



# Upper San Gabriel Valley Municipal Water District

2023/2024  
ENGINEER'S ANNUAL LEVY REPORT  
FOR THE RENEWAL OF STANDBY CHARGE

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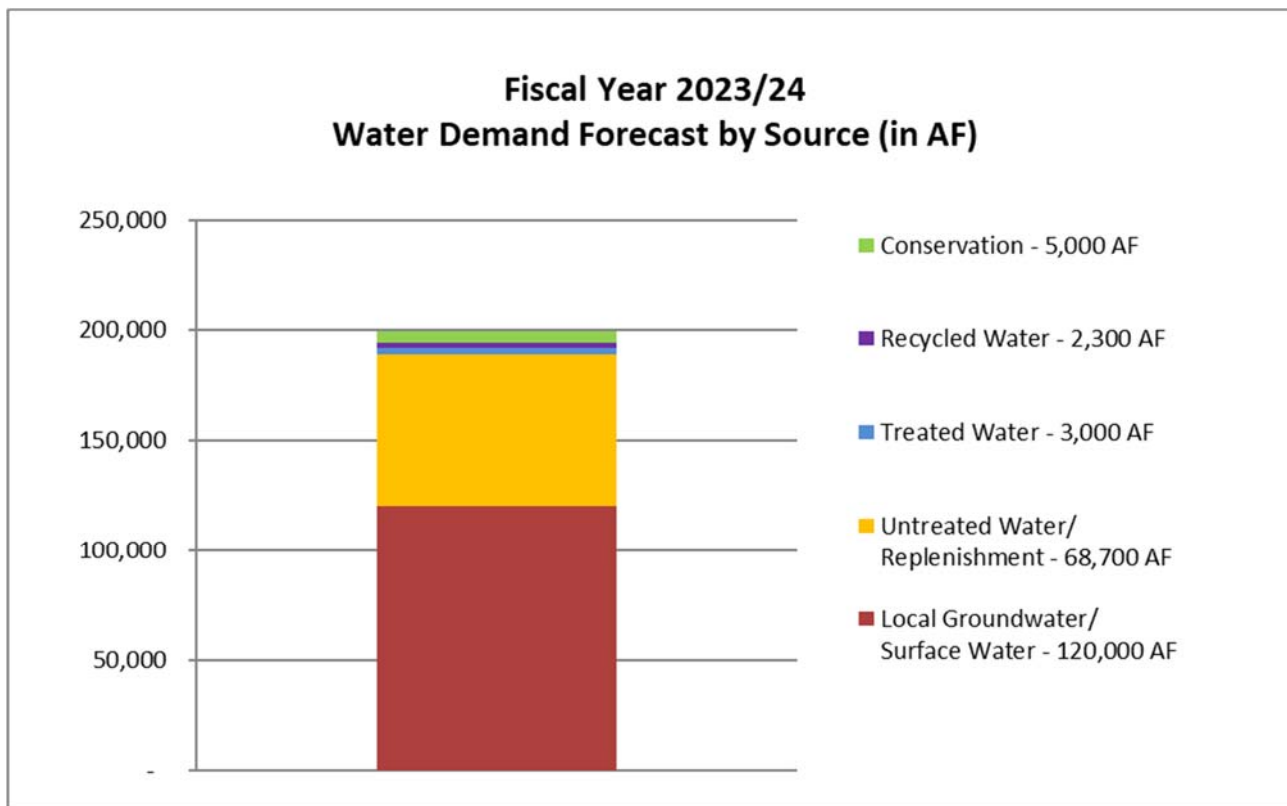
## I. REPORT PURPOSE

This report describes the expected benefits and related costs from the Upper San Gabriel Valley Municipal Water District’s (“Upper District”) comprehensive water recycling program and water conservation program as well as the proposed method and basis for the continuation of the previously adopted (prior to the passage of Proposition 218) standby charge program.

