Central Basin Municipal Water District Engineer's Report

Central Basin Standby Charge
2021/2022 ENGINEER'S REPORT

Intent Meeting: March 22, 2021
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ENGINEER'S REPORT AFFIDAVIT

Establishment of Annual Assessments for the:

Central Basin Standby Charge

Central Basin Municipal Water District Engineer's Report,
County of Los Angeles, State of California

This Report describes the improvements, budgets, parcels and assessments to be levied for Fiscal Year 2021/2022. Reference is hereby made to the Los Angeles County Assessor's maps for a detailed description of the lines and dimensions of the parcels within the District. The undersigned respectfully submits the enclosed Report as directed by the Board of Directors.

Dated this 26th day of April, 2021.

Willdan Financial Services
Assessment Engineer
On Behalf of the Central Basin
Municipal Water District

By: Chonney Gano

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INTRODUCTION

The Central Basin Municipal Water District (the "District") is a public agency in southeast Los Angeles County. The District was formed in 1952 by popular vote to provide supplemental imported water supplies to local retail agencies. Currently, there are approximately 1.6 million people within the District's 227-square-mile service area. The District Diagram of Section VIII shows the District's service area, including cities and political subdivisions.

The District has been a leader in changing the manner in which scarce water resources are managed in Southern California. Over the past 25 years, the District has implemented a plan to reduce the need for imported water from Northern California and the Colorado River, and insulate its service area from future water shortages. This "drought-proofing" plan is founded on aggressive water conservation, including retrofits on water efficient devices, education, and water recycling.

In 1990, the District took a significant step in its drought-proofing plan by commencing construction on a recycled water distribution system. This new system was envisioned to provide a source of non-potable water completely independent of drought-sensitive imported supplies, for use in non-potable applications, such as irrigation and industry. Today, the District's recycled water system serves over 378 individual sites with a water supply of more than 5,000 acre-feet that would otherwise be served by potable sources such as groundwater and imported water that are used by all customers in the service area. During future imported water shortages, recycled water offers significant benefits that aid in drought proofing the region.

Pursuant to the provisions of the Municipal Water District Act of 1911 (Water Code Section 71638, et seq.), the District began levying an assessment in 1991. The assessment, called a "standby charge", is levied on all property owners within its service area to help recover the cost of drought-proofing the service area. The purpose of this Engineer's Report ("Report") is to 1) describe the District's recycled water program and its benefits to all residents within the District's service area, and 2) explain the standby charge, and how it is calculated and imposed. To this end, the Report also gives historical context to the water recycling program and describes the water supply outlook in Southern California as well as the District's water resource management approach.

Section I. Historical Context

Much of the impetus for recycled water efforts began after the drought of 1976-77. Ten years later, the drought of 1987-92 strongly reinforced the need for recycled water programs because the supply is not subject to hydrologic variability or other uncertainties as imported water sources. These sources, the Colorado River and the Sacramento-San Joaquin River Delta are significant because they provide Southern California with about 30% of its water supply. In 1991, the state legislature passed the Water Recycling Act setting a goal for future increased use of recycled water. Recycled water programs and conservation projects are key to achieving state mandated goals.

In 2009, the legislature passed Senate Bill (SB) X7-7, the Water Conservation Act. This amended the Urban Water Management Plan Act to require urban water suppliers to reduce per capita water use 20% by 2020. SBX7-7 paved the way for water conservation and was also the predecessor to new long-term urban water use targets recently signed into law. Although the District is not required by state law to establish conservation targets for its service area as part of the 20x2020 legislation, most of the individual retail cities and agencies are. The District engaged with the Gateway Regional Water Management Authority to establish a plan for the Central Basin service area which most cities and agencies agreed to comply with. As such, the District included the 20x2020 regional plan to its 2010 and 2015 Urban Water Management Plans.

In 2018, Assembly Bill 1668 and Senate Bill 606 was signed into law for Water Conservation and Drought Planning. This framework builds upon ongoing efforts to make water conservation a way of life in California, by providing a road map for long-term improvements in water conservation and drought planning. These bills establish new responsibilities to facilitate permanent water use efficiency improvements in the face of climate change adaptation that leads to longer and more intense droughts.

Municipal recycled water has been safely and beneficially reused in California for more than 100 years, according to the California Department of Water Resources (DWR). Since 1970, the state has periodically quantified how much beneficial water reuse is occurring. The most recent survey of municipal water recycling in 2015, conducted jointly by DWR and the State Water Resources Control Board (SWRCB), found that California reused 714,000 acre-feet of municipal recycled water. This was an increase of 45,000 AF since the previous survey in 2009.

