BUDGET UPDATE

FISCAL YEAR 2021-2022

Orange County Sanitation District, California

OC SAN
ORANGE COUNTY SANITATION DISTRICT

Orange County Sanitation District, California

BUDGET UPDATE

Fiscal Year 2021-22

ORANGE COUNTY SANITATION DISTRICT

OUR MISSION

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


OVER FLOW

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.

Hyperlinks are active

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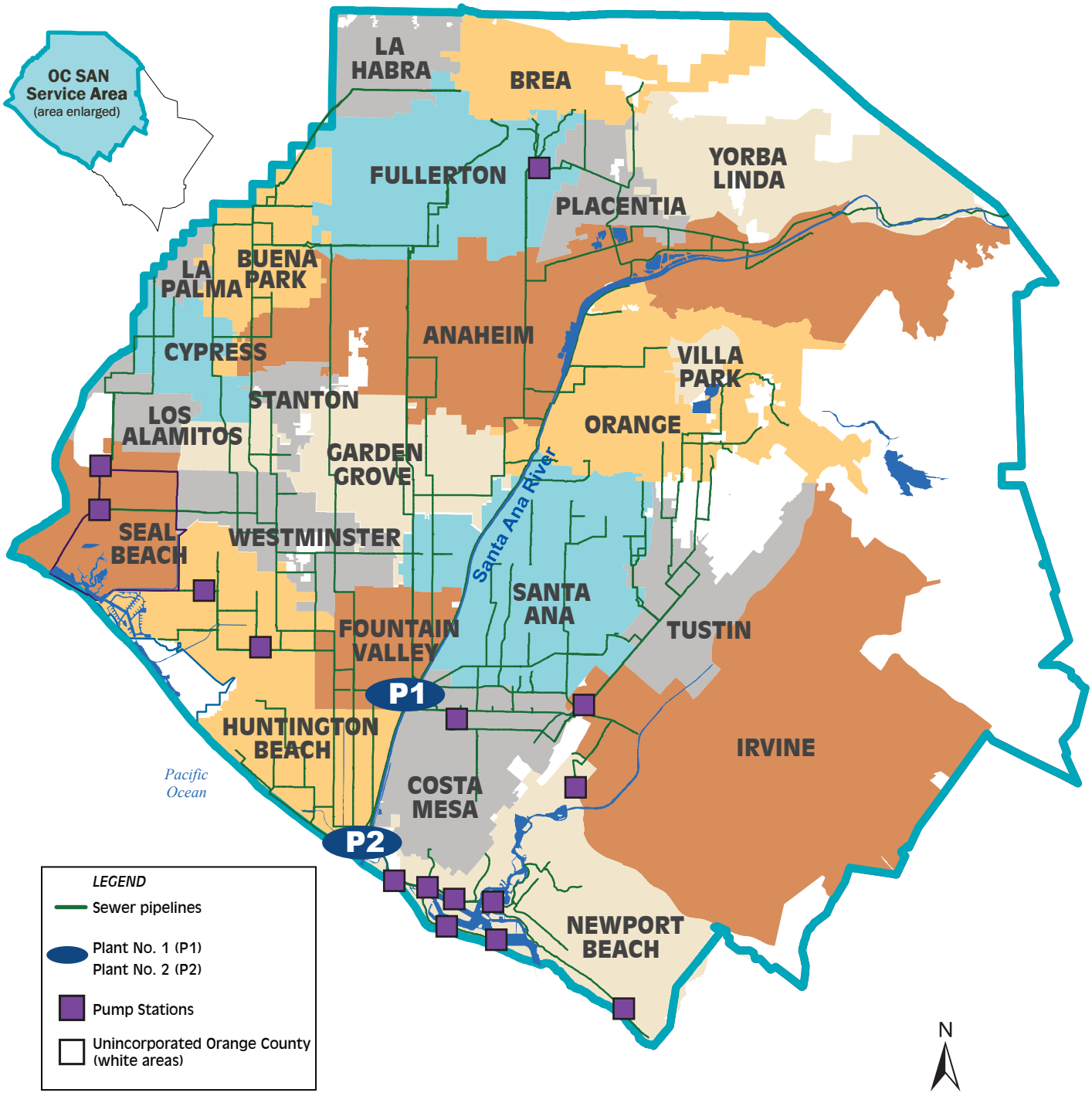
Orange County Sanitation District
Service Area and Treatment Plant Locations
in Orange County, California



