Executive SUMMARY

Fiscal Years 2022-23 and 2023-24

ADOPTED JUNE 22, 2022

Orange County Sanitation District, California

OC SAN
ORANGE COUNTY SANITATION DISTRICT

Orange County Sanitation District, California

BUDGET EXECUTIVE SUMMARY

Fiscal Years 2022-23 and 2023-24

ORANGE COUNTY SANITATION DISTRICT

OUR MISSION

"To protect public health and the environment by providing effective wastewater collection, treatment, and recycling."

Trickling Filter at Plant No. 1 in Fountain Valley

GFOA BUDGET PRESENTATION AWARD

GOVERNMENT FINANCE OFFICERS ASSOCIATION

Distinguished Budget Presentation Award

PRESENTED TO

Orange County Sanitation District

California

For the Biennium Beginning

July 1, 2020

Christopher P. Morrill

Executive Director

The Government Finance Officers Association of the United States and Canada (GFOA) presented a Distinguished Budget Presentation Award to the Orange County Sanitation District, California, for its biennial budget for the biennium beginning July 1, 2020.

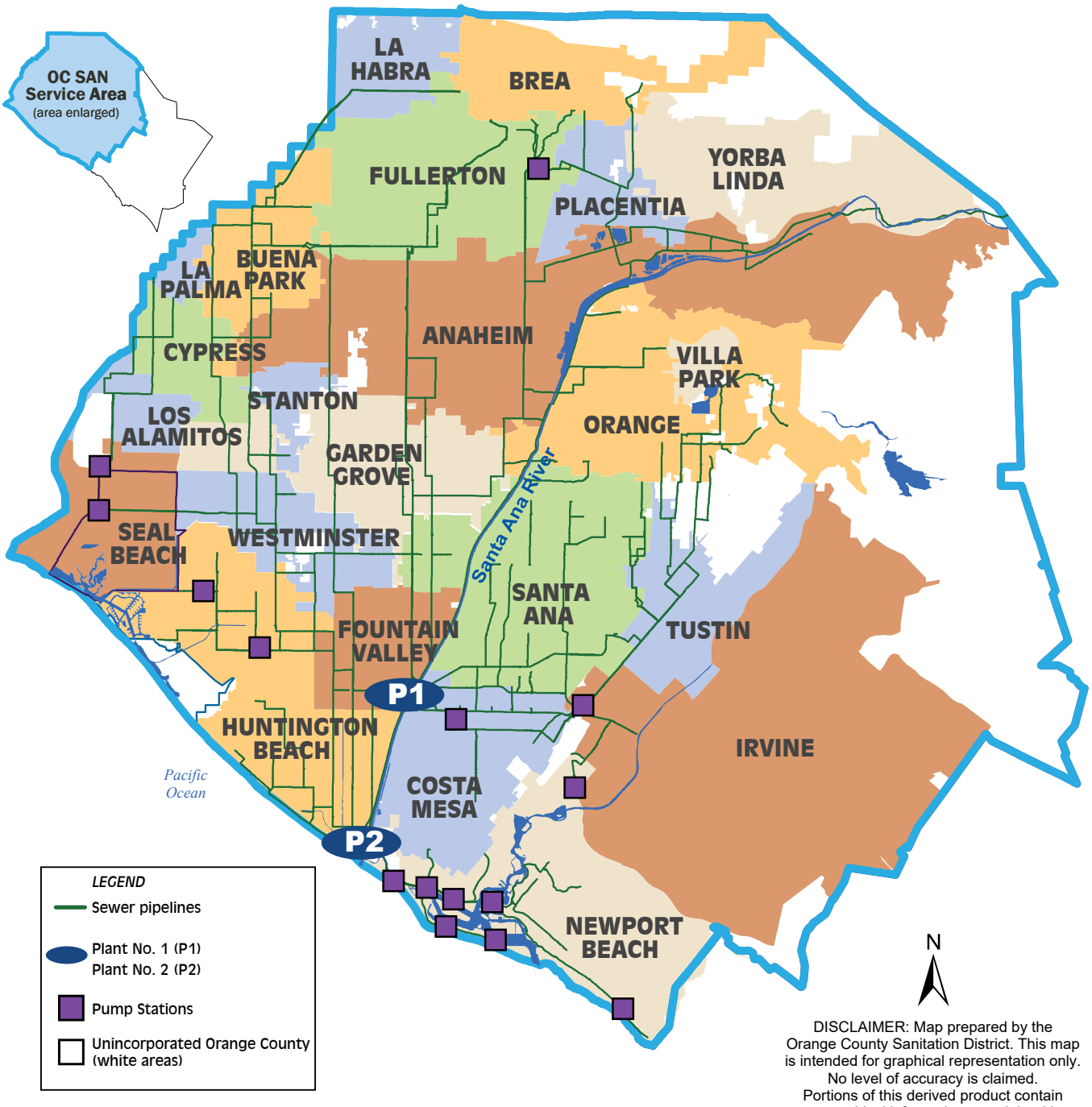
In order to receive this award, a government unit must publish a budget document that meets program criteria as a policy document, as an operations guide, as a financial plan, and as a communication device.

The award is valid for a period of two years only. We believe our current budget continues to conform to the program requirements, and we are submitting it to GFOA to determine its eligibility for another award.

TABLE OF CONTENTS

OC SAN SERVICE AREA

Orange County Sanitation District
Service Area and Treatment Plant Locations
in Orange County, California



DISCLAIMER: Map prepared by the Orange County Sanitation District. This map is intended for graphical representation only. No level of accuracy is claimed. Portions of this derived product contain geographical information copyrighted by Rand McNally 2013. All Rights Reserved. REVISED: 2018

BOARD OF DIRECTORS

Agency/City	Active Director	Alternate Director
Anaheim	Stephen Faessel	Gloria Ma'ae
Brea	Glenn Parker	Cecilia Hupp
Buena Park	Art Brown	Connor Traut
Cypress	Paulo Morales	Anne Hertz-Mallari
Fountain Valley	Patrick Harper	Ted Bui
Fullerton	Jesus J. Silva	Nick Dunlap
Garden Grove	Steve Jones	John O'Neill
Huntington Beach	Kim Carr	Dan Kalmick
Irvine	Anthony Kuo	Farrah N. Khan
La Habra	Rose Espinoza	Steve Simonian
La Palma	Marshall Goodman	Nitesh Patel
Los Alamitos	Ron Bates	None
Newport Beach	Brad Avery	Joy Brenner
Orange	Kim Nichols	Chip Monaco
Placentia	Chad Wanke	Ward Smith
Santa Ana	Johnathan Ryan Hernandez	Nelida Mendoza
Seal Beach	Sandra Massa-Lavitt	Schelly Sustarsic
Stanton	David Shawver	Carol Warren
Tustin	Ryan Gallagher	Austin Lumbard
Villa Park	Chad Zimmerman	Robert Collacott

Sanitary/Water Districts

Costa Mesa Sanitary District (CMSD)	Robert Ooten	Art Perry
Midway City Sanitary District (MCSD)	Andrew Nguyen	Mark Nguyen
Irvine Ranch Water District (IRWD)	John Withers	Douglas Reinhart
Yorba Linda Water District (YLWD)	Brooke Jones	Tom Lindsey

County Areas

Member of the Board of Supervisors	Donald P. Wagner	Doug Chaffee

BOARD COMMITTEES

Steering Committee

John Withers, Board Chair (IRWD)
Chad Wanke, Board Vice-Chair (Placentia)
Glenn Parker, Chair, Administration Committee (Brea)
Brooke Jones, Chair, Operations Committee (YLWD)
Jesus J. Silva, LaPA Committee (Fullerton)
Ryan Gallagher, Member-At-Large (Tustin)
Sandra Massa-Lavitt, Member-At-Large (Seal Beach)

Administration Committee

Glenn Parker, Chair (Brea)
Anthony Kuo, Vice-Chair (Irvine)
Brad Avery (Newport Beach)
Ron Bates (Los Alamitos)
Art Brown (Buena Park)
Kim Carr (Huntington Beach)
Rose Espinoza (La Habra)
Marshall Goodman (La Palma)
Patrick Harper (Fountain Valley)
Andrew Nguyen (MCSD)
David Shawver (Stanton)
John Withers, Board Chair (IRWD)
Chad Wanke, Board Vice-Chair (Placentia)

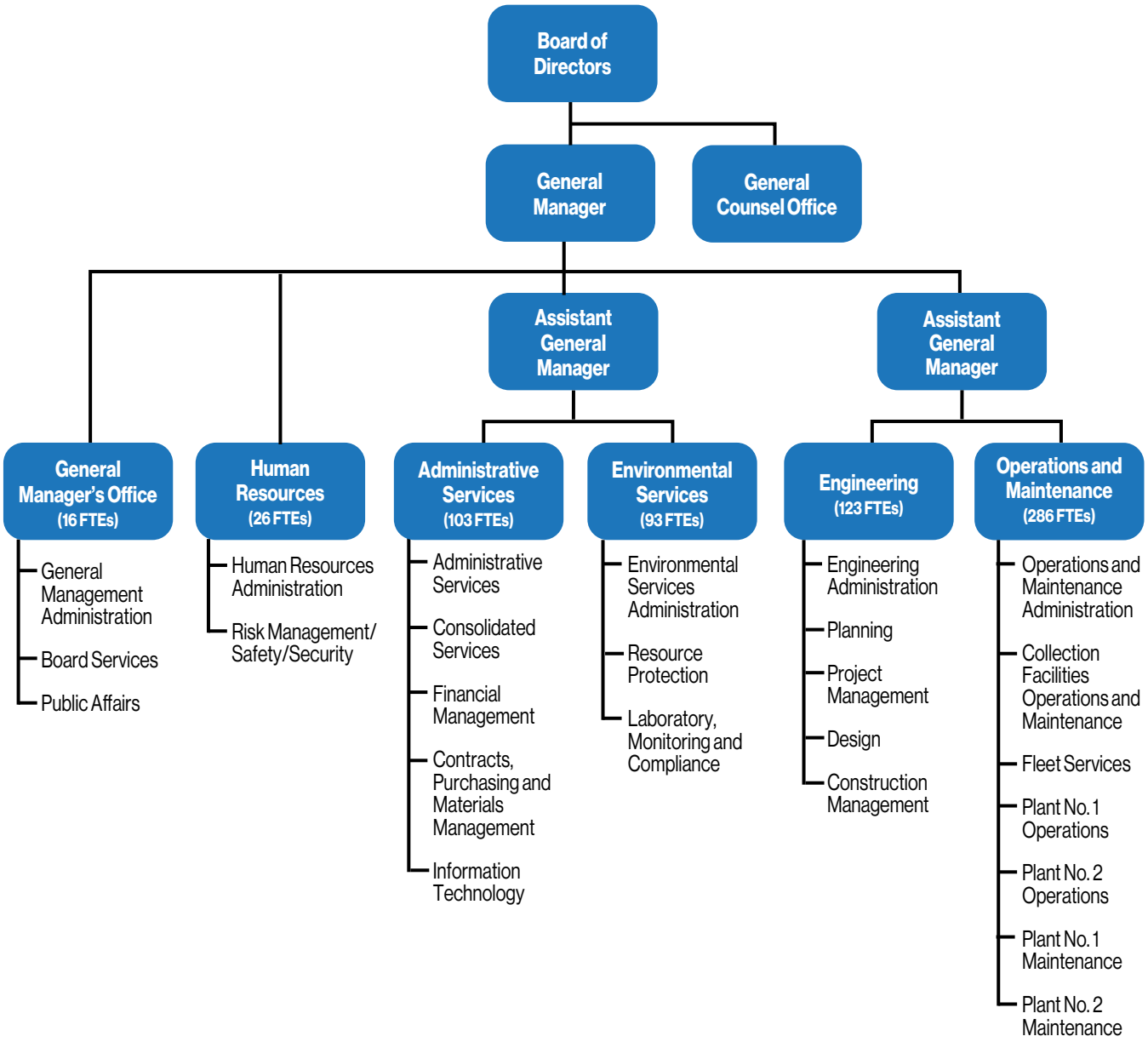
Operations Committee

Brooke Jones, Chair (YLWD)
Ryan Gallagher, Vice-Chair (Tustin)
Stephen Faessel (Anaheim)
Johnathan Ryan Hernandez (Santa Ana)
Steve Jones (Garden Grove)
Sandra Massa-Lavitt (Seal Beach)
Paulo Morales (Cypress)
Kim Nichols (Orange)
Bob Ooten (CMSD)
Jesus J. Silva (Fullerton)
Donald P. Wagner (Board of Supervisors)
Chad Zimmerman (Villa Park)
John Withers, Board Chair (IRWD)
Chad Wanke, Board Vice-Chair (Placentia)

Legislative and Public Affairs Committee

Jesus Silva, Board Chair (Fullerton)
Marshall Goodman, Board Vice-Chair (La Palma)
Kim Carr, Member-At-Large (Huntington Beach)
Anthony Kuo, Member-At-Large (Irvine)
Andrew Nguyen, Member-At-Large (MCSD)
John Withers, Board Chair (IRWD)
Chad Wanke, Board Vice-Chair (Placentia)

ORGANIZATION CHART



ADMINISTRATIVE OFFICIALS

Management Team

General Manager ..... **James D. Herberg**

Assistant General Manager ..... **Robert Thompson**

Assistant General Manager and Director of Finance and Administrative Services ..... **Lorenzo Tyner**

Director of Engineering ..... **Kathy Millea**

Director of Environmental Services ..... **Lan C. Wiborg**

Director of Human Resources ..... **Celia Chandler**

Director of Operations & Maintenance ..... **Riaz Moinuddin**

General Counsel ..... **Bradley R. Hogin**

Bar Screen Facility and Influent Pump Station at Plant No. 2 in Huntington Beach

MESSAGE FROM THE GENERAL MANAGER

June 1, 2022

Honorable Chair and Board of Directors:

I am pleased to submit the Orange County Sanitation District's (OC San) Proposed Budget for fiscal years 2022-23 and 2023-24. This document lays out the framework of OC San's activities during the next two years and serves as a source of information for OC San's Board of Directors, our ratepayers, and our employees. This budget includes the operational, capital, and debt service expenditures necessary to cost-effectively support our mission and execute the Strategic Plan adopted by our Board of Directors in November 2021.

OC San's proposed fiscal year 2022-23 total Operating and Capital Improvement Program (CIP) budget is $476.5 million, which is an increase of $61 million (14.7 percent) compared to the fiscal year 2021-22 budget. Proposed CIP expenditures are increasing by $43.6 million, while the Operating Budget includes an increase of $17.4 million.

The Operating Budget increase is primarily driven by increased chemical, utility, and infrastructure maintenance/repair costs. The historically high inflation that has impacted the nation's economy over the past year is also driving up OC San's cost of doing business. Some of the Operating Budget increase is also due to $4.3 million in charges being moved from the CIP to the Operating Budget in accordance with accounting standards. During the budget preparation process, I met with each of the departments to ensure their budget proposals were prudent and cost-effective and that we are taking steps to mitigate the impacts of escalating costs for materials, supplies and services.

I would like to highlight some of our areas of focus for the next two years:

- **Operational Readiness** — OC San continues to a look ahead, preparing for our future infrastructure needs and for emergency events such as line breaks, earthquakes, and potential cybersecurity breaches. We are updating our Business Continuity Plans and conducting tabletop exercises for emergency scenarios to allow us to respond quickly and effectively without compromising our mission or levels of service. This focus on preparation, response, and recovery has served us well during the COVID-19 pandemic as we continued to provide uninterrupted service while making progress on important projects to ensure that we continue to deliver our mission into the future.

- **Expanded Recycling Efforts** — In partnership with the Orange County Water District (OCWD), our agency continues to move forward with the final expansion of the Groundwater Replenishment System (GWRS). Scheduled for completion in 2023, the final expansion will allow our agencies to recycle 100 percent of OC San's reclaimable wastewater, making the GWRS capable of providing a reliable water source for over one million people in central and northern Orange County.

- **Headquarters Complex** — Construction of our headquarters building which will house OC San's centralized administrative functions is underway and scheduled to be completed in late 2023. Efforts are also ongoing to construct the pedestrian bridge that will connect the new building with Reclamation Plant No. 1. When the new headquarters is complete, outdated office buildings currently located on the plant site will be demolished, freeing up space for future wastewater treatment infrastructure.

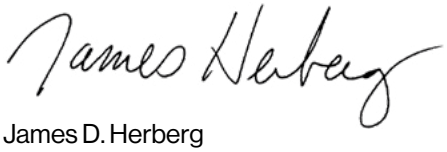
- **Capital Improvement Program (CIP)** — OC San continues to construct essential wastewater infrastructure, investing $500 million in projects in the next year and a half. These projects are focused on upgrading aging infrastructure incorporating climate resiliency, seismic risk, and maximizing resource recovery. While the COVID-19 pandemic has resulted in operational modifications, OC San's CIP has not been significantly impacted.

- **Infrastructure Reliability and Asset Management** — It is essential for OC San's infrastructure to operate continuously day and night. To ensure the reliability of our $11 billion wastewater system, we evaluate our infrastructure annually as part of the Asset Management Plan. This annual plan updates the state of OC San's assets and includes integrated planning for recurring maintenance, repairs, and CIP implementation. The plan lays out how we will operate and maintain those assets to deliver the required level of service at the lowest lifecycle cost with an acceptable level of risk. The proposed budget includes $32.1 million in repairs and maintenance for next year.

FISCAL YEARS 2022-23 AND 2023-24 BUDGET

- **Safety and Security** — Capital projects, maintenance activities, drafting of an implementation plan for a Voluntary Protection Program Certification, and training to address safety in our workplace are all included in this budget. The proposed budget includes enhancements to our physical, electronic, and cyber security infrastructure.
- **Staffing Cost Containment** — Overall, operational staffing levels will remain static for the next few years, while seven new positions are proposed in the Engineering Department to support the increased level of CIP projects.
- **Strategic Planning** — In November 2021, the Board adopted an updated Strategic Plan setting the policy framework and priorities for the next two years. This plan is a tool that will help ensure that our efforts throughout the organization are aligned with the Board's priorities.