## II. WATER SUPPLY

For FY 2023/2024, Upper District expects to deliver 3,000 acre feet (AF) of treated water. Upper District also expects to supply approximately 2,300 AF of recycled water for large area landscape and turf irrigation. A moderate level in Upper District’s conservation efforts could supply an additional 5,000 AF. To meet forecasted demand for FY 2023/2024, Upper District will have to supply approximately 68,700 AF, either from existing or alternative sources, for groundwater replenishment operations.

**Figure 1**



### **III. RECYCLED WATER PROGRAM**

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While some years have produced above-average rainfall in California, consecutive dry years are very common. Drought is an ever-present challenge. Southern California is subject to an increasing shortage of dependable water supplies for its growing population. On average, approximately fifty percent of the region's water supplies are imported from Northern California and the Colorado River. Both of these sources have become less dependable. In recent years, Metropolitan's dependable, imported supply from the Colorado River and Northern California has also been facing increasing demands and restrictions. This places even greater importance on the development of new local water supplies in Southern California.

There is little dispute that seasonal and cyclic droughts will reoccur in Southern California. The key to drought management is planning and preparation prior to those years when Southern California experiences drought and/or reduced regional water supplies. Advanced planning and preparation is especially important since California's population continues to grow (projected at 4.46 million between FY 2019 and 2060 <sup>(1)</sup>) and to place increased demand on the limited available potable water resources of the State.

Additionally, endangered species issues prompted a reduction in imported water supplies. The State Water Project is the primary source of imported water supplies to Southern California and the Upper District.

Water reclamation and recycling is one alternative source of water that offers the San Gabriel Valley a very cost effective solution for improving water supply reliability and addressing cyclical drought conditions. Water recycling uses existing, proven technologies to treat wastewater to local, state and federal quality levels and is safe for many non-potable applications. Water recycling provides an alternative to disposal and an excellent opportunity to conserve and reuse this scarce natural resource in Southern California. By shifting non-potable demands to recycled water, more drinking water is made available to meet the potable demands of our communities. Water recycling has proven to be not only acceptable to the general public, but is also mandated by the State of California and most municipalities in Southern California.

### **IV. PROJECT DESCRIPTION**

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Since 2006, the Upper District has pursued a Water Recycling Program to reduce the San Gabriel Valley's dependence on expensive and increasingly scarce imported water supplies and lessen the overproduction of the groundwater basin. From the very beginning, the Upper District recognized the value of "a partnership approach" to its Water Recycling Program. The Upper District's partners include many of its customer agencies, cities and private water purveyors. Other partners include the Los Angeles County Sanitation Districts (LACSD), the Metropolitan Water District of Southern California, the

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<sup>(1)</sup> California Department of Finance – July 2021

U.S. Bureau of Reclamation, State Water Resources Control Board and the California Department of Natural Resources.

The first projects to begin delivering recycled water for irrigation purposes were the Rose Hills Memorial Park Water Recycling Project and the Whittier Narrows Water Recycling Project. Prior to using recycled water, Rose Hills used approximately 293 million gallons per year or 803,000 gallons per day of drinking water for irrigation purposes. In the fall of 2006, the Whittier Narrows Water Recycling Project began supplying the 2,500 acre Whittier Narrows Recreation Area with over 2 billion gallons of recycled water since inception.

Additional projects completed include the South El Monte High School (2007) and Rosemead Extension (2010) Water Recycling Projects. Together these two projects save 250 million gallons of drinking water per year. The South El Monte project provides recycled water to the school's athletic fields and green areas while the Rosemead Extension serves commercial and public sector customers including the Whittier Narrows Golf Course, Edison headquarters campus, Walmart, University of the West, various schools, parks, and nurseries, and the Panda Express corporate offices.

In 2015, the Upper District finalized recycled water expansion into the City of West Covina, with the conversion of irrigation customers from potable to recycled water as part of the Phase IIB Recycled Water Project. The Phase IIB System added about 14 miles of "purple pipe" and a 2 million gallon reservoir to deliver an additional 290 million gallons per year to 25 more customers including the BKK Landfill (2012), South Hills Country Club (2012), Big League Dreams Sports Complex (2012), Shadow Oak Park (2014), West Covina High School (2014), 5 additional West Covina Schools (2014-15), Rimgrove Park (2014), Woodgrove Park, Cortez Park (2014), and several City of West Covina street medians and landscaped walking paths (2012 – 2014).