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BOARD OF DIRECTORS

Agency/City	Active Director	Alternate Director
Anaheim	Stephen Faessel	Jose Diaz
Brea	Glenn Parker	Steven Vargas
Buena Park	Art Brown	Connor Traut
Cypress	Stacy Berry	Anne Hertz
Fountain Valley	Patrick Harper	Glenn Grandis
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	Jose Medrano
La Palma	Marshall Goodman	Nitesh Patel
Los Alamitos	Mark Chirco	Ron Bates
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	Robert Ooten	Art Perry
Midway City Sanitary District	Andrew Nguyen	Sergio Contreras
Irvine Ranch Water District	John Withers	Douglas Reinhart
Yorba Linda Water District	Brooke Jones	Phil Hawkins

County Areas

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

BOARD COMMITTEES

Steering Committee

David Shawver, Board Chair
John Withers, Board Vice-Chair
Stacy Berry, Chair, Operations Committee
Jesus Silva, Chair, LaPA Committee
Chad Wanke, Chair, Administration Committee
Sandra Massa-Lavitt, Member-At-Large
Glenn Parker, Member-At-Large

Legislative and Public Affairs Committee

Jesus Silva, Chair
Marshall Goodman, Vice-Chair
Kim Carr, Member-At-Large
Anthony Kuo, Member-At-Large
Andrew Nguyen, Member-At-Large
David Shawver, Board Chair
John Withers, Board Vice-Chair