Water Supply Outlook

In 2018, weather conditions were hot and dry in Southern California and the region experienced above-average temperatures with the warmest summer on record. However, water use demands remained relatively low, mainly due to increased conservation efforts that have lasted from the recent drought years.

Since the start of 2019, significant winter storm activities boosted statewide snowpack and precipitation levels to well above average for the year. The DWR reported February 2019 to be the third wettest month recorded in the Northern Sierra's since 1921. The above average snow and rainfall conditions have positioned the state for ample water supplies.

Winter snowpack and spring snowmelt runoff from the Sierra's provide approximately 1/3 of the state's annual water supply. The amount of water stored in the state's snowpack is highly variable from one year to the next. Historically, snow water equivalent percentages have ranged from 240% in 1952 to a record low of 5% in 2015. When winter temperatures are warmer, less snowpack accumulates because more precipitation falls as rain, instead of snow. In April 2019, the average statewide snowpack was at 155% of normal, compared to 56% last year.

As a member agency of the Metropolitan Water District of Southern California, the District is able to purchase imported water supplies drawn from the Colorado River and from the northern California Bay-Delta. In addition, a significant percentage of Southern California's water supply comes from conservation, water-recycling and recovered groundwater. Water supplies will need to stretch as far as possible given tomorrow's climate uncertainties. Climate change is already impacting water resources and will continue to do so with increases in demands and the state's population.

The DWR reports new surface storage facilities in Southern California and the expansion of groundwater storage programs will help lessen the impact of future droughts and increase local reliability. Additionally, water agencies should continue to develop water resource programs to meet future demand. Moving forward, the District will continue its active role on strategic initiatives in water resource management by working with local water agencies and Metropolitan with initiatives to enhance water-use efficiency and ensure continued water supply reliability for the service area.

Section II. Water Resource Management Approach

For more than four decades, the District was strictly an imported water wholesaler, purchasing supply from the Bay-Delta and Colorado River through Metropolitan Water District ("MWD") to supplement local groundwater supplies. Since the early 1990's, the District has embarked on an ambitious plan to help make its service area more drought resistant through more efficient use of supplies and resources already available. Water conservation and water recycling are at the heart of this resource management approach. The District also assists local groundwater producers and agencies in protecting groundwater supplies and optimizing the use of the groundwater basins.

Water conservation is a demand-management method aimed at reducing the consumption of potable water (groundwater and imported water) at the point where it is put to use. Water recycling is the beneficial reuse of wastewater for specific non-potable applications such as irrigation. Both conservation and recycling are effective tools for reducing reliance on imported water and extending the use of locally available supplies essentially "drought-proofing" the area against future imported water shortages.

Past and Current Water Conservation Efforts

To address the growing concern over limited water supply, the District has long been committed to providing leadership and innovative solutions to promote water conservation. These efforts have included establishing Best Management Practices (BMPs) through a Memorandum of Understanding (MOU) with the California Urban Water Conservation Council in 1991, now known as the California Water Efficiency Partnership, aimed at reducing long-term water demands by improving water-use efficiency practices. Through this BMP process, the District implemented youth education programs for more than two decades, which led the way in shaping future attitudes towards water use. These programs were developed in partnership with a variety of organizations committed to environmental education to offer top-notch curricula to elementary, middle-school, and high school students.

In 2006, the District adopted its first Conservation Master Plan designed to expand the role of conservation in ensuring water reliability for the region, which served as a roadmap to evaluate existing conservation measures as well as identify the latest trends and technology in the market to develop a viable strategy to preserve limited water supplies. The Conservation Master Plan provided goals to maximize water use efficiency and led the region in its efforts to meet the state water use reduction mandates during the recent historic drought of 2012-2017.

In 2015, mandatory restrictions were placed on urban water suppliers to achieve a statewide 25% reduction in water usage. In response to this unprecedented event, the District adopted a Drought Response Plan and Toolkit in order to assist the retail agencies with responding to the regulations and conservation mandates. Through these efforts, residents and businesses throughout the District's service area responded to the state's call for emergency conservation by not watering lawns after rainfall, hosing down sidewalks, overwatering landscapes. According to the U.S. Drought Monitor in March 2019, California officially became free of drought conditions for the first time since 2011. Although statewide emergency regulations were lifted in 2017, it is important for conservation to remain a way of life. As a member agency of Metropolitan, the District can offer incentives to encourage continued conservation regardless of drought conditions. Between the years 2013 to 2018, residents and businesses throughout the District's service area received more than $9.2 million in Metropolitan rebate incentives.

