

# IEUA Ten-Year Forecast

Fiscal Year 2020/2021





Inland Empire Utilities Agency  
Fiscal Year 2020/21  
Ten-Year Forecast

**Inland Empire Utilities Agency**  
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# Executive Summary

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## TEN-YEAR FORECAST PURPOSE

The Board of Directors of the Inland Empire Utilities Agency (the Agency) adopts a Ten-Year Forecast (TYF) based on the growth and regulatory requirements, existing asset management needs, comments, and recommendations from the Regional Technical and Policy Committees, pursuant to the terms of the Regional Sewage Service Contract. The TYF includes wastewater strength and flow forecasts and a description of planned capital projects, including any necessary facility expansions, major asset replacement and rehabilitation, and major capital equipment purchases. The TYF also provides a summary of the capital costs and capital financing plans associated with the following Agency program funds:

- Regional Wastewater Capital Improvement (RC)
- Regional Wastewater Operations and Maintenance (RO)
- Recycled Water (WC)
- Non-reclaimable Wastewater (NC)
- Groundwater Recharge (RW)
- Administrative Services (GG)
- Water Resources (WW)

The Fiscal Year (FY) 2020/2021 TYF outlines capital projects through FY 2029/30. Two major themes of the TYF are: (1) the need for rehabilitation and replacement (R&R) and maintenance of aging equipment and facilities; and (2) the need for expansion of the Regional System to meet expected future growth. Considering the age and condition of the Agency's facilities and infrastructure, appropriate funding of R&R and routine preventive maintenance is critical in ensuring the reliability and quality of the services the Agency is committed to providing its customers. The combination of these needs has resulted in a proposed FY 2020/21 TYF of \$920.7 million (see Table 1).

Major projects in the FY 2020/21 TYF include: the expansion of the liquids treatment and the construction of a wastewater solids handling facility at Regional Water Recycling Plant No. 5 (RP-5), which will replace Regional Water

Plant No. 2 (RP-2) infrastructure located in a flood zone; rehabilitation and upgrades to Regional Water Recycling Plant No. 4 (RP-4); and the completion of the groundwater basin improvements per the 2013 Recharge Master Plan Update.

Major projects near the end of the ten-year planning horizon include the liquids capacity recovery and solids treatment expansion of the Water Recycling Plant No. 1 (RP-1). Project construction is expected to begin in FY 2026/27, while an evaluation of efficiency projects will be used to refine the timing and criticality of the project implementation. Based on an asset assessment completed by Agency staff

TABLE 1: COMPARISON OF FY 2019/20 TO FY 2020/21  
TEN-YEAR CAPITAL PROJECT FORECAST (\$ IN MILLIONS)

Fund	FY 2019/20	FY 2020/21
Administrative Services Fund (GG)	\$13.6 M	\$ 10.3 M
Non-Reclaimable Wastewater Fund (NC)	\$30.5 M	\$ 32.2 M
Regional Capital Improvement Fund (RC)	\$513.1 M	\$ 678.0 M
Regional Operations and Maintenance (RO)	\$107.8 M	\$ 105.7 M
Recharge Water Fund (RW)	\$26.5 M	\$ 21.2 M
Recycled Water Fund (WC)	\$204.4 M	\$ 60.9 M
Water Resources Fund (WW)	24.7	\$12.4
<b>TOTAL</b>	<b>\$920.6 M</b>	<b>\$ 920.7 M</b>

\*All values rounded, exact FY 2020/21 numbers can be found in TYF 20/21 Project List (Appendix A)



# Introduction

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## TEN-YEAR FORECAST PURPOSE

The purpose of the TYF is to catalog and schedule capital improvement projects over a multiyear period. Pursuant to Section 9 of the Regional Sewage Service Contract, the Agency submits a ten-year forecast of capacity demands and capital projects to the Regional Technical and Policy Committees. This TYF identifies projects for the FY 2020/2021 through FY 2029/2030 that are needed for the rehabilitation, replacement, or expansion of the facilities owned or operated by the Agency.

The TYF is a document that outlines the Agency's capital priorities through a list of ongoing and future projects. Projects identified in the TYF are necessary in accomplishing the Agency's goals of ensuring reliability and safety while meeting all regulatory requirements, based on physical conditions of assets and the forecasted regional projections of water and wastewater needs. According to these projections, the TYF proposes a schedule for the implementation of projects based on necessity. The timing of the projects identified in the TYF are further refined during the Capital Budget process, based on the availability of financial resources.

## DEFINITION OF A CAPITAL PROJECT

The TYF is composed of a list of Capital Projects, which are projects that involve the purchase, improvement, or construction of major fixed assets and equipment, such as the expansion of treatment plants, the construction of pipeline and pump stations, and the replacement of equipment. Capital projects do not include funds spent on standard operation and maintenance.

## REGIONAL SEWAGE SERVICE CONTRACT REQUIREMENTS AND TYF ADOPTION

The Regional Sewage Service Contract is the guiding document that defines the terms of the services and facilities in the Agency's regional sewage system. The contract was originally signed in January 1973, amended in 1984 and 1994, and is



due for renewal in January 2023, 50 years after it was originally executed.

As required by the Regional Sewage Service Contract, the TYF includes wastewater flow forecasts and a description of planned capital projects, including any necessary facility expansions, major asset replacement and rehabilitation, and major capital equipment purchases. Projected annual expenditures and financing will be developed in the Agency’s annual Operating and Capital Program Budget. After detailed review, comments and recommendations from the Regional Technical and Policy Committees and the Agency’s Board of Directors, the TYF is adopted.



## **IEUA AGENCY OVERVIEW**

The Agency is a regional wastewater treatment agency and wholesale distributor of imported water. The Agency is responsible for serving approximately 875,000 people over 242 square miles in western San Bernardino County. The Agency is focused on providing three key services: (1) treating wastewater, developing recycled water, local water resources, and conservation programs to reduce dependence on imported water supplies and provide local supply resiliency to the region; (2) converting biosolids and waste products into a high-quality compost made from recycled materials; and (3) generating electrical energy from renewable sources. This Ten-Year Forecast, beyond being a requirement of the Regional Sewage Service Contract between the Agency and its Contracting Agencies, is also a means of communicating the future projects and capital spending needed to meet future demands in the service area.

## **FORMATION & PURPOSE**

The Agency was originally formed as the Chino Basin Municipal Water District on June 6, 1950 as a municipal corporation with the mission to supply supplemental imported water purchased from the Metropolitan Water District of Southern California (MWD) to municipalities in the Chino Basin. Since then, the Agency has expanded its mission from a supplemental water supplier to include regional wastewater treatment with both domestic and industrial disposal systems, and energy production facilities. In addition, the Agency has become a major provider of recycled water, a supplier of biosolids/compost materials, and continues its leading role in water quality management and environmental protection in the Inland Empire.

## **GOVERNANCE**

The Agency is a special district governed by five publicly elected Board of Directors. Each director is assigned to one of the five divisions which generally serve the following regions: Division 1- Upland/Montclair; Division 2- Ontario; Division 3- Chino/Chino Hills; Division 4- Fontana; and Division 5- Rancho Cucamonga. Monthly meetings are also held with the Regional Technical and Policy Committees comprised of representatives from each of the Agency's Regional Sewer Service Contracting Agencies. These Committees discuss and provide recommendations on various technical and policy issues affecting the Agency.

## **INTER-AGENCY COORDINATION IN THE CHINO BASIN**

The Agency joined the Santa Ana Watershed Project Authority (SAWPA) in 1972 to participate in regional watershed-scale planning. The Agency also sits on the Board of Directors for MWD, SAWPA, and Chino Basin Watermaster (CBWM).

The Agency collaborates with SAWPA, MWD, CBWM, and the Regional Water Quality Control Board (RWQCB) to develop regional planning documents. The Agency also works with state agencies, such as the Department of Water Resources and California Environmental Protection Agency, in the development of State of California planning documents.

## **CONTRACTING AND RETAIL AGENCIES**

As a regional wastewater treatment agency, the Agency provides sewage utility services to seven contracting agencies under the Chino Basin Regional Sewage Service Contract: the cities of Chino, Chino Hills, Fontana, Montclair, Ontario, and Upland along with Cucamonga Valley Water District. Figure 1 depicts each Contracting Agency's sphere of influence within the Agency's service area.

In addition to the contracting agencies, the Agency provides wholesale imported water from MWD to seven retail agencies: the cities of Chino, Chino Hills, Ontario, Upland, CVWD in the city of Rancho Cucamonga, Fontana Water Company in the city of Fontana, and the Monte Vista Water District (MVWD) in the city of Montclair.

## **REGIONAL PROGRAMS & FACILITIES OVERVIEW**

Although IEUA is a wholesale water provider, the Agency has few assets or infrastructure related to water treatment, conveyance, or use. The majority of assets are connected to the regional wastewater system, salinity management system, recycled water program, and groundwater recharge program.

### **Regional Wastewater Facilities**

The Agency has four Regional Water Recycling Plants (RWRPs) which produce recycled water that meet Title 22 standards for indirect reuse and groundwater recharge. The four regional facilities are: RP-1, RP-4, RP-5, and Carbon Canyon Wastewater Recycling Facility (CCWRF). All of the RWRPs have primary, secondary,

and tertiary treatment and recycled water pumping facilities that are interconnected in a regional network. Agency staff use sewage bypass and diversion facilities, such as the San Bernardino Lift Station, Montclair Diversion Structure, Etiwanda Trunk Line, and Carbon Canyon bypass, to optimize the Agency's flows and capacity utilization. In general, flows are routed between regional plants in order to maximize recycled water deliveries while minimizing overall pumping and treatment costs. Figure 1. illustrates the contracting agencies and regional wastewater facilities.

The Agency also has three facilities where the biosolids from the water recycling plants are handled: RP-1 Solids Handling Facility, RP-2 Solids Handling Facility, and the Inland Empire Regional Composting Facility (IERCF).

The Agency has a network of regional interceptor sewers that can be used to bypass sewer flow from one water recycling plant to another to balance and optimize the use of treatment capacity. Currently, the regional interceptors can bypass flow from RP-4 to RP-1 and from CCWRF to RP-5. In addition, primary effluent can be bypassed from the RP-1 equalization basins to RP-5.

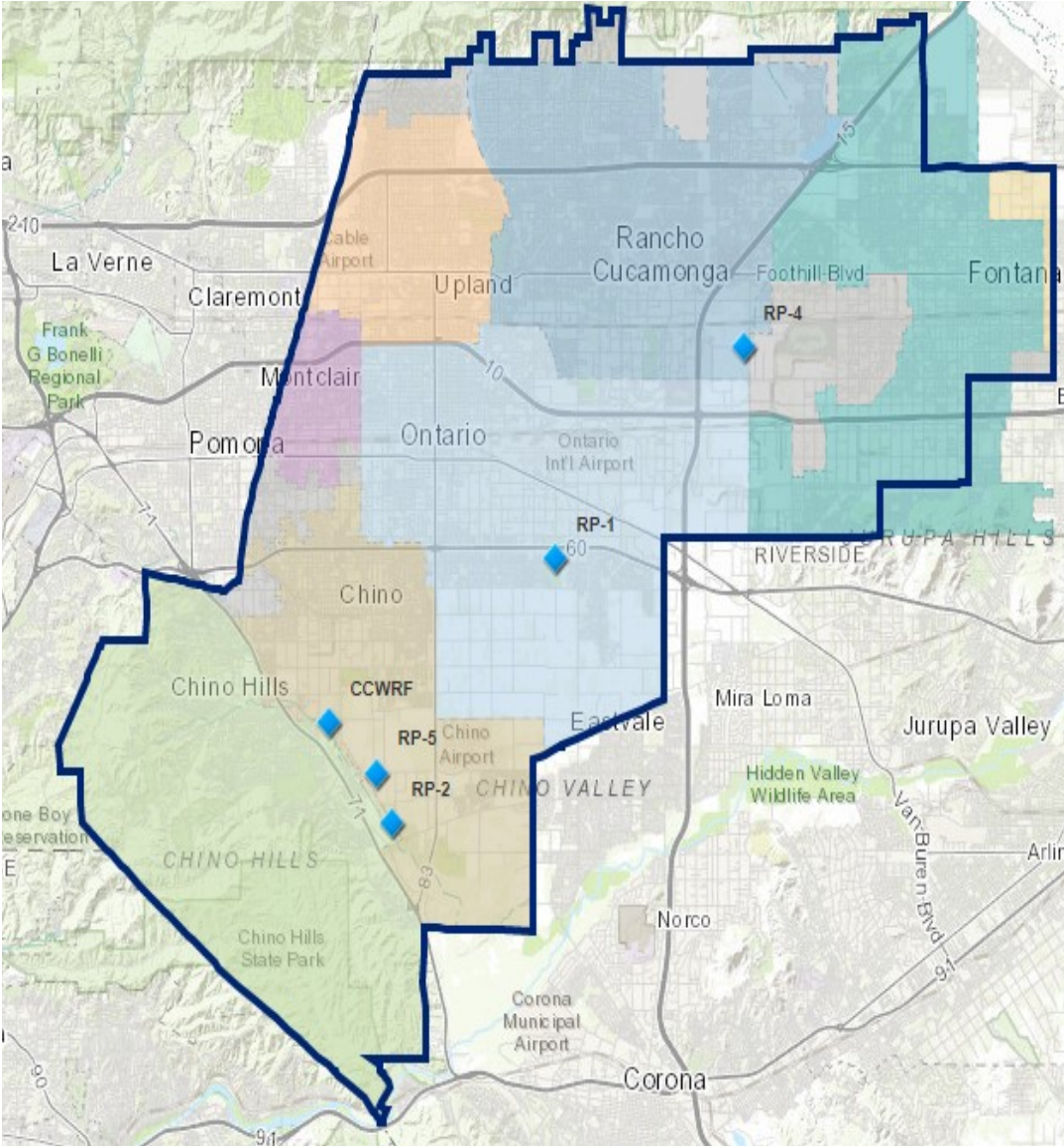
The Agency also has four Regional Sewage System lift stations. These are used to shift flows that would naturally flow to one portion of the service area to a different treatment plant. This balancing of flows keeps water in the northern portion of the service area, maximizing potential recycled water use. The lift stations are:

- Montclair Lift Station – pumps sewage from portions of Montclair, Upland, and Chino to RP-1 and CCWRF.
- Preserve Lift Station – pumps sewage from the Prado Regional Park and The Preserve community in the City of Chino to RP-5.
- RP-2 Lift Station – pumps sewage from the southeastern portions of the cities of Chino and Chino Hills and the solids treatment side streams from RP-2 to RP-5.
- San Bernardino Avenue Pump Station – pumps a portion of the flow from the City of Fontana to RP-4.