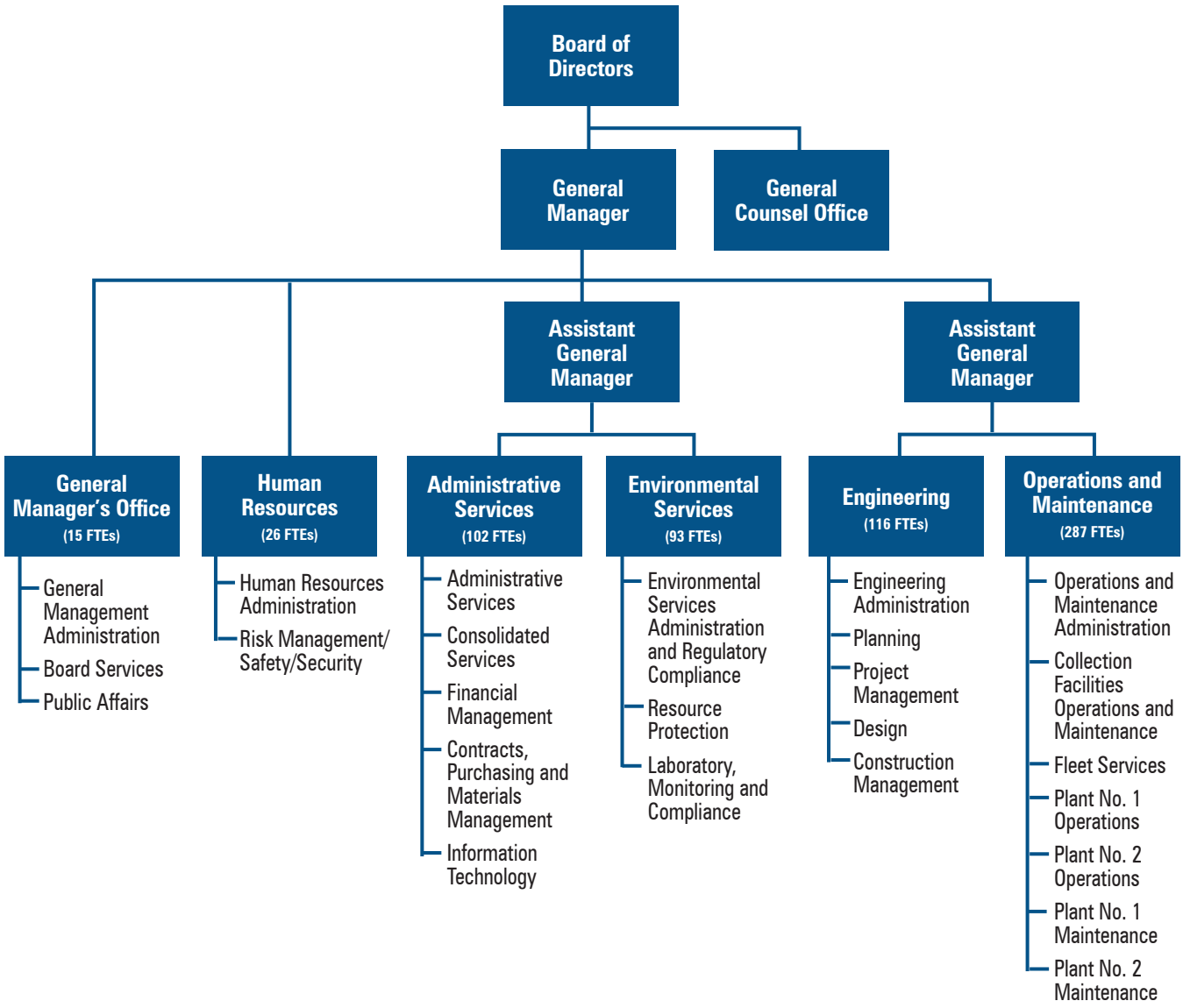
Administration Committee

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

Operations Committee

Stacy Berry, Chair (Cypress)
Brooke Jones, Vice-Chair (YLWD)
Doug Chaffee (Board of Supervisors)
Stephen Faessel (Anaheim)
Ryan Gallagher (Tustin)
Johnathan Ryan Hernandez (Santa Ana)
Steve Jones (Garden Grove)
Sandra Massa-Lavitt (Seal Beach)
Kim Nichols (Orange)
Bob Ooten (CMSD)
Jesus J. Silva (Fullerton)
Chad Zimmerman (Villa Park)
David Shawver, Board Chair (Stanton)
John Withers, Board Vice-Chair (IRWD)

ORGANIZATION CHART



ADMINISTRATIVE OFFICIALS

Management Team

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

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

Assistant General Manager and Director of Operations and Maintenance ..... **Robert Thompson**

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

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

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

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

MESSAGE FROM THE GENERAL MANAGER

June 1, 2021

Honorable Chair and Board of Directors:

I am pleased to submit the Orange County Sanitation District's (OC San) Proposed Budget Update for fiscal year 2021-22, the second year of the two year budget adopted in June 2020. This document lays out the framework of OC San's activities during the upcoming fiscal year and serves as a source of information for the 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 2019. The projects and programs contained in this budget are mostly a continuation of OC San's on-going workload.

OC San's proposed Fiscal Year 2021-22 operating and capital improvement program budget totals $408.5 million, or $6.8 million (1.6 percent) below what was approved last year as the second year of the adopted two-year budget. The proposed 2021-22 Capital Improvement Program (CIP) budget includes an overall decrease of $16.2 million from the budget approved a year ago, while the Operating Budget includes an increase of $9.4 million. The Operating Budget increase is primarily driven by additional chemical, utility, and infrastructure maintenance/repair costs. Some of the Operating Budget increase is also due to $3.5 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.

This budget is being submitted 15 months into the COVID-19 pandemic. While there are still some unknowns and uncertainties about how the pandemic will fully be resolved, this proposed budget reflects a financially sound and stable organization that is weathering the crisis and continues to move forward.

