetwater Valley basin. This basin is as described in the State of California Department of Water Resources Bulletin Number 118 as the Sweetwater Valley Basin Number 9-17. Also included in the groundwater management activities are the watershed of the Sweetwater River and the underlying San Diego Formation within the Service area of the Sweetwater Authority.

C. Groundwater Management Strategies

1. Maintain static groundwater levels

It shall be the policy and goal of Sweetwater Authority groundwater management to extract from the San Diego Formation so as to not cause a decline in the long-term static water levels. In the Sweetwater Valley basin alluvial areas, the policy and goal of Sweetwater Authority groundwater management shall be to extract groundwater to not increase seawater intrusion or cause environmental impacts or damage other producers in the alluvial portion of the basin through the operations of Sweetwater Authority's groundwater projects.

2. Protect groundwater from pollution by manmade activities

Sweetwater Authority shall work with the San Diego Regional Water Quality Control Board (Region 9) to ensure that the groundwater quality within the Sweetwater Valley Basin and the San Diego Formation is protected from contamination.

3. Monitor seawater intrusion

Sweetwater Authority shall monitor groundwater levels, quality and seawater intrusion to ensure that activities of Sweetwater Authority are not causing seawater intrusion.

4. Monitor groundwater quality and quantity

Sweetwater Authority shall periodically monitor the levels and quality of groundwater in the monitoring wells shown in Appendix A. The Authority shall maintain a database of this periodic information for display on the Sweetwater Authority web page located at www.sweetwater.org.

5. Sweetwater Authority Groundwater Projects

Current Sweetwater Authority groundwater projects include the following:

a. Existing National City Wells.

b. Existing Richard A. Reynolds Brackish Groundwater Demineralization Facility and its nine groundwater extraction wells

c. Monitoring of existing groundwater monitoring wells and maintenance of a groundwater level and groundwater quality database.

d. Proposed National City Aquifer Storage and Recovery (ASR) Project.

6. Develop New or Expanded Groundwater Supplies

Staff shall perform activities to develop new groundwater supplies and expand existing groundwater supplies and provide Budget Requests for the Governing Board's approval for these activities, as follows:

a. Investigate the development of new wells to extract potable or brackish groundwater to facilitate expansion of existing groundwater projects as in paragraph C.5. above.

b. Investigate new technologies and their application to existing groundwater sources.

c. Explore conjunctive use activities to augment or expand existing groundwater supplies.

D. Implementation

Sweetwater Authority shall work within the watershed of the Sweetwater River, the Sweetwater Valley Basin (Number 9-17) and the San Diego Formation within the service area of the Sweetwater Authority to manage groundwater levels and

protect groundwater quality. By adoption of this document, the Sweetwater Authority Governing Board hereby authorizes staff to maintain databases and perform groundwater management activities as described in this interim groundwater management plan.

E. Data Collection and Management

Sweetwater Authority shall maintain a database of groundwater levels and water quality for the existing monitoring wells shown in Appendix A. Staff shall, to the best of its abilities, carry out groundwater management activities using the strategies in Section C of this interim groundwater management plan.

F. Education

The Sweetwater Authority Stakeholder Survey identifies issues important to stakeholders in the watershed of the Sweetwater River, the Sweetwater Valley basin and the San Diego Formation within the Sweetwater Authority service area. As a part of the groundwater management activities to be carried out under the auspices of this interim groundwater management plan, Sweetwater Authority staff is directed to meet with other public entities and the public interested in the groundwater activities of the Sweetwater Authority. The purpose of these meetings shall be to coordinate information about Sweetwater Authority groundwater management activities and projects, receive input and responses from the public and public entities. Also these meetings shall strive to develop a base of support and a forum for constructive criticism and input to Sweetwater Authority for the groundwater management activities of the Authority.

G. Resolutions of the Governing board, Sweetwater Authority Policy and Legal Authority

1. Resolutions of the Governing Board

Adoption of the attached Resolution 01-19 establishes governing board adoption of this interim groundwater management plan and provides authorization for Sweetwater Authority staff to proceed with the activities described within.

2. Sweetwater Authority Policy concerning groundwater management

Sweetwater Authority's policies regarding groundwater management activities are described within this plan and any subsequent amendments to this interim groundwater management plan authorized by the Governing Board.

3. Legal Authority

Sweetwater Authority operates under the legal authority contained in Irrigation District Law as included in water code section 20500 et seq. Under this authorization the Sweetwater Authority may control, distribute, store, spread, sink, treat, purify, recapture and salvage any water for the beneficial use of the district. Further Sweetwater Authority according to water code 22078 may do any act to put to any beneficial use any water under its control.

Also under water code section 22076 Sweetwater Authority has, though its groundwater management practices have not been previously memorialized in an AB 3030 plan (water code section 10750 et seq.) programs that relate to the following:

a. the control of saline water intrusion

b. identification of and management of wellhead protection areas and recharge areas

c. replenishment of groundwater

d. monitoring of groundwater levels and storage

e. construction and operation of a brackish groundwater demineralization facility

f. development of state and federal partnerships in the funding of groundwater management activities

g. review and coordination of land use permitting with the County of San Diego to access development activities and their impact on groundwater

h. management of its groundwater resources by Sweetwater Authority as a local agency thereby making state-controlled groundwater management unnecessary

H. Program Coordination

The General Manager and the Operations Manager of Sweetwater Authority shall be responsible to the Governing Board for the performance of the groundwater management activities described in this interim groundwater management plan.