In partnership with Metropolitan, local cities, water retailers, federal and state agencies, the District's conservation programs have been responsible for providing various opportunities and programs to the communities the District serves. Central Basin has been successful in receiving grant funding for conservation programs, at the federal, state, and local levels throughout agencies such as the United States Department of Energy, the DWR, and the Metropolitan Water District of Southern California. Since 2004, the District has been selected receive more than $8.2 million in grant funding to implement a variety of water reuse and conservation programs. These programs include distribution and installation of indoor and outdoor water conserving devices and the availability of rebate programs for high-efficiency clothes washers, high efficiency toilets, waterless

urinals, commercial and industrial devices along with transformation of outdoor landscapes requiring little water.

Realizing that the future of water conservation lies in the growth of water recycling programs, the District continues to be on the cutting edge developing new and viable programs that conserve water to help maintain safe and reliable supplies. Since inception of the District's recycled water project, the District has expanded the system delivery capability, continued to provide a reliable supply, and improved the cost efficiency of the system.

Section III. Description of Water Recycling Program

In 1989, the District, in partnership with MWD and the County Sanitation Districts of Los Angeles County ("LACSD"), began planning the implementation of a program to deliver recycled water to a significant portion of the District's service area.

The two recycled water projects that resulted from this planning, E. Thornton Ibbetson (Century) Recycled Water Project and Esteban E. Torres (Rio Hondo) Recycled Water Project are interconnected and operate as one distribution system. The combined projects are now referred to as the Central Basin Recycled Water Project. The program will continue to grow as additional customers are identified and expansion is determined to be economically feasible. The recycled water program provides the District's service area with a reliable, local water supply that reduces dependence on imported water.

E. Thornton Ibbetson Century Recycled Water Project

Construction on the first part of the program, the Century Project, began in December 1989 and the first customers were connected in February 1992. Construction of the entire Century Project was completed in August 1993.

The District acquires water from the Los Coyotes Water Reclamation Plant (a CSDLAC facility) and uses the City of Cerritos' pump station and the Hollydale Pump Station to distribute recycled water through several miles of pipeline.

Esteban E. Torres Rio Hondo Recycled Water Project

In 1991, District staff prepared a feasibility study and implementation plan for the Century Project. Design of project facilities was completed and construction on portions of the project began in February 1993. Those portions of the project are now in operation and delivering water to customers.

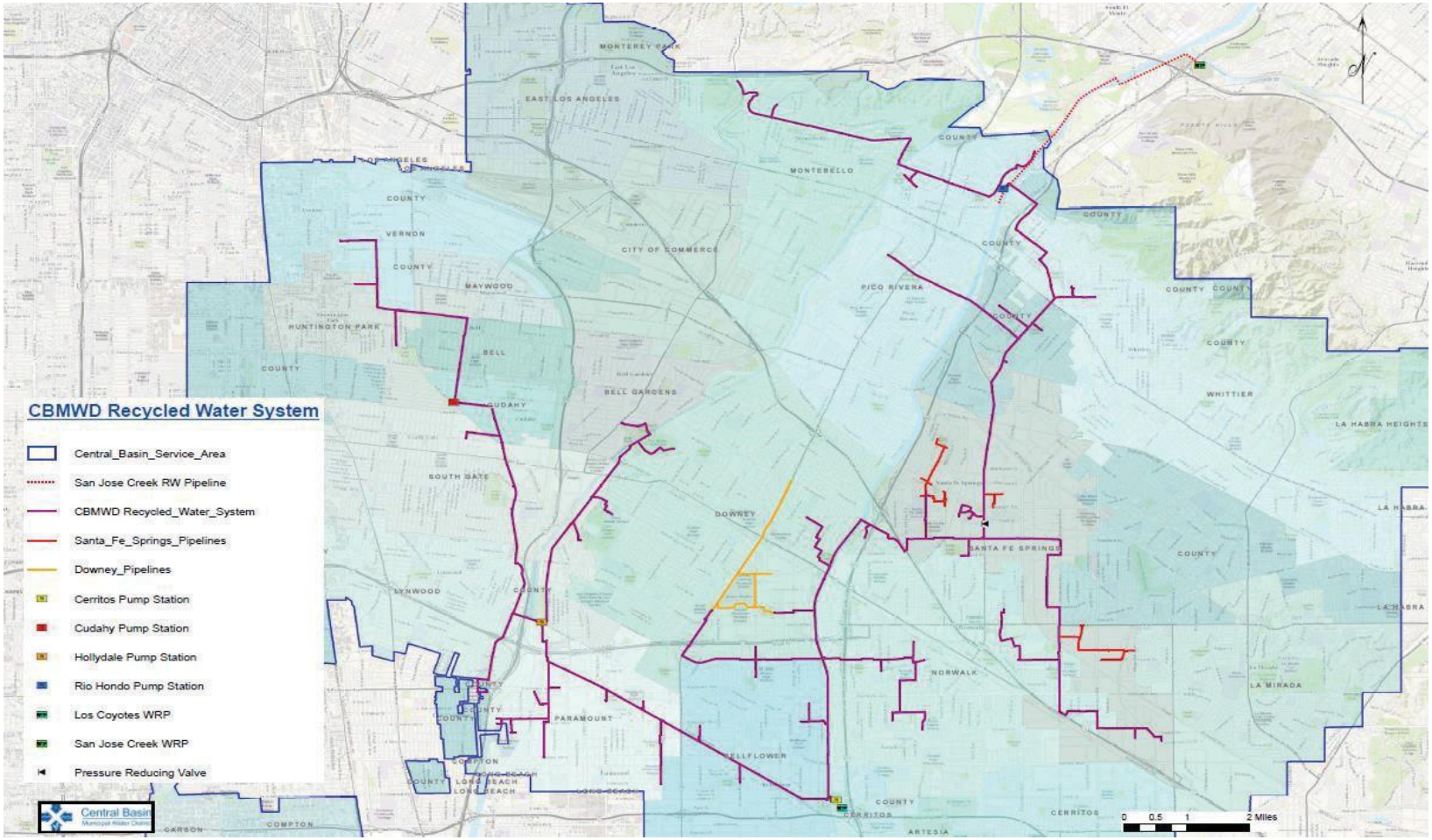
The District acquires water from the San Jose Creek Water Reclamation plant (a CSDLAC facility) and uses the Rio Hondo Pump Station to distribute recycled water through several miles of pipeline.