This budget supports the goals and levels of service included in OC San's Strategic Plan and positions us well to proactively manage in the coming years. OC San will continue to provide wastewater collection, treatment, and recycling as well as facilities maintenance, ocean monitoring, and many other services while keeping rates among the lowest in California. As we enter the last year of the five-year rate plan, OC San will begin the evaluation process to determine the necessary future rate structure to continue to provide these essential services.



James D. Herberg
General Manager
Orange County Sanitation District

Trickling Filter and Clarifiers at Plant No. 1 in Fountain Valley

Table of Contents

FINANCIAL SUMMARY/OVERVIEW AND BUDGETARY ISSUES

Budget Overview

Orange County Sanitation District's (OC San) proposed FY 2022-23 and FY 2023-24 operating and capital improvement budgets total $476.5 million and $532.5 million, respectively. The increase in the FY 2022-23 budget over the FY 2021-22 projected spending of $389.2 million is primarily due to the timing of construction cash outlays, in addition to increases in salaries and benefits, operating supplies, utilities, and repairs and maintenance. The increase in the FY 2023-24 budget is primarily due to the timing of construction cash outlays as we meet our infrastructure needs. The budget continues to reflect the agency's ongoing efforts to streamline operations.

OC San's proposed Capital Improvement Program (CIP) budgets for FY 2022-23 and FY 2023-24 are $268.2 million and $315.3 million, respectively, net of savings and deferrals. This CIP budget supports collection system, joint works treatment and disposal system improvement projects.

Financing

OC San uses long-term Certificates of Participation (COP) for financing capital improvements that cannot be completely funded from current revenue. Before any new debt is issued, the impact of debt service payments on total annual fixed costs is analyzed. Total COP indebtedness, as of July 1, 2022, will be $819.8 million. No new money debt financings are currently forecasted to assist in the funding of the $3.1 billion in capital improvements required over the next 10 years.

Staffing

Reflecting the organization's commitment to meet the operational standards and regulatory requirements, the budget reflects an increase of eight authorized full time equivalent (FTE) positions for FY 2022-23 and an additional one FTE in FY 2023-24 as staffing is proposed at 647 FTE and 648 FTE positions, respectively.

Personnel costs will increase primarily due to additional staff and anticipated increases in salaries and wages for all employee bargaining units based on the Memorandums of Understanding.

OC San will continue to effectively manage these expenses with approximately 20.7 percent of the budget allocated to employee costs, much less than most other government agencies.

Cost of Treatment

The agency's two treatment plants, located in Fountain Valley and Huntington Beach, process about 185 million gallons of wastewater each day generated by approximately 2.6 million people residing within central and northwest Orange County and the businesses that operate within this service area. The proposed budget to operate, maintain and manage our sewage collection, treatment, and disposal system, including self-insurance requirements, for the next two years is $204.8 million and $213.7 million.

The cost per million gallons of wastewater treated (an industry-wide performance measurement) is expected to increase $197, or 7.1 percent, in FY 2022-23 to $2,979. The increase in the cost per million gallons is due to the increase in the operating budget.

Sewer Service Fees

The FY 2022-23 single family residential rates are scheduled to increase by approximately one percent from $343 to $347. The FY 2023-24 rates will be determined by the rate study currently underway. OC San's rates are well below the statewide average sewer rate of $523 as reported in a 2018 survey of 963 agencies in California.

Groundwater Replenishment System (GWRS)

The OC San Strategic Plan includes water reclamation. With the Orange County Water District (OCWD), OC San completed the GWRS, the nation's largest water reclamation project, in January 2008.

The original GWRS facility reclaimed 70 million gallons of water a day (MDG), eliminating the need to build a second outfall which could cost more than $200 million. OC San and OCWD equally shared the expenses of this project and approximately $44 million in Federal and State grants that were received to offset part of the total costs.

Initial expansion of GWRS increased the production of reclaimed water to 100 million gallons a day. This expansion, which was funded entirely by the OCWD, was completed in early 2015. OC San is directing all reclaimable flows from Plant No. 1 to OCWD in support of providing maximum amounts of specification water for reclamation.

The GWRS Final Expansion will be funded solely by the OCWD. OC San currently has two active projects supporting the GWRS Final Expansion. The costs of these projects will be reimbursed by the OCWD. The Final Expansion of the GWRS is expected to be online in 2023, bringing the total GWRS capacity to 130 MGD of drinking water.

FISCAL YEARS 2022-23 AND 2023-24 BUDGET

Odor Control Air Scrubbers at Plant No. 1 in Fountain Valley

Capital Improvement Program (CIP)

The proposed CIP budget for FY 2022-23, net of savings and deferrals, is $268.2 million.

Over the next 10 years, OC San's Capital Improvement Program will:

- At Reclamation Plant No. 1:
  - o Rehabilitate the headworks, digester gas handling systems, secondary treatment plant (AS-1), utility systems, and complete central generation engine overhauls.
  - o Replace three primary clarifiers.
  - o Perform various structural upgrades for seismic deficiencies.
- At Treatment Plant No. 2:
  - o Rehabilitate digester gas handling systems, digesters, utility systems, the outfall and its pumping system, secondary treatment aeration basins and complete central generation engine overhauls.
  - o Replace a third of the primary treatment facilities.
  - o Construct a new digester complex, interim food waste receiving facility, and odor control improvements.
  - o Perform various structural upgrades for seismic deficiencies.
- For Support Facilities:
  - o Construct a new headquarters complex.
  - o Construct a new operations center at Plant No. 2.
  - o Perform security and southern perimeter improvements and Plant No. 1.
  - o Replace the central laboratory.
- Complete all Projects in support of Groundwater Replenishment System (GWRS) final expansion.
- Replace, improve, or rehabilitate identified pump stations and trunk sewers in the collections system.

FINANCIAL SUMMARY/OVERVIEW AND BUDGETARY ISSUES

Projects Driving the CIP

Over the next 24 months, the largest capital cash outlays are:

- Headworks Rehabilitation & Expansion at Plant No. 1 — $112 million ($340 million total budget).
- Headquarters Complex at Plant No. 1 — $75.8 million ($167.5 million total budget).
- Primary Treatment Rehabilitation at Plant No. 2 — $66.5 million ($188 million total budget).
- Ocean Outfall System Rehabilitation— $35 million ($166 million total budget).
- Gisler-Red Hill Interceptor and Baker Force Main Rehabilitation— $27.9 million ($44.4 million total budget).
- Rehabilitation of Western Regional Sewers— $29.4 million ($101 million total budget).

Operating Budget Increase — $19.0M

The operations budget for the collection, treatment, and disposal of wastewater, along with self-insurance requirements is proposed at $204.8 million, a $19.0 million (10.2 percent) increase above FY 2021-22 projected expenditures. In FY 2023-24, it is projected to increase by $8.9 million (4.3 percent).

Although some expenses will increase or decrease slightly, the overall increase to the operating budget in FY 2022-23 over the FY 2021-22 projected is primarily attributable to five specific areas:

Salaries and Benefits — $7.6M Increase

Personnel costs are being proposed at $7.6 million, or 7.3 percent increase over the prior year projection mainly due to proposed additional staff, cost of living adjustments anticipated in the Memorandums of Understanding for all employee bargaining units and increased insurance premiums and retirement contributions. There is a proposed increase of eight full time equivalent (FTE) staff positions in FY 2022-23 and an additional one FTE staff position in FY 2023-24 bringing the proposed total FTE count 647 and 648, respectively.

Contractual Services — $2.5M Increase

The increase in contractual services in FY 2022-23 is primarily for hauling and fuel costs associated with solids removal.

Professional Services — $2.6M Increase

The increase in professional services in FY 2022-23 is for legal fees and technical consulting fees on projects and studies.

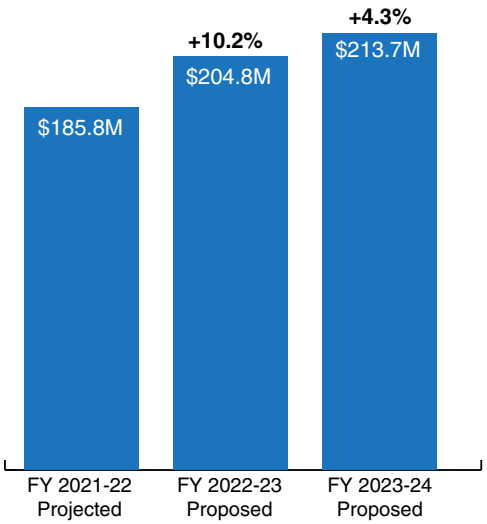
Utilities — $1.9M Increase

This expense category is telephone, natural gas, electricity, and water. Costs are proposed to increase based on inflation and increased unit costs, mainly for natural gas and electricity.

Operating Materials and Supplies — $2.6M Increase

OC San uses chemical coagulants to improve solids removal efficiencies in the primary clarifiers, add to digested sludge prior to dewatering to aid in coagulation, improving the sludge and water separation process, and add to the waste activated sludge dissolved air flotation thickeners (DAFTs) to improve solids coagulation. Odor control chemicals are used in both the treatment plants and the collection system. Both hauling and unit costs are expected to increase in FY 2022-23.

Operating Expenses (in millions)



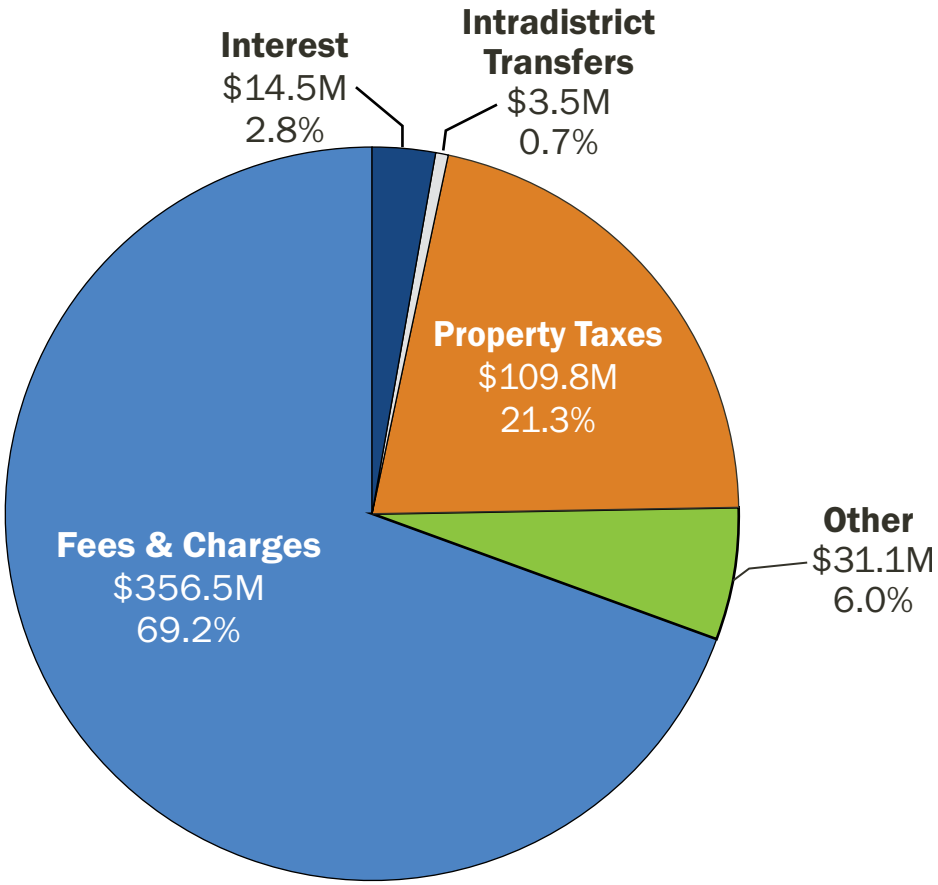
Operating and Self-Insurance expenses increase $19.0 million (10.2%) in FY 2022-23 and increase $8.9 million (4.3%) in FY 2023-24.

FISCAL YEARS 2022-23 AND 2023-24 BUDGET

Headworks Rehab Construction at Plant No. 1 in Fountain Valley

FINANCIAL SUMMARY/FUNDING SOURCES BY CATEGORY

Where The Money Comes From



Funding Sources by Category (in millions)

Category	2020-21 Actual	2021-22 Projected	2022-23 Proposed	2023-24 Proposed
Service Fees	$311.8	$311.7	$326.1	$339.2
Property Taxes	98.3	107.6	109.8	112.1
Permit User Fees	9.9	12.4	12.5	12.9
Capital Facilities Capacity Charges	21.0	17.2	17.9	18.5
Interest	28.7	5.8	14.5	13.7
Intradistrict Transfers	19.7	0.0	3.5	3.5
Debt Proceeds	0.0	0.0	0.0	0.0
Other Revenue	12.5	27.2	31.1	26.1
Total Funding Sources	$501.9	$481.9	$515.4	$526.0

FISCAL YEARS 2022-23 AND 2023-24 BUDGET

OC San has a variety of revenue sources available for operating and capital expenses. The major revenue sources are:

General Service Fees — $326.1M

User fees are ongoing fees for service paid by customers connected to the sewer system.

A property owner, or user, does not pay user fees until connected to the sewer system and receiving services. Once connected, users are responsible for their share of the system's costs, both fixed and variable, in proportion to their demand on the system. These fees are for both Single Family Residences (SFR) and Multiple Family Residences (MFR).

Property Taxes — $109.8M

The County of Orange is permitted by State law (Proposition 13) to levy taxes at one percent of full market value (at time of purchase) and can increase the assessed value no more than two percent per year. OC San receives a share of the basic levy proportionate to what was received in the 1976 to 1978 period, less $3.5 million, the amount that represents the State's permanent annual diversion from special districts to school districts that began in 1992-93. OC San's share of this revenue is first dedicated for the payment of debt service.

Permit User Fees — $12.5M

Permit user fees are paid by large industrial and commercial property owners connected to the sewer system. These fees are for the owner's share of the system's costs, both fixed and variable, in proportion to the user's demand on the system.

Since the inception of the Permit User Fee Program in 1970, users of OC San's system that discharge high volumes or high strength wastewater have been required to obtain a discharge permit and pay extra fees for the costs of service.

Capital Facilities Capacity Charges (CFCC) — $17.9M

The Capital Facilities Capacity Charge is a one-time charge imposed at the time a building or structure is newly connected to OC San's system, directly or indirectly, or an existing structure or category of use is expanded or increased. This charge pays for OC San facilities that exist at the time the charge is imposed, or to pay for new facilities to be constructed in the future that will benefit the property being charged.

Interest Earnings — $14.5M

Interest earnings are generated from the investment of accumulated reserves consisting of a cash flow/ contingency, a capital improvement, a renewal/ replacement, and a self-insurance reserve.

Intradistrict Transfers — $3.5M

In accordance with Amendment No. 2 to the Agreement for Purchase and Sale of Capacity Rights in Treatment, Disposal and Sewer Facilities between Irvine Ranch Water District (IRWD) and OC San dated November 15, 1995, ownership is adjusted annually to reflect the current equity percentage ownership based on sewage flows.

Debt Proceeds — $0M

Certificates of Participation (COPs) are OC San's primary mechanism for financing capital projects. COPs are repayment obligations based on a lease or installment sale agreement. COPs are not viewed as "debt" by the State of California, but rather a share in an installment arrangement where OC San serves as the purchaser.

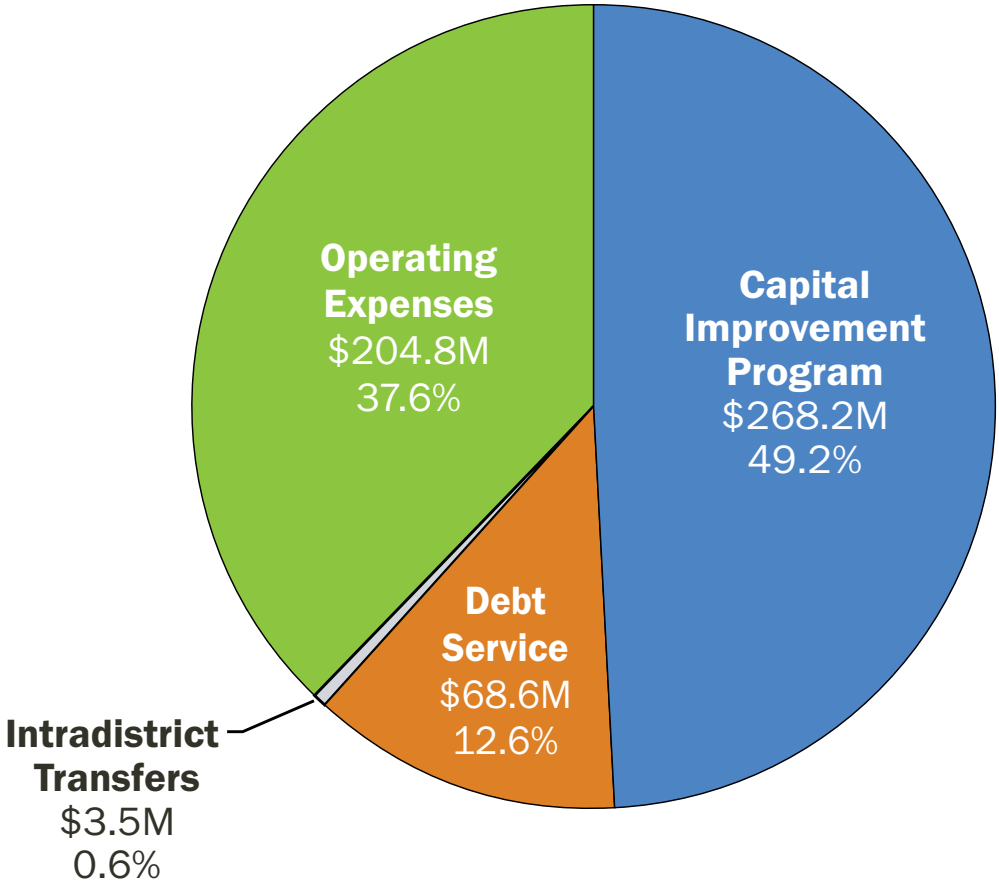
No new money debt issuances are being proposed over the next two fiscal years as the $3.1 billion in future replacement, rehabilitation, and refurbishment projects anticipated over the next ten years will be adequately funded through current sewer service fee charges and existing reserves.