The Agency's Regional Program encompasses the activities associated with repair and replacement (R&R) of the Agency's wastewater, energy generation, and solids handling facilities. The Regional Sewerage System connects several regional water recycling plants.



FIGURE 1: IEUA CONTRACTING AGENCIES & REGIONAL WASTEWATER FACILITIES



**RP-1 (Northern Service Area)**

Regional Water Recycling Plant No. 1 (RP-1) is located in the City of Ontario near the intersection of Highway 60 and Archibald Avenue. This facility was originally commissioned in 1948 and has undergone several expansions to increase the design wastewater treatment capacity to approximately 44 MGD, based on the sewage characteristics at the time of the expansions. Although the projected sewage flows do not show a significant increase from current to build-out, they do reflect higher loading characteristics that require treatment process modifications to meet effluent discharge regulations. RP-1 serves the areas of Ontario, Upland, Fontana, Chino, Montclair and Rancho Cucamonga, and currently treats approximately 24.5 MGD.

RP-1 also has biosolids treatment, designed at a capacity of approximately 60 MGD. Treatment consists of gravity thickening and dissolved air flotation thickening, anaerobic digestion, and dewatering by centrifuges. RP-1 handles solids from both RP-1 and RP-4. The stabilized, dewatered solids are trucked to the IERCF in the City of Rancho Cucamonga for further treatment to produce Grade A compost.

### **RP-4 (Northern Service Area)**

The Regional Water Recycling Plant No. 4 (RP-4) is located in Rancho Cucamonga and has been in operation treating sewage and producing recycled water since 1997. The RP-4 facility capacity was doubled in 2009 from 7 MGD to 14 MGD.

Waste sludge generated at RP-4 is discharged back to the sewer and flows by gravity to RP-1. RP-4 serves areas of Fontana and Rancho Cucamonga, treating approximately 9.7 MGD.

### **CCWRF (Southern Service Area)**

The Carbon Canyon Water Reclamation Facility (CCWRF) is located in the City of Chino and has been in operation since May 1992. The CCWRF works in tandem with RP-2 and RP-5 to serve the areas of Chino, Chino Hills, Montclair, and Upland.

Wastewater is treated at CCWRF while the biosolids removed from the wastewater flow are pumped to RP-2 for processing. The CCWRF is designed to treat an annual average flow of 11.4 MGD and treats approximately 8.0 MGD.

### **RP-2 (Southern Service Area)**

The Regional Plant No. 2 (RP-2) in the City of Chino has been in operation since 1960. RP-2 was both a liquids and solids treatment facility until 2004, when RP-5 was constructed to handle the liquids portion. Since then, RP-2 treats only the solids from CCWRF and RP-5. RP-2 treatment processes include: gravity thickening and DAF thickening, anaerobic digestion for stabilization, and dewatering by either belt press or centrifuge.

Once the solids are dewatered, they are transported to the IERCF. RP-2 is located on land leased from the US Army Corps of Engineers and the lease is due to expire in 2035. RP-2 is also located within the recently redefined flood zone behind Prado Dam. Orange County Flood Control District and the Army Corps have plans to raise the maximum operational water level behind the dam to allow greater water storage

and conservation. Since RP-2 does not have physical flood protection, IEUA will relocate the solids handling from RP-2 to RP-5. The relocation of solids handling is expected to occur in 2023.

## **RP-5 (Southern Service Area)**

The Regional Water Recycling Plant No. 5 (RP-5) is located immediately east of the Agency's Administrative Headquarters campus in the City of Chino and began operation in March 2004. It has a capacity rating of 16.3 MGD, which includes capacity for approximately 15 MGD of raw sewage and 1.3 MGD of solids processing return or recycled flows from RP-2. Waste sludge produced at RP-5 is pumped to the RP-2 solids handling facility, which will be relocated to RP-5 around 2023. RP-5 serves areas of Chino, Chino Hills, and Ontario, treating approximately 8.2 MGD.

The RP-5 Solids Handling Facility (RP-5 SHF) was operated by IEUA from 2001 to 2009 as a regional facility accepting dairy manure for recycling and generating biogas. In 2010, IEUA entered into a lease agreement with Environ Strategies (now Inland BioEnergy) and in 2012, they began utilizing the facility for digestion of primarily food wastes with minor amounts of dairy manure. RP-5 SHF can process 705 wet tons/day of food and dairy waste through an anaerobic digestion process and can generate electricity from the biogas produced. As of August 2017, Inland Bio Energy stopped regular Operations of the facility. Due to the regional benefits of such a waste handling facility and the reduced energy costs, the Agency plans to keep RP-5 SHF available for the processing of food and dairy waste.

## **IERCF**

The IERCF is the largest indoor composting facility in North America. It was constructed and began daily operations in 2007 under a Joint Powers Authority agreement between the Agency and the SDLAC. The IERCF, located in Rancho Cucamonga, is completely enclosed in order to control odors and to meet stringent air quality regulations.

The IERCF uses the aerated static pile composting process to recycle approximately 150,000 wet tons/year of dewatered and stabilized biosolids from the Agency, SDLAC, and OCSD's wastewater treatment processes, as well as wood waste from local communities. It produces approximately 230,000 cubic yards of high-quality compost each year for local landscaping, agricultural, and horticultural use. The



composted product, marketed as SoilPro. Premium Compost, is sold as a soil conditioner which helps improve water retention, resulting in improved plant growth and water savings.

The facility has been operating at its design capacity for over 10 years, receiving nearly 800 tons of biosolids and recycled waste products each workday and has maintained a perfect compliance record.

## **SALINITY MANGEMENT PROGRAM**

Maintaining a low salinity (total dissolved solids, TDS) level in recycled water is critical in ensuring that recycled water can be used for groundwater recharge and other uses. To reduce the salinity, the Agency operates a Non-Reclaimable Wastewater System (NRWS). As shown in Figure 2., the NRWS is comprised of 75 miles of pipelines and pump stations that export high-salinity industrial wastewater generated within the Agency's service area to the Pacific Ocean. This system also ensures that the regional water recycling plants do not exceed the TDS discharge limits established by the RWQCB. The NRWS is comprised of a north and a south system. The north system conveys non-reclaimable wastewater to the Sanitation Districts of Los Angeles County (SDLAC) for treatment and disposal and serves approximately 37 industries. The south system conveys wastewater through the brine line owned by SAWPA, to the Orange County Sanitation District (OCSD) and serves approximately 11 industries, including five indirect dischargers which haul their wastewater to a Brine Line Collection Station.

Discharges to the NRWS consists mainly of industrial and groundwater treatment brines. The Agency also discharges centrate resulting from the dewatering of the biosolids treated at RP-1, as well as some domestic sewage from two dischargers. The NRWS is physically separated from the Regional Wastewater System and provides a means for segregating non-reclaimable, high salinity waste for export out of the Agency's service area.

The Agency also has a single NRWS lift station that is used to shift naturally occurring flows.

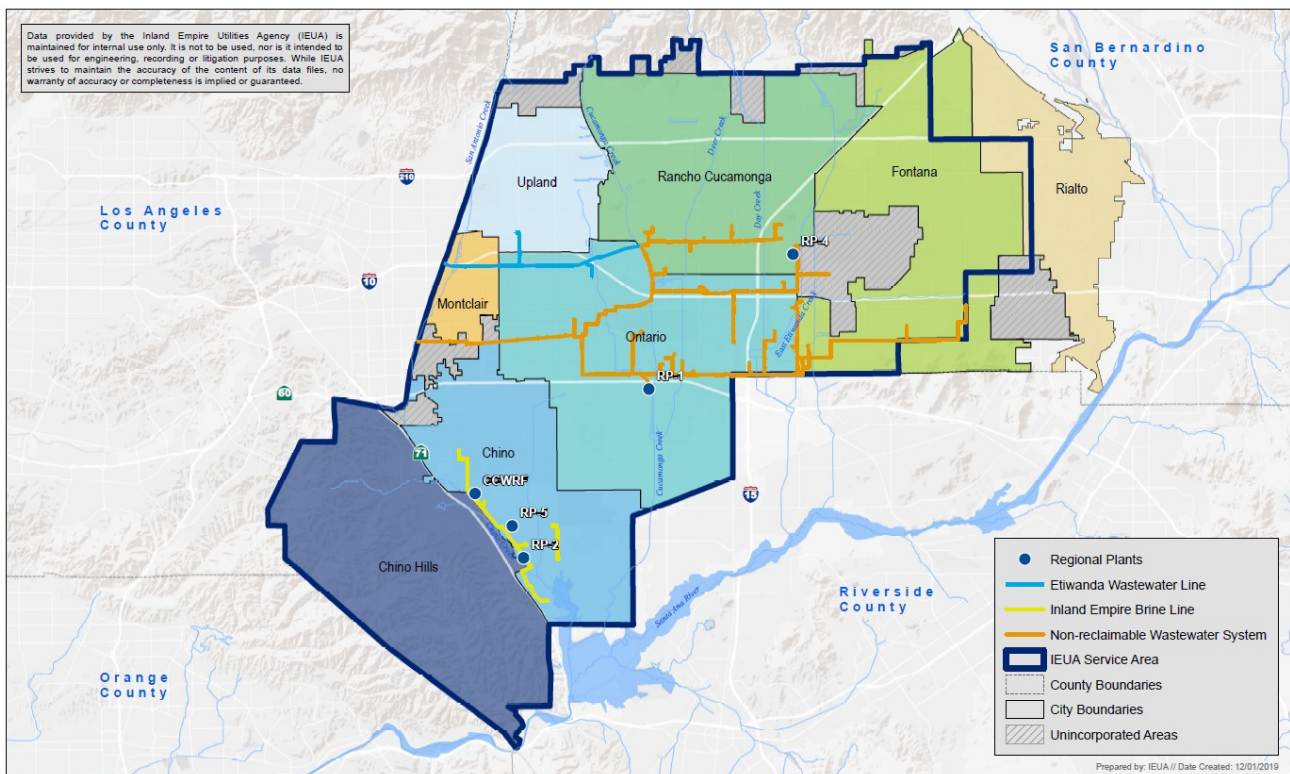
- Philadelphia Lift Station – pumps industrial discharge from portions of the Northern system to the main trunk line.

By maximizing the use of the NRWS, the quality of recycled water is improved for local use and helps ensure that the Agency can comply with the final effluent TDS and total nitrogen limits listed in the National Pollutant Discharge Elimination System (NPDES) permit. The combined northern and southern NRWS system removed 47,486 tons of salt in FY 2018/19 from the service area, reducing the region’s salinity and enhancing the opportunities for beneficial use of recycled water.

In addition to the NRWS system, the salinity management program includes a residential Self-Regenerating Water Softener Removal Rebate Program. This program incentivizes the removal of self-regenerating salt-based devices which increase the salinity of plant influent and thus also increases salinity of recycled water supplies.

The Agency also operates the Chino Basin Desalter I facility as a Chino Basin Desalter Authority (CDA) Joint Powers Authority member. The Desalter I facility purifies brackish groundwater extracted from the lower Chino Basin and then distributes the drinking water to eight member agencies, including IEUA. Figure 3 includes a map of the CDA infrastructure.