The Upper District continues to work with local water purveyors and property owners to increase the use of recycled water in the region. Recognizing the need to continue developing all feasible potential direct reuse recycled water projects, Upper District's Board of Directors approved a new project delivery model in 2015. Under this new approach, Upper District will act as the lead agency for CEQA, provide technical support services, and help finance the project by securing grant funds. The partner producer will finance the remaining balance of the project costs, construct, own and operate the project.

The first three projects delivered under this model are the South El Monte Recycled Water Expansion Project with a project yield of 72 AFY, the Rose Hills Recycled Water Project with a projected yield of 600 AFY, and the La Puente Valley County Water District Recycled Water Project with a projected yield of 60 AFY. These projects are now complete.

## **V. PROJECT BENEFITS**

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The purpose of the project is to augment local water supply and reduce the need for less reliable and costlier imported water. Thus all retail water purveyors and the public they serve in the Upper District's service area that utilize groundwater and/or utilize treated imported supplies receive benefits from the project's supplemental capacity. All water supplied from the LACSD plants will comply with the strictest requirements of Title 22 of the California Code of Regulations. The quality of the water will be suitable for all categories of recycled water use that are planned in the current and future programs. Over the long-term, the project will improve the water supply reliability of the San Gabriel Valley by increasing the quantity of local supplies, reduce the area's dependence on imported water, and help protect the region from future drought impacts. Recycled water produced by this program will be distributed locally for a wide range of beneficial uses. As the Upper District continues to expand its distribution system and pipeline infrastructure, recycled water will benefit many throughout the San Gabriel Valley.

As the Upper District implements projects such as its water recycling program, the reliability of the San Gabriel Valley's water supply is dramatically improved. Improving the reliability of local water resources helps mitigate water shortages even during extended periods of drought and allows the Upper District to keep future water rate increases to a minimum.

## **VI. CAPITAL PROGRAM FINANCE**

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The Upper District serves as the lead agency in the water recycling program and will be responsible for obtaining funds, construction of facilities, and providing for the operation and maintenance of the system (except for the proposed Rose Hills, South El Monte, and La Puente Recycled Water Projects, that will be constructed and maintained by the local water purveyor and/or owner, for which Upper District will only serve as the lead agency for obtaining funds). The Upper District is aggressively pursuing several sources of project funding to expand its recycled water program as rapidly as practical.

The Upper District has secured grant funding from the Bureau of Reclamation in the amount of 25% of the construction cost of recycled water projects. The Upper District has also secured project construction funding through the State of California State Revolving Fund (SRF) and the Metropolitan Water District. The standby charge revenues pay the interest and principal payments on the loans from the SRF and provide a limited source of cash financing for the program. It is also expected that additional federal, state, and regional grant money will be utilized to fund a portion of the cost for future project phases.



## VII. WATER USE EFFICIENCY PROGRAM

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Entering into 2022, California was facing its third consecutive year of drought conditions. California experienced the driest January, February and March 2022 on record, dating back over 100 years. These drought conditions impacted every region of the State, which by the Summer of 2022, all 58 counties in the State were under a drought emergency proclamation.

The severe drought conditions across the State impacted the imported water supplies from the State Water Project (SWP) that help replenish the Main San Gabriel Groundwater Basin. The SWP accounts for 20 percent of the region's local water resources. On March 18, 2022, the Department of Water Resources announced an allocation cut from 15 percent to 5 percent, amounting to water deliveries for human health and safety.

Governor Gavin Newsom signed an executive order, N-7-22, on March 28, 2022, calling upon local water suppliers to move to Level 2 of their Water Storage Contingency Plans, which requires locally appropriate actions that will conserve water across all sectors. Governor Newsom directed the State Water Resources Control Board to evaluate the adoption of new water regulations banning irrigation of non-functional turf at businesses and institutions. With the worsening of the drought and ongoing water shortages, Governor Newsom called on all Californians to voluntarily reduce their water use by 15% and help conserve as much water as possible to make supplies last longer.