The District's Recycled Water Distribution System consists of four (4) pump stations, a pressure reducing station, and approximately 80 miles of distribution pipeline. The pump stations are: the Rio Hondo Pump Station (RHPS), Cerritos Pump Station (CPS), Hollydale Pump Station (HDPS) and Cudahy Pump Station (CDYPS). The CPS station is owned by the City of Cerritos and is operated by the Los Angeles County Sanitation Districts (LACSD). The other three (3) pump stations are owned, maintained, and operated by the District.

Recycled Water Distribution and Use

In an attempt to drought-proof the area, the District has aggressively marketed and connected irrigation and industrial users to the recycled water system. Current irrigation uses include schools, golf courses, freeway landscape, parks, cemeteries, nurseries, and street medians. Current industrial uses include concrete mixing, carpet dying and cooling towers. Figure 1 shows the existing facilities of recycled water system.

FIGURE 1
CBMWD
EXISTING RECYCLED WATER FACILITIES
(Fiscal Year 2021/2022)
Central Basin Municipal Water District Recycled Water System



Section IV. Capital Improvement Plans

The District's Capital Improvement Projects Plan and Five (5) Year Recycled Water Facilities Plan (Recycled Water Master Plan) seeks to expand the existing recycled water distribution system. Current conditions, new regulations, and available funding through Proposition 84 have accelerated the District's expansions efforts.

Plans included in the FY 2021/2022 Preliminary Capital Improvement Projects Plan are described below.

Project

Upgrade of the Rio Hondo Pump Station

Project Description

The District's Recycled Water Distribution System consists of four (4) pump stations, a pressure reducing station, and approximately 80 miles of distribution pipeline. The pump stations are the Rio Hondo Pump Station (RHPS), Cerritos Pump Station (CPS), Hollydale Pump Station (HDPS) and Cudahy Pump Station (CDYPS). The CPS station is owned by the City of Cerritos and is operated by the Los Angeles County Sanitation Districts (LACSD). The other three (3) pump stations are owned, maintained, and operated by the District.

At this time, the District is looking to plan and perform the work necessary to rehabilitate and/or upgrade the District's aging RHPS located in the City of Pico Rivera. The RHPS was constructed in 1993 as one of the first, and largest, recycled water pump stations for the District. Previous improvements to the RHPS were planned in 2010 with upgrades and modifications made in 2012. Much of the existing equipment at the RHPS, including two (2) of the three (3) service pumps, are the original equipment installed in 1993. The scope of work for this project includes an enhanced assessment of the entire RHPS to determine what improvements are needed/prudent at this time. The District's general objectives for this phased project are to be completed in four (4) Phases:

The District in 2019 hired Hazen and Sawyer, the Consultant to perform and prepare a Preliminary Design Report and Conditions Assessment of RHPS. The included evaluating the condition of the RHPS and all its various subsystem components; tabulate the components and their conditions; determine what improvements are needed and developing a phasing plan for the recommended improvements based on the identified priorities, costs, and economies due to packaging of multiple related improvements or other factors currently being developed under related expansion projects. The Preliminary Design Report and Conditions Assessment of RHPS was completed and submitted on November 2019 at a cost of $91,515.