FIGURE 2: NON-RECLAIMABLE WASTEWATER SYSTEM (NRWS)



## RECYCLED WATER

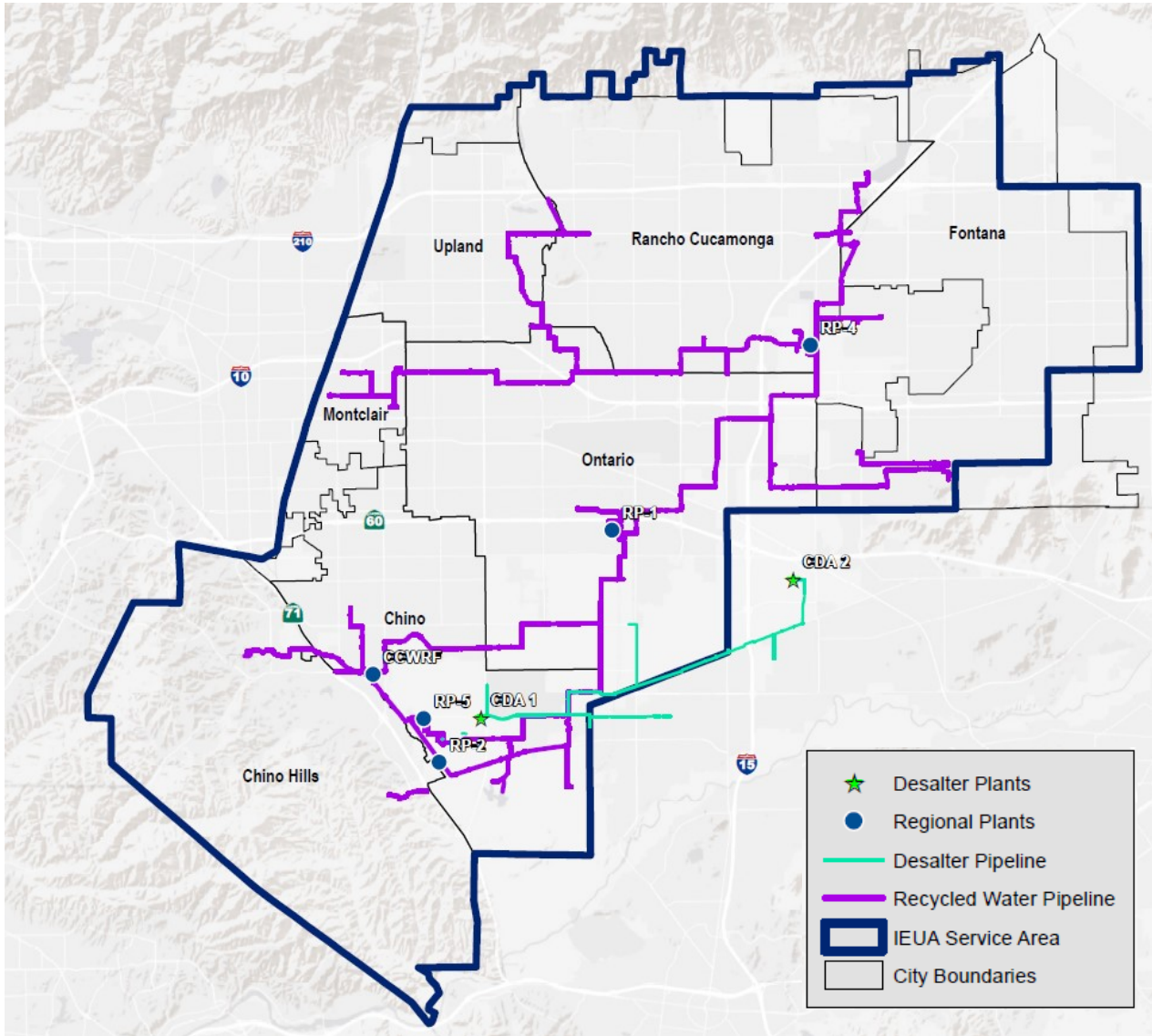
The Agency has served recycled water to its member agencies since formation of the Regional Sewage Service Contract in 1972. The Agency currently receives over 50 million gallons per day (MGD) of sewage from its member agencies. The sewage is treated to Title 22 regulations set forth by the California Department of Health Services and supplied to the recycled water distribution system.

The Recycled Water Distribution Facilities consists of a network of pipelines, pump stations and reservoirs that allow the Agency to deliver recycled water throughout the service area. Figure 3. provides a map of the recycled water distribution system. The facilities allow recycled water to be distributed into six pressure zones for direct use and groundwater recharge.

During FY 2018-19, the Agency delivered over 28,000 acre-feet (AF) of recycled water for direct use to four groundwater recharge basins (see following section on groundwater recharge for a more detailed discussion) and to customers. Major benefits of the regional recycled water program include:

- New Water Supply – delivery of approximately 30,000 AF per year of a local water supply
- Reliable Supply – is not directly impacted by drought or climate change and helps mitigate the impacts of water supply restrictions
- Local Resiliency – increases local water supply reliability and reduces dependence on water imports from the Sacramento Bay Delta
- Reduces Greenhouse Gas Emissions – requires significantly less energy to deliver to customers than imported water.

FIGURE 3: RECYCLED WATER DISTRIBUTION SYSTEM



## GROUNDWATER RECHARGE

In conjunction with CBWM, CBWCD, and SBCFCD, the Agency conducts the groundwater recharge program within Chino Basin to replenish and maintain the Chino Groundwater Basin. Recharged water includes captured stormwater, recycled water, and imported water. The groundwater recharge projects are a means to diversify the water supply for the region and maximize the beneficial reuse of recycled water and the yield of the Chino Basin. Recycled water recharge is a key component of the region’s water supply portfolio. The more recycled water that is recharged into the Chino Groundwater Basin, the more resilient the region becomes. Figure 4. highlights groundwater recharge locations within the basin.

TABLE 2: MAXIMUM THERORETICAL ANNUAL RECHARGE

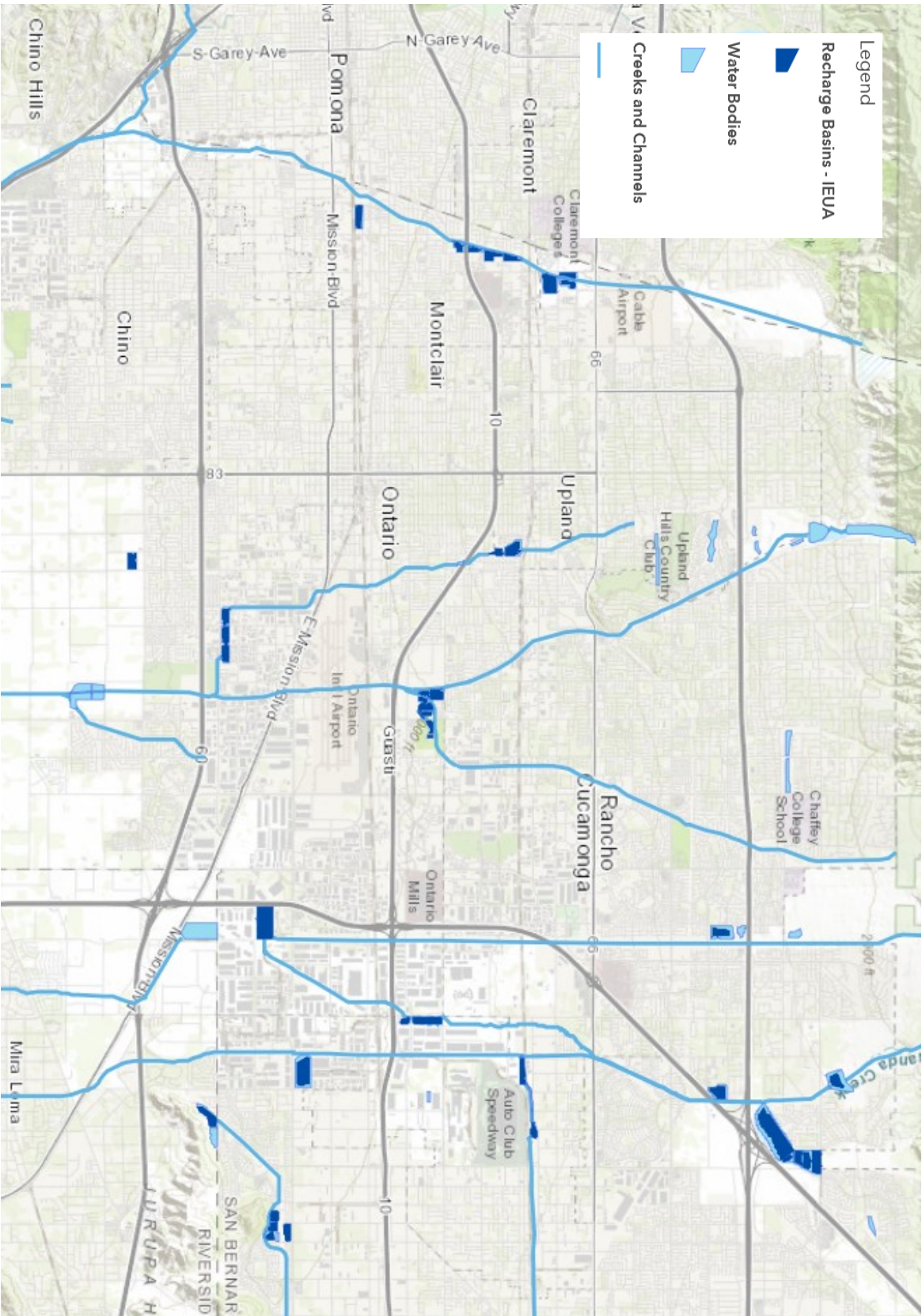
Recharge Site	Acre-Feet per Year
7th and 8th St. Basins	5,045
Banana Basin	1,913
Brooks Basin	2,825
College Heights Basins	8,037
Declez Basin	3,023
Ely Basins	7,375
Etiwanda Debris Basin	2,966
Grove Basin	0
Hickory Basin	2,433
Lower Day Basin	2,547
Montclair Basins	10,707
RP3 Basin	12,390
San Sevaine Basins	9,637
Turner Basins	3,673
Upland Basin	2,490
Victoria Basin	2,436
<b>Total</b>	<b>77,497</b>

Source: 2018 Recharge Master Plan Update, Table 4-1



# INTRODUCTION

FIGURE 4: CHINO BASINGROUNDWATER RECHARGE BASIN LOCATIONS



## **ADDITIONAL REGIONAL PROGRAMS & FACILITIES**

### **Headquarters & Chino Creek Wetlands & Education Park**

The Agency headquarters, located in the City of Chino, opened in the summer of 2003. It was constructed to meet the Platinum rating from the United States Green Building Council's Leadership in Energy and Environmental Design (LEED) 2004. The headquarter facilities demonstrate how using recycled building materials and state-of-the-art energy efficient technologies can be used to incorporate environmental sensibilities in an urban setting while creating a better environment, saving water, improving staff productivity, and contributing to the restoration of native landscapes. The headquarters' complex is one of the largest public landscapes in Southern California to use native plants and to have integrated stormwater management, including the restoration of natural drainage and the creation of wetlands and riparian habitat known as the Chino Creek Wetlands and Educational Park.

The Chino Creek Wetlands and Educational Park (Park) is located adjacent to the IEUA headquarters. The 22-acre Park opened in 2008 and was partially funded by a grant from the State Water Resources Control Board. It was designed to restore native habitat and natural drainage, and to showcase the environmental values of the Prado Basin, the largest freshwater habitat remaining in Southern California. The Prado Basin, within which the park resides, provides a critical link for biological and trail networks between the extensive riparian open space of the Prado Flood Control Basin and the Chino Hills State Park to the west. Prado Basin is home to endangered species, including the Least Bell's Vireo and Southwestern Willow Flycatcher.

The Park facilities include an outdoor classroom, wetlands, 1.7 miles of trails, and educational stations with signage. Local and regional school programs are held at the park, including the Water Discovery educational program funded by the State's Department of Parks and Recreation. The Park is open to the public seven days a week throughout the year, with special programs about water quality, conservation, and local ecosystems provided by the Agency.

### **Laboratory**

IEUA has constructed a new 17,166 sq. ft Water Quality Laboratory at its headquarters in Chino, California. The facility was built near Regional Water



Recycling Plant No.5 (RP-5) to manage water quality testing, enhance, performance, and improve the process of sample analysis.

This \$17.8 million state-of-the-art facility was awarded a Leadership in Energy and Environmental Design™ (LEED®) Gold Certification for meeting over 60 categories established by the U.S. Green Building Council. The heating and cooling equipment were designed to meet the highest energy reductions standards, which contributes to the facility's overall energy reduction of 41%. Funding for the lab was obtained through a Clean Water State Revolving Fund (SRF) loan, and the SRF program awarded a principal forgiveness grant of approximately \$1.2 million for achieving green project status.

The new lab was awarded the Outstanding Civil Engineering Water/Wastewater Project Award from the American Society of Civil Engineers in the San Bernardino and Riverside Counties branch and the Los Angeles section.

The laboratory has received an Environmental Laboratory Accreditation Program certificate and is now fully operational. The new facility includes additional instrumentation allowing lab staff to run additional analyses. Staff is currently evaluating new technologies to determine the feasibility of adding additional tests to meet the need of stricter water quality regulations.

## **Renewable Energy**

The Agency has made significant strides in decreasing energy costs, enhancing the Agency's ability to help achieve the State's goals of improving the reliability of the energy grid, and reducing greenhouse gasses by investing in renewable energy. In an effort to diversify and maximize renewable energy generation, the Agency entered into a Power Purchase Agreement (PPA) and had 3.5 MW of solar power installed at four of IEUA's facilities. In 2010, IEUA expanded its renewable energy agreement (PPA) and had 3.5 MW of solar power installed at four of IEUA's facilities. In 2010, IEUA expanded its renewable energy portfolio by securing a PPA for a 1.0 MW wind turbine at RP-4. In 2015, IEUA partnered with an energy firm to install 4.0 MW of advanced energy storage systems at Agency facilities, and an additional 1.5 MW of solar power. The storage systems optimize IEUA's on-site generation, store excess renewable energy, and use stored energy to power facilities when demand on the electric grid is high.