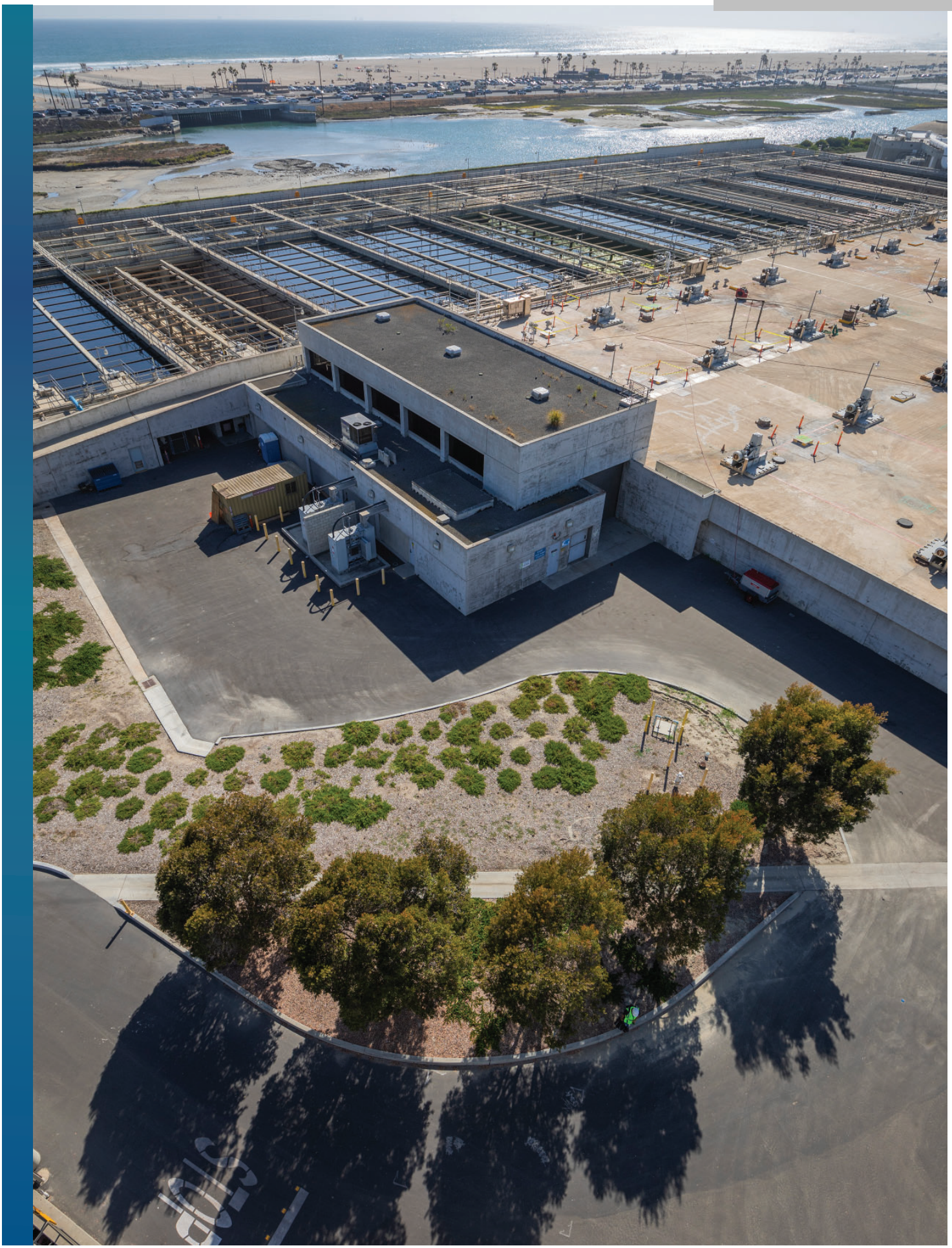
I would like to highlight some of our areas of focus for 2021-22:

- **Operational Readiness** – OC San continues to 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.
- **Expanded Recycling Efforts**
  - **Groundwater Replenishment System Final Expansion** – In partnership with the Orange County Water District (OCWD), our agency recycles enough water to supply the needs of 850,000 people through the Groundwater Replenishment System (GWRS). Construction continues on the Final Expansion phase of this internationally recognized project. Changes and additions to infrastructure will allow for the treated water from Plant No. 2 that is currently unavailable, to be processed at the GWRS facility in Fountain Valley. With this final phase, the GWRS will increase treatment capacity from 100 to 130 million gallons per day; enough water for 1 million people in central and northern Orange County.
  - **Food Waste Treatment Facility** – A project created to assist the cities in our service area satisfy the requirements of California State Assembly Bill 1826 and Senate Bill 1383 which requires that organic wastes be diverted away from landfills. This regulatory shift has created an opportunity in the wastewater sector to provide a cost effective and environmentally friendly service to help manage organics using OC San's existing anaerobic digesters, which in turn will produce renewable energy to power our treatment plants.
- **Headquarters Complex** – In our ongoing effort to streamline our operation and plan for the future, we have acquired 7.5 acres across Ellis Avenue from Reclamation Plant No. 1 in Fountain Valley. The buildings on those properties have been demolished to make room for a consolidated headquarters building to house the staff that are currently located in various buildings and trailers spread out on the existing 100-acre wastewater treatment facility. The new headquarters complex will allow space for future wastewater treatment infrastructure and will centralize our administrative functions. Construction is scheduled to begin in August 2021 with move-in by the end of 2023.