Phase 1 – Fiscal Year 2021/2022

Design, Construction Management and Construction of the following improvements:

1. Inspect Hydropneumatics Tank.
2. Replace Check Valves for Pump Nos. 110, 120 and 130.
3. Replace Air Valves and Pressure Indicators for Pump.
4. Replace Submersible Sump Pump.
5. Replace Air Compressor and Aire Compressor Receiver Tank.
6. Replace Pressure Transmitter.
7. Replace Level Transmitter No. 2.
8. Replace Wet Well Level Transmitter.
9. Replace Reservoir Fee Pump Pressure Indicator.
10. Replace Potable water Pressure Indicator.
11. Replace PLC Cabinet.
12. Replace Discharge Valve for Recycled Water.
13. Replace Local Control Panel – Flow Control Valve.

Provide engineering and technical assistance to District staff during the bid and award of a contract for construction.

Costs for Phase 1 will be negotiated, or a new RFP will be issued. Total project costs will be about $530,000 to $630,000 depending on the design scope, construction management needs, and contractor.

Phase 2 – Fiscal Year 2022/2023

Design, Construction Management and Construction of the following improvements:

1. Replace the motors for Recycled Water Pumps Nos. 110, 120 and 270.
2. Replace the Variable Frequency Drive for Recycled Water Pump No. 270.
3. Replace the Variable Frequency Drives for Recycled Water Pump Nos. 110 and 120.
4. Replace Sodium Hypochlorite Pumps No.1 and 2, replace the motor and outlet piping assembly for Sodium Hypochlorite Pump No.2 and replace the pressure switches for both Sodium Hypochlorite Pumps.
5. Replace Pump Room Ventilation.
6. Replace Recirculation Line Flow Meter.

Provide engineering and technical assistance to District staff during the bid and award of a contract for construction.

Costs for Phase 2 will be negotiated, or a new RFP will be issued. Total project costs will be about $1,350,000 to $1,620,000 depending on the design scope, construction management needs, and contractor.

Phase 3 – Fiscal Year 2023/2024

Design, Construction Management and Construction of the following improvements:

1. Replace Transformer No. 3 (XFMR-100) with an upgraded transformer to handle the additional power required by the new Recycled Water Pump No. 130.
2. Replace the Motor Control Center.
3. Replace Power Distribution Panel DP-1 and its associated 30 kVA transformer assembly for Sodium Hypochlorite Pumps No.2 and replace the pressure switches for both Sodium Hypochlorite Pumps.
4. Replace the interior and exterior building mounted lighting with energy efficient lighting.
5. Replace the neutral grounding resistors for Recycled Water Pumps No. 110 and 120. (Each neutral grounding resistor is associated with a 750kVA 4160-480V transformer associated with RWP-110 and RWP-120)
6. Replace Magnetic Flow Meter.

Provide engineering and technical assistance to District staff during the bid and award of a contract for construction.

Costs for Phase 2 will be negotiated, or a new RFP will be issued. Total project costs will be about $530,000 to $630,000 depending on the design scope, construction management needs, and contractor.

Project

Conditions Assessment and Upgrade of the Hollydale Pump Station

Project Description

The District's Recycled Water Distribution System consists of four (4) pump stations, a pressure reducing station, and approximately 80 miles of distribution pipeline. The pump stations are: the Rio Hondo Pump Station (RHPS), Cerritos Pump Station (CPS), Hollydale Pump Station (HDPS) and Cudahy Pump Station (CDYPS). The CPS station is owned by the City of Cerritos and is operated by the Los Angeles County Sanitation Districts (LACSD). The other three (3) pump stations are owned, maintained, and operated by the District.

At this time, the District is looking to plan and perform the work necessary to rehabilitate and/or upgrade the District's aging HDPS. HDPS was installed in 2004 in order for the District's Recycled Water System to be able to deliver recycled water to the City of Vernon's Malburg Generation station to use for cooling purposes. There are no known improvements made to the HDPS. It is assumed all existing equipment at the HDPS, including three (3) service pumps, are the original equipment installed in 2004. The scope of work for this project includes an assessment of the entire HDPS to determine what improvements are needed/prudent at this time. The District's general objectives for this phased project are to be completed in three (3) Phases:

Phase 1

1. Evaluate the condition of the HDPS and all its various subsystem components.
2. Tabulate the components and their conditions
3. Determine what improvements are needed.
4. Develop a phasing plan for the recommended improvements based on the identified priorities, costs, and economies due to packaging of multiple related improvements or other factors currently being developed under related expansion projects.