The Agency is continually evaluating new technologies that can increase sustainability. Full utilization of renewable digester gas to support sustainability and minimize gas flaring is a primary goal. Agency personnel will continue to assess operational processes and strive for optimization to reduce energy consumption and costs wherever possible.

# Treatment Plant Flow Projections

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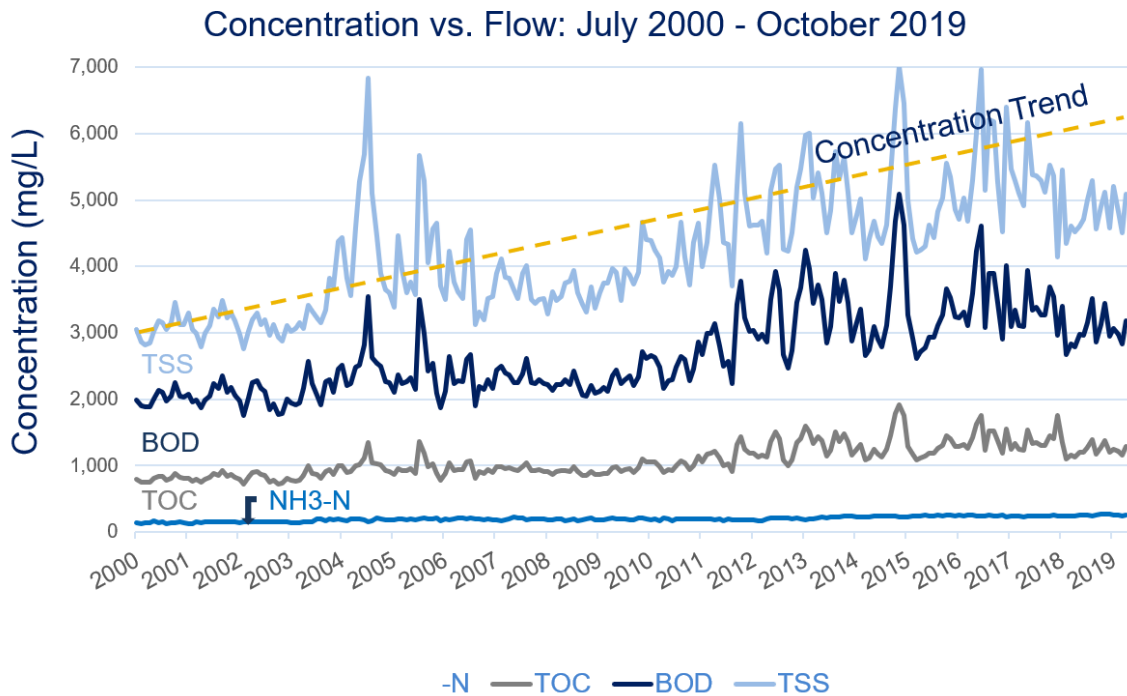
Wastewater flow forecasts are conducted annually, and are based on four main components: (1) historical wastewater flow trends; (2) per dwelling unit wastewater generation factors, based on the 2015 Wastewater Facilities Master Plan projections; (3) actual influent flows measured at the treatment plants; and (4) expected future growth numbers provided by Contracting Agencies. These Projections are used to determine future demands on the Agency's facilities, and help anticipate the need for modifications to RWRPs and solids handling facilities.

## TREATMENT PLANT FLOW TRENDS

Over the past decade the region has experienced increased indoor water use efficiency. This is a result of drought, shifting public policy, more efficient building codes and devices, and effective conservation program campaigns. At regional facilities, the result has been a decrease in the volume of sewage flows of approximately 10% since 2013. However, the influent water quality is tied to the population served. As a result of these two factors, while the population has increased, indoor water consumption has decreased, resulting in increased sewage strength. This trend is expected to continue (see Figure 5) and has resulted in regional wastewater treatment plant expansions being driven by the increased strength of sewage flows to the facilities, rather than the volume of flows to the facilities.

While sewage flows have decreased, recycled water production has increased. This increase in recycled water production can be attributed to the San Bernardino Avenue Lift Station and the Montclair Lift Station rerouting additional raw sewage flows to the recycling plants in the northern service area, which is where the recycled water system has been expanded and where groundwater recharge basins are located. In addition to moving recycled water, this regional system flexibility allows the treatment plants to operate as an interconnected system.

FIGURE 5: TOTAL WASTEWATER STRENGTH VS WASTEWATER FLOW 2000-2019



### ANTICIPATED SERVICE AREA GROWTH

In 2019 the Contracting Agencies completed a survey of their 10-year capacity demand forecast. The results of the 10-year capacity demand forecast survey are summarized in Table 3. For FY 2020/21, the forecasted activity was 9,321 EDUs. Over the next ten years, activity was projected to total 74,083 EDUs. Approximately 77% of this projected activity is a result of new development in the service areas of Ontario and Fontana. Over the next ten years, building activity is projected to be approximately 54% residential and 46% commercial/industrial (see Table 3).

### FIFTY YEAR FLOW PROJECTION

As part of the Wastewater Facilities Master Plan Update (WWFMPU), flow projections were made for each regional facility, assuming ultimate conditions will be reached by 2060. Wastewater flows are estimated to reach approximately 80.0 MGD by the year 2060 (Table 6).

Figure 7. shows the projected flows to the treatment plants in 2035 and 2060 (ultimate) based on the WWFMPU. The WWFMPU estimates that there will be a regional flow of 73.5 MGD by 2035 and an ultimate/build-out flow of 80 MGD by 2060. Although these periods are beyond the 10-year window of the current TYF, this implies that there will be facility expansions over the next 20 years. A rough timeline based on the WWFMPU findings for plant expansions is shown in Table 4. Expansions at RP-5, the relocation of RP-2 solids handling to RP-5, and the beginning of the RP-1 liquid capacity recovery and solids treatment expansion are included in the 10-year window.

TABLE 3: CONTRACTING AGENCY 10-YEAR DEMAND FORECAST BY CUSTOMER TYPE

Fiscal Year	Residential (EDUs)	Commercial/ Industrial (EDUs)	Total (EDUs)
2020/21	5,778	3,543	9,321
2021/22	5,641	3,605	9,246
2022/23	5,602	3,659	9,261
2023/24	4,483	3,450	7,933
2024/25	3,850	3,410	7,260
2025/26	3,295	3,330	6,625
2026/27	2,804	3,280	6,084
2027/28	2,724	3,250	5,974
2028/29	2,724	3,250	5,974
2029/30	3,154	3,251	6,405
<b>TOTAL</b>	<b>40,055</b>	<b>34,028</b>	<b>74,083</b>

*\*As reported on November 2019*

TABLE 4: MAJOR TREATMENT FACILITY CAPACITY/EXPANSION PROJECTS

Description	2021/25	2026/30	2031/35	2036/40	Total Cost
RP-5 Expansion					\$371 M
RP-1 Capacity Improvement					\$284 M
RP-4 Expansion					\$115 M

TABLE 5: 10-YEAR CAPACITY DEMAND FORECAST BY AGENCY (EDUs)

Fiscal Year	Chino	Chino Hills	CVWD	Fontana	Montclair	Ontario	Upland	Total
<b>2020/21</b>	430	182	1,650	2,406	407	3,865	381	9,321
<b>2021/22</b>	355	133	2,050	2,527	26	3,865	290	9,246
<b>2022/23</b>	262	96	2,050	2,653	25	3,865	310	9,261
<b>2023/24</b>	262	64	1,650	2,787	25	3,000	145	7,933
<b>2024/25</b>	262	6	1,250	2,787	25	2,840	90	7,260
<b>2025/26</b>	262	1	890	2,787	25	2,660	0	6,625
<b>2026/27</b>	262	0	490	2,787	25	2,520	0	6,084
<b>2027/28</b>	262	0	490	2,787	25	2,410	0	5,974
<b>2028/29</b>	262	0	490	2,787	25	2,410	0	5,974
<b>2029/30</b>	262	0	490	2,787	25	2,410	431	6,405
<b>TOTAL</b>	<b>2,881</b>	<b>482</b>	<b>11,500</b>	<b>27,095</b>	<b>633</b>	<b>29,845</b>	<b>1,647</b>	<b>74,083</b>
<b>Percent</b>	<b>4%</b>	<b>1%</b>	<b>16%</b>	<b>37%</b>	<b>1%</b>	<b>40%</b>	<b>2%</b>	<b>100%</b>

TABLE 6: WWFMPU PROJECTED AVERAGE INFLUENT WASTEWATER FLOW

Year	RP-1 (MGD)	RP-4 (MGD)	CCWRF (MGD)	RP-5 (MGD)	Total (MGD)
<b>2030</b>	29.3	12.7	6.5	14.5	63.0
<b>2035</b>	28.3	13.4	6.6	16.7	66.9
<b>2040</b>	30.9	14.0	6.7	19.0	70.7
<b>2050</b>	32.9	15.3	7.0	22.6	77.7
<b>2060</b>	33.0	16.7	7.2	23.0	80.0

Source: TM No.4, WWFMPU (CH2M Hill 2014)

FIGURE 6: PROJECTED TRIBUTARY SEWER FLOWS

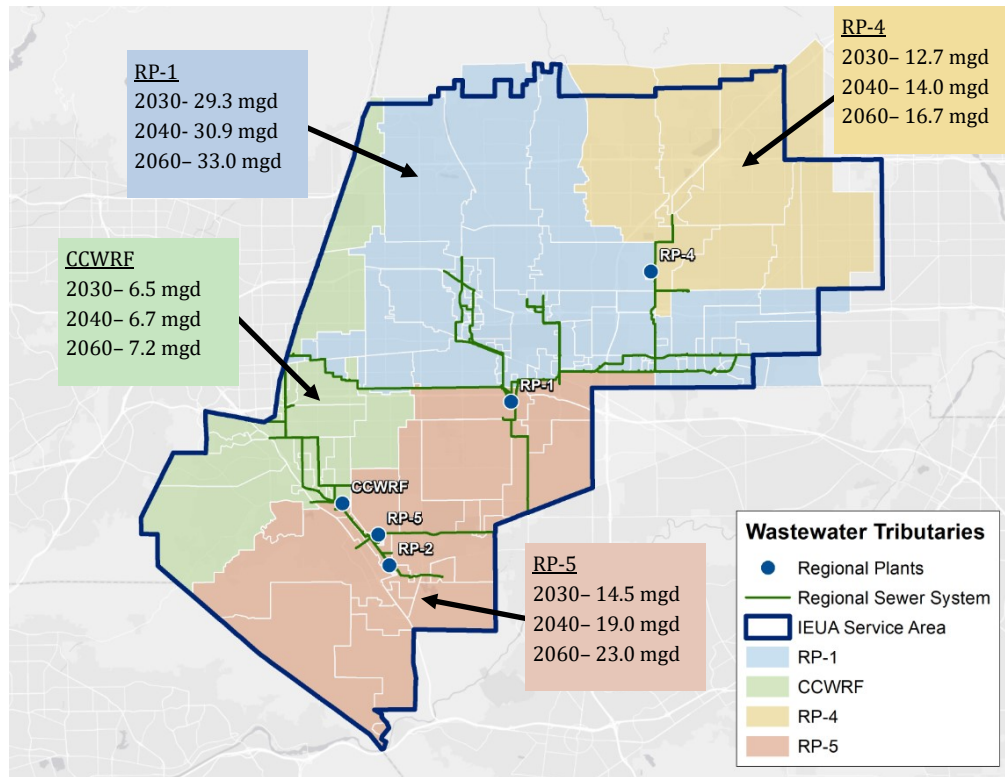
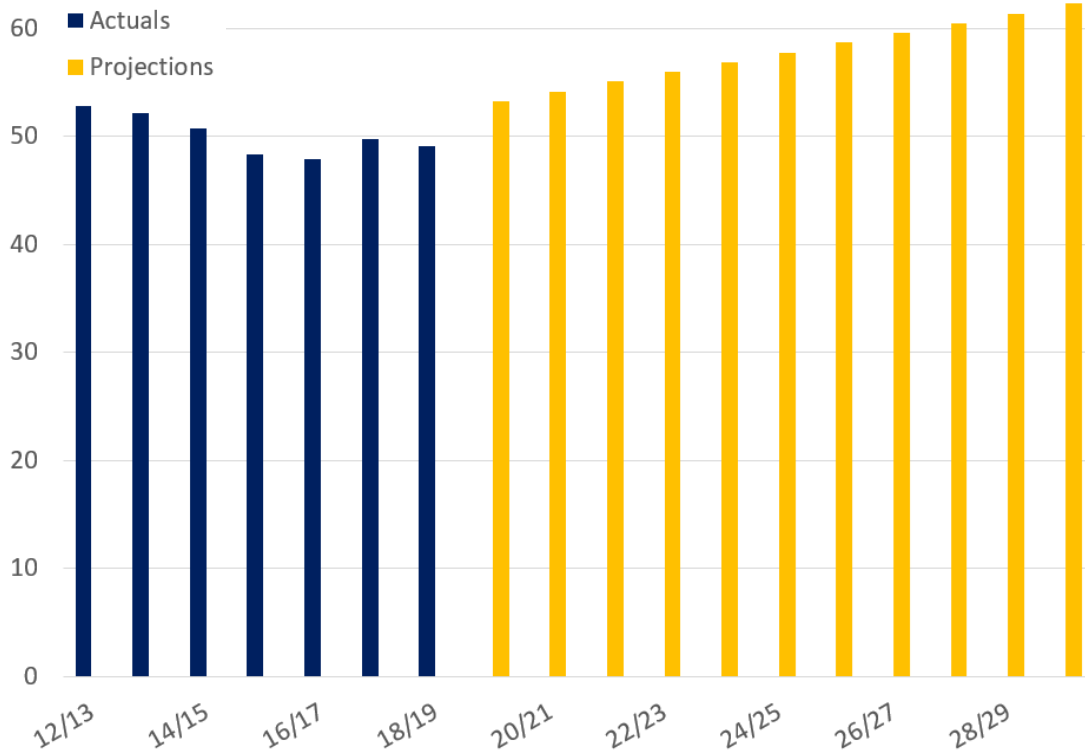


FIGURE 7: REGIONAL SYSTEM TREATED INFLUENT FLOW FORECAST







TREATMENT PLANT FLOW PROJECTIONS



# Capital Improvement Projects

## PROJECT IDENTIFICATION PROCESS

The TYF contains projects which were identified by Agency staff. The two main project types are 1) repair and rehabilitation projects for existing facilities; and 2) expansion projects to provide additional treatment capacity to meet future growth.