Other Revenue — $31.1M

Other revenue includes self-insurance assessments for workers' compensation and general liability coverage and project reimbursements as well as miscellaneous revenue such as rents and leases.

FINANCIAL SUMMARY/FUNDING USES BY CATEGORY

Where The Money Goes



Funding Uses by Category (in millions)

Category	2020-21 Actual	2021-22 Projected	2022-23 Proposed	2023-24 Proposed
Capital Improvement Program, Net	$161.2	$203.3	$268.2	$315.3
Operating Expenses	164.4	185.8	204.8	213.7
Debt Service*	73.1	70.7	68.6	68.6
Intradistrict Transfers	19.7	0.0	3.5	3.5
Total Funding Uses	$418.4	$459.8	$545.1	$601.2

**The fiscal year 2021-22 debt service amount excludes the Revenue Refunding issues 2021A and 2022A for OC San's maturing and callable debt.*

FISCAL YEARS 2022-23 AND 2023-24 BUDGET

OC San budgets its funds in four distinct areas:

Capital Improvement Program (CIP) — $268.2M

To provide an appropriate level of service to OC San's rate payers, large capital improvements are required. The CIP provides for the management and implementation of these improvements. The CIP budget includes specific projects as well as an allocation for anticipated replacement, rehabilitation, or refurbishment (RRR) projects where detailed job plans have not yet been prepared. The authorized budgets for specific CIP projects for FY 2022-23 and FY 2023-24 total $284.6 million and $339.3 million, respectively. However, the net CIP cash outlays, which includes future rehabilitation and replacement less savings and deferrals, are budgeted at $268.2 million and $315.3 million for each year, respectively.

Operating Expenses — $204.8M

The proposed budget allocates resources to operate, maintain and manage our sewage collection, treatment, and disposal system, and for any associated administrative or technical requirements, along with the associated self-insurance costs.

Debt Service — $68.6M

This is the cost of repaying debt. Long-term debt financing allows OC San to complete large multi-year capital projects by providing funds not always immediately available.

Intradistrict Transfers — $3.5M

In accordance with Amendment No. 2 to the Agreement for Purchase and Sale of Capacity Rights in Treatment, Disposal and Sewer Facilities between IRWD and OC San dated November 15, 1995, ownership is adjusted annually to reflect the current equity percentage ownership based on sewage flows.

Digesters at Plant No. 1 in Fountain Valley

COLLECTION, TREATMENT AND RECYCLING PROCESS OVERVIEW

OC San's system includes approximately 388 miles of sewers that convey wastewater generated within OC San's service area to its two treatment facilities, Reclamation Plant No. 1 located in the City of Fountain Valley, and Treatment Plant No. 2 located in the City of Huntington Beach.

Influent wastewater undergoes Preliminary Treatment upon entry to the treatment plants where it is filtered through bar screens, and grit and debris are removed. It then flows to Primary Treatment, which consists of large settling basins where solids are settled out, enhanced by the addition of chemicals, and sent to Solids Processing. Wastewater then flows to Secondary Treatment, which is a biological process using either the trickling filter or activated sludge process. Solids removed in Secondary Treatment are also sent to digestion.

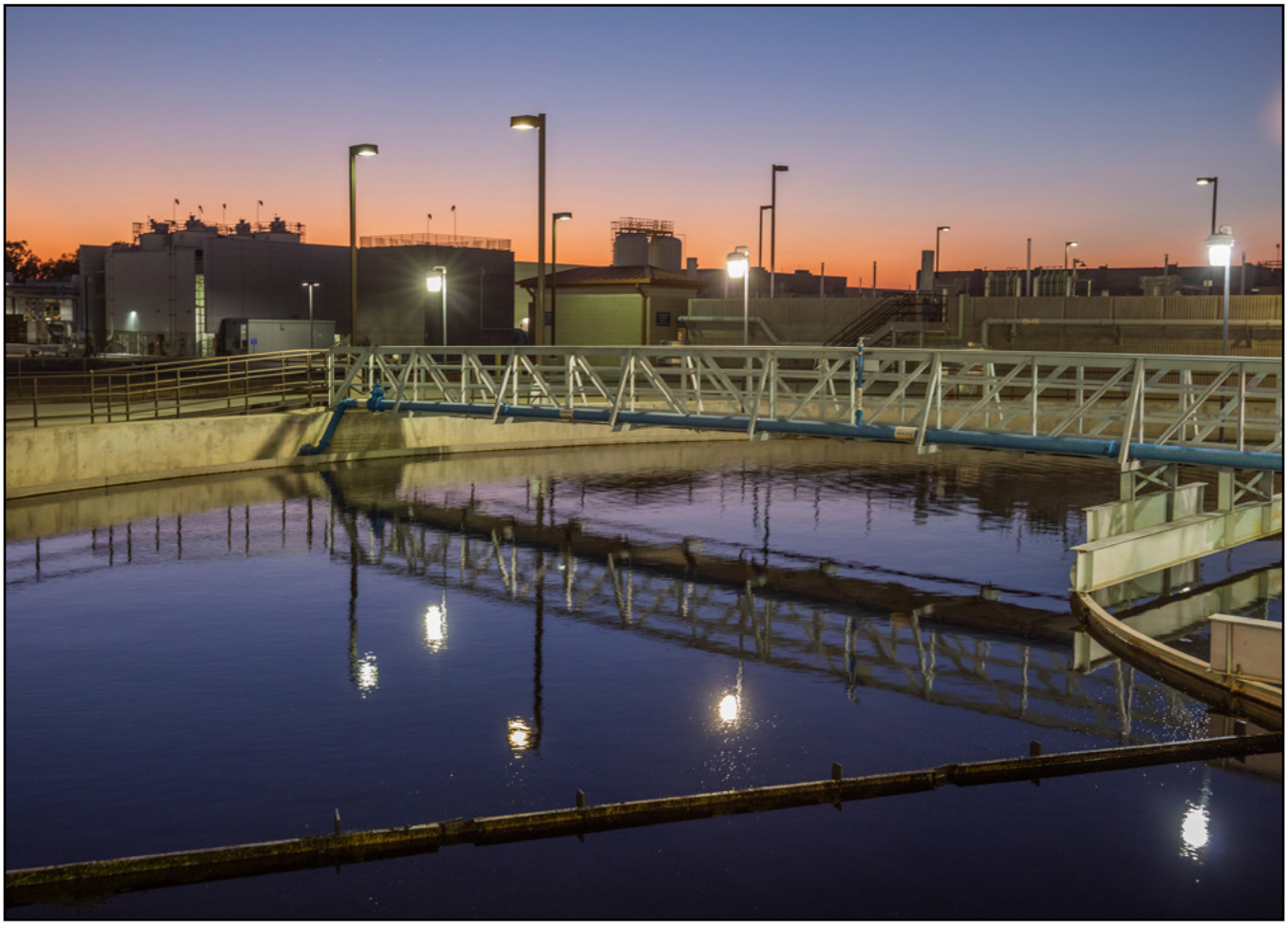
Methane gas generated during the natural decomposition of the solids in the digesters fuels the Central Power Generation System producing enough electricity to meet two-thirds of the power needed to run both treatment plants.

Solids are then dewatered to a 20 percent solids consistency, called biosolids, and recycled via direct land application or composting.

Approximately 130 million gallons per day of secondary effluent from Reclamation Plant No. 1 is sent to the Orange County Water District (OCWD) for recycling in its two treatment processes.

The first is OCWD's Groundwater Replenishment System (GWRS). The GWRS is the largest water purification project of its kind in the world and its construction was funded jointly by OCWD and OC San. At 100 million gallons per day, the GWRS generates enough pure water to meet the needs of 850,000 people.

The second is OCWD's Green Acres Project (GAP) which is a water recycling effort that provides reclaimed water for landscape irrigation at parks, schools and golf courses as well as for industrial uses, such as carpet dying. The demand for GAP water is about four million gallons per day.



Secondary Treatment Trickling Filters at Plant No. 1 in Fountain Valley

FISCAL YEARS 2022-23 AND 2023-24 BUDGET

Surge Tower at Plant No. 2 in Huntington Beach

STRATEGIC PLANNING

OC San Planning Environment

OC San has developed an integrated planning system that allows for intentional, thoughtful decision making to maintain current operations while adding resilience and meeting new challenges. This integrated planning system includes Strategic Planning, Asset Management, Budgeting (Capital and Operating), a General Manager's work plan, focused engineering study efforts, and a research program. While these plans are important, equally important is an organizational structure and relationships between employees that work together toward these common goals.

Strategic Planning is the first step. OC San has developed a strategic planning model that creates a long-term level-of-service agreement between its Board of Directors and staff. The Board of Directors use this document to lay out a vision of what the agency will deliver over the next 10 to 20 years. This is an alignment document to define long-term levels of service. The Strategic Plan also serves as a continuity bridge as members of the 25-member Board of Directors come onto and leave the governing body. It is initially important as an education tool for what and why OC San does what it does, but also allows for new Board members to adjust the vision as it is revised every two years. The Strategic Plan is timed to be adopted by the Board of Directors in the November prior to the bi-annual budget development.

OC San has also created an updated Asset Management Plan. The Asset Management Plan details what we own, what condition it is in, and what it is capable of delivering. This plan is renewed every year. OC San has broken down its facilities by drainage areas, pump stations, and treatment plant process areas. Each of these discrete areas have a plan. One of the key features of this planning method is to assume that each area has a life expectancy and will need regular refurbishment to maintain resiliency and attain the lowest lifecycle cost. Corrosion, mechanical wear and tear, electrical and instrumentation obsolescence, and technological opportunity must be addressed. It is much more efficient and responsible for OC San to rehabilitate and extend the life of our assets rather than replace once failure occurs.

Strategic Plan

In November 2021, the Board of Directors adopted an updated comprehensive strategic plan to steer OC San's efforts. The Strategic Plan developed by the Board of Directors and staff defines the strategic initiatives to be pursued by OC San and provides a basis for long-term financial, capital, and operational planning. In addition, it provides for long-term continuity of vision as Board and staff members change over the many years it takes to deliver public works infrastructure.

Driven by our Mission, Vision and Core Values, this Strategic Plan continues OC San's aggressive efforts to meet the sanitation, health, and safety needs of the more than 2.6 million people we serve while protecting the environment where we live.

The Strategic Plan is broken down into four broad categories with fifteen policy areas that define our responsibilities and the services we provide. These areas are:

- Business Principles
  - o Budget Control and Fiscal Discipline
  - o Asset Management
  - o Cybersecurity
  - o Property Management
  - o Organizational Advocacy and Outreach
- Environmental Stewardship
  - o Energy Independence
  - o Climate and Catastrophic Event Resiliency
  - o Food Waste Treatment
  - o Water Reuse
  - o Environmental Water Quality, Stormwater Management and Urban Runoff
- Wastewater Management
  - o Chemical Sustainability
  - o Biosolids Management
  - o Constituents of Emerging Concern
- Workplace Environment
  - o Resilient Staffing
  - o Safety and Physical Security

The Strategic Plan is not a radical departure from the current direction, but rather the well-defined iterative update to the direction of OC San. With the adoption of the Strategic Plan, staff will be updating the Asset Management Plan, Capital Improvement Program, and Financial Plan that are the basis of a two-year budget that will be adopted by the Board of Directors. The Budget goals and the General Manager's work plan are the accountability steps that measure achievable progress toward the strategic initiatives listed in the Strategic Plan.

FISCAL YEARS 2022-23 AND 2023-24 BUDGET

Centrifuge facility at Plant No. 2 in Huntington Beach

INFRASTRUCTURE ASSET MANAGEMENT

Asset Management

OC San is committed to providing services for its rate payers to reliably meet our regulatory mandates and levels of service approved by the Board of Directors and will provide these services using sustainable engineering principles that result in the lowest responsible lifecycle cost with an acceptable level of risk. OC San installs, operates, maintains, refurbishes, and disposes of assets with lifecycles measured from years to decades, so an approach which balances long, medium, and short-term needs is necessary. OC San's Asset Management Program has evolved into a comprehensive decision-making framework that encompasses engineering planning, design, and construction of quality facilities, optimized operation, proper maintenance, and planned rehabilitation, replacement and refurbishment of assets that will meet OC San's changing needs. This coordinated decision-making process will allow OC San to consistently meet mandated levels of service to the rate payers at the lowest lifecycle cost.

Updated annually, OC San's Asset Management Plan focuses on the long-term planning of maintenance and capital improvement projects to ensure the proper rate structure is in place to support sustainable operations. These are important starting points and have yielded tangible benefits in reduced risk levels and an improved capital planning approach. The implementation of the Maximo Computer Maintenance Management System (CMMS) is an example of an effort to improve OC San's Asset Register. CMMS Technicians and the Asset Engineers continue to work to update the database information including installation date, asset cost, condition, and criticality in the new system.

OC San has been striving to accurately identify medium to long-term capital cash flow requirements. Specifically, the Engineering Department Planning Division has developed a 20-year CIP by creating specific project plans for the rehabilitation, replacement, improvements and expansion for each treatment plant or collections area.

This medium to long-term planning is important for several reasons. By moving away from narrowly focused projects to solve individual problems, to more comprehensive projects refurbishing entire processes, OC San benefits by having less operational disruption and more efficient project delivery, better cash flow estimation, and better operations and maintenance decision-making framework. This is a huge undertaking based on the number of assets and facilities, but over time the undefined future rehabilitation capital estimates within the 20-year window are expected to be drastically reduced and replaced by more specific estimated capital needs.

Complementing the medium to long-term planning are the short-term efforts to coordinate maintenance actions that can reduce risks, actively defer the larger refurbishment projects, and reduce asset consumption rates to minimize the need for replacement of structures and conveyance systems when projects are executed. The Planning Division asset engineers conduct condition assessment, and continuously work with operations and maintenance staff to keep track of the condition of all critical assets, to identify opportunities for operational adjustments or maintenance activities that cost effectively extend the life of key assets which may allow for deferral of the larger overall project. This may be a targeted equipment replacement or pipeline repair that is more urgent than the need of the overall facility. These engineers may also identify opportunities to reduce asset consumption through coating systems, atmosphere improvements or small structure repairs before major damage is done. These actions can drastically reduce the cost of future projects by preventing the need to demolish and replace entire structures.

OC San is committed to continuous improvement of the process by which it manages the assets and facilities that are required to reliably deliver its level of service commitments. The additional resources and individual accountability for specific areas has improved, and will continue to improve our capital planning, project packaging, project execution and delivery, plant operability and maintenance planning.

The average age and value of the assets OC San owns is increasing steadily over time, the latent asset replacement obligation is rising, and as a consequence, OC San needs to plan for decreased capital projects for expansion and increased renewal expenditures in the future relative to past expenditure levels. Additional focus will need to be given to ensure that appropriate operation and maintenance strategies are being applied that consider the different ages of assets being maintained.

FISCAL YEARS 2022-23 AND 2023-24 BUDGET

Headworks Order Control Facility at Plant No. 2 in Huntington Beach

INFRASTRUCTURE ASSET MANAGEMENT

Asset Valuation

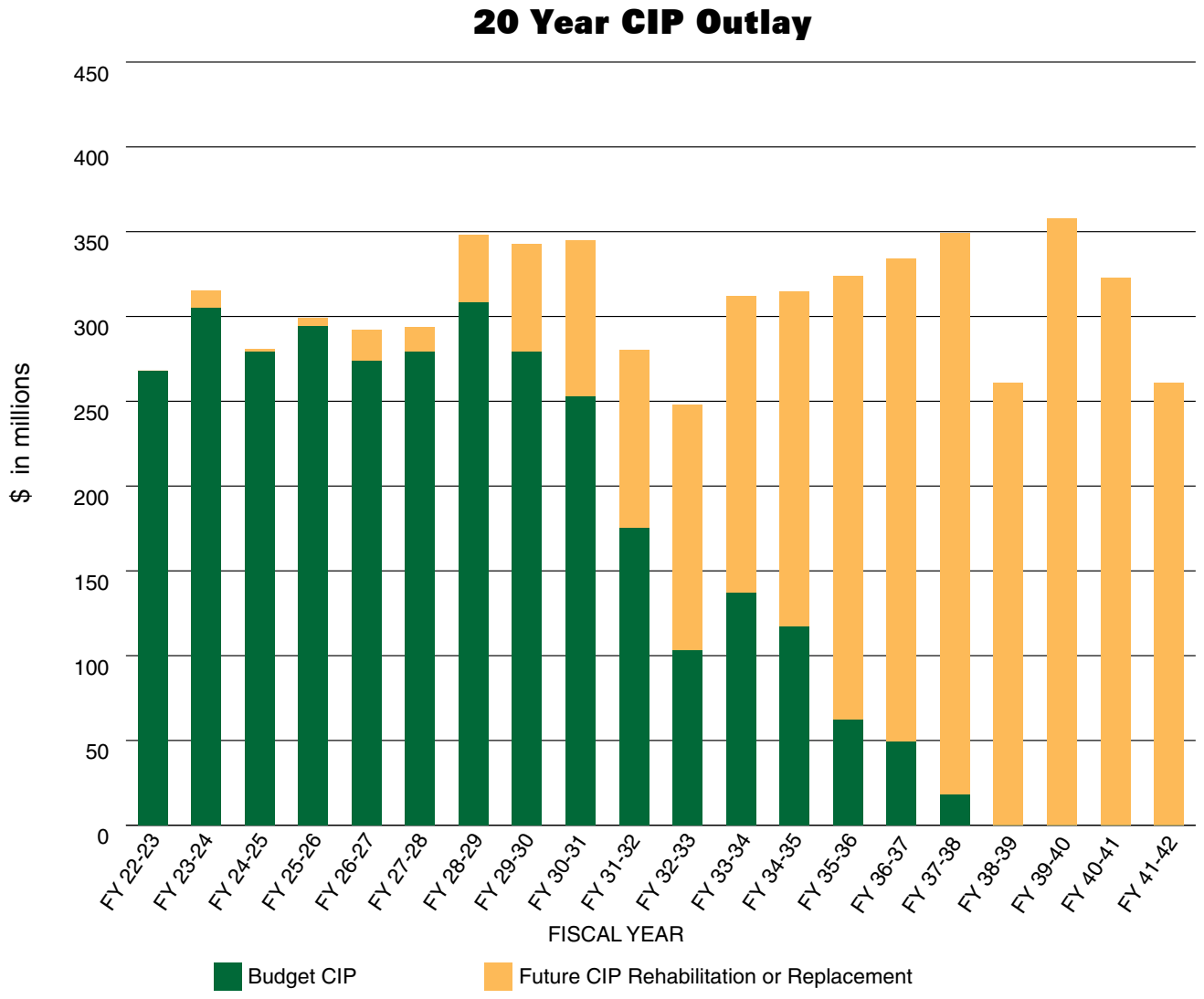
The replacement valuation for all of OC San's assets has been updated in 2018 as part of the 2017 Facilities Master Plan project. The table below presents the current replacement and depreciated values of OC San's assets. The replacement value represents the cost to completely rebuild all the assets to a new condition. The depreciated value is the book value of the assets based on their age, which is a prediction of their current condition.