Phase 2

1. Plan and design the recommended improvements, as directed by the District.
2. Provide engineering and technical assistance to District staff during the bid and award of a contract for construction.

Costs for Phase 2 will be negotiated. Total engineering costs will be between $100,000 and $500,000 depending on the design scope and construction management needs.

Phase 3

1. Construction.

Construction costs are estimated to be $500,000 and $1,500,000 depending on the design scope.

Project

Montebello Expansion Project

Project Description

Central Basin, Toll Brothers, Inc. (a publicly traded homebuilding company), the City of Montebello, and the San Gabriel Valley Water Company are involved in a pipeline project and pump station project to bring recycled water supply for grading, construction, and permanent irrigation into the northern area of the City of Montebello. Toll Brothers, Inc. has started developing a 488-acre residential community in the City of Montebello with approximately 1,200 units.

The 16-inch recycled water has been completed and started supplying recycled water to the project in December 2020. The 2,600 linear foot pipeline was extended from the District's existing distribution system within Lincoln Avenue and head north within Montebello Boulevard to the project area. The total permanent irrigated area within the Montebello Hills Site will use approximately 240 AF per year for a proposed park,

landscaped slopes, recreation facilities, greenbelts and parkways. Dust control and grading may require more than 240 AF per year. If more recycled water is available beyond 240 AF per year, staff will look into providing up to 200 AF additional supply to the Montebello Hills Development site.

Toll Brothers has contracted West Yost to design the recycled water pipelines (internal to the Montebello Hills site) and pump station. Central Basin is proposing that the District cover the recycled water supply pipeline environmental compliance and construction costs, and Toll Brothers cover all costs for the onsite piping and pump station. The pump station designs are partially completed. Toll Brothers is anticipated to complete construction on behalf of the District unless other alternatives are available.

Central Basin anticipates coordinating the construction of the pump station and conducting the construction management. The expenditure of the pump station is estimated at $1,350,000. Central Basin will only pay an additional cost of $28,000 for the construction inspection and any costs over the $1,000,000 for the pump station.

Project

Central Basin Customer Conversions for DAC Communities

Project Description

The project would install approximately 4,000 linear feet of recycled water pipeline to supply approximately 110 acre-feet per year of Title 22 recycled water to ten (10) disadvantaged community-based irrigation customers. The recycled water supply will be provided by our partner, the Los Angeles County Sanitation Districts. Technical services, pipelines, service connections, and recycled water customer site retrofits and conversions will be bundled into one program that will be coordinated with a targeted group of cities and water retailers. This project is focused specifically on future recycled water customer connections for Disadvantaged Communities within CBMWD's service area. This is part of a renewed effort to focus on expansion of an additional source of water supply to support Disadvantaged Communities, while simultaneously working towards the goals of the Integrated Regional Water Management Plan.

The project will eliminate approximately 110 acre-feet per year of either the pumping of groundwater or importing of treated drinking water by local retailers. The project will utilize a renewable resource of Title 22 recycled water for irrigation purposes in Disadvantaged Area Communities.

Costs for all project components are estimated to be between $1,550,000 and those costs would be provided by Department of Water Resources Proposition 1 Integrated Regional Water Management Plan grant award.

Section V. Benefits of Water Recycling Program

The District's water recycling program creates multiple benefits for both potable and recycled water users within its service area:

- All property owners and residents benefit from the increase in the availability of potable water resulting from the use of recycled water for non-potable uses that would have otherwise been met with potable water.

- The expansion of drought proofing the potable supply due to its replacement with recycled water will be particularly beneficial during drought conditions, when the availability of imported water can be significantly reduced, thus impacting the potable supply. Drought-proofing will also help mitigate adverse economic impacts, which typically accompany a severe drought.

- Recycled water users benefit from a supply that is not subject to hydrologic variability locally or in other parts of the state that contribute to the imported supply. This is particularly beneficial to commercial and industrial users which rely on a firm, dependable supply of water for their operations. Water supply reliability is an incentive for industry to remain in, or locate in, the District's service area.

- Recycled water users can also benefit from a lower per unit water cost than potable, in most cases, the difference depending primarily on the amount of imported water included in the potable supply.