2021-22 BUDGET UPDATE

- **Capital Improvement Program** – OC San's Capital Improvement Program (CIP) has evolved over time. It began by focusing on creating the initial infrastructure of the collections and treatment system, shifted to expanding capacity, and now our focus is on aging infrastructure, incorporating climate resiliency, seismic risk, and maximizing resource recovery. While the COVID-19 pandemic has resulted in operational modifications, OC San has continued moving our CIP forward, with 32 projects with a construction budget of $438 million, helping keep the economic engine running in Orange County.
- **Infrastructure Reliability and Asset Management** – OC San's infrastructure must operate continuously day and night, requiring that we proactively manage the condition of more than $10.7 billion in assets to ensure reliable operation. Over the past two years, we made a concerted effort to establish an updated and more robust understanding of the condition and performance of all critical and major assets and our ability to meet established levels of service. Last year, we updated our Asset Management Plan to develop a tactical approach for addressing asset condition and performance issues. 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. OC San will be investing an additional $29.7 million in repairs and maintenance this next year.
- **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, as are enhancements to our physical, electronic, and cyber security infrastructure.
- **Staffing Cost Containment** – While continuing to implement programs to enhance our resiliency, reliability and resource recovery, this budget displays our commitment to efficiency as it includes no staffing increases.
- **Strategic Planning** – OC San strives to create an integrated planning environment which begins with the strategic and policy expectations of the Board of Directors and ensures that our efforts are aligned throughout the organization. In 2021-22, the Board will adopt an updated Strategic Plan to set the policy framework and priorities for the next two years. OC San will continue to provide wastewater collection, treatment, recycling, infrastructure maintenance, ocean monitoring, and many other services while keeping rates among the lowest in California. This budget fully supports the goals and levels of service included in the Orange County Sanitation District's Strategic Plan and positions us well to proactively manage in the coming years.

James D. Herberg
General Manager
Orange County Sanitation District



FINANCE SUMMARY

FINANCIAL SUMMARY/OVERVIEW AND BUDGETARY ISSUES

Budget Overview

OC San's proposed Fiscal Year 2021-22 operating and capital improvement program budget totals $408.5 million, or $6.8 million (1.6 percent) below what was approved last year as the second year of the adopted two-year budget. The decrease in the FY 2021-22 budget is primarily attributable to a $16.2 million reduction in capital spending for changes in project estimates and scheduling and an increase of $9.4 million in operating budget.

The budget continues to reflect the agency's ongoing efforts to streamline operations. Staffing levels are proposed to remain at 639 FTEs in FY 2021-22.

OC San's Capital Improvement Program (CIP) budget for FY 2021-22 is $224.6 million. This CIP budget finances collection system, joint works treatment and disposal system improvement projects. The $16.2 million decrease from the originally proposed budget is attributable to changes in project schedules and estimates that result in deferred spending.

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 is currently at $909.6 million. It is planned to refinance $163.8 million of maturing and callable debt during FY 2021-22 because of the low interest rate environment that will produce savings over the life of the debt. No new money debt financings are currently forecasted to assist in the funding of the $3.0 billion in capital improvements required over the next ten years.

Staffing

Reflecting the organization's commitment to providing service at the lowest costs, the budget includes no increase in authorized full time positions for FY 2021-22. Total filled positions will not exceed 639 full time equivalent (FTE) staff positions. This staffing level continues to reflect a significant reduction from the Fiscal Year 1995-96 approved staffing level of 678 positions.

Overall personnel costs for FY 2021-22 will approximate the original adopted budget due to reductions in retirement premiums following the pay down of the Orange County Employees' Retirement System (OCERS) unfunded accrued liability.

Costs for medical insurance and workers compensation benefits are also expected to remain the same as the level originally approved. OC San will continue to effectively manage these expenses with approximately 26 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 188 million gallons of wastewater each day generated by approximately 2.6 million residents and a 1.8-million-person employment in central and northwest Orange County. The proposed budget to operate, maintain and manage our sewage collection, treatment and disposal system in FY 2021-22 is $183.9 million.

The cost per million gallons of wastewater treated, (an industry-wide performance measurement), is expected to increase in FY 2021-22 to $2,681, a $106, or 4.1 percent increase from the 2020-21 projection of $2,575. The increase in the cost per million gallons is due to an $9.4 million increase in total operating costs.

Sewer Service Fees

The 2021-22 single family residential rate, the underlying basis for all sewer rates, is proposed at $343 a year. This follows a one-year rate hold due to the coronavirus pandemic and represents an increase of $4 per the rate structure approved by the Board of Directors.