Valuation	Plants	Collections	Total
Replacement Value (in billions)	$7.75	$3.85	$11.60
Depreciated Value (in billions)	$2.88	$0.76	$3.64

The estimated replacement value in FY 2022-23 is $11.6 billion based on the Engineering News-Record Construction Cost Index (CCI) increase since the 2017 Facilities Master Plan.

Planned CIP Outlays

The chart below shows the 20-year net CIP outlay which includes current and projected future Capital Improvement Program projects.



FISCAL YEARS 2022-23 AND 2023-24 BUDGET

OC San manages and assesses the collection system and treatment plants assets to improve resilience and reliability while lowering lifecycle costs. This is accomplished through adaptive operation, coordination of maintenance and condition assessment, and planned capital investment. Staff will balance maintenance, refurbishment, and replacement strategies to maximize useful life, system availability and efficiency.

Below is a summary of the FY 2021-22 infrastructure maintenance activities and FY 2022-23 planned activities.

Collection System:

OC San's collection system consists of 388 miles of sewers, 15 pump stations and 3 metering stations. The maintenance of all regional sewers is actively managed but only 230 miles of regional sewers are on a cleaning schedule. The largest sewers and force mains are designed to be self-cleaning using higher flows and natural scouring action. Typical gravity sewer maintenance activities consist of closed-circuit television (CCTV) inspection, physical inspection, and cleaning operations. The cleaning frequencies are based on data from pipe inspections, CCTV work, process conditions, historical records, and industry best practices. Pump station and metering station maintenance activities include operating the stations, maintaining electrical, mechanical, and civil components, and cleaning activities. The collection system odors and corrosive gases are actively managed for nuisance odor mitigation and asset preservation. Maintenance activities are based on established levels of service to ensure compliance with our permit required Sewer System Management Plan, which is designed to reduce spills and increase reliability and safety. The planned activities help extend the useful life of the assets and minimize nuisance odors.

During FY 2021-22 the following maintenance activities are projected to be completed:

- Major valve replacement at two pump stations.
- Repair of liners in the Sunflower Trunkline.
- Cleaned 40 miles of regional sewer lines on a cleaning schedule.
- CCTV video inspection of 638 regional system manholes.
- CCTV video inspection of 50 miles of regional sewer pipeline.
- Completed 90% of scheduled preventative maintenance work.
- Managed odor control chemical expenditures to 80% of budget.
- Continued to implement emergency preparedness bypass pumping plan for pump stations and bypass a station to prove readiness.
- In addition, OC San has deployed level sensing technology in the collection system for early warning of a potential sewer spill, and condition-based sewer cleaning. This will provide 24/7 level monitoring of critical areas in the gravity collection system.

Total costs for the collections system maintenance is greater than $14 million.

The following activities and goals are planned for FY 2022-23:

- Major valve replacement at three Pump Stations.
- Continued repair of liners in the Sunflower Trunkline.
- Repair of the Bushard Diversion Structure.
- Clean 56 miles of regional sewer lines on a cleaning schedule.
- CCTV video inspection of 650 regional system manholes.
- CCTV video inspection of 70 miles of regional sewer pipeline.
- Complete at least 90% of scheduled preventative maintenance work.
- Manage odor control chemical expenditures to between 95-102 percent of budget.
- Continue to implement emergency preparedness bypass pumping plan for pump stations.
- Continue to deploy collection system level sensing equipment for condition-based cleaning.

The total cost for these proposed collections system activities is greater than $16 million.

Collection System Capital Improvement Projects:

OC San's collections projects go through a planning and design process to ensure all elements of the project are thoroughly assessed. These projects typically renew or replace aging pipelines and pump stations, address odor issues, upgrade facilities to meet current codes, and standards, and in some instances, increase flow capacity due to growth in a localized portion of our service area.

Currently in final design is the Gisler Red-Hill Interceptor Project (Project No. 7-65). This project will rehabilitate the Gisler Red-Hill Interceptor from a manhole near the

INFRASTRUCTURE ASSET MANAGEMENT

Main Street Pump Station in Irvine to the College Avenue Pump Station in Costa Mesa. It will also rehabilitate two 42-inch force mains from the Main Street Pump Station. Approximately 30 manholes will be rehabilitated, and the total length of pipe included in the entire Project is 21,000 feet. Construction is planned to start in early 2023. The project has a budget of $44 million.

The Rehabilitation of the Western Regional Sewers (Project No. 3-64) covers sewers in the northwestern service area in the cities of Anaheim, Buena Park, Cypress, La Palma, Los Alamitos, Seal Beach, and unincorporated areas of the County of Orange referred to as Rossmoor. This large project is required to rehabilitate or replace portions of the sewers and manholes that were installed in the late 1950s and early 1960s. The sewers have multiple deficiencies which have allowed the intrusion of ground water. In some cases, hard calcium deposits have developed, making the pipe difficult to clean, and may, over time, impede the wastewater flow. There are a family of sub-projects that focus on specific areas. One specific area will rehabilitate portions of the Los Alamitos Sub-Trunk; (13,660 feet) and the Westside Relief Interceptor; (7,770 feet) that are within a section of Katella Avenue, Los Alamitos/Seal Beach Boulevard and Old Ranch Parkway. The work also includes replacement of 3 manholes and rehabilitation of 68 manholes. These sewers are in the Cities of Seal Beach, Los Alamitos, and Cypress in public rights of way with a segment within a Sanitation District easement. This specific area project is forecasted to spend $12 million in construction costs during FY 22-23. The total project budget is $101 million.

The Westminster Blvd. Force Mains Replacement (Project No. 3-62) will replace two existing force mains that run three miles along Westminster Blvd. from Seal Beach Boulevard in the City of Seal Beach to Rancho Road in the City of Westminster. The project commenced construction in spring 2020 and will finish in spring 2023. The budget for this project is $43 million.

The Seal Beach Pump Station is the starting point of the Westminster Blvd. Force Mains. The Seal Beach Pump Station Replacement (Project No. 3-67) will replace the existing pump station on the existing site and demolish the old pump station when the new one is complete. Not only are the electrical and safety codes significantly different from when the station was first construction in the early 1970s, but many of the electrical, mechanical, and control system components are becoming obsolete, and long-term maintenance is no longer an option. The project will also include odor control improvements at the pump station to minimize both upstream and downstream odors and corrosion. The pump station will connect to the newly constructed Westminster Blvd. Force Mains. The project is currently in the final design phase with construction anticipated to begin in spring 2023. The budget for this project is $87 million.

In Newport Beach, the Bay Bridge Pump Station Replacement (Project No. 5-67) will replace the existing pump station to meet current building, electrical, and safety codes, and to meet projected capacity needs. The existing force mains will also be replaced, and will extend from the new pump station location, across the Back-Bay channel, to connect with the existing pipes near the Dover Avenue and Pacific Coast Highway intersection. The project is currently in the final design phase with construction of both the force mains and pump station anticipated to begin in early 2024. The budget for this project is $106 million.

Reclamation Plant No. 1 and Treatment Plant No. 2 Maintenance:

The maintenance organization has taken additional steps to strategically align its organization to support OC San's increasing Capital Improvement Program (CIP) outlay and improve asset availability and reliability. Major initiatives during FY 2021-2022 included preventive maintenance optimization efforts, and the creation of a new team to coordinate ongoing maintenance and repair efforts with CIP projects.

Throughout the Plants, more than 11,300 preventative maintenance activities were performed. In addition, the following significant maintenance and repair activities are projected to be completed in FY 2021-22:

- Major overhaul of one gas compressor at each Plant.
- Cleaned three digesters at Plant No. 1 and three at Plant No. 2.
- Repair of failed low voltage cables at both Plants.
- Overhaul of one primary effluent pump at Plant No. 2.
- Primary Distribution Structure B Gates Repair at Plant No. 2.
- Completing the overhaul of Engine #1 at Plant No. 1.
- Replacement of end-of-life pump motor drive units throughout Plant Nos. 1 and 2.
- Bi-annual and annual major overhaul of thickening and dewatering centrifuges at Plant Nos. 1 and 2.
- On-going efforts of major mechanical repair of Plant No. 2 Digester equipment to retain in service until completion of new digesters.

FISCAL YEARS 2022-23 AND 2023-24 BUDGET

Total costs for the treatment plant maintenance is greater than $22 million.

Looking forward to FY 2022-23, there are nearly 13,000 preventative/predictive maintenance activities scheduled to be completed at Plant Nos. 1 and 2. This includes typical time or cycle-based maintenance tasks such as adjustments and mechanical alignments, cleaning and tightening of electrical equipment, calibration of sensors and meters, changing of lubricants and filters, exercising equipment, rebuilds and regulatory testing. Additionally, continued focus on integration of maintenance Staff to facilitate construction shutdown support towards the increasing active projects at both Plants and Pump Stations. We will also implement strategic electrical distribution management with the transfer of the Power Plant Operations Staff into the Maintenance Divisions to improve resiliency.

In addition to routine maintenance activities, OC San is planning the following major activities for FY 2022-23:

- Replacement of the Plant No. 1 CenGen Battery System.
- Bi-annual and annual major overhaul of thickening and dewatering centrifuges at Plant Nos. 1 and 2.
- On-going efforts of major mechanical repair of Plant No. 2 Digester equipment to retain in service until completion of new digesters.
- Major overhaul of one gas compressor at each Plant.
- Replacement of end-of-life pump motor drive units throughout Plant Nos. 1 and 2.
- Repair of failed low voltage cables at the Plant No. 2 Headworks.
- Overhaul of 3 secondary clarifiers at Plant No. 2.

Trickling Filter and GWRS Tanks at Plant No. 1 in Fountain Valley

INFRASTRUCTURE ASSET MANAGEMENT

Redrilling well at Plant No. 2 in Huntington Beach

FISCAL YEARS 2022-23 AND 2023-24 BUDGET

- Cleaning of one digester at Plant No. 1 and two digesters at Plant No. 2

The total cost for these proposed plant maintenance activities is greater than $23 million.

Reclamation Plant No. 1 Capital Improvement Projects:

These projects are intended to rehabilitate or reconstruct major components of our treatment process and support facilities to ensure reliable operations.

One of the largest projects is the Headworks Rehabilitation at Plant No. 1 (Project No. P1-105). The facility is over 30 years old, and a comprehensive refurbishment is required in order to extend the life of the facility. The project will rehabilitate systems including the metering and diversion structure, the bar screen building, the bin loading building, the main sewage pump station, the grit basins, the primary influent channels, the headworks odor control scrubbers, and electrical power distribution and control systems. This project will also replace the emergency pumping capacity that has been provided by the original headworks pumping system dating back to the 1950s. Construction is anticipated to be finished in 2027. The total budgeted cost for this project is $340 million.

To ensure Plant No. 1 has allocated space for future treatment processes, the Headquarters Complex (Project No. P1-128) will build new support facilities across from Plant No. 1 on the north side of Ellis Avenue. Currently, administrative and engineering functions are located primarily at Plant No. 1, and the buildings that house the staff are aging and need replacement. The new Headquarters will be a three-story building for administrative, engineering, resource protection and environmental compliance staff. The project also includes a pedestrian bridge across Ellis that will link the complex to Plant No.1. Construction is underway and occupancy is planned for late 2023. The total budgeted cost for this project is $168 million.

Treatment Plant No. 2 Capital Improvement Projects:

These projects are intended to rehabilitate or reconstruct major components of our treatment process to ensure compliance with regulatory permits, enhance water recycling and safety.

The Primary Treatment Rehabilitation Project (Project No. P2-98) will replace or rehabilitate the 14 primary clarifiers at Plant No. 2 with associated influent pipes, construct new primary effluent pipes, and rehabilitate and upgrade the odor control systems. These facilities date back to the late 1950s and need seismic and condition-based upgrades. The project as a whole will improve the resiliency of our infrastructure and thus improve our ability to provide service. This is anticipated to be a very long duration project because of the need to maintain treatment operations during the project. The final phase of this project in now under construction and is anticipated to spend $31 million in FY 2022-23. Construction is scheduled to end in 2026. The total project budget is $188 million.

The Headworks Modifications at Plant No. 2 (Project No. P2-122) will support the Ground Water Replenishment System (GWRS) Final Expansion by separating non-reclaimable flows from those that can be transferred to OCWD for reclamation. The project will include the installation of new gates, replacement of three existing influent pumps at the existing Headworks, and modification of waste side stream pumping and piping. Costs associated with this project will be reimbursed by OCWD.

As we make improvements throughout the plant, it is imperative we pay attention to our ocean outfall system. Many components of the system such as the pipeline assets have already been addressed, so now we turn our attention to the pumping systems with the Ocean Outfall System Rehabilitation (Project No. J-117). Work to the Ocean Outfall Booster Station includes rehabilitation of the mechanical, electrical, and civil systems which will extend the life of the facility and increase the efficiency of the system. In addition, a new low flow pump station will be added due to our increased water recycling rates, which will reduce our outfall flows below the minimum capacity of the existing effluent pumps. This project will also relocate the existing Plant Water Pump Station to prevent water that is not reclaimable by the GWRS from flowing into the reclaimable portion of the treatment plant. The project will also replace existing electrical switchgear at the Central Generation Building. Rehabilitation of the 84-inch and 120-inch interplant effluent lines between Plant No. 1 and Plant No. 2 was completed in 2018. GWRS final expansion related construction is anticipated to be complete in early 2023. The budget for this project and P2-122 is $196 million.

As part of the long-term CIP planning efforts, several studies (funded via the M-Studies budget) are currently underway evaluating various areas of the plants and the collection system to determine their condition, and identify deficiencies or improvements needed. One of these studies is the Ocean Outfall Condition Assessment and Scoping Study. This Study has assessed the condition of the 120-inch diameter, 5-mile long ocean outfall and developed an operational strategy for the low flows that the outfall will have after GWRS Final Expansion. The results of this study are being used to provide scope, schedule, and budget for 120-inch Ocean Outfall Rehabilitation Project (Project No.

INFRASTRUCTURE ASSET MANAGEMENT

J-137) that is scheduled to start in mid-2023. This project is necessary to help maintain reliable operations for a 50-year-old facility and to stay in compliance with permit conditions. The total project budget is $65 million.

Planning Studies:

As part of the long-term CIP planning efforts, several studies are currently underway evaluating various areas of the plants and the collection system to determine their condition, and identify deficiencies or improvements needed. These studies include the Ocean Outfall Condition Assessment and Scoping Study, ETAP Model (electrical simulation software tool) Updates for Plant Nos. 1 and 2, Digester 6 Pipe Stress Analysis at Plant No. 1, Circular Primary Clarifier Replacement Phasing Study at Plant No. 1, The Facilities Master Plan Program Environmental Impact Report, and the Laboratory Rehabilitation Feasibility Study. The results of these studies will help support, define and refine future CIP projects to improve our facilities and systems.

Trickling Filter at Plant No. 1 in Fountain Valley

FISCAL YEARS 2022-23 AND 2023-24 BUDGET

Central Generation engines at Plant No. 1 in Fountain Valley

CAPITAL IMPROVEMENT PROGRAM

CIP Budget Request Summary

Each year, the Board of Directors, through their committee process, reviews and approves the Capital Improvement Program (CIP) prepared by staff for both sewage collection system projects (collections) and the joint works treatment and disposal system projects.

CIP projects take several years to complete the planning, design, and construction cycle. The proposed budget for each project covers the life of the project. This budget is reevaluated each year for the purpose of managing annual cash flows. Thus, many of the projects in the CIP Budget for FY 2022-23 and FY 2023-24 are continuing projects that were approved in prior years.

In December 2017, the 2017 Facilities Master Plan was adopted by the Board of Directors. The Master Plan identified a phased 20-year program of capital improvement projects that will allow OC San to maintain reliability and accommodate future growth, as well as meet future regulatory requirements, level of service goals, and strategic initiatives.

This phased 20-year program is only a starting point. The Asset Management Program within the Planning Division continues assessing the condition of OC San's existing assets and systems to ensure these assets and systems can provide the necessary level of service. The Planning Division continues reviewing and updating the ongoing and future CIP to appropriately manage the risks associated with asset or system failure. Projects can be delayed, consolidated or rescoped to help ensure that the CIP is delivered in the most efficient way possible. The Asset Management Program will continue these efforts and will continue to define the future CIP project requirements not currently included on the CIP list but are anticipated within the long-term financial plan to ensure effective and efficient operations.