Drivers used to determine the timeframe and necessity of projects include regulatory and permitting requirements, wastewater flow projections, asset age, performance, efficiency, and grant or funding availability.

The 10-year project list in Appendix A represents the Agency’s capital projects forecast based on existing planning documents and anticipated funding sources. The

TABLE 7: FY 2020/21 TOTAL TEN-YEAR FORECAST BREAKDOWN,

Description	Year One FY 2020/21	+ Year Two FY 2021/22	+ Years 3-10 FY 2022-30	= Ten Year Total FY 2020-2030
Administrative Services (GG)	\$3.0 M	\$0.3 M	\$ 7.0 M	\$ 10.3 M
Non-Reclaimable Wastewater (NC)	\$4 .0 M	\$3.6 M	\$24.5 M	\$32.2 M
Regional Capital Improvement (RC)	\$ 98.6 M	\$164.5 M	\$414.7 M	\$678.0 M
Regional Operations & Maintenance (RO)	\$39.9 M	\$10.2 M	\$55.6 M	\$ 105.7 M
Recharge Water (RW)	\$ 14.2M	\$3.0 M	\$4.0 M	\$21.2 M
Recycled Water (WC)	\$ 3.6 M	\$5.5 M	\$51.8 M	\$60.9 M
Water Resources (WW)	\$ 3.5 M	\$3.6 M	\$5.3 M	\$12.4 M
<b>TOTAL</b>	<b>\$ 166.9 M</b>	<b>\$ 190.6 M</b>	<b>\$ 563.1 M</b>	<b>\$920.7 M</b>

\*All values rounded, exact numbers can be found in TYF 20/21 Project List (Appendix A)

list will be updated regularly as facility needs are reprioritized. An estimated ten-year budget for capital project by fund is summarized in Table 7. A full list of non-capitalized projects are listed in Appendix B. Projects associated with the IERCA are listed in Appendix C. Projects that will only move forward if grant funding is made available are listed in Appendix D.

## **REGIONAL WASTEWATER FACILITIES**

### **RP-1 (Northern Service Area) TYF Projects**

Major projects in the next ten years include the design and construction of both liquid and solids treatment capacity recovery expansions, starting in 2026/2027. Other projects include the design of an advanced water purification facility, flare improvements, and other mechanical upgrades including energy recovery.

### **RP-4 (Northern Service Area) TYF Projects**

Major projects in the next ten years include various process improvements, primary clarifier rehab, contact basin cover repairs, and influent screen replacement. A major expansion of RP-4 is expected to be completed before 2040.

### **CCWRF (Southern Service Area) TYF Projects**

Major projects in the next ten years include asset management projects, automatic valve upgrades, and filter level sensor replacements. There are currently no major expansion projects planned for CCWRF in the next 30 years.

### **RP-2 (Southern Service Area) TYF Projects**

The only project planned for RP-2 is a security upgrade. Beyond ten years, there will be a major project to fully decommission RP-2 prior to the end of the lease period in 2035.

### **RP-5 (Southern Service Area) TYF Projects**

Major projects in the next ten years include expansion of the liquids processing to 30MGD and the construction of a solids handling facility. The solids handling facility will allow RP-5 to take over the capacity currently being handled by RP-2 before RP-2 is decommissioned.

## **IERCF TYF Projects**

Projects associated with IERCF have their own funding as outlined in the Joint Powers Agreement between the Agency and SDLAC. Projects include the improvement of the current fire sprinkler system and the replacement of existing front end loaders. A complete list of IERCF projects can be found in Appendix C. Any capital maintenance, enhancement, or replacement projects will be jointly analyzed and determined with the SDLAC.

## **SALINITY MANAGEMENT TYF PROJECTS**

The Chino Basin Desalter I facility is managed by the CDA and thus there are no IEUA capital projects associated with the Desalter. Other NRWS projects include manhole upgrades, pipeline relining, and lift station upgrades.

## **RECYCLED WATER TYF PROJECTS**

Regional recycled water distribution projects are largely focused on capacity improvements and operational upgrades. Capacity improvements include the RP-1 1158 pump station upgrade, Baseline pipeline extension, and projects that help maximize operational flexibility to meet seasonal variation in direct use and groundwater recharge demands. Project prioritization is based on the ability of projects to increase recycled water deliveries and decrease unit costs. Projects that are listed were identified in the Recycled Water Implementation Plan, Recycled Water Program Strategy, Chino Basin Recharge Master Plan Update, the Agency's Asset Management Plan, and by review of use projections from Contracting Agencies. These projects will enable the region to beneficially maximize the reuse of the region's projected recycled water supply.

## **GROUNDWATER RECHARGE TYF PROJECTS**

The Agency, CBWM, CBWCD, and their respective member agencies completed the 2013 Recharge Master Plan Update (Update) to the 2010 Recharge Master Plan. The Update evaluated 27 yield enhancing capital projects for the Chino Basin. In 2017 CBWM and IEUA approved to implement recharge improvements as part of the Update for the following basins: Wineville Basin, Jurupa Basin, Victoria Basin, Lower Day Basin, and Montclair Basin. The new improvements will also include a new stormwater distribution system between Wineville and Jurupa to convey additional

stormwater runoff to multiple basins for recharge. Design of this project started in 2017, and construction started in 2018, with an expected completion to occur sometime in 2020. All groundwater recharge projects are cost shared with CBWM. See Appendix A for the capital project list.

## **ADDITIONAL REGIONAL PROGRAMS & FACILITIES**

### **Water Resources TYF Projects**

The only capital project funded through water resources is the Preliminary Design Report feasibility evaluation of the Chino Basin Program. Project components listed in the Chino Basin Program include long-range regional master plan projects that will enhance resiliency and anticipated future water supply challenges including: an advanced water purification facility and wellhead treatment to address water quality concerns; and pipelines and interties to maximize regional flexibility and provide redundancy for the Rialto Feeder. The Chino Basin Program feasibility study will be used to create a final report including a refined scope, the basis for an environmental determination, and to identify necessary institutional agreements. This feasibility study will assist with on-going discussions to determine if it is in the region's best interest to secure the \$206.7 million funding agreement from the California Water Commission with water exchange stipulations, or if the region should fund the program locally and phase in the project components.

### **Headquarters & Chino Creek Wetlands & Education Park TYF Projects**

Capital projects at the Agency headquarters and Chino Creek Wetlands include the improvement to current driveways leading into the headquarters building.

### **Laboratory TYF Projects**

Capital projects at the lab include the addition of liquid chromatography-mass spectrometry equipment for PFAS Testing.

### **Renewable Energy TYF Projects**

Renewable Energy capital projects include the purchase of existing solar panels currently on a power purchase agreement and the addition of more photovoltaic power at Agency headquarters.

## **Business Network And Process Automation Control Network TYF Projects**

Current capital projects include the installation of the SCADA Enterprise System.



# Abbreviations

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<b>4R</b>	Repair, Relocation, Reconstruction, and Rehabilitation
<b>AFY</b>	Acre-Feet of Water per Year
<b>AMP</b>	Asset Management Plan
<b>ARRA</b>	American Recovery Rehabilitation Act
<b>BIP</b>	Base Interruptible Program
<b>BCU</b>	Baseline Capacity Units
<b>BMPTF</b>	Basin Monitoring Program Task Force
<b>CASA</b>	California Association of Sanitation Districts
<b>CBFIP</b>	Chino Basin Facilities Improvement Project
<b>CBWCD</b>	Chino Basin Water Conservation District
<b>CBWM</b>	Chino Basin Watermaster
<b>CCRA</b>	Capital Capacity Reimbursement Account
<b>CCTV</b>	Closed Circuit Television
<b>CCWRF</b>	Carbon Canyon Wastewater Recycling Facility
<b>CDA</b>	Chino Basin Desalter Authority
<b>CEC</b>	California Energy Commission
<b>CEQA</b>	California Environmental Quality Act
<b>CH<sub>4</sub></b>	Methane
<b>CO<sub>2</sub></b>	Carbon Dioxide



<b>CO2-eq</b>	CO2 Equivalent
<b>CPUC</b>	California Public Utilities Commission
<b>CSI</b>	California Solar Incentive
<b>CUWCC</b>	California Urban Water Conservation Council
<b>CVWD</b>	Cucamonga Valley Water District
<b>DA</b>	Direct Access
<b>DCS</b>	Distribution Control System
<b>DR</b>	Demand Response
<b>DWR</b>	Department of Water Resources
<b>DYY</b>	Dry Year Yield
<b>EDU</b>	Equivalent Dwelling Unit
<b>ESP</b>	Electricity Service Provider
<b>FMP</b>	Facilities Master Plan
<b>FSL</b>	Firm Service Level
<b>FY</b>	Fiscal Year
<b>GG</b>	Administrative Services Program
<b>GPD</b>	Gallons per Day
<b>GPS</b>	Global Positioning System
<b>GWP</b>	Global Warming Potential
<b>H2S</b>	Hydrogen Sulfide
<b>HFC</b>	Hydrofluorocarbon
<b>HVAC</b>	Heating/Ventilation/Air Conditioning
<b>ICE</b>	Internal Combustion Engine

<b>IE</b>	Inland Empire
<b>IERCF</b>	Inland Empire Regional Composting Facility
<b>IEUA</b>	Inland Empire Utilities Agency
<b>IRP</b>	Integrated Resource Plan
<b>KPI</b>	Key Performance Indicators
<b>KW</b>	Kilowatt
<b>LOC</b>	Lewis Operating Company
<b>LOS</b>	Level of Service
<b>MACR</b>	Modified Accelerated Cost-Recovery
<b>mg/L</b>	Milligrams per liter
<b>MGD</b>	Million Gallons per Day
<b>MW</b>	Megawatts
<b>MG</b>	Million Gallons
<b>MWH</b>	Megawatt Hours
<b>MOU</b>	Memorandum of Understanding
<b>MVWD</b>	Monte Vista Water District
<b>MWD</b>	Metropolitan Water District of Southern California
<b>N2O</b>	Nitrous Oxide
<b>NC</b>	Non-Reclaimable Wastewater Program Capital Fund
<b>NEM</b>	Net Energy Metering
<b>NPDES</b>	National Pollutant Discharge Elimination System
<b>NRW</b>	Non-Reclaimable Wastewater
<b>NRWS</b>	Non-Reclaimable Wastewater System

<b>O&amp;M</b>	Operations & Maintenance
<b>OBMP</b>	Optimum Basin Management Plan
<b>OBMP</b>	Optimum Basin Management Plan
<b>OCSD</b>	Orange County Sanitation District
<b>OWOW</b>	One Water One Watershed
<b>PPA</b>	Power Purchase Agreement
<b>PFC</b>	Perfluorocarbon
<b>PEIR</b>	Program Environmental Impact Report
<b>RC</b>	Regional Capital Improvement (Wastewater) Fund
<b>RCA</b>	Regional Composting Authority
<b>RDA</b>	Redevelopment Agency
<b>REC</b>	Renewable Energy Credit
<b>RO</b>	Regional Operations and Maintenance (Wastewater) Fund
<b>RP-1</b>	Regional Plant No.1 in the City of Ontario
<b>RP-2</b>	Regional Plant No.2 in the City of Chino
<b>RP-4</b>	Regional Plant No.4 in the City of Rancho Cucamonga
<b>RP-5</b>	Regional Plant No.5 in the City of Chino
<b>R&amp;R</b>	Repair and Replacement
<b>RW</b>	Groundwater Recharge Fund
<b>RWC</b>	Recycled Water Contribution
<b>RWRP</b>	Regional Water Recycling Plants
<b>RWQCB</b>	Regional Water Quality Control Board
<b>SAWA</b>	Santa Ana Watershed Association