In late March, the Metropolitan Water District of Southern California (Metropolitan) acted on mandatory conservation necessary to generate a greater level of water savings needed to stretch the limited SWP supplies. The Metropolitan Board of Directors on April 27, 2022, declared a Water Shortage Emergency for the SWP dependent areas and executed an Emergency Water Conservation Program. Metropolitan's Board adopted new restrictions to reduce water use in those communities that are dependent on SWP water, affecting about six million Southern Californians.

Upper District's service area was impacted by limited SWP supplies and in May 2022, adopted its own Emergency Water Conservation Program which directed the General Manager to continue working with Metropolitan to implement the volumetric option for Upper District's service area. Additionally, the program reinforced actions under Upper District's Water Shortage Contingency Plan – Level 2 that required robust conservation efforts for the region. The resolution called for a 20 percent water use reduction and limited outdoor irrigation to two days per week for all of Upper District's retail water agencies.

Additionally, under the Emergency Water Conservation Program, Upper District expanded its public outreach and education activities in the region to increase the public's awareness of the drought and the need to conserve water. The campaign also focused

on educating the public on the region's local water resources and preserving the water storage levels of the Main San Gabriel Groundwater Basin.

Recognizing that hydrologic conditions are subject to change, Upper District remains a leader in its conservation efforts by implementing new innovative programs and outreach that emphasize best water efficient practices as a continued way of life for its residents and businesses.

Upper District's recycled water and conservation programs are fundamental to achieving long-term regional sustainability and meeting the water use efficiency goals set forth under the 2018 Water Conservation and Drought Planning Legislation aimed at "*Making Water Conservation a California Way of Life.*" . While Upper District is not directly required to report water usage data, it strives to assist its water purveyors that are urban water suppliers in achieving and maintaining compliance with their conservation efforts and water supply goals. Upper District offers various water use efficiency programs and rebates offered through Metropolitan, that are targeted for residential, commercial/institutional, and outdoor water savings. Any standby charge revenues not fully utilized to fund the Water Recycling Program are used to pay for a portion of the Water Use Efficiency Program.

While water conservation does not produce new water, it effectively increases the amount of available water by improving water use efficiency and reducing per capita water usage. As a result, the Upper District's Water Conservation Program helps manage available water supplies in the most efficient manner possible. In this way, regional water conservation programs effectively supplement new local water supply to meet the immediate needs of a growing population. For the long-term, water use efficiency allows the Upper District to defer some capital expenses for the development of new supplies and helps in reducing the quantity of new water supplies necessary to meet anticipated water demands.

Over the years, the Upper District's water conservation efforts have been effective at saving substantial quantities of water. Since 1992, the Upper District's water use efficiency program has yielded over 87,313AF (29.22 billion gallons) of water savings.

## **VIII. WATER SUPPLY ISSUES**

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Throughout California's history, the development of reliable water supplies has lagged behind the growth in population and the corresponding demands on available resources. Today, achieving a water supply that is less dependent on imported water is the greatest challenge and most critical goal of all water agencies in Southern California. The Upper District's water supply and financial management plans offer a prudent and efficient strategy for meeting the water resource needs of the region in a cost-effective and environmentally responsible manner.



## **IX. LONG-RANGE FINANCIAL PLANNING**

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One of Upper District's goals is to continue focusing on selected revenue sources that will further strengthen its financial position. Pursuit of this goal will help ensure that Upper District has the option of choosing a financing alternative that is most advantageous to water rate payers and property owners. A strong financial position will provide the Upper District with the opportunity to minimize its cost of capital, stabilize cash flows and improve the economics of beneficial projects without sacrificing future financial or operating flexibility.

Two additional goals of the financial plan are: 1) to ensure that there is an adequate revenue stream to fund the proposed capital improvement program, and 2) to assure that the blend of revenues will distribute the costs of the facilities and water service appropriately and equitably to the program's beneficiaries.