This year, four new projects are proposed for addition to the FY 2022-23 budget. These are:

- Project No. 2-78: Santa Ana Canyon South River Trunk Rehabilitation
- Project No. J-137: 120-inch Ocean Outfall Rehabilitation
- Project No. P1-141: Administrative Facilities and Power Building 3A Demolition
- Project No. P2-140: Truck Loading Bay Odor Control Improvements at Plant No. 2

OC San staff has also validated all active and future CIP projects to ensure the project scopes of work, schedule and cost estimates are up to date. Through the budget validation process, each project's schedule, staff resources, total project cost, cash flow and risks are assessed to confirm the budgetary requirements. The validated CIP includes 70 active and future capital projects, and five programs, such as:

- Small Construction Projects Program (M-FE)
- Planning Studies Program (M-Studies)
- Research Program (M-Research)
- Operation & Maintenance Capital Program (M-SM-CAP)
- Information Technology Capital Program (M-MC-IT)

The total CIP budget authority has increased by $35 million as compared to FY 2021-22 approved budget of $4.3 billion. The changes are summarized below:

FY 2021-22 Approved Total CIP Budget Authority		$4.3 B
Project Net Changes:		
New		$98 M
Budget Increases		$261 M
Budget Decreases		($133 M)
Cancellation/Closures		($191 M)
	Total:	$35 M
FY 2022-23 Proposed Total CIP Budget Authority		$4.3 B

Following is a table of the FY 2022-23 proposed CIP budget:

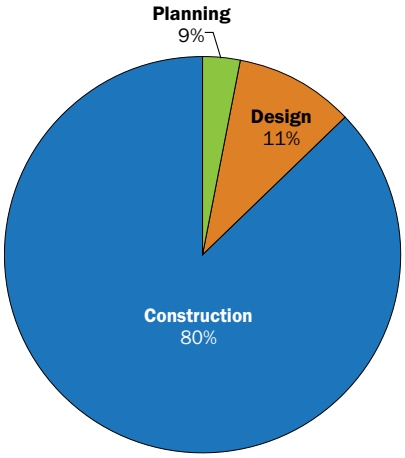
Description	FY 2022-23 CIP Budget
Capital Improvement Program (CIP)	$284.6 M
Less: Savings and Deferrals	($16.4 M)
Net CIP Outlay	$268.2 M

The proposed FY 2022-23 net CIP outlays can be categorized by the project phase, location of the projects in terms of wastewater treatment process, or by the reasons why the projects are needed, i.e., project drivers. Charts showing the distribution of the funds by CIP status, process area, and driver are shown on the following page.

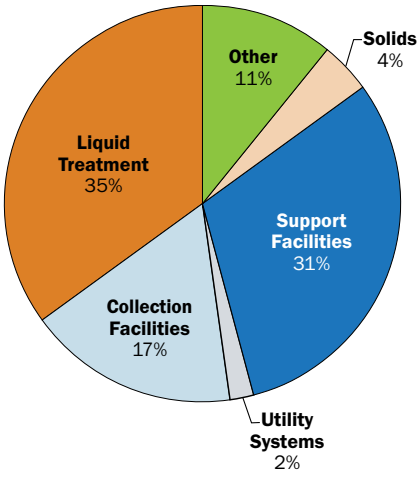
From the charts, it is apparent that construction is the primary area where the FY 2022-23 Outlay will be spent ($228.4 million). In construction is the Headworks Rehabilitation at Plant No. 1 (Project No. P1-105). The facility is over 30 years old, and a comprehensive refurbishment is required to extend the life of the facility. The project will rehabilitate systems including the metering and diversion structure, the bar screen building, the bin loading building, the main sewage pump station, the grit basins, the primary

FISCAL YEARS 2022-23 AND 2023-24 BUDGET

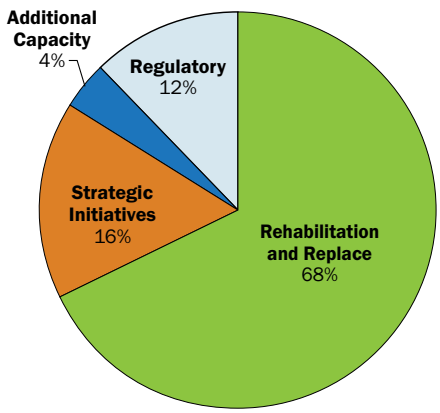
Projected FY 22-23 Net CIP Outlay by Project Status



Projected FY 22-23 Net CIP Outlay by Area



Projected FY 22-23 Net CIP Outlay by Project Driver



influent channels, the headworks odor control scrubbers, and electrical power distribution and control systems. This project will also replace the emergency pumping capacity that has been provided by the original headworks pumping system dating back to the 1950s. Construction is anticipated to finish in 2027. The total budgeted cost for this project is $340 million and the FY 2022-23 expenditures are estimated to be $35 million.

35% of the FY 2022-23 Net CIP Outlay will be spent on the area that processes liquid treatment. An example is the Primary Treatment Rehabilitation Project (Project No. P2-98) that will replace or rehabilitate the 14 primary clarifiers at Plant No. 2 with associated influent pipes, construct new primary effluent pipes, and rehabilitate and upgrade the odor control systems. These facilities date back to the late 1950s and need seismic and condition-based upgrades. The project as a whole will improve the resiliency of our infrastructure and thus improve our ability to provide service. This is anticipated to be a very long duration project because the need to maintain treatment operations during the project. The final phase of this Project in now under construction and is anticipated to spend $31 million in FY 2022-23. Construction is scheduled to end in 2026. The total project budget is $188 million.

Project drivers are dominated by Rehabilitation and Replacement Projects at 68% of FY 2022-23 Net CIP Outlay. Currently, administrative and engineering functions are located primarily at Plant No. 1, and the buildings that house the staff are aging and need replacement. The Headquarters Complex (Project No. P1-128) will build new support facilities across from Plant No. 1 on the north side of Ellis Avenue. The new Headquarters will be a three-story building for administrative, engineering, resource protection and environmental compliance staff. The project also includes a pedestrian bridge across Ellis Avenue that will link the complex to Plant No.1. Construction is underway and occupancy is planned for late 2023. The total budgeted cost for this project is $168 million and the FY 2022-23 expenditures are estimated to be $61 million.

DEBT FINANCING PROGRAM

Debt Financing

Due to the potential magnitude of the capital improvement program, it may be necessary that OC San utilize debt financing to meet its total obligations. Debt financing allows OC San to meet projected construction schedules while achieving the lowest possible user fees, as well as long-term stability in future sewer service fee rates.

Certificates of Participation (COP)

The primary debt financing mechanism used is Certificates of Participation (COP). COPs are repayment obligations based on a lease or installment sale agreement. The COP structure was selected over other structures because COPs are not viewed as debt by the State of California, as the purchaser does not actually receive a "bond," but rather a share in an installment sale arrangement where OC San serves as the purchaser. COPs can be issued with fixed or variable interest rates.

As of July 1, 2022, the total outstanding COP indebtedness will be $819.8 million.

Build America Bonds Financings

OC San issued the $80.0 million Wastewater Revenue Obligations, Series 2010A in May 2010 and the $157.0 million Wastewater Revenue Obligations, Series 2010C in November 2010 as "Build America Bonds" (BABs) fixed rate debt.

The American Recovery and Reinvestment Act of 2009 created a new financing product, BABs, for the municipal issuer. BABs are issued as higher interest taxable bonds; however, the U.S. Treasury provides a 35 percent subsidy on interest payments. The net cost, after accounting for the 35 percent subsidy payment, frequently results in lower net costs to the issuer, specifically in the maturity years beyond ten years.

On March 1, 2013, the federal government implemented certain automatic spending cuts known as the sequester. As a result of the sequester, federal subsidy payments on BABs have been reduced annually from a high of 8.7 percent for the federal fiscal year ended September 30, 2013 to a low of 5.7 percent for the federal fiscal year ended September 30, 2022.

Dedicated Funding Source

In 1992 and 2004 the Board of Directors formalized the dedication of certain funding sources. To assure the continuation of favorable credit ratings, revenues were dedicated to debt service in the following order:

1. Ad valorem property taxes
2. Sanitary sewer service charges
3. Other revenues

This apportionment of the ad valorem tax was consistent with and pursuant to the Revenue Program adopted in April 1979 to comply with regulations of the Environmental Protection Agency and the State Water Resources Control Board and in accordance with COP documents and Board policy.

OC San Maintains AAA Bond Rating

OC San's bond rating is "AAA" from Fitch Ratings, Moody's Investors Service and S&P Global Ratings. An "AAA" Rating is the highest for a government agency. In order to maintain this rating, OC San adheres to its debt policy and coverage ratio requirements. This Board-adopted policy serves as the agency's guide in the management of existing debt and in the issuance of future debt.

Debt Ratios

OC San has contractual covenants within the existing COP agreements which require minimum coverage ratios of 1.25. The minimum coverage ratio is the ratio of net annual revenues available for debt service requirements to total annual debt service requirements for all senior lien COP debt. The coverage ratio for senior lien COP debt is being proposed to remain above 4.00 for FY 2022-23 and FY 2023-24.

Future Financings

No new money debt issuances are being proposed over the next two fiscal years as the $3.1 billion in future replacement, rehabilitation, and refurbishment projects anticipated over the next ten years will be adequately funded through current sewer service fee charges and existing reserves. Current outstanding debt will be paid off in 2044.

FISCAL YEARS 2022-23 AND 2023-24 BUDGET

Deep Soil Mixing Rig at Plant No. 2 in Huntington Beach

OPERATING EXPENSES

Summary of Operating and Maintenance Expenses (in millions)

Category	2020-21 Actual	2021-22 Projected	2022-23 Proposed	2023-24 Proposed
Salaries and Benefits	$90.6	$105.1	$112.8	$118.4
Contractual Services	17.3	17.6	20.1	21.3
Repairs and Maintenance	33.7	34.8	32.1	33.8
Operating Materials & Supplies	19.8	21.7	24.3	26.0
Utilities	9.8	10.9	12.8	12.6
Professional Services	4.1	5.2	7.8	7.6
Other Materials, Supplies, Services	4.0	4.0	6.0	6.4
Self-Insurance Requirements	2.7	2.3	3.7	3.8
Administrative Expenses	1.7	2.3	2.3	2.2
Training and Meetings	0.3	0.4	1.2	1.1
Research and Monitoring	1.1	1.1	1.7	1.8
Printing and Publications	0.2	0.3	0.8	0.4
Cost Allocation	(20.9)	(20.8)	(20.8)	(21.6)
Total Operating Expenses	$164.4	$184.9	$204.8	$213.7

Salaries, Wages, and Benefits — $112.8M

Salaries and Wages — The proposed budget for Full Time Equivalent (FTE) positions for FY 2022-23 reflects an increase of eight FTE (0.2 percent) from the FY 2021-22 approved staffing level of 639.0 FTEs to 647.0 FTEs. Provision has been made in these salary projections to comply with the anticipated terms of the Memorandums of Understanding.

Retirement — OC San employees are members of the Orange County Employees' Retirement System (OCERS). Information from OCERS indicates that the employer's required contribution rates will remain flat in FY 2022-23 at 11.85 percent.

Group Insurance — These expenses include OC San's share (approximately $17,000 per employee) of employee medical plan benefits for the indemnity plan, prepaid HMO plans, dental insurance plan, and life and disability insurance premiums. The proposed budget includes a seven percent increase for medical plans starting January 2023.

Contractual Services — $20.1M

The treatment plants currently produce about 800 wet tons per day of biosolids which are recycled in California and Arizona. About half of the biosolids are currently allocated to create compost and the other half is used on farms to grow feed and seed crops. The FY 2022-23 biosolids budget is $13.7 million, approximately 65 percent of the Contractual Services budget. Other residuals solids and waste includes disposal costs for grit and screening waste, digester cleaning waste, and hazardous materials.

This category also includes appropriations for grounds keeping, janitorial, security, toxic waste removal, outside laboratory, trash pickup, plant site sweeping, closed circuit television pipeline inspections, line cleaning, and temporary services.

Repairs and Maintenance — $32.1M

This item, which is for parts and services for repair of plant and collection facilities and annual service contracts, is expected to decrease $2.6 million, or 7.5 percent below the FY 2021-22 projected costs of $34.8 million.

FISCAL YEARS 2022-23 AND 2023-24 BUDGET

Planned repairs include: Bushard diversion structure repair; valve replacement at three pump stations; overhauls of thickening and dewatering centrifuges; digester repairs; secondary clarifier overhauls; and digester cleaning.

Operating Materials and Supplies — $24.3M

Chemical Coagulants — Anionic polymer is added to the influent wastewater along with ferric chloride to improve solids removal efficiencies in the primary clarifiers. Ferric chloride is also added to the digesters for solids odor control. Cationic polymer is added to digested sludge prior to dewatering to aid in coagulation, improving the sludge and water separation process. Cationic polymer is also added to the waste activated sludge dissolved air flotation thickeners (DAFTs) to improve solids coagulation.

The costs for this group of chemicals are expected to slightly increase by $900,000 or 8.0 percent above the FY 2021-22 projected costs of $11.2 million.

Odor Control Chemicals — OC San uses hydrogen peroxide, sodium hydroxide (caustic soda), sodium hypochlorite (bleach) and muriatic acid as the primary odor control chemicals in the treatment plants. Ferrous chloride, magnesium hydroxide, calcium nitrate, and caustic soda are the primary odor control chemicals used in the collection system.

The FY 2022-23 budget for these chemicals is $7.8 million, 19.8 percent higher than the FY 2021-22 projected costs of $6.5 million.

Utilities — $12.8M

During FY 2022-23, the overall cost for utilities, a significant component of the operating budget, is anticipated to increase by $1.9 million, or 17.4 percent.

Natural Gas — Natural gas is purchased from two providers for different purposes. Purchases from a gas marketer are used to supplement the digester gas that is used to run the CenGen facilities. The FY 2022-23 natural gas budget is $1.6 million, 30.1 percent higher than the projected FY 2021-22 costs.

Electricity — Electricity is the largest utility cost incurred by OC San. Purchased electricity is used in running the plant processes as a supplement to power produced in the central generation facilities.

The FY 2022-23 proposed budget is $9.8 million, 21.3 percent higher than the FY 2021-22 projected.

Water — Water is used throughout the treatment plants. Potable (drinking) water is supplied by the Cities of Fountain Valley and Huntington Beach; reclaimed water is supplied by the GAP; and plant water is disinfected secondary effluent.

- GAP water is secondary treated effluent from OC San that is further treated by the Orange County Water District. GAP water is significantly less expensive than potable water and is used in the process wherever possible. The major uses of GAP water include cooling water, solids handling, and landscaping. By agreement, OC San receives up to 1,120 acre feet per year of GAP water at no charge, no cost is proposed for GAP water in FY 2022-23 budget.

- Potable Water — The potable water budget includes water supplied by the City of Fountain Valley for Plant No. 1 and the City of Huntington Beach for Plant No. 2. Approximately 5 percent of the potable water at Plant No. 1 is used for domestic uses and less than 1 percent is used for irrigation. The majority of the irrigation at both plants uses reclaimed water. Less than 1 percent of the potable water used at Plant No. 2 is for domestic uses due to the relatively small number of employees at Plant No. 2. The proposed total potable water cost for FY 2022-23 is $876,000, a 14.8 percent decrease from the projected FY 2021-22 costs.

Professional Services — $7.8M

Professional Services includes General Counsel, special labor counsel, audit and miscellaneous accounting services, legislative advocacy, engineering, and other technical consulting services.

Other Operating Material, Supplies, Services — $6.0M

This category of costs includes the in-lieu insurance premium used to maintain the level of accumulated reserves for the property and general liability self-insurance programs. This in-lieu cost for FY 2022-23 is proposed at $2.4 million.

Expenses not chargeable to other categories, such as freight and miscellaneous items, and annual regulatory fees assessed by the South Coast Air Quality Management District, are recorded with this category.

Insurance — $3.7M

OC San's outside excess general liability insurance coverage is $40 million per occurrence with self-insurance retention of $750,000.

OC San's property insurance coverage is $800 million for perils of fire and $25 million for perils of flood, subject to a self-insurance retention of $250,000. OC San is partially

OPERATING EXPENSES

self-insured for earthquake but does carry $25 million in coverage on 15 key structures with a $5 million deductible. OC San also has a $50 million sublimit for builder's risk under the property insurance program to ensure upcoming construction projects are adequately covered.

An appropriation of $3.7 million for in-lieu premium contribution charged to operations is recommended for the Property and General Liability Program. This will serve to maintain the reserves balance.

Administrative Expenses — $2.3M

These accounts include supplies, postage, technical journals and publications, forms, small office equipment, and small computer items that cost less than $10,000 per item and exclude items that are capitalized.

Training and Meetings — $1.2M

Board member and staff travel has been significantly reduced in recent years. This category also includes meetings of professional societies; ongoing technical training and materials for staff; training for computerized plant monitoring and control systems, MAXIMO (a computerized maintenance management system), Enterprise Resource Planning (ERP), and other "high tech" equipment, processes, and systems; and training to allow for an adaptive and flexible work force. While OC San continues to place an emphasis on effective safety training, as well as technical, leadership and management training, the training budget is at approximately 1.1 percent of budgeted regular salaries due to savings achieved in part through the use of online courses.

Research and Monitoring — $1.7M

Research and monitoring expenditures consist of contract services to carry out the extensive ocean monitoring program required by the EPA under provisions of OC San's NPDES permit; air quality monitoring costs; OC San's contribution to the Southern California Coastal Water Research Project (SCCWRP) being conducted under a joint powers agreement with other Southern California municipal dischargers; and also provide for increased operational and ocean research and evaluation to develop optimum operating parameters in treatment plants.

Printing and Publication — $0.8M

The budget provides for in-house and outside reproduction costs and reflects an expanded management information system and administrative requirements, as well as a continuing demand by the public and regulatory agencies for information. The continuing effort of the Public Affairs Office to improve public education programs about OC San's activities is also reflected in the budget for this line item. This group of accounts also includes costs for photo processing, advertisements, and notices.

Cost Allocation — ($20.8M)

This represents direct labor and benefit charge outs and materials, supplies and services cost allocation to the capital projects where the related work was performed.