- Keeps community areas green when imported water supply is reduced. A positive impact is created for residents through recreational activities and overall general well-being of the residents.

Section VI. Long Range Financial Planning

The District has also developed an approach to recovering the costs of its recycled water program. The approach has been to not only ensure that adequate revenue is recovered to fund the program, but also to create a blend of revenue sources that would equitably distribute the fixed and variable cost components of the program to the appropriate beneficiaries.

To this end, program costs were divided into two broad categories:
1) costs attributable to the development of the program (fixed) and,
2) costs attributable to operation and maintenance of the system (variable).

Variable Costs

The District determined that operation and maintenance costs of the distribution system would be paid directly by those customers purchasing the recycled water. This is considered equitable on the basis that recycled water customers receive the direct benefit of the recycled water and pay in proportion to the quantity of water they purchase.

Fixed Costs

The District also determined that the benefit of this new water source could not be reflected through the sale of recycled water alone. As stated above, the increase in the availability of potable water is a benefit to every property owner within the District's service area. As such, it is appropriate that the capital and replacement costs of the recycled water program be partially recovered through a parcel charge known as a Standby Charge.

Table 1 shows the District's projected budget, including operating expenses, debt service, and capital for fiscal year 2021/2022. Revenues are projected to exceed operating expenses, with the balance being used to contribute toward replenishing the District's reserves that were significantly reduced through an early defeasance of debt related to the recycled distribution system in fiscal year 2012/2013. The debt service is proposed to be recovered through the standby charge.

TABLE 1
Determination of Total Standby Charge Revenue Requirement

PROJECTED BUDGET FY 2021/2022 ($ millions)	
Revenues (without standby)	$23.30
Operating Expenses	(21.99)
Debt Service & Capital	(3.95)
Budget Deficit	$(2.64)
Standby Charge Amount	**$3.27**

External Funding

The District has been aggressive in seeking external financial assistance to help defray the cost of the recycled water program. The federal, state and regional organizations that have contributed financially to the development of the program include the U.S. Department of Interior through the U.S. Bureau of Reclamation, the U.S. Department of Energy, Department of Water Resources, the Metropolitan Water District of Southern California, San Gabriel Valley Water Quality Authority and the State of California through the Greater Los Angeles County Integrated Regional Water Management Plan, and the Los Angeles County Flood Control District.

Section VII. Rate and Method

In the calculation of the standby charge, it is necessary to first define the Benefiting Unit. The number of total Benefiting Units is divided into the total standby charge revenue required to determine the standby charge per Benefiting Unit.

The definition of a Benefiting Unit for the purposes of this parcel assessment is founded on the determination that the economic value of one acre-foot of water, in terms of employment and production, is several times greater than the actual cost of that acre-foot of supply provided. Because the District is in the business of providing water, it was deemed appropriate that the Benefiting Unit be defined as one acre, or portion thereof.

As shown in Table 2, the District's service area includes 309,186 parcels encompassing 72,071 acres. For the purposes of this report, a Benefiting Unit is described as either (a) any parcel with 1 acre or less; or, (b) any acre, or portion thereof, within a parcel with 1 or more acres. Therefore, the District's service area has approximately 327,171 Benefiting Units. The FY 2021/2022 parcel assessment (calculated by dividing the projected standby charge requirement by total Benefiting Units) is approximately $10 per Benefiting Unit.

PROPOSED STANDBY CHARGE FOR FY 2021/2022

The District pledged current and future standby charge proceeds in its bond agreements dated 2008 and 2010. For FY 2021/2022, the District will continue to use standby charge proceeds to repay principal and interest payments obligated under bond agreements. The proposed assessment level and methodology for FY 2021/2022 will remain the same as FY 2020/2021.

TABLE 2

Projected Benefiting Units

	ACRES =<1	ACRES >1	Total
Improved Parcels			
Parcels	296,078	6,366	**302,444**
Acres	46,876	18,747	**65,623**
Benefiting Units	296,078	18,747	**314,825**
Unimproved Parcels			
Parcels	6,089	653	**6,742**
Acres	1,120	5,327	**6,447**
Benefiting Units	6,096	6,250	**12,346**
Total			
Parcels	302,167	7,019	**309,186**
Acres	47,997	24,074	**72,071**
Benefiting Units	**302,174**	**24,997**	**327,171**