Groundwater Replenishment System (GWRS)

The OC San Strategic Plan includes water reclamation. Partnered with the Orange County Water District (OCWD), OCWD 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 (mgd). OC San and OCWD equally shared the expenses of this project.

Initial expansion of the GWRS increased the production of reclaimed water to 100 mgd. The project, which was funded entirely by the OCWD, was completed in 2015. OC San is directing all reclaimable flows from Plant No. 1 to OCWD in support of providing maximum amounts of treated wastewater for reclamation.

2021-22 BUDGET UPDATE

The plan to achieve the final expansion of the GWRS was approved by both OC San and OCWD Board of Directors in 2016. The final expansion of GWRS will bring the total production of reclaimed water to 130 mgd. Since OC San has maximized the available reclaimable wastewater treated at Plant No. 1, secondary effluent from Plant No. 2 will be sent to the GWRS for reclamation. Modification of existing Plant No. 2 Headworks, a new Plant Water pump station and construction of new pumping, equalization and conveyance facilities will be funded by the OCWD. As the Headworks Modification and Plant Water project is impacting OC San's critical infrastructure, OC San will manage the design and construction of these projects and will be reimbursed by OCWD up to $50 million. GWRS final expansion is scheduled to complete in 2023.

Capital Improvement Program (CIP)

The total CIP budget for FY 2021-22 is being proposed at $224.6 million, a decrease of $16.2 million from the previously approved 2021-22 budget primarily due to changes in project schedules and estimates that result in deferred spending Over the next 10 years, OC San's Capital Improvement Program will:

- Rehabilitate the headworks, primary treatment, utility systems and perform security improvements at Plant No. 1.
- Replace a third of the primary treatment facilities, rehabilitate the outfall pumping and perform power reliability improvements at Plant No. 2.
- Rehabilitate all of the digester gas compressor systems
- Construct a new food waste receiving facility and rehabilitate and replace digesters at Plant No.2
- Construct a new Headquarters Complex.
- Replace or rehabilitate OC San's aging pump stations and trunk sewers in the collections system. This includes the West Side sewers and Seal Beach Pump Station. Newhope Placentia Trunk Improvements (in Anaheim) will continue construction through 2022.

FINANCIAL SUMMARY/OVERVIEW AND BUDGETARY ISSUES

Operating Budget Increase – $12.2M

The operations budget for the collection, treatment, and disposal of wastewater is proposed at $183.9 million, a $12.2 million (7.1 percent) increase above 2020-21 projected expenditures.

Although some expenses will increase or decrease slightly, the overall increase to the operating budget in 2021-22 over the 2020-21 projected is primarily attributable to the following specific areas:

Salaries and Benefits – $5.7M Increase

Salaries and benefits will increase $5.7 million above the 2020-21 projected expenditures primarily due to the impacts of the collective bargaining agreements and increases in medical insurance premiums. The increases are partially offset by a decrease in workers' compensation costs and lower retirement premiums resulting from OC San's previous decision to use available cash reserves to reduce the unfunded pension liability.

These changes reflect the impacts from collective bargaining agreements and revised actuarial assumptions on retirement premiums.

Professional Services – $2.7M Increase

The increase is primarily due to increases in anticipated engineering costs and technical consulting for operationally funded projects and software program consultants for OC San systems.

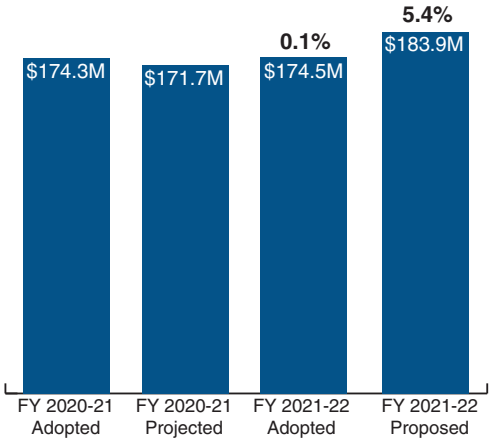
Repairs and Maintenance – $1.7M Increase

This expense category includes parts and services for repairing aging treatment plant and collection facilities and reflects base budgets for equipment maintenance as well as out-sourced annual service contracts and maintenance agreements. The fiscal year 2021-22 budget increase over the 2020-21 projected expenditures is mostly attributable to delayed rehabilitation projects for primary and secondary clarifiers, increases in basic repairs and maintenance costs and repairs to major trunklines in the collection system.