Outfall Low Flow Pump Station construction at Plant No. 2 in Huntington Beach

FISCAL YEARS 2022-23 AND 2023-24 BUDGET

Huntington Beach Pier

DEPARTMENTS SUMMARY

Expenses by Department (in millions)

Department	2021-22 Budget	2022-23 Proposed	Percent Change	2023-24 Proposed	Percent Change
Administration Units:					
General Manager's Office	$4.1	$4.4	7.3%	4.3	(2.3%)
Human Resources	7.3	7.9	8.2%	8.0	1.3%
Administrative Services	30.0	32.0	6.7%	33.4	4.4%
Sub-Total	*$41.4*	*$44.3*	*7.0%*	*$45.7*	*3.2%*
Operating Units:					
Environmental Services	21.3	22.7	6.6%	23.8	4.8%
Engineering	5.4	8.9	64.8%	9.0	1.1%
Operations & Maintenance	115.9	125.2	8.0%	131.4	5.0%
Sub-Total	*$142.6*	*$156.8*	*10.0%*	*$164.2*	*4.7%*
Total	$184.0	$201.1	9.3%	$209.9	4.3%

Staffing by Department (FTEs)

Department	2021-22 Authorized	2022-23 Proposed	Percent Change	2023-24 Proposed	Percent Change
Administration Units					
General Manager's Office	15.00	16.00	6.7%	17.00	6.3%
Human Resources	26.00	26.00	0.0%	26.00	0.0%
Administrative Services	102.00	103.00	1.0%	103.00	0.0%
Sub-Total	*143.00*	*145.00*	*1.4%*	*146.00*	*0.7%*
Operating Units					
Environmental Services	93.00	93.00	0.0%	93.00	0.0%
Engineering	116.00	123.00	6.0%	123.00	0.0%
Operations & Maintenance	287.00	286.00	(0.3%)	286.00	0.0%
Sub-Total	*496.00*	*502.00*	*1.4%*	*502.00*	*0.0%*
Total FTEs	639.00	647.00	1.3%	648.00	*0.2%*

FISCAL YEARS 2022-23 AND 2023-24 BUDGET

ADMINISTRATION UNITS

General Manager's Office
Budget $4.4M — Staffing 16 FTEs

The General Manager's Office provides general oversight of all OC San operations and incorporates functions in the areas of Public Affairs and Board Services. The budget reflects the transfer in of one position from another department.

Human Resources
Budget $7.9M — Staffing 26 FTEs

The Human Resources Department works with management and employees to ensure an effective and productive employment relationship. The department also provides risk management services to the organization to create a safe, healthy, and secure environment for staff, contractors, and visitors.

Administrative Services
Budget $32.0M — Staffing 103 FTEs

The Administrative Services Department maintains financial oversight and administration of all OC San funds and accounts and is responsible for contract administration and procurement, and oversees all OC San computer, networking, and customer support issues. The budget reflects the addition of one position to provide computer system support for OC San's pretreatment program.

OPERATING UNITS

Environmental Services
Budget $22.7M — Staffing 93 FTEs

The Environmental Services Department manages all environmental monitoring, regulatory, compliance and reporting elements to ensure that OC San meets the requirements of federal, state, and local regulations for treated sewage discharge into the ocean, water recycling, air emissions, industrial waste, sewer system operations, land use controls and biosolids and stormwater management.

Engineering
Budget $8.9M — Staffing 123 FTEs

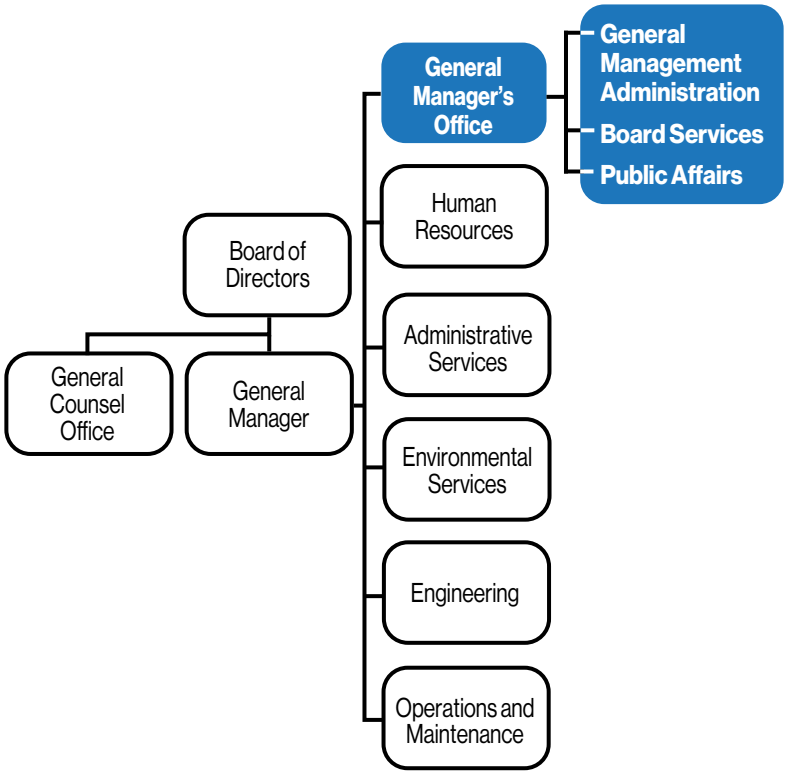
The Engineering Department is responsible for the planning and execution of the OC San's capital improvement program and asset management program.

Operations and Maintenance
Budget $125.2M — Staffing 286 FTEs

The Operations and Maintenance Department is responsible for the operation and maintenance of OC San's two wastewater treatment plants as well as the sanitary sewer system pipeline and pumping facilities. The department also provides fleet management services for OC San. The budget reflects the transfer out of one position to another department.

FTEs = Full-Time Equivalent Positions

GENERAL MANAGER'S OFFICE



Service Description

General Management Administration is responsible for working with the Board of Directors to establish standards, policies and procedures, and the overall goals and Strategic Plan of the agency. The General Manager reports directly to the Board of Directors and provides general oversight to all OC San operations, interagency relations, legislative activities, communications, and the strategic planning. The General Manager oversees the Board Services and Public Affairs Divisions.

Board Services provides a high level of customer service through the Clerk of the Board's office. The Clerk of the Board's office promotes public trust and ensures transparency by: accurately recording and preserving the legislative actions of OC San; safeguarding the vital, historic and permanent records of OC San as their official custodian; preparing and publishing agendas and notices in accordance with legal requirements; receiving and responding to requests for records, acts as filing officer for Statement of Economic Interest filings; receiving and processing summons, subpoenas and complaints filed against OC San; and maintaining rosters of the Board of Directors, appointed committees and historical events.

Public Affairs provides services and implements programs to meet the communications and legislative needs of both internal and external audiences for OC San. The division plans and implements media relations, website content, community relations, community education and outreach, employee newsletter, intranet development, corporate identity program, collateral material and graphics development, presentation development, crisis communications and legislative affairs. The goal is to create a comprehensive communications program that promotes clear and transparent communications with all identified audiences and to promote the understanding of OC San's mission to protect public health and the environment.

FISCAL YEARS 2022-23 AND 2023-24 BUDGET

Operating Expense

Category	2020-21 Actual	2021-22 Budget	2021-22 Projected	2022-23 Proposed	2023-24 Proposed
Personnel	$2,378,344	$2,688,522	$2,692,500	$2,816,200	$2,928,700
Supplies	374,071	519,420	387,840	864,560	511,303
Professional Contractual Services	461,878	926,400	353,350	774,204	830,204
Research & Monitoring	-	-	-	-	-
Repairs & Maintenance	-	-	-	-	-
Utilities	-	-	-	-	-
Other	95,933	122,460	96,400	152,710	163,410
Cost Allocation	(117,684)	(117,360)	(117,650)	(120,500)	(120,500)
Total	$3,192,542	$4,139,442	$3,412,440	$4,487,174	$4,313,117

Budget Overview

The FY 2022-23 budget for the General Manager's Office reflects an increase of 8.4 percent over the FY 2021-22 adopted budget. The increase is primarily due to increases in costs for personnel, printing and publication, and other professional services. The overall increase is partially offset by a decrease in temporary services, and legal services.

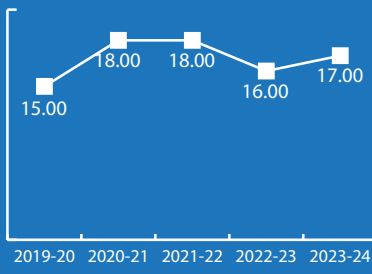
Performance Objectives / Measures

- Ensure that the Board approved Strategic Plan is implemented.
- Managing operating expenditures to within 96 to 100 percent of the approved budget.
- Maintain the Special District Leadership Foundation (SLDF) District Transparency Certificate of Excellence.
- Respond to 95 percent of public records requests within seven business days.
- Provide services and implement programs that meet the communications needs of OC San's internal audiences by producing a minimum of 500 internal communication pieces.
- Provide services and implement programs that meet communication needs of OC San's external audience by reaching a minimum of 25,000 people.

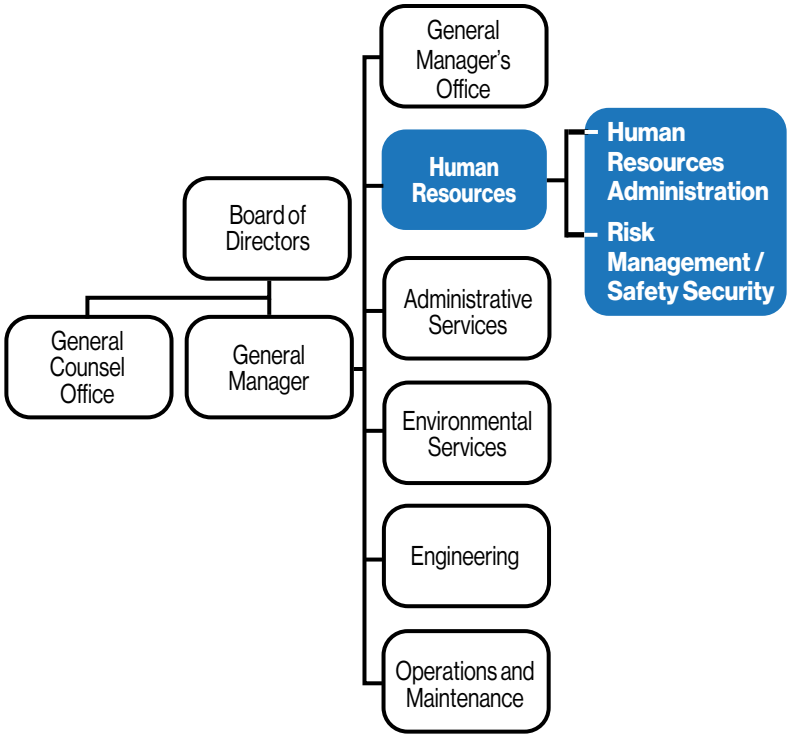
Authorized FTE Positions

Managers	3.00
Supervisors /Professionals	6.00
Administrative /Clerical	6.00
Technical Services	1.00
Total	16.00

Staffing Trends



HUMAN RESOURCES DEPARTMENT



Service Description

Human Resources is a full-service department responsible for all aspects of Human Resources administration and risk management to ensure a safe, effective, and productive workplace and employment relationship. The Human Resources Department is committed to a workplace grounded in fair and equitable employment decisions and practices. This department serves as the in-house advisor to the General Manager, executive staff, OC San departments, and all staff. Delivering services with a high-level of customer satisfaction is a key objective.

Human Resources Administration oversees all human resources functions, including Benefits Administration, Classification and Compensation, Employee/Labor Relations, Employee Development/Performance Management, and Recruitment and Selection. Benefits Administration manages, maintains, and administers benefits for employees, including medical, dental, vision, and life insurance plans, Employee Assistance Program, retirement, voluntary benefits, and reasonable accommodations. Classification and Compensation is a vital function that establishes new classifications and salaries, while also reviewing existing classifications to determine appropriate placement within OC San departments, including salary surveys and studies. Employee and Labor Relations offers professional assistance in various areas of the employee and labor relations field. Human Resources manages, interprets, and administers agency policies and collective bargaining agreements while ensuring compliance with local, state, and federal regulations. Employee Development/ Performance Management manages and coordinates agency-wide legally mandated and development training programs; and manages employee performance through consulting management regarding performance appraisals and performance improvement plans. Through the Recruitment and Selection program, OC San seeks to attract, hire, and retain the best qualified employees in a manner that is fair, equitable and merit based.

Risk Management/Safety/Security protects the assets and human resources of OC San. It identifies and manages potential risk to the organization and provides solutions for mitigating or reducing the risk; and manages the OC San's Workers' Compensation Program and provides a secure, safe and healthy work environment for OC San staff, contractors, and visitors. The division also provides training to identify and control risk, and cost-effectively address safety, health, and security issues.

FISCAL YEARS 2022-23 AND 2023-24 BUDGET

Operating Expense

Category	2020-21 Actual	2021-22 Budget	2021-22 Projected	2022-23 Proposed	2023-24 Proposed
Personnel	$3,711,801	4,371,762	4,479,180	4,581,300	4,781,700
Supplies	376,889	818,530	898,240	858,520	767,170
Professional Contractual Services	2,658,002	3,387,621	3,399,032	3,659,328	3,584,328
Research & Monitoring	-	-	-	-	-
Repairs & Maintenance	8,353	14,050	16,500	15,550	15,550
Utilities	-	-	-	-	-
Other	41,952	141,040	75,040	164,210	164,210
Cost Allocation	(1,488,368)	(1,486,070)	(1,486,730)	(1,335,830)	(1,335,830)
Total	$5,308,629	7,246,933	7,381,262	7,943,078	7,977,128

Budget Overview

The FY 2022-23 budget for the Human Resources Department reflects a 9.6 percent increase from the FY 2021-22 adopted budget. The increase is primarily due to increase in personnel costs, printing and publication, other waste disposal costs, security services, legal services, and labor negotiation. The overall increase is partially offset by a decrease in other professional services.

Performance Objectives / Measures

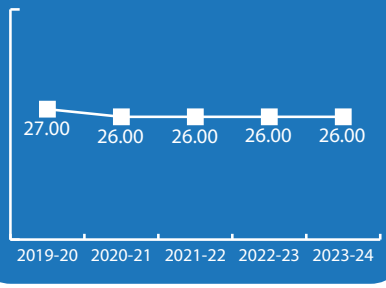
- Continue with development and implementation of effective workforce planning/development and succession planning strategies.
- Evaluate and determine agency needs for a centralized training program and implement the changes effective FY 2022-23.
- Review all training requirements and support departments in meeting the training level of service requirements of 45 hours per employee.
- Ensure 100% of Safety Compliance Training is completed.
- Implement Leading Safety Indicators to reduce injuries to employees.
- Manage operating expenditures to within 96 to 100 percent of the approved budget.

Authorized FTE Positions

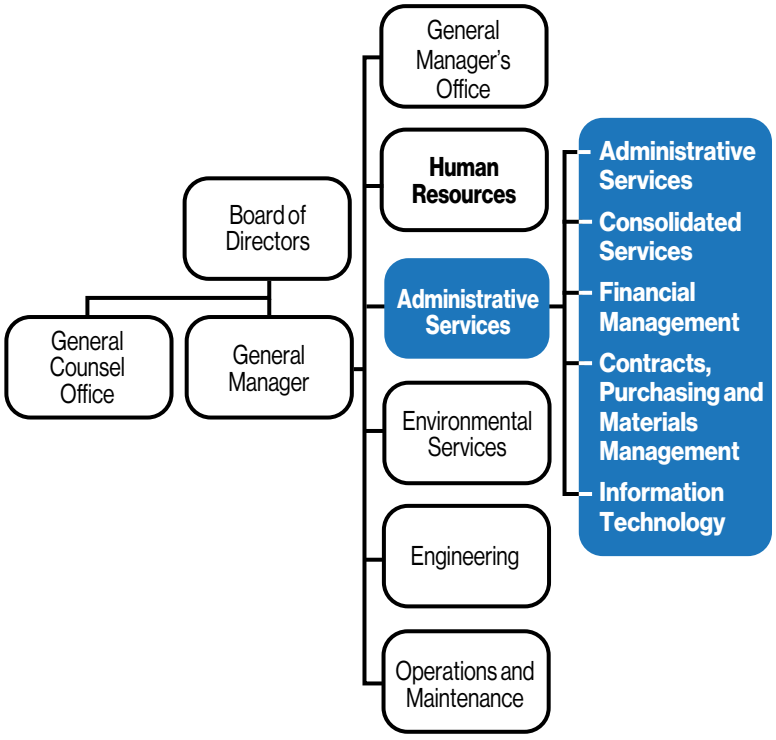
Managers..... 2.00
Supervisors /Professionals ... 20.00
Administrative /Clerical..... 4.00

Total 26.00

Staffing Trends



ADMINISTRATIVE SERVICES DEPARTMENT



Service Description

The Administrative Services Department oversees all of OC San's finance, contracts/purchasing, and information technology activities, including both day-to-day operations and strategic planning. The department serves as a liaison to Executive Management, the Board of Directors, and other departments of OC San. The department includes five divisions:

Administrative Services provides leadership and oversight to all Administrative Services divisions.

Consolidated Services accounts for various OC San expenses that are not attributed to one division.

Financial Management oversees and administers all OC San's funds and accounts. Programs include treasury and debt management, accounts receivable and payable, user fees, payroll, fixed assets accounting, project controls, and coordinating the capital and operating budget process.

Contracts, Purchasing, and Materials Management is responsible for contract administration and procurement for all departments. Additionally, this division manages OC San's warehouses, receives and maintains inventory, and distributes supplies, materials, and equipment.

Information Technology is responsible for customer support related information technology assets and services, networking and infrastructure, telecommunications service operation and maintenance, network and programming, solutions and application support, and cyber security.

FISCAL YEARS 2022-23 AND 2023-24 BUDGET

Operating Expense

Category	2020-21 Actual	2021-22 Budget	2021-22 Projected	2022-23 Proposed	2023-24 Proposed
Personnel	$15,140,360	$17,794,580	$18,004,754	$18,815,793	$19,915,625
Supplies	1,085,862	1,497,491	1,531,287	1,787,748	1,814,389
Professional Contractual Services	2,526,154	3,205,715	2,485,557	3,315,995	2,982,118
Research & Monitoring	-	-	-	-	-
Repairs & Maintenance	2,935,000	3,580,271	4,947,100	4,402,633	4,608,665
Utilities	1,310,436	1,289,103	1,464,010	1,376,267	1,431,905
Other	2,430,864	3,633,479	2,347,730	4,129,211	4,430,425
Cost Allocation	(981,865)	(986,770)	(981,900)	(1,825,200)	(1,825,200)
Total	$24,446,811	$30,013,869	$29,798,538	$32,002,447	$33,357,927

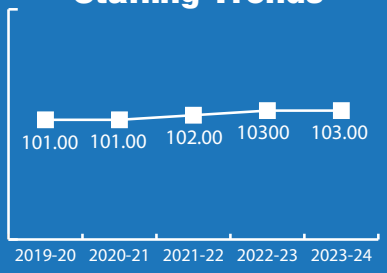
Budget Overview

The FY 2022-23 budget for the Administrative Services Department reflects a 6.6 percent increase from the FY 2021-22 adopted budget. The increase is primarily due to an increase in personnel costs, small computer items, minor furniture and fixtures, training and meetings, tools, legal services, other professional services, service maintenance agreements, natural gas, property and general liability insurance, and the General Manager's contingency and the contingency for reappropriations. The overall increase is partially offset by a decrease in temporary services, and software program consulting.