<b>SAWPA</b>	Santa Ana Watershed Project Authority
<b>SBCFCD</b>	San Bernardino County Flood Control District
<b>SCADA</b>	Supervisory Control and Data Acquisition
<b>SCAP</b>	Southern California Alliance of Publicly-Owned Treatment Works
<b>SCAQMD</b>	South Coast Air Quality Management District
<b>SCE</b>	Southern California Edison
<b>SDLAC</b>	County Sanitation Districts of Los Angeles County
<b>SF6</b>	Sulfur Hexafluoride
<b>SGIP</b>	Self-Generation Incentive Program
<b>SHF</b>	RP-5 Solids Handling Facility
<b>SRF</b>	State Revolving Fund
<b>SWRCB</b>	State Water Resources Control Board
<b>TA&amp;TI</b>	Technical Assistance and Technology Incentives
<b>TDS</b>	Total Dissolved Solids
<b>TIN</b>	Total Inorganic Nitrogen
<b>TOU-BIP</b>	Time-of-Use Base Interruptible Program
<b>TYF</b>	Ten-Year Forecast
<b>UPC</b>	Unit Production Cost
<b>USBR</b>	United States Bureau of Reclamation
<b>UWMP</b>	Urban Water Management Plan
<b>VFD</b>	Variable Frequency Drives
<b>WC</b>	Recycled Water Program Fund
<b>WFMP</b>	Wastewater Facilities Master Plan

<b>WSAP</b>	Water Supply Allocation Plan
<b>WUE</b>	Water Use Efficiency

# Appendix A

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## Proposed Capital Project List

# Appendix A

## Proposed Capital Project List

ID #	Project #	Project Name	Fund	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	10 Year Total	PAYGO %	GRANT %	DEBT %	OUTSIDE %
1	EN22010	GG Asset Managment Project	GG	\$ -	\$ 50,000	\$ 50,000	\$ 50,000	\$ 300,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 5,450,000	100%	0%	0%	0%
2	EP21004	Agency Wide Vehicle Replacement	GG	\$ 150,000	\$ 154,500	\$ 159,135	\$ 163,909	\$ 168,826	\$ 173,891	\$ 179,108	\$ 184,481	\$ 190,015	\$ 195,715	\$ 1,719,580	100%	0%	0%	0%
3	FP10200	Financial Planning Project LRPF	GG	\$ 1,275,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,275,000	100%	0%	0%	0%
4	FM20005	Agency Wide HVAC Replacements	GG	\$ 250,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 550,000	100%	0%	0%	0%
5	LB21001	LCMSMS for PFAS and CEC Testing	GG	\$ 400,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 400,000	100%	0%	0%	0%
6	EN20040	HQ Driveway Improvements	GG	\$ 335,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 335,000	100%	0%	0%	0%
7	IS21006	Replace RP1 Trailer	GG	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200,000	0%	0%	100%	0%
8	EN21049	Main HDQ Improvements Office Addition	GG	\$ 140,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 140,000	100%	0%	0%	0%
9	IS20003	BIZ Infrastructure Replacement Project	GG	\$ 110,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 110,000	100%	0%	0%	0%
10	IS21001	BIZ Microwave Upgrade Phase II	GG	\$ 70,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 70,000	100%	0%	0%	0%
11	IS20006	BIZ New Workstations	GG	\$ 20,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,000	100%	0%	0%	0%
<b>GG Total</b>				\$ 2,950,000	\$ 304,500	\$ 309,135	\$ 313,909	\$ 468,826	\$ 1,173,891	\$ 1,179,108	\$ 1,184,481	\$ 1,190,015	\$ 1,195,715	\$ 10,269,580				

ID #	Project #	Project Name	Fund	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	10 Year Total	PAYGO %	GRANT %	DEBT %	OUTSIDE %
12	EN23002	Philadelphia Lift Station Force Main Imp	NC	\$ 250,000	\$ 1,000,000	\$ 15,000,000	\$ 3,450,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 19,700,000	100%	0%	0%	0%
13	EN22007	NRW Asset Managment Projects	NC	\$ -	\$ -	\$ -	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 3,500,000	100%	0%	0%	0%
14	EN22020	Philadelphia Lift Station Pump Upgrades	NC	\$ -	\$ 1,700,000	\$ 800,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,500,000	100%	0%	0%	0%
15	EN22002	NRW East End Flowmeter Replacement	NC	\$ 2,300,000	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,400,000	100%	0%	0%	0%
16	EN21014	NRWS Manhole Upgrades - 20/21	NC	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 2,000,000	100%	0%	0%	0%
17	EN19027	NRW Pipeline Relining Along Cucamonga Cr	NC	\$ 1,335,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,335,000	100%	0%	0%	0%
18	EN15044	SBCFCD NRW Easement	NC	\$ -	\$ 550,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 550,000	100%	0%	0%	0%
19	EN26020	Lift Station AMP Projects	NC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ 200,000	100%	0%	0%	0%
<b>NC Total</b>				\$ 4,085,000	\$ 3,550,000	\$ 16,000,000	\$ 4,150,000	\$ 700,000	\$ 900,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 32,185,000				

ID #	Project #	Project Name	Fund	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	10 Year Total	PAYGO %	GRANT %	DEBT %	OUTSIDE %
20	EN19006	RP-5 Biosolids Facility	RC	\$ 55,345,979	\$ 91,364,549	\$ 40,345,368	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 187,055,896	19%	35%	46%	0%
21	EN19001	RP-5 Expansion to 30 mgd	RC	\$ 31,711,330	\$ 65,146,725	\$ 62,906,035	\$ 24,350,634	\$ 236,286	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 184,351,010	100%	0%	0%	0%
22	EN24001	RP-1 Liquid Treatment Capacity Recovery	RC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,500,000	\$ 4,750,000	\$ 57,000,000	\$ 105,000,000	\$ 169,250,000	100%	0%	0%	0%
23	EN22006	RC Asset Managment	RC	\$ -	\$ 250,000	\$ 250,000	\$ 250,000	\$ 2,400,000	\$ 8,000,000	\$ 8,000,000	\$ 8,000,000	\$ 8,000,000	\$ 8,000,000	\$ 43,150,000	100%	0%	0%	0%
24	EN24002	RP-1 Solids Treatment Expansion	RC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 750,000	\$ 1,250,000	\$ 14,000,000	\$ 26,000,000	\$ 42,000,000	100%	0%	0%	0%
25	EN17006	CCWRF Asset Management and Improvements	RC	\$ 1,500,000	\$ 2,000,000	\$ 8,000,000	\$ 3,500,000	\$ 650,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,650,000	100%	0%	0%	0%
26	EN11039	RP-1 Disinfection Pump Improvements	RC	\$ -	\$ -	\$ -	\$ 150,000	\$ 2,400,000	\$ 4,660,000	\$ 250,000	\$ -	\$ -	\$ -	\$ 7,460,000	100%	0%	0%	0%
27	EN21045	Montclair Force Main Improvements	RC	\$ 500,000	\$ 4,500,000	\$ 1,800,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,800,000	100%	0%	0%	0%

28	EN18006	RP-1 Flare Improvements	RC	\$ 4,500,000	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000,000	100%	0%	0%	0%
29	EN21015	Collection System Upgrades 20/21	RC	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 5,000,000	100%	0%	0%	0%
30	EN19025	Regional Force Main Improvements	RC	\$ 3,500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,500,000	100%	0%	0%	0%
31	PL19001	Purchase Existing Solar Installation	RC	\$ -	\$ -	\$ -	\$ -	\$ 3,500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,500,000	100%	0%	0%	0%
32	EN22022	RP-1 Air Compressor Upgrades	RC	\$ -	\$ 250,000	\$ 1,500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,750,000	100%	0%	0%	0%
33	EN18036	CCWRF Asset Mgmt and Imprvmt Pkg. III	RC	\$ 500,000	\$ -	\$ 200,000	\$ 500,000	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,500,000	100%	0%	0%	0%
34	PL17002	HQ Solar Photovoltaic Power Plants Ph. 2	RC	\$ -	\$ -	\$ 300,000	\$ 1,100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,400,000	100%	0%	0%	0%
35	EN14019	RP-1 Headworks Primary & Secondary Upg	RC	\$ 450,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 450,000	100%	0%	0%	0%
36	IS20004	WW Cybersecurity Projects	RC	\$ 80,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 80,000	100%	0%	0%	0%
37	IS21003	Wireless Manager Software Replacement	RC	\$ 30,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 30,000	100%	0%	0%	0%
38	IS21004	Secure Access for RP-2	RC	\$ 20,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,000	100%	0%	0%	0%
39	IS20005	WW Infrastructure Replacement Project	RC	\$ 8,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,000	100%	0%	0%	0%
<b>RC Total</b>				\$ 98,645,309	\$ 164,511,274	\$ 115,801,403	\$ 30,350,634	\$ 9,986,286	\$ 13,160,000	\$ 12,000,000	\$ 14,500,000	\$ 79,500,000	\$ 139,500,000	\$ 677,954,906				

ID #	Project #	Project Name	Fund	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	10 Year Total	PAYGO %	GRANT %	DEBT %	OUTSIDE %
40	EN17110	RP-4 Process Improvements	RO	\$ 12,500,000	\$ 2,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,500,000	100%	0%	0%	0%
41	PL26001	Advanced Water Purification Facility	RO	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000,000	\$ 5,000,000	\$ 10,000,000	100%	0%	0%	0%
42	EN18025	RP-1 Secondary System Rehabilitation	RO	\$ -	\$ -	\$ -	\$ 250,000	\$ 1,100,000	\$ 1,950,000	\$ 2,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 8,300,000	100%	0%	0%	0%
43	EN20057	RP-4 Process Improvements Phase II	RO	\$ -	\$ -	\$ 500,000	\$ 4,000,000	\$ 3,500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,000,000	100%	0%	0%	0%
44	EN13016	SCADA Enterprise System	RO	\$ 3,000,000	\$ 3,000,000	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,000,000	35%	65%	0%	0%
45	EP21003	South Major Facilities Repair/Replacemnt	RO	\$ 600,000	\$ 600,000	\$ 600,000	\$ 600,000	\$ 600,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 6,500,000	100%	0%	0%	0%
46	EP21002	North Major Facilities Repair/Replacemnt	RO	\$ 600,000	\$ 600,000	\$ 600,000	\$ 600,000	\$ 600,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 6,500,000	100%	0%	0%	0%
47	EN20056	RSS Haven Avenue Repairs	RO	\$ 5,751,606	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,751,606	100%	0%	0%	0%
48	EN22005	RO Asset Management	RO	\$ -	\$ 50,000	\$ 50,000	\$ 50,000	\$ 300,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 5,450,000	100%	0%	0%	0%
49	EN17043	RP4 Primary Clarifier Rehab	RO	\$ 4,500,000	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000,000	100%	0%	0%	0%
50	EN17082	Mechanical Restoration and Upgrades	RO	\$ 4,300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,300,000	100%	0%	0%	0%
51	EN17042	Digester 6 and 7 Roof Repairs	RO	\$ 2,800,000	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,000,000	50%	0%	0%	50%
52	EN22031	RP-1 Influent Pump Station Electrical Improvements	RO	\$ -	\$ 500,000	\$ 1,700,000	\$ 800,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,000,000	100%	0%	0%	0%
53	EN22025	RP-1 Dump Station	RO	\$ -	\$ 64,000	\$ 95,400	\$ 1,855,600	\$ 106,100	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,121,100	100%	0%	0%	0%
54	EN20051	RP-1 MCB and Old Lab Building Rehab	RO	\$ 320,000	\$ 1,200,000	\$ 80,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,600,000	100%	0%	0%	0%
55	EN23020	RP-1 Solids Heat Exchanger Replacements & Upgrades	RO	\$ -	\$ -	\$ 600,000	\$ 600,000	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,500,000	0%	28%	72%	0%
56	EN19010	RP-4 Influent Screen Replacement	RO	\$ 1,460,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,460,000	100%	0%	0%	0%
57	EN23024	RP-1 TP-1 Stormwater Drainage Upgrades	RO	\$ -	\$ -	\$ 250,000	\$ 1,000,000	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,300,000	100%	0%	0%	0%
58	EN22027	RP-1 Repurpose Lab	RO	\$ -	\$ 110,000	\$ 930,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,040,000	100%	0%	0%	0%