## **X. COST RECOVERY**

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The Upper District territory includes a wide variety of land uses. Generally speaking, all land uses benefit from a reliable water supply. Therefore, the cost to produce new water resources cannot be recovered solely through the sale of recycled water to just a few users or through avoided costs generated by conservation. Recycled water and effective water conservation programs allow greater flexibility by extending the potable water supply. The availability of recycled water as an additional source becomes a benefit to all parcels and users within the Upper District. Therefore, a portion of the cost of these program benefits should be recovered through a mechanism that apportions the cost in relationship to potential benefit. Depending on the extent of the development, the Upper District's cost of water production could be significantly reduced over the long-term compared to continued reliance on imported water supplies.

Upper District's current operating revenue sources mainly include a surcharge on imported water purchases and the standby charge on parcels. In prior years, the use of standby charge revenue has been a key element in the funding of the Upper District's recycling and conservation programs.

## **XI. EQUITY OF STANDBY CHARGE**

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One of the many major benefits that accrue from the use of the standby charge is the independence of the revenue from actual water demand. Traditionally, rate and revenue studies have shown that a single revenue source does not adequately address the distribution of costs and benefits. In some instances, rather large benefits accrue to properties that use little or no water and would otherwise contribute very little financially for the value received.

The direct benefits derived from the Upper District's comprehensive program include: 1) highly reliable alternate water supply for non-potable uses, 2) replenishment of groundwater in lieu of more expensive new water supplies, and 3) increased water use efficiency by reducing per capita consumption. Since supplying non-potable water to non-potable users reduces the demand on the potable water supply, both potable and non-potable water users benefit from the Upper District's program. A blend of water sales (including recycled) and standby charge revenue sources recovers both the direct cost of water use as well as the cost of the tangible and direct benefit of improved water supply reliability.

## ***XII. REVENUE STABILITY***

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In addition to providing a means of equitable cost sharing, the standby charge generates a stable source of revenue. In other words, standby charge revenue is not dependent upon weather cycles and/or water sales fluctuations. Stable (fixed) revenue sources assist the Upper District in meeting its financial and capital obligations under all cyclical demand conditions that, in turn, are reflected in increased borrowing efficiencies, lower interest rates, and other cost savings.

## ***XIII. PROPOSED RATE AND METHODOLOGY – FISCAL YEAR 2023/2024***

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The Upper District standby charge rate was \$10 per acre per year or \$10 per parcel less than one acre per year in FY 2022/2023. This report recommends that Upper District continue the previously adopted formula and methodology for assessing the standby charge at a rate of \$10 per acre per year or \$10 per parcel less than one acre per year for Fiscal Year 2023/2024. The proposed rate is for Fiscal Year 2023/2024 only and may or may not be maintained in subsequent years. At the rate of \$10 per acre, the standby charge will provide approximately \$2.05 million in revenue for Fiscal Year 2023/2024.

## ***XIV. PROPOSED USE OF STANDBY CHARGE REVENUE***

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Appendix I demonstrates that the standby charge revenue is needed to fund the District's water recycling and conservation programs. The continued use of standby charge revenue to fund the recycled water capital program is also recommended.

**APPENDIX I**

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**Fiscal Year 23/24 Preliminary Budget**

<b>Beginning Balance All Funds (Projected Balance)</b>	<b>\$ 22,537,000</b>
<b>Revenues</b>	
Imported Water Sales	\$ 39,800,000
MWD Gross Standby Charge	1,950,000
Recycled Water Sales	1,947,000
Upper District Standby Charge	2,050,000
Water Conservation Program Revenue	585,000
Recycled Water Program Revenues	128,000
Taxes	500,000
Interest and Other	386,000
<b>Total Revenues</b>	<b>\$ 47,346,000</b>
<b>Expenses</b>	
Water Purchases	\$ 35,786,000
MWD Ready-to-Serve Charge	3,648,000
Recycled Water Purchases	624,000
Administrative Expenses	2,848,000
Water Conservation Program	2,078,000
Water Quality and Supply Program	590,000
Recycled Water Program	1,554,000
Stormwater Program	43,000
Capital Program	217,000
<b>Total Expenses</b>	<b>\$ 47,388,000</b>
<b>Ending Balance All Funds</b>	<b>\$ 22,495,000</b>