Authorized FTE Positions

Managers	4.00
Supervisors /Professionals	65.00
Technical Services	12.00
Administrative /Clerical	22.00
Total	103.00

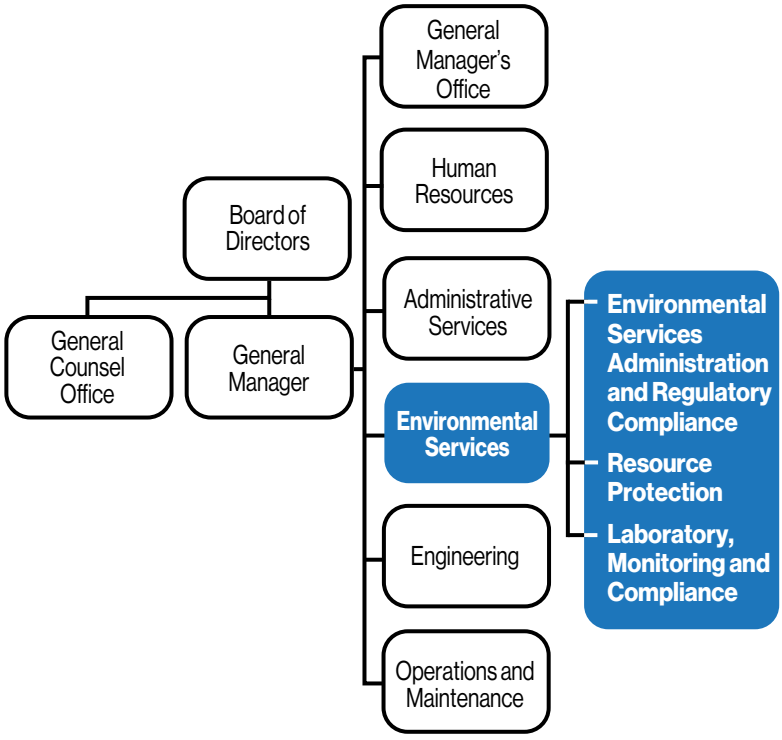
Staffing Trends



Performance Objectives / Measures

- Manage operating expenditures to within 96 to 100 percent of the approved budget.
- Validate project schedules and costs for the Capital Improvement Program (CIP) in conjunction with the budget process.
- Comply with the California State Government Code 100 percent of the time with all treasury investments.,
- Submit the annual sewer service fee property parcel database to the County in time for placement on annual secured property tax bills.
- Process all approved sewer service fee refund requests within 90 days, 90 percent of the time.
- All debt service payments will be paid electronically, on the actual due dates, and error free 100 percent of the time.
- Continue the cycle count program and maintain a 97 percent accuracy rate or better.
- Replace obsolete desktop, mobile, and server computers. Rotate desktop computers every 5 years, mobile computers every 3 years, and servers every 5-6 years.
- Cyber Security Awareness Protection – report on the overall effectiveness of phishing campaign.

ENVIRONMENTAL SERVICES DEPARTMENT



Service Description

The Environmental Services Department manages OC San's environmental monitoring, regulatory compliance and reporting elements to ensure that OC San meets the requirements of federal, state, and local regulations for treated sewage discharge into the ocean, water recycling, air emissions, industrial waste, sewer system operations, dry weather urban runoff diversion, biosolids, and on-site stormwater management. The Environmental Services Department consists of three divisions:

Environmental Services Administration and Regulatory Compliance provides leadership, support, and management oversight for the Department to accomplish OC San's Strategic Plan and departmental annual goals. The Regulatory Compliance group is tasked with ensuring adherence to environmental regulations and permit conditions for ocean discharge, air emissions, potable reuse, and biosolids management. The team actively advocates for responsible and pragmatic environmental regulations relevant to wastewater treatment and resource recovery.

Resource Protection provides local enforcement of federal pretreatment regulations and ensures continuous improvement in OC San's enhanced source control program to sustain water reclamation and beneficial biosolids reuse. The division conducts its industrial and non-industrial source control activities in a cost effective and legally defensible manner to protects OC San's assets, employees, public health, and the environment.

Environmental Laboratory and Ocean Monitoring provides sampling, ocean and treatment process monitoring, laboratory analysis, and oceanographic research services to OC San's operations and to protect receiving water quality. The division is responsible for collaborating with OC San's coastal monitoring partners and advancing analytical innovation in key regulatory areas such as compounds of emerging concern and toxic air contaminants.

FISCAL YEARS 2022-23 AND 2023-24 BUDGET

Operating Expense

Category	2020-21 Actual	2021-22 Budget	2021-22 Projected	2022-23 Proposed	2023-24 Proposed
Personnel	$12,907,425	$15,372,316	$14,694,900	$16,016,900	$16,904,000
Supplies	937,191	975,488	901,355	1,243,255	1,231,615
Professional Contractual Services	741,057	1,437,683	722,795	1,882,621	2,008,400
Research & Monitoring	1,052,470	1,547,700	1,087,170	1,675,450	1,751,363
Repairs & Maintenance	314,323	380,910	366,480	432,000	432,000
Utilities	-	-	-	-	-
Other	1,361,682	1,494,004	1,298,337	1,429,340	1,531,140
Cost Allocation	31,655	(22,800)	(6,850)	(14,750)	(16,990)
Total	$17,345,803	$21,185,301	$19,064,187	$22,664,816	$23,841,528

Budget Overview

The FY 2022-23 budget for the Environmental Services Department reflects an increase of 7.0 percent from the FY 2021-22 adopted budget. The increase is primarily due to an increase in personnel costs, training and meetings, tools, safety equipment/tools, lab chemicals and supplies, legal services, engineering services, environmental scientific consulting, research and monitoring, service maintenance agreements, and regulatory operating fees. The overall increase is partially offset by a decrease in audit and accounting services, and miscellaneous operating expenses.

Performance Objectives / Measures

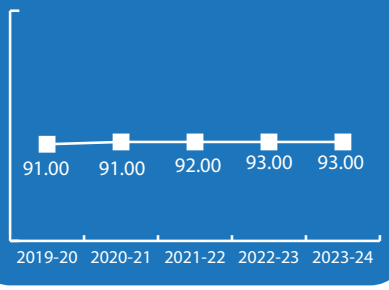
- Manage operating expenditures to within 96 to 100 percent of the approved budget.
- Ensure that reporting divisions achieve no less than 90 percent of individual performance objectives.
- Ensure that all environmental compliance reporting requirements are met on or before required submission dates.
- Conduct audits of all major environmental permits at least once every two years.
- Complete 100 percent of Safety Scorecard requirements each quarter.

Authorized FTE Positions

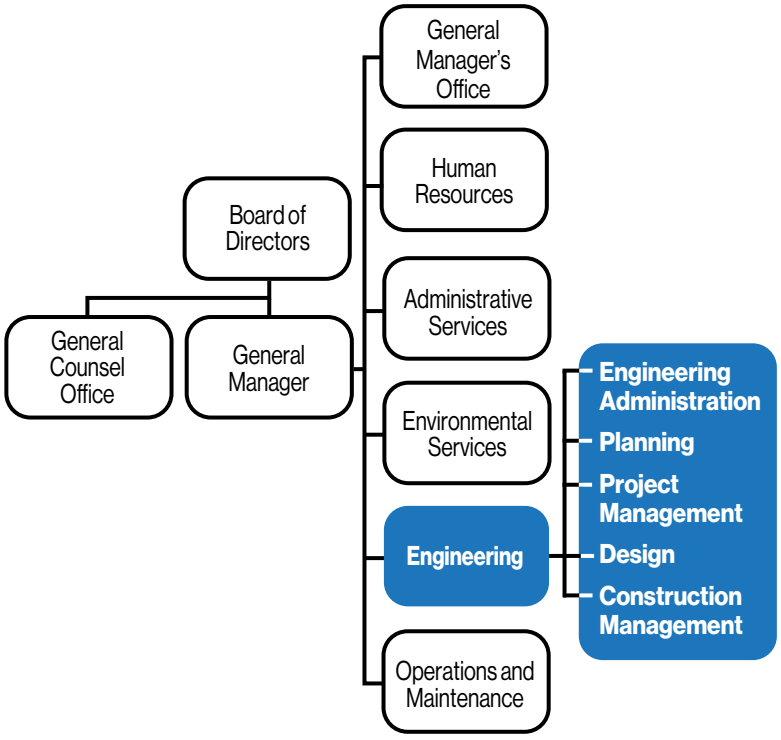
Managers..... 3.00
Supervisors /Professionals ... 65.00
Administrative /Clerical..... 8.00
Technical..... 17.00

Total..... 93.00

Staffing Trends



ENGINEERING DEPARTMENT



Service Description

The Engineering Department is responsible for the planning and execution of OC San's Capital Improvement Program, the Asset Management Program, and interagency coordination. The Engineering Department is comprised of five divisions:

Engineering Administration provides management to all Engineering Divisions.

Planning is responsible for developing and maintaining a comprehensive Capital Improvement Program for OC San considering projected capacity requirements, condition of assets, anticipated regulatory and level of service changes, and technological opportunities. Planning is responsible for OC San's Asset Management program to ensure that required levels of service are met by performing planned repair, rehabilitation and replacement of facilities at optimal lifecycle costs. In addition, this division is responsible for the California Environmental Quality Act preparation and review, and performs services for annexations, connection permitting, and interagency agreements.

Project Management is responsible for the delivery of capital projects from the preliminary design stage through project closeout.

Design provides technical leadership, engineering design and quality assurance, design standards development and management, control systems design and programming, and commissioning oversight.

Construction Management provides construction engineering, quality control inspection, commissioning execution, and other technical support for construction projects.

FISCAL YEARS 2022-23 AND 2023-24 BUDGET

Operating Expense

Category	2020-21 Actual	2021-22 Budget	2021-22 Projected	2022-23 Proposed	2023-24 Proposed
Personnel	$19,267,661	$22,566,438	$22,127,000	$24,241,135	$25,276,435
Supplies	400,188	323,150	232,077	331,260	300,690
Professional Contractual Services	859,722	1,491,615	1,060,550	1,404,000	1,410,000
Research & Monitoring	-	-	-	-	-
Repairs & Maintenance	1,347	3,900	300	1,400	1,400
Utilities	0	0	0	0	0
Other	687	16,930	42,830	5,330	5,350
Cost Allocation	(17,584,439)	(18,954,190)	(17,081,740)	(17,094,070)	(17,953,930)
Total	$2,945,166	$5,447,843	$6,381,017	$8,889,055	$9,039,945

Budget Overview

The FY 2022-23 budget for the Engineering Department reflects a 63.2 percent increase from the FY 2021-22 adopted budget. The increase is primarily due to an increase in personnel costs that includes seven new FTE's, training and meetings, and software programing consulting. The overall increase is partially offset by a decrease in minor furniture and fixtures, other contractual services, and legal services, engineering services, and other operating materials and supplies.

Performance Objectives / Measures

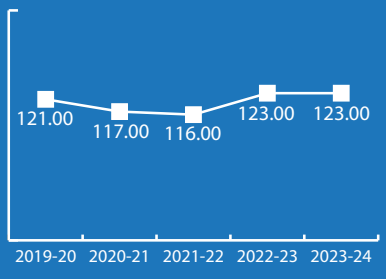
- Expend 85 to 105 percent of project annual Capital Improvement Program cash flows.
- Manage operating expenditures to within 90 to 100 percent of the approved budget.
- Ensure that reporting divisions achieve 90 percent of individual performance objectives.
- Prepare and maintain a 20-year agency-wide capital plan coordinating condition assessment, regulatory requirements, changing levels of service, and projected capacity requirements.

Authorized FTE Positions

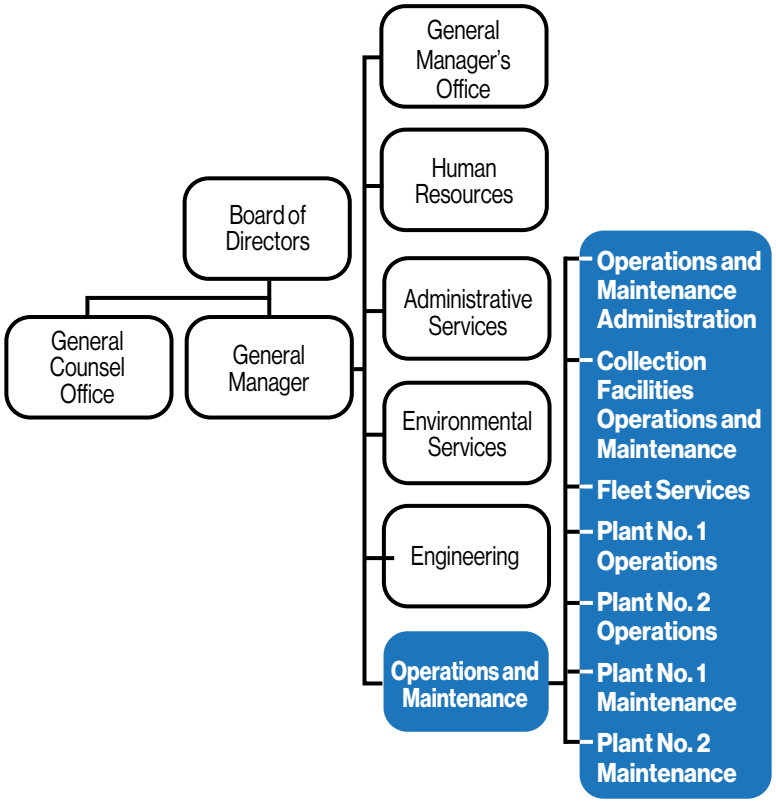
Managers..... 5.00
Supervisors /Professionals ... 88.00
Administrative /Clerical..... 30.00

Total 123.00

Staffing Trends



OPERATIONS AND MAINTENANCE DEPARTMENT



Service Description

The Operations and Maintenance (O&M) Department is responsible for treating wastewater, reusing or disposing of the treated wastewater and all residuals, providing maintenance support to all treatment facilities, operating and maintaining the sanitary sewer system pipeline and pumping facilities, and for providing fleet management services. The Department consists of seven divisions:

Operations and Maintenance Administration provides leadership and oversight to all O&M divisions.

Collection Facilities Operations and Maintenance operates and maintains the regional facilities which include gravity sewers and pumping facilities.

Fleet Services provides fleet and heavy equipment services and motor pool management to all OC San staff.

Plant No. 1 and Plant No. 2 Operations are responsible for the daily management of the wastewater treatment processes, sludge and biosolids treatment and loading processes and odor and air quality control processes. Activities also include ensuring compliance with all regulatory permits, support of the Capital Improvement Program, and coordination of construction and maintenance work. Plant No. 1 Operations also ensures the delivery of specification water to the Groundwater Replenishment System.

Plant No. 1 and Plant No. 2 Maintenance are responsible for civil, electrical, facilities, instrumentation and mechanical maintenance of the two treatment plants and pump stations facilities. Plant No. 1 Maintenance also includes planning for all maintenance activities as well as reliability engineering for both Plants and the Collections System.

FISCAL YEARS 2022-23 AND 2023-24 BUDGET

Operating Expense

Category	2020-21 Actual	2021-22 Budget	2021-22 Projected	2022-23 Proposed	2023-24 Proposed
Personnel	$37,155,644	$45,308,222	$43,130,300	$46,300,254	$48,568,554
Supplies	18,906,117	21,222,049	20,768,751	23,448,321	25,102,752
Professional Contractual Services	14,175,204	15,616,600	14,802,340	16,931,025	18,089,025
Research & Monitoring	-	-	-	-	-
Repairs & Maintenance	30,480,467	25,738,215	29,424,854	27,283,791	28,727,324
Utilities	8,479,052	8,040,623	9,445,554	11,427,001	11,127,061
Other	81,412	137,667	102,686	139,620	141,336
Cost Allocation	(782,530)	(145,890)	(1,132,660)	(371,880)	(393,920)
Total	$108,495,366	$115,917,486	$116,541,825	$125,158,132	$131,362,132

Budget Overview

The FY 2022-23 budget for the Operations and Maintenance Department reflects an 8.0 percent increase from the FY 2021-22 adopted budget. The increase is primarily due to increases in personnel costs, minor furniture & fixtures, training and meetings, various chemicals, total operating material and supplies, engineering services, other professional services, consultant support, tools, solids removal, repairs & maintenance costs, and utilities.

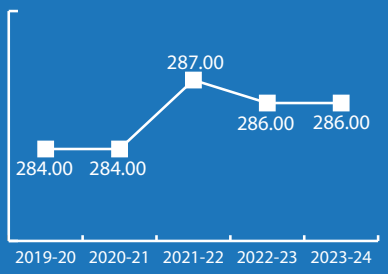
Performance Objectives / Measures

- Achieve 100 percent compliance with water, solids, air, and energy permits and regulatory requirements.
- Achieve 100 percent compliance level of 90 to 100 percent of the Levels of Service targets.
- Manage operating expenditures to within 96 to 100 percent of the approved budget.