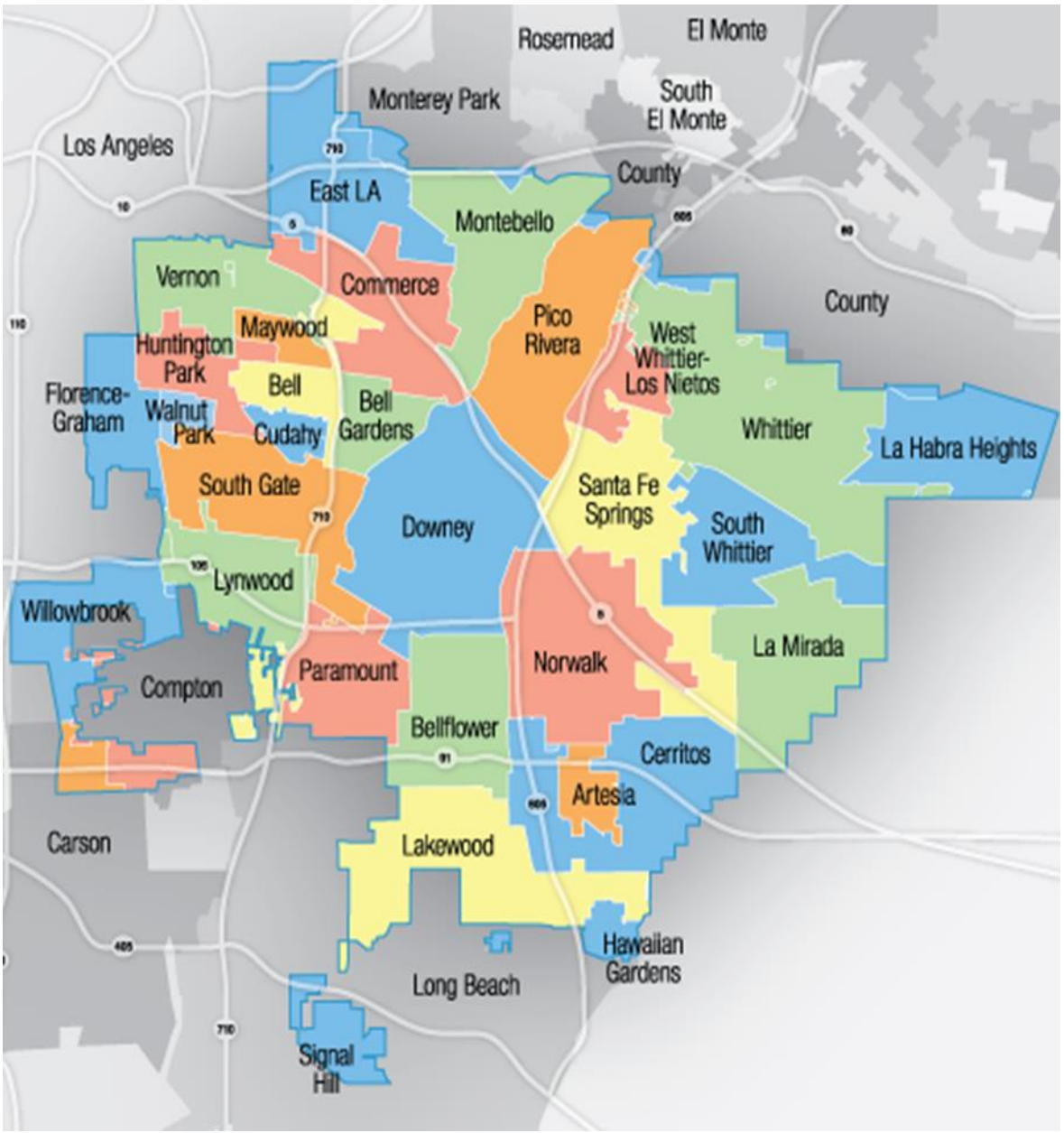
The method of, and formula for, this assessment is proposed as $10 per Benefiting Unit (i.e., $10 per parcel of 1 acre or less; or $10 per acre, or portion thereof, for parcels 1 acre or more). The estimated revenue for FY 2021/2022 is approximately $3,271,714.27. The levy of this assessment is proposed under the Municipal Water District Act, Alternative Procedures.

SUMMARY

The benefits described in this Engineer's Report far exceed the recommended charge. Conservation of potable water through demand management and recycled water helps to "drought-proof" the entire service area by increasing the potable supply for all property owners within the District. The standby charge recognizes that there are economic benefits to land from extending potable water supplies through the use of recycled water, whether or not such lands are directly using the recycled water. The performance of the financial plan will be reevaluated annually to ensure that the program expectations are being realized.

Section VIII. District Diagram

Service Area Map and Incorporated Cities



Section IX. Standby Charge Roll

The Standby Charge Roll is voluminous, is on file with the Board, and is hereby included by reference.