59	EN22030	Replace Anoxic Mixers with Energy Efficient System	RO	\$ -	\$ 60,000	\$ 780,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 840,000	100%	0%	0%	0%
60	EN21040	RP-1 Solids Hot Water Loop Valves	RO	\$ 250,000	\$ 560,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 810,000	100%	0%	0%	0%
61	EN21053	RP-1 Old Effluent Structure Rehabilitation	RO	\$ 15,000	\$ 55,000	\$ 560,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 630,000	100%	0%	0%	0%
62	EN20044	RP-1 Plant 3 Primary Cover Replacement	RO	\$ -	\$ -	\$ 200,000	\$ 400,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 600,000	100%	0%	0%	0%
63	EN20041	RP-1 TP-1 Bleach Mixing Repairs	RO	\$ 586,725	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 586,725	100%	0%	0%	0%
64	EN15012	RP-1 Primary Effluent Conveyance Improve	RO	\$ 550,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 550,000	100%	0%	0%	0%
65	EN20058	RP-1 TP-1 Waste Wash Water Basin Pumps R	RO	\$ 510,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 510,000	100%	0%	0%	0%
66	EN26021	Regional Conveyance AMP	RO	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ 500,000	100%	0%	0%	0%
67	EN24020	RP-1 Dewatering Centrate Pumps	RO	\$ -	\$ -	\$ -	\$ 95,000	\$ 330,000	\$ 75,000	\$ -	\$ -	\$ -	\$ -	\$ 500,000	53%	47%	0%	0%
68	EN21042	RP-1 East Influent Gate Replacement	RO	\$ 450,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 450,000	100%	0%	0%	0%
69	EN27001	RP-1 Equalization Basin #1 Access Ramp	RO	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 35,000	\$ 106,500	\$ 300,000	\$ -	\$ 441,500	100%	0%	0%	0%
70	EN21046	CCWRF Filter Automatic Valves	RO	\$ 388,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 388,000	100%	0%	0%	0%
71	EN21054	CCWRF Filter Level Sensor Replacement	RO	\$ 388,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 388,000	100%	0%	0%	0%
72	EN21047	RP-5 Bar Screen Inlet Gate Primary Actuators Replacement	RO	\$ 370,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 370,000	100%	0%	0%	0%
73	EN21044	RP-1 Dewatering Centrate and Drainage Valves (MOV)	RO	\$ 50,000	\$ 270,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 320,000	100%	0%	0%	0%
74	EN21056	RP-1 Evaporative Cooling for Aeration Blower Building	RO	\$ -	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 300,000	100%	0%	0%	0%
75	EN20037	Agency Wide Chemical Containment Coating	RO	\$ 252,625	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 252,625	0%	0%	100%	0%
76	EN25020	RP-1 Digester Cleaning Lagoon (DCL) Lining	RO	\$ -	\$ -	\$ -	\$ -	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200,000	95%	5%	0%	0%
77	EN19009	RP-1 Energy Recovery	RO	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200,000	100%	0%	0%	0%
78	EN20045	RP-1 TP-1 Level Sensor Replacement	RO	\$ -	\$ -	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200,000	100%	0%	0%	0%
79	EN23022	RP-1 Solids Sludge Recirculating Pump Upgrades	RO	\$ -	\$ -	\$ 80,000	\$ 105,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 185,000	26%	35%	0%	39%
80	EN22021	RP-1 Digester Area Utility Water (UW) Line Replacement	RO	\$ -	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000	100%	0%	0%	0%
81	IS20007	Control System Ent Historian Enhancement	RO	\$ 45,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 45,000	100%	0%	0%	0%
<b>RO Total</b>				\$ 39,886,956	\$ 10,169,000	\$ 8,225,400	\$ 10,355,600	\$ 7,086,100	\$ 4,925,000	\$ 4,435,000	\$ 3,506,500	\$ 8,700,000	\$ 8,400,000	\$ 105,689,556				

ID #	Project #	Project Name	Fund	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	10 Year Total	PAYGO %	GRANT %	DEBT %	OUTSIDE %
82	RW15003	Recharge Master Plan Update	RW	\$ 11,500,000	\$ 3,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,500,000	100%	0%	0%	0%
83	EN22008	GWR Asset Managment Project	RW	\$ -	\$ -	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 4,000,000	100%	0%	0%	0%
84	RW15004	Lower Day Basin Improvements (RMPU PID 1	RW	\$ 2,375,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,375,000	100%	0%	0%	0%
85	EN21057	Recharge Basin Clean-up of Illegally Dumped Materials	RW	\$ 298,950	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 298,950	100%	0%	0%	0%
86	IS21008	GWR Infrastructure Replacement Project	RW	\$ 30,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 30,000	100%	0%	0%	0%
<b>RW Total</b>				\$ 14,203,950	\$ 3,000,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 21,203,950				

ID #	Project #	Project Name	Fund	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	10 Year Total	PAYGO %	GRANT %	DEBT %	OUTSIDE %
87	EN22009	WC Asset Managment Project	WC	\$ -	\$ 500,000	\$ 1,000,000	\$ 2,000,000	\$ 3,000,000	\$ 5,000,000	\$ 7,000,000	\$ 8,900,000	\$ 8,900,000	\$ 8,900,000	\$ 45,200,000	100%	0%	0%	0%
88	EN09007	1630 E Pipeline Seg B & 1630 E Reservoir	WC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,000,000	\$ 2,400,000	\$ 3,000,000	\$ -	\$ -	\$ 6,400,000	100%	0%	0%	0%
89	EN21041	RP-4 Contact Basin Cover Repair & RW Wet Well Passive Overflow Improvements	WC	\$ 350,000	\$ 3,500,000	\$ 70,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,920,000	100%	0%	0%	0%
90	EN22004	1158 East Reservoir Re-coating/painting	WC	\$ 1,550,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,550,000	100%	0%	0%	0%
91	EN20055	CCWRF Tertiary Panel Rebuild	WC	\$ 60,000	\$ 600,000	\$ 525,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,185,000	100%	0%	0%	0%
92	EN21050	8th Street RW Turnout Connection to the 1630 W Pipeline	WC	\$ 350,000	\$ 485,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 835,000	100%	0%	0%	0%
93	EN14042	1158 RWPS Upgrades	WC	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 500,000	19%	35%	46%	0%
94	EN22023	Prado Dechlor Sump Pump Replacement	WC	\$ -	\$ 360,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 360,000	100%	0%	0%	0%
95	EN17041	Orchard Recycled Water Turnout Improveme	WC	\$ 310,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 310,000	11%	17%	72%	0%
96	EN15043	SBCFCD Recycled Water Easement	WC	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250,000	0%	1%	100%	0%
97	EN15002	1158 Reservoir Site Cleanup	WC	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200,000	19%	35%	46%	0%
98	EN20022	1299 Reservoir Paint/Coating Repairs and	WC	\$ -	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000	100%	0%	0%	0%
99	EN24005	1630 West Reservoir Paint/Coating Repair	WC	\$ -	\$ -	\$ 75,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 75,000	100%	0%	0%	0%
100	EN24006	930 Reservoir Paint/Coating Repairs and	WC	\$ -	\$ -	\$ -	\$ 75,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 75,000	100%	0%	0%	0%
<b>WC Total</b>				\$ 3,570,000	\$ 5,545,000	\$ 1,670,000	\$ 2,075,000	\$ 3,000,000	\$ 6,000,000	\$ 9,400,000	\$ 11,900,000	\$ 8,900,000	\$ 8,900,000	\$ 60,960,000				

ID #	Project #	Project Name	Fund	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	10 Year Total	PAYGO %	GRANT %	DEBT %	OUTSIDE %
101	PL19005	Chino Basin Program	WW	\$ 3,542,950	\$ 3,542,950	\$ 5,307,689	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,393,589	100%	0%	0%	0%
<b>WW Total</b>				\$ 3,542,950	\$ 3,542,950	\$ 5,307,689	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,393,589				

**Capital Project List Grand Total**      \$ 166,884,165   \$ 190,622,724   \$ 147,813,627   \$ 47,745,143   \$ 21,741,212   \$ 26,658,891   \$ 28,214,108   \$ 32,290,981   \$ 99,490,015   \$ 159,195,715   \$ 920,656,581

# Appendix B

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## Proposed Non-Capital Project List

# Appendix B

## Proposed Non-Capital Project List

ID #	Project #	Project Name	Fund	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	10 Year Total	PAYGO %	GRANT %	DEBT %	OUTSIDE %
102	FM21002	Agency Wide Roofing	GG	\$ 1,780,000	\$ 1,050,000	\$ 1,050,000	\$ 630,000	\$ 575,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,085,000	50%	50%	0%	0%
103	FM20001	HQ Interior Replacements	GG	\$ -	\$ -	\$ 800,000	\$ 1,680,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,480,000	100%	0%	0%	0%
104	FM21003	Agency Wide Facilities Rehab & Repairs	GG	\$ 51,500	\$ 53,045	\$ 54,636	\$ 56,275	\$ 57,964	\$ 59,703	\$ 61,494	\$ 63,339	\$ 65,239	\$ -	\$ 523,195	100%	0%	0%	0%
105	EN20008	HQ Parking Lot FY19/20	GG	\$ 380,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 380,000	100%	0%	0%	0%
106	IS20015	SAP Roadmap & Strategy	GG	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200,000	100%	0%	0%	0%
107	IS20020	ERP Readiness Assessment	GG	\$ 150,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 150,000	75%	25%	0%	0%
108	IS21002	BIZ Cybersecurity Project	GG	\$ 140,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 140,000	50%	0%	0%	50%
109	IS20014	Technology Master Plan	GG	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000	100%	0%	0%	0%
<b>GG Total</b>				\$ 2,801,500	\$ 1,103,045	\$ 1,904,636	\$ 2,366,275	\$ 632,964	\$ 59,703	\$ 61,494	\$ 63,339	\$ 65,239	\$ -	\$ 9,058,195				

ID #	Project #	Project Name	Fund	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	10 Year Total	PAYGO %	GRANT %	DEBT %	OUTSIDE %
110	EN21016	NRWS Emergency O&M Projects FY 20/21	NC	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 1,000,000	100%	0%	0%	0%
111	PL21002	NRWS Rate Study	NC	\$ 200,000	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 400,000	60%	0%	0%	40%
112	EN19028	NRW Man Hole and Pipeline Condition Asse	NC	\$ -	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250,000	100%	0%	0%	0%
<b>NC Total</b>				\$ 300,000	\$ 550,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 1,650,000				

ID #	Project #	Project Name	Fund	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	10 Year Total	PAYGO %	GRANT %	DEBT %	OUTSIDE %
113	EN22024	RP-1 Digester Cleaning Service Contract	RO	\$ -	\$ 1,000,000	\$ 2,000,000	\$ 1,000,000	\$ 2,000,000	\$ 1,000,000	\$ 2,000,000	\$ 1,000,000	\$ 2,000,000	\$ 3,000,000	\$ 15,000,000	100%	0%	0%	0%
114	EN21019	RO Emergency O&M Projects FY 20/21	RO	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 5,000,000	100%	0%	0%	0%
115	EN21034	RO On-Call/Small Projects FY 20/21	RO	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 5,000,000	100%	0%	0%	0%
116	EN21035	RO Safety Operations and Maintenance Pro	RO	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 5,000,000	100%	0%	0%	0%
117	PA17006	Agency-Wide Aeration	RO	\$ -	\$ -	\$ 500,000	\$ 1,200,000	\$ 2,500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,200,000	100%	0%	0%	0%
118	PA21003	Agency Wide Paving	RO	\$ 260,000	\$ 800,000	\$ 800,000	\$ 800,000	\$ 1,150,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,810,000	100%	0%	0%	0%
119	EN16021	TCE Plume Cleanup	RO	\$ 3,793,979	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,793,979	100%	0%	0%	0%
120	EN19024	Regional System Asset Management (Assess	RO	\$ 3,100,000	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,200,000	100%	0%	0%	0%
121	EN26025	RP2-Preliminary Design Report for Decomm	RO	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 600,000	\$ 1,100,000	\$ 1,500,000	\$ 3,200,000	100%	0%	0%	0%
122	PA21002	Agency Wide Coatings	RO	\$ 750,000	\$ 50,000	\$ 50,000	\$ 150,000	\$ 388,810	\$ 445,975	\$ 353,354	\$ 260,955	\$ -	\$ -	\$ 2,449,094	100%	0%	0%	0%
123	PL21007	RO Planning Documents	RO	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 1,500,000	100%	0%	0%	0%
124	EN19023	Asset Management Planning Document	RO	\$ 1,100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,100,000	100%	0%	0%	0%
125	EN20043	RP-1 Pipe Gallery Staircase Evaluation	RO	\$ -	\$ -	\$ -	\$ 650,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 650,000	100%	0%	0%	0%
126	EN23021	Agency-Wide Infiltration and Inflow Study	RO	\$ -	\$ -	\$ 300,000	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 600,000	50%	0%	0%	50%
127	PL21001	Flow & Loading Supplemental Study	RO	\$ 300,000	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 600,000	100%	0%	0%	0%

128	EN23023	RP-1 Daft Pavement Improvements	RO	\$ -	\$ -	\$ 20,000	\$ 510,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 530,000	100%	0%	0%	0%
129	EN21055	RP-1 Blower Lamella Silencers Upgrades	RO	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 300,000	100%	0%	0%	0%
130	EN20038	Agency Wide Pavement Management Study	RO	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 150,000	0%	0%	100%	0%
131	PL19002	Regional Contract Facilitation	RO	\$ 150,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 150,000	100%	0%	0%	0%
132	EN26027	RP-1 & RP-4 Bird Deterrent Systems	RO	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ 100,000	100%	0%	0%	0%
133	PL17004	Wastewater Flow and Loading Study	RO	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000	100%	0%	0%	0%
134	IS21005	Upgrade Carbon Canyon to Plant Pax 4.5	RO	\$ 75,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 75,000	100%	0%	0%	0%
135	IS21007	WW Cybersecurity Assessment	RO	\$ 75,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 75,000	0%	0%	100%	0%
136	EN22029	RP-1 Repurpose Lab Assessment	RO	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000	100%	0%	0%	0%
137	EN22032	RP-1 TP-1 Stormwater Drainage Upgrades Assessment	RO	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000	0%	0%	10%	90%
138	EN21052	RP-1 Evaporative Cooling for Aeration Blower Building Study	RO	\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 40,000	100%	0%	0%	0%
139	PL17001	RO Planning Documents	RO	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	100%	0%	0%	0%
<b>RO Total</b>				\$ 11,743,979	\$ 4,025,000	\$ 5,320,000	\$ 6,335,000	\$ 7,688,810	\$ 3,195,975	\$ 4,003,354	\$ 3,510,955	\$ 4,750,000	\$ 6,150,000	\$ 56,723,073				