Authorized FTE Positions

Managers	4.00
Supervisors /Professionals	65.00
Administrative /Clerical	6.00
Technical	1.00
Operations & Maintenance	210.00
Total	286.00

Staffing Trends



MISCELLANEOUS STATISTICS

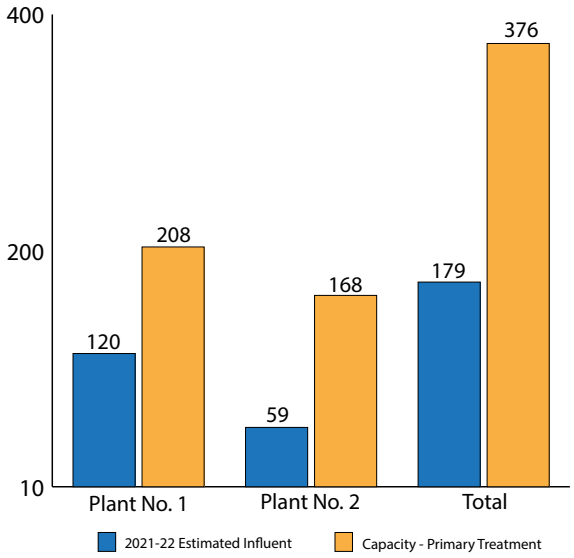
General Information

Year of Formation 1948
Form of Government ..... County Sanitation District
Authority ..... Section 4700 et. seq.
..... California Health & Safety Code
Service Area ..... 479 square miles
Service Population ..... Approximately 2.6 million
2021-22 Assessed Value ..... $516.2 billion

Miles of Sewers ..... 388 miles
On-Plant Pump Station 2
Off-Plant Pump Stations 15
Operating Authority ..... RWQCB/NPDES
..... Permit No. CA0110604
..... Statewide WDR Order No. 2006-0003
Authorized Staff (Full-Time Equivalent) 647.00

Treatment Information

Daily Influent Flow to Total Primary Capacity Comparison (in MGD)



Primary Treatment Capacity (includes standby):
Plant No. 1 ..... 208 MGD
Plant No. 2 ..... 168 MGD

TOTAL ..... 376 MGD

Secondary Treatment Capacity:
Plant No. 1 ..... 182 MGD
Plant No. 2 ..... 150 MGD

TOTAL ..... 332 MGD

Legend:
MGD – million gallons per day
kWh – kilowatts per hour

2020-21 Influent BOD:
Plant No. 1 ..... 292 milligrams per liter
Plant No. 2 ..... 201 milligrams per liter

2020-21 Influent Suspended Solids:
Plant No. 1 ..... 310 milligrams per liter
Plant No. 2 ..... 325 milligrams per liter

2020-21 Effluent BOD ..... 13 milligrams per liter

2020-21 Effluent Suspended Solids ..... 5 milligrams per liter

2020-21 Biosolids Produced & Reused .. 198,306 wet tons

2021-22 Estimated Average Daily Influent:
Plant No. 1 ..... 120 MGD
Plant No. 2 ..... 59 MGD

TOTAL ..... 179 MGD

2021-22 Estimated Electricity Generated:
Plant No. 1 ..... 36,757,403 kWh
Plant No. 2 ..... 47,929,825 kWh

TOTAL ..... 84,687,228 kWh

FISCAL YEARS 2022-23 AND 2023-24 BUDGET

Financial Information

Fees and Charges:	2020-21 Actual	2021-22 Projected	2022-23 Proposed	2023-24 Proposed
One-Time 3-Bedroom Residence Connection	$4,973.00	$5,346.00	$5,719.00	$5,719.00
Average Annual Single-Family Residence Fee	$339	$343	$347	$347
Local SRF Fee	$108	$108	$108	$108
OC San's Avg. Share of Ad Valorem Property Tax	1.59%	1.59%	1.59%	1.59%
Cost to Collect, Treat and Dispose of One Million Gallons	$2,428.28	$2,782.37	$2,977.80	$3,107.06

Summary of COP Issues

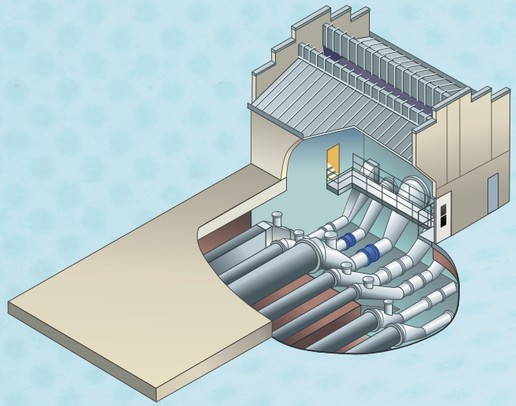
May 2010A New Money	$80,000,000
November 2010C New Money	157,000,000
August 2014A Refunding	47,835,000
February 2015A Refunding	127,510,000
March 2016A Refunding	131,965,000
February 2017A Refunding	65,815,000
July 2021A Refunding	128,040,000
February 2022A Refunding	81,620,000
Total Outstanding COP Balance 7/1/22	$819,785,000

New OC San Headquarters — coming in late 2023

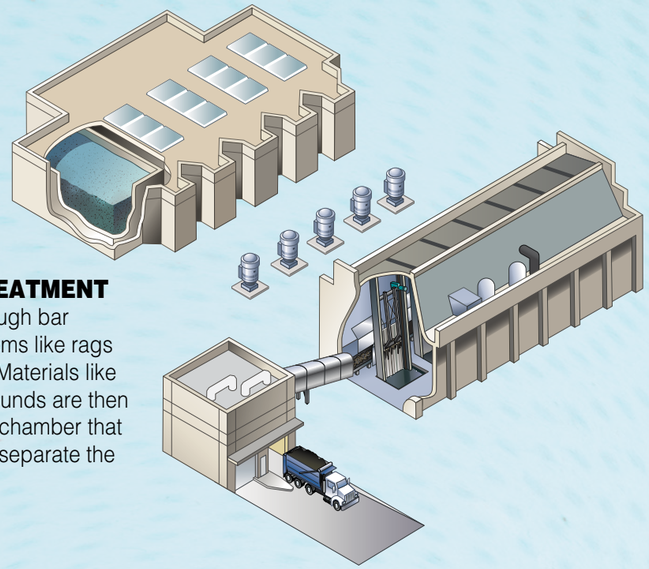
Table of Contents

Orange County Sanitation District

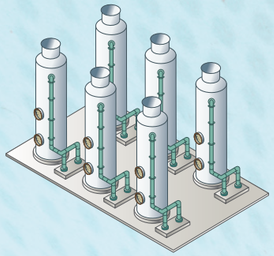
Wastewater Treatment Process



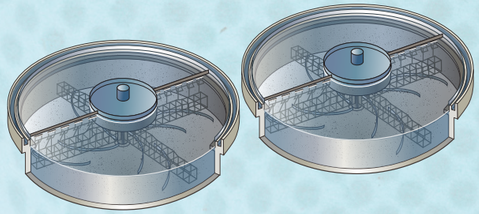
1. METERING AND DIVERSION
Wastewater enters our plant at 2.5 - 5 mph through pipes up to 10 feet in diameter. High tech equipment monitors the temperature, pH, conductivity, and flow of the incoming wastewater.



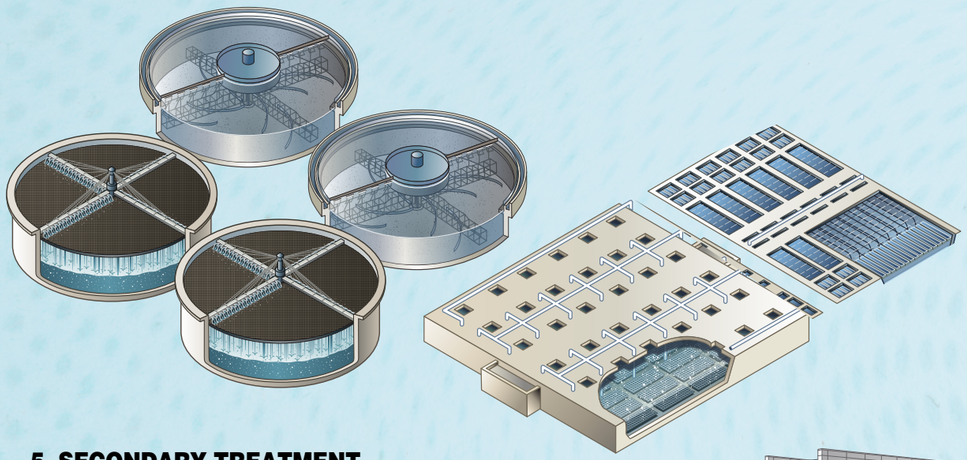
2. PRELIMINARY TREATMENT
Raw sewage passes through bar screens that trap large items like rags that cannot be recycled. Materials like egg shells and coffee grounds are then removed through the grit chamber that uses high pressure air to separate the gritty material.



3. AIR SCRUBBER
Hydrogen sulfide (foul air) is captured throughout the process and funneled into large silos. It passes through a plastic medium and mixes with caustic soda and bleach. Causing the odorous compounds to be neutralized.

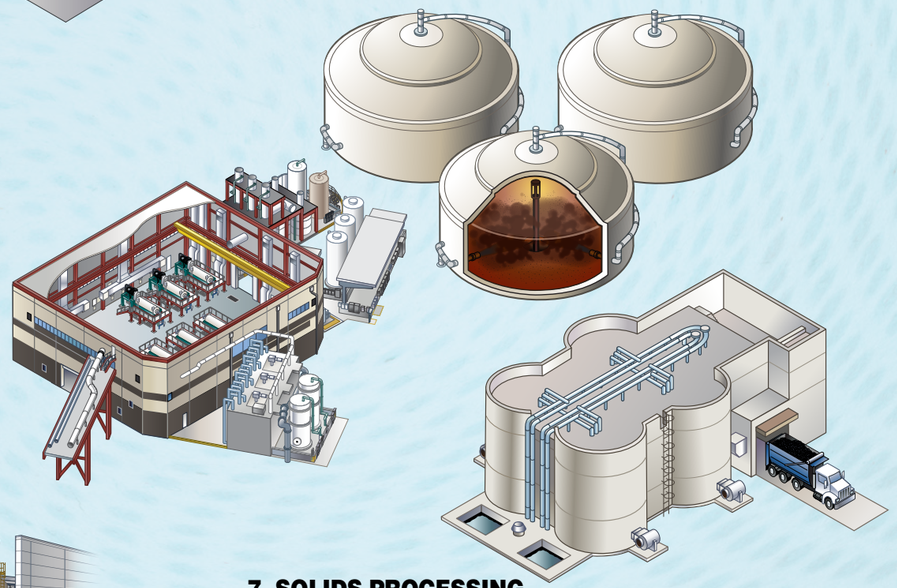


4. PRIMARY TREATMENT
Primary clarifiers or settling basins, slow the water down to allow the solids in the wastewater that readily settle or float to be separated from the water being treated. Collector arms that move along the top and the bottom remove over 80 percent of the influent wastewater solids. Solids are then sent to the digesters for processing.

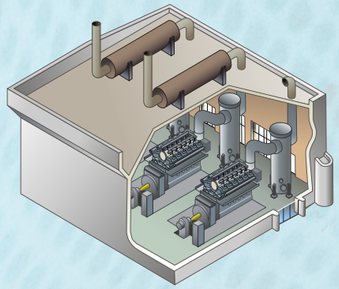


5. SECONDARY TREATMENT
Trickling filters and aeration basins are used to further clean the water. In trickling filters the water is sprayed over a honeycomb type material upon which aerobic bacteria grow. As the water trickles down, the microorganisms consume the solids that were not removed through primary treatment. Aeration tanks use a combination of oxygen and microorganisms, (activated sludge) that consume the remaining organic solids. Treated water is then sent to the Orange County Water District for recycling, or discharged into the ocean.

6. GROUNDWATER REPLENSMENT SYSTEM
A joint project between Orange County Sanitation District and Orange County Water District. This system reduces the amount of wastewater discharged to the Pacific Ocean and creates a reliable supply of high-quality water that is drought-resilient.



7. SOLIDS PROCESSING
Solids captured from primary and secondary treatment are batch loaded into anaerobic digesters where they are heated to about 98 degrees and treated for 18-21 days. The digestion process produces methane gas and a material called biosolids. Biosolids are sent to the dewatering facility where they are run through dewatering centrifuges. The centrifuges spin the biosolids separating water from the solids. This process saves OC San several million dollars per year in truck hauling costs. The nutrient-rich biosolids are trucked off to farms where they are recycled for direct land application and composting.



8. CENTRAL GENERATION
Methane gas that is captured from digesters is compressed and used to fuel engine generators that produce electricity, supplying more than 60% of our energy needs.

OC SAN
ORANGE COUNTY SANITATION DISTRICT

PA 05/2020

Table of Contents

Our Mission:

"To protect public health and the environment by providing effective wastewater collection, treatment, and recycling."

The Orange County Sanitation District (OC San) is a public agency that provides wastewater collection, treatment, recycling, and disposal services for approximately 2.6 million people in our service area of central and northern Orange County. OC San is a special district that is governed by a Board of Directors consisting of 25 board members. OC San has two operating facilities in Fountain Valley and Huntington Beach that treat wastewater from residential, commercial, and industrial sources.

Follow the Flow:

Pretreatment: All the cities' sewers connect to OC San's collections system that transports the wastewater to our treatment plants. Before the sewage enters our facilities, our Source Control Program permits and inspects business and industry that discharge waste into the sewers. Maintaining and protecting our trunklines from corrosion and odor issues is also an important part of what we do.

1. **Metering and Diversion:** Wastewater enters our treatment plants through trunklines up to 10-feet in diameter at a speed of 2.5-5 mph. Automated equipment measures the pH, conductivity, flow, and temperature. Data is monitored by operators around the clock.

2. **Preliminary Treatment:** Consists of two parts – bar screens and grit chambers. First, sewage passes through metal bars that catch large items (rags, trash, wood, etc.). Next, grit chambers use air bubbles to suspend lighter material while heavier grit (egg shells, coffee grounds, gravel, sand, etc.) sinks to the bottom and is removed. Screenings and grit are sent to a landfill.

3. **Air Scrubber:** Most processes that produce odors are covered and the foul air is drawn off for cleaning (deodorizing) by air scrubbers. OC San uses both chemical and biofilter systems. Hydrogen sulfides (sewer gas smell) are neutralized by using caustic soda, bleach, or live microorganisms.

4. **Advanced Primary Treatment:** Chemicals (ferric chloride and anionic polymer) are added to the preliminary treated sewage to improve settling. Heavier suspended solids clump together and sink to the bottom (sludge). Lighter waste (grease and oil) float to the surface (scum). This process takes about 2 hours and up to 80% of the suspended solids are continuously removed by scraper arms that revolve along the top and bottom of the basin. These solids are sent to digesters for further processing.

5. **Secondary Treatment:** Advanced primary treated sewage is sent to either trickling filters or activated sludge processes were aerobic microorganisms eat the remaining dissolved waste from the water. The secondary treated wastewater is then settled in clarifiers allowing the remaining sludge (either live or dead microorganisms) to be removed. Activated sludge process uses aeration basins to mix oxygen and microorganisms to enhance the waste removal rate. Some of the sludge is pumped back into the aeration basin as return activated sludge to regenerate the basin. The remaining sludge is thickened and sent to digesters.

Final Effluent: The secondary treated wastewater from Plant No. 1 is sent to the Orange County Water District for advanced treatment through the Groundwater Replenishment System (GWRS). This water is used to replenish Orange County's groundwater aquifers and protect against seawater intrusion. The secondary treated wastewater from Plant No. 2 is safely released though our ocean pipeline five miles out to sea at a depth of 200 feet below the ocean surface.

Biosolids

Our Policy

OC San strives to recycle our biosolids using sustainable options while protecting public health and the environment.

Some of our biosolids are recycled and used like fertilizer on farm fields to create and maintain healthy soils and improve crop yields.

Some of OC San's biosolids are further processed through composting to create a consumer-grade soil amendment that is distributed to agricultural, commercial and residential users.

Our Program

Orange County's biosolids are safe, highly-regulated, and meet the most restrictive standards. In order to maintain these high-quality standards for recycling our biosolids, OC San maintains a comprehensive and award-winning Source Control Program that has significantly reduced the amount of pollutants entering our facilities and biosolids.

Fertilizing farmland with biosolids is a win-win for the environment because we are recycling a renewable resource and creating productive farmland. It's a win for farmers because research has demonstrated using biosolids increases crop yields. And this biosolids management option is a win for local sewer rate payers since it is a low-tech, low-cost, reliable option that helps keep sewer rates low.

Learn More

Visit our website at **www.ocsan.gov/biosolids** for more information and to sign up for periodic biosolids program newsletters.

G | W | R | S

GROUNDWATER REPLENISHMENT SYSTEM

The Groundwater Replenishment System (GWRS) is the world's largest advanced water purification system for potable reuse. It takes treated wastewater that otherwise would be sent to the Pacific Ocean and purifies it using a three-step advanced process.

The design and construction of the GWRS was jointly funded by the Orange County Sanitation District (OC San) and the Orange County Water District (OCWD). Together OC San and OCWD constructed one of the most celebrated civil engineering and water reuse projects in the world.

The GWRS provides a reliable supply of highly purified, near-distilled quality water. Even during drought years, the GWRS offers a more cost-effective and energy-efficient way of producing water.

GWRS provides the county with new water it can count on. The project serves as a model for other regions throughout the United States and the world.

WHAT 2 FLUSH®.com

Know what should go down the drain that is sewer safe

It's simple, the toilet is only meant to flush the **three Ps—pee, poop and paper.**

Unfortunately, over the years, people have turned the toilet into a trash can. From medications and sanitary products to deceased pet fish and cigarette butts. If it fits, people flush it. Flushing these types of items down the toilet causes home pipes to clog, wastes water (up to five gallons of water every time you flush) and most importantly can have a huge impact on our sewers, not to mention our ocean.

Besides the three Ps **the only other thing going down the drain should be soap and water.** The toilet is not the only drain that people are using to get rid of unwanted waste; people are also known to use the kitchen sink as a trash can. Letting trash flow and go down the kitchen sink (or any other drain in the house) may cause pipes to clog and can eventually lead to sewage spills that harm the environment.

Visit **www.What2Flush.com** to learn how to properly dispose of common items that people flush or dump down the drain. Let's keep our wastewater flowing and our oceans clean. Educate yourself and others.

Know **What 2 Flush** and what to put down the drain. Protect our sewers and environment!

Reclamation Plant No. 1 and Administration Offices
10844 Ellis Avenue, Fountain Valley, California 92708

Treatment Plant No. 2
22212 Brookhurst Street, Huntington Beach, California 92646

Phone: 714.962.2411
Email: forinformation@ocsan.gov
Website: www.ocsan.gov

ORANGE COUNTY SANITATION DISTRICT
10844 Ellis Avenue
Fountain Valley, Calilfornia, 92708-7018
714.962.2411 | www.ocsan.gov

05/2022

OCSAN
ORANGE COUNTY SANITATION DISTRICT