ID #	Project #	Project Name	Fund	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	10 Year Total	PAYGO %	GRANT %	DEBT %	OUTSIDE %
140	RW20001	SB88 Data Compliance Review	RW	\$ 69,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 69,000	100%	0%	0%	0%
<b>RW Total</b>				\$ 69,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 69,000				

ID #	Project #	Project Name	Fund	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	10 Year Total	PAYGO %	GRANT %	DEBT %	OUTSIDE %
141	EN21037	WW (Recycled Water) Planning Documents	WC	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 2,500,000	100%	0%	0%	0%
142	WR21029	Implementation of Upper SAP HCP-Recycled Water Benefits	WC	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 2,500,000	90%	0%	0%	10%
143	EN21017	WC Emergency O&M Projects FY 20/21	WC	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 1,500,000	100%	0%	0%	0%
144	EN21036	WC On-Call/Small Projects FY 20/21	WC	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 1,500,000	100%	0%	0%	0%
145	EN18021	Prado Basin AMP Annual Monitoring	WC	\$ 105,000	\$ 107,500	\$ 110,000	\$ 112,500	\$ 115,000	\$ 117,500	\$ 120,000	\$ 122,500	\$ 125,000	\$ 127,500	\$ 1,162,500	100%	0%	0%	0%
146	WR16001	Water Softener Removal Rebate Program	WC	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ -	\$ 675,000	100%	0%	0%	0%
147	EN21051	Ely Monitoring Well	WC	\$ 300,000	\$ 285,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 585,000	100%	0%	0%	0%
148	EN25031	Recycled Water Program Strategy 2025	WC	\$ -	\$ -	\$ -	\$ -	\$ 250,000	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ 500,000	100%	0%	0%	0%
149	EN22028	Philly RW Gravity Line Abandonment	WC	\$ -	\$ 250,000	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 500,000	100%	0%	0%	0%
150	EN19030	WC Asset Management (Assessment Only)	WC	\$ -	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250,000	100%	0%	0%	0%
151	PL18002	Basin Plan Amendment	WC	\$ 210,000	\$ 20,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 230,000	100%	0%	0%	0%
152	EN20031	Recycled Water Program Strategy 2020	WC	\$ 175,000	\$ 25,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200,000	0%	0%	100%	0%
153	EN19051	RW Hydraulic Modeling	WC	\$ 190,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 190,000	100%	0%	0%	0%
154	WR20029	Upper SAR HCP & Int Model-Recy Wtr Benef	WC	\$ 85,000	\$ 85,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 170,000	100%	0%	0%	0%

155	EN20050	Reservoir Maintenance	WC	\$ -	\$ -	\$ 20,000	\$ -	\$ -	\$ 20,000	\$ -	\$ -	\$ 20,000	\$ -	\$ 60,000	100%	0%	0%	0%
156	EN20049	Reservoir Maintenance	WC	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000	100%	0%	0%	0%
<b>WC Total</b>				\$ 1,990,000	\$ 1,897,500	\$ 1,255,000	\$ 987,500	\$ 1,240,000	\$ 1,262,500	\$ 995,000	\$ 997,500	\$ 1,020,000	\$ 927,500	\$ 12,572,500				

ID #	Project #	Project Name	Fund	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	10 Year Total	PAYGO %	GRANT %	DEBT %	OUTSIDE %
157	WR21027	WW (Recharged Water) Planning Documents	WW	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 2,500,000	75%	0%	0%	25%
158	WR21028	Implementation of Upper SAP HCP-Water Benefits	WW	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 2,500,000	33%	0%	0%	67%
159	WR21006	Large Landscape Retrofit Program	WW	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 2,000,000	100%	0%	0%	0%
160	WR21013	Sponsorships & Public Outreach Activities	WW	\$ 174,500	\$ 174,500	\$ 174,500	\$ 174,500	\$ 174,500	\$ 174,500	\$ 174,500	\$ 174,500	\$ 174,500	\$ -	\$ 1,570,500	100%	0%	0%	0%
161	WR18028	Chino Basin Water Bank Planning Authority	WW	\$ 600,000	\$ 600,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,200,000	100%	0%	0%	0%
162	WR21007	Residential Rebate Incentives	WW	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 1,000,000	100%	0%	0%	0%
163	WR21008	CII Rebate Incentives	WW	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 1,000,000	100%	0%	0%	0%
164	WR21025	Landscape Irrigation Tune-Ups	WW	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 800,000	100%	0%	0%	0%
165	WR21021	Regional WUE Support Tools	WW	\$ 73,000	\$ 73,000	\$ 73,000	\$ 73,000	\$ 73,000	\$ 73,000	\$ 73,000	\$ 73,000	\$ 73,000	\$ 73,000	\$ 730,000	100%	0%	0%	0%
166	WR21009	National Theater for Children	WW	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 600,000	100%	0%	0%	0%
167	WR21017	Residential Pressure Regulation Program	WW	\$ 300,000	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 600,000	100%	0%	0%	0%
168	WR21004	Garden In Every School	WW	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 450,000	100%	0%	0%	0%
169	WR16024	SARCCUP	WW	\$ 200,000	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 400,000	100%	0%	0%	0%
170	WR21002	CBWCD Leap	WW	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 400,000	100%	0%	0%	0%
171	WR21019	Residential Small Site Controller Upgrad	WW	\$ 200,000	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 400,000	100%	0%	0%	0%
172	WR21022	Landscape Design Services	WW	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 300,000	100%	0%	0%	0%
173	WR20028	Upper SAR HCP& Int. Model-Water Benefits	WW	\$ 90,000	\$ 88,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 178,000	100%	0%	0%	0%
174	WR21003	Shows That Teach	WW	\$ 16,000	\$ 16,000	\$ 16,000	\$ 16,000	\$ 16,000	\$ 16,000	\$ 16,000	\$ 16,000	\$ 16,000	\$ 16,000	\$ 160,000	100%	0%	0%	0%
175	WR21015	Landscape Training Classes	WW	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 150,000	100%	0%	0%	0%
176	WR21018	Member Agency Administered Project	WW	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000	100%	0%	0%	0%
177	WR21023	CIMIS Station	WW	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 50,000	100%	0%	0%	0%
178	WR21026	Flume Leak Detection Program	WW	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000	100%	0%	0%	0%
179	WR21030	Chino Basin Pilot Ag Program	WW	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000	100%	0%	0%	0%
180	WR21020	WUE Business Plan Model Update and Wkshp	WW	\$ 4,500	\$ 4,500	\$ 4,500	\$ 4,500	\$ 4,500	\$ 4,500	\$ 4,500	\$ 4,500	\$ 4,500	\$ 4,500	\$ 45,000	100%	0%	0%	0%
181	WR21024	WUE Research and Evaluation	WW	\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 40,000	100%	0%	0%	0%
182	PL18001	Calif. Data Collab. WUE Data Analytics	WW	\$ 5,000	\$ 5,000	\$ 5,000	\$ 2,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17,500	100%	0%	0%	0%
183	WR16025	WW Planning Documents	WW	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	100%	0%	0%	0%
184	WR20025	Landscape Irrigation Tune-Ups	WW	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	100%	0%	0%	0%
<b>WW Total</b>				\$ 3,198,000	\$ 2,956,000	\$ 1,568,000	\$ 1,565,500	\$ 1,363,000	\$ 1,363,000	\$ 1,363,000	\$ 1,363,000	\$ 1,363,000	\$ 1,188,500	\$ 17,291,000				

**Non-Capital Project List Grand Total**

\$ 20,102,479	\$ 10,531,545	\$ 10,147,636	\$ 11,354,275	\$ 11,024,774	\$ 5,981,178	\$ 6,522,848	\$ 6,034,794	\$ 7,298,239	\$ 8,366,000	\$ 97,363,768
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# Appendix C

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## Proposed IERCA Project List

# Appendix C

## Proposed IERCF Project List

ID #	Project #	Project Name	Fund	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	10 Year Total	PAYGO %	GRANT %	DEBT %	OUTSIDE %
185	RA11001	RCA Capital Replacement	RCA											\$ -	100%	0%	0%	0%
186	RA14003	IERCF Receiving Pit and Drain	RCA											\$ -	100%	0%	0%	0%
187	RA15001	IERCF Baghouse and Dust Collection	RCA											\$ -	100%	0%	0%	0%
188	RA15004	Server Replacement	RCA											\$ -	100%	0%	0%	0%
189	RA16003	IERCF Data Server Replacement	RCA											\$ -	100%	0%	0%	0%
190	RA17001	IERCF Transition Air Duct Improvement	RCA	\$ 100,000										\$ 100,000	100%	0%	0%	0%
191	RA17002	Replace Printers - IERCF	RCA											\$ -	100%	0%	0%	0%
192	RA17007	IERCF Building Improvements	RCA											\$ -	100%	0%	0%	0%
193	RA18002	IERCF Solar Photovoltaic Power	RCA											\$ -	100%	0%	0%	0%
194	RA19001	IERCF Pug Mill Improvements	RCA	\$ 100,000										\$ 100,000	100%	0%	0%	0%
195	RA19002	IERCF Trommel Screen Improvement	RCA		\$ 200,000			\$ 200,000					\$ 200,000	\$ 600,000	100%	0%	0%	0%
196	RA19003	IERCF Front End Loader Replacement	RCA	\$ 400,000		\$ 400,000								\$ 800,000	100%	0%	0%	0%
197	RA19004	IERCF Cybersecurity Project	RCA											\$ -	100%	0%	0%	0%
198	RA19101	IERCF Capital Replacement	RCA											\$ -	100%	0%	0%	0%
199	RA20001	IERCF Amendment Hopper Improvement	RCA											\$ -	100%	0%	0%	0%
200	RA20002	IERCF Biosolids Hopper Improvement	RCA											\$ -	100%	0%	0%	0%
201	RA20003	IERCF Belt Conveyor Improvement	RCA			\$ 250,000			\$ 200,000		\$ 200,000			\$ 650,000	100%	0%	0%	0%
202	RA20004	IERCF Mis. Fan Improvements	RCA				\$ 300,000							\$ 300,000	100%	0%	0%	0%
203	RA20005	RCA Capital Replacement	RCA	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 5,000,000	100%	0%	0%	0%
204	RA20006	RCA Exterior Paint	RCA											\$ -	100%	0%	0%	0%
205	RA20007	RCA Compost Storage Convey	RCA											\$ -	100%	0%	0%	0%
206	RA21001	RCA Fire Sprinkler Improvement	RCA	\$ 300,000	\$ 300,000									\$ 600,000	100%	0%	0%	0%
207	RA23001	IERCF Inner Roof Lining Repair	RCA			\$ 200,000	\$ 200,000							\$ 400,000	100%	0%	0%	0%
208	RA2401	RCA Corrosion Replacement	RCA				\$ 200,000							\$ 200,000	100%	0%	0%	0%
209	RA2501	RCA Compost Storage Facility	RCA					\$ 700,000						\$ 700,000	100%	0%	0%	0%

**RCA Total** \$ 1,400,000 \$ 1,000,000 \$ 1,350,000 \$ 1,200,000 \$ 1,400,000 \$ 700,000 \$ 500,000 \$ 700,000 \$ 500,000 \$ 700,000 \$ 9,450,000

**IERCF Project List Grand Total**

**\$ 1,400,000 \$ 1,000,000 \$ 1,350,000 \$ 1,200,000 \$ 1,400,000 \$ 700,000 \$ 500,000 \$ 700,000 \$ 500,000 \$ 700,000 \$ 9,450,000**

# Appendix D

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## Proposed Grant Dependent Project List

# Appendix D

## Proposed Grant Dependent Project List

ID #	Project #	Project Name	Fund	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	10 Year Total	PAYGO %	GRANT %	DEBT %	OUTSIDE %
210	EN16060	Recycled Water Inter-Connections	WC	\$ 1,500,000	\$ 3,000,000	\$ 18,000,000	\$ 40,000,000	\$ 10,500,000	\$ 3,500,000	\$ 3,500,000	\$ -	\$ -	\$ -	\$ 80,000,000	0%	100%	0%	0%
211	EN16065	RW Connections to JCSD	WC	\$ 4,255,200	\$ 7,210,200	\$ 18,746,520	\$ 2,884,080	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 33,096,000	0%	100%	0%	0%
<b>WC Total</b>				\$ 5,755,200	\$ 10,210,200	\$ 36,746,520	\$ 42,884,080	\$ 10,500,000	\$ 3,500,000	\$ 3,500,000	\$ -	\$ -	\$ -	\$ 113,096,000				
<b>Proposed Grant List Grand Total</b>				\$ 5,755,200	\$ 10,210,200	\$ 36,746,520	\$ 42,884,080	\$ 10,500,000	\$ 3,500,000	\$ 3,500,000	\$ -	\$ -	\$ -	\$ 113,096,000				



## **Inland Empire Utilities Agency**

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