Other Materials, Supplies and Services – $1.1M Increase

The proposed budget increase over the 2020-21 projected expenditures is due to lab certification and audit fees, regulatory operating fees, and expenses associated with PFAS studies and monitoring.

Operating Expenses (in millions)

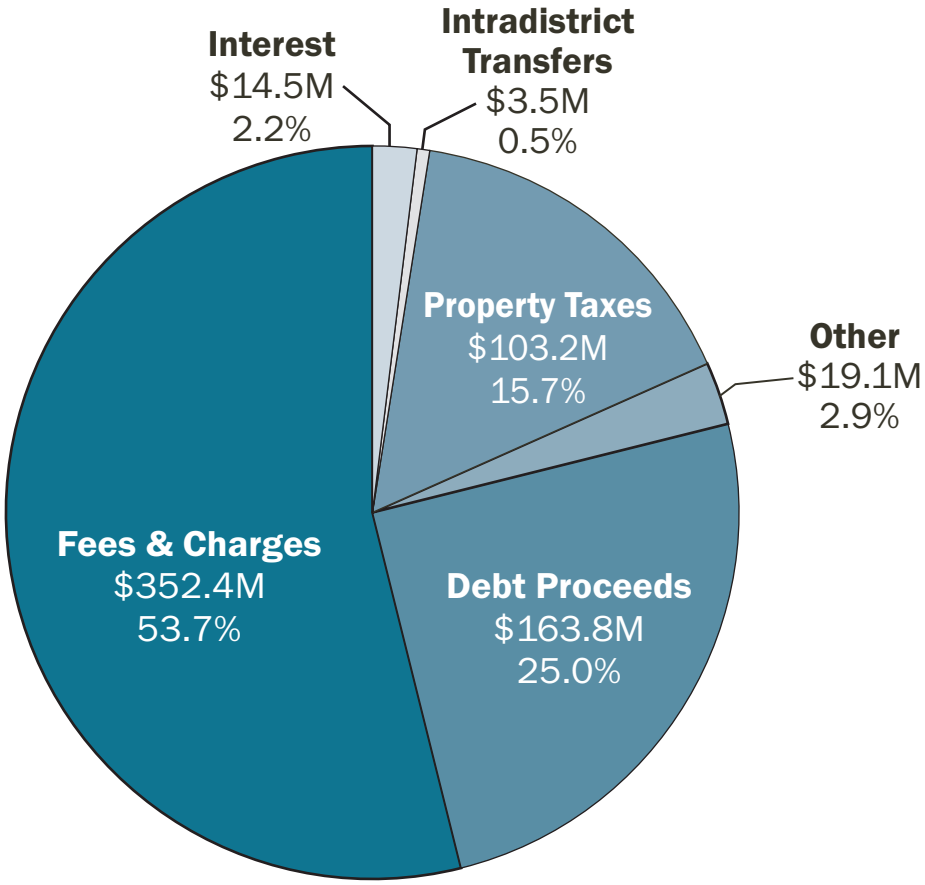


Budget over budget percentages are shown above the columns.

2021-22 BUDGET UPDATE

FINANCIAL SUMMARY/FUNDING SOURCES BY CATEGORY

Where The Money Comes From



Funding Sources by Category (in millions)

Category	2020-21 Adopted	2021-22 Adopted	2021-22 Proposed
Service Fees	$316.7	$325.4	$323.2
Property Taxes	99.9	102.0	103.2
Permit User Fees	12.8	13.0	12.6
Capital Facilities Capacity Charges	20.1	20.7	16.6
Interest	13.2	13.1	14.5
Intradistrict Transfers	6.1	3.5	3.5
Debt Proceeds	0.0	0.0	163.8
Other Revenue	16.0	16.7	19.1
Total Funding Sources	$484.8	$494.4	$656.5

2021-22 BUDGET UPDATE

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

General Service Fees – $323.2M

User fees are ongoing fees for service paid by customers connected to the sewer system and are the primary source of OC San's revenue. 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 – $103.2M

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 dedicated for the payment of debt service before other operational expenses.

Permit User Fees – $12.6M

Permit user fees are paid by large industrial and commercial properties 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 cost of service received.

Capital Facilities Capacity Charges (CFCC) – $16.6M

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 – $163.8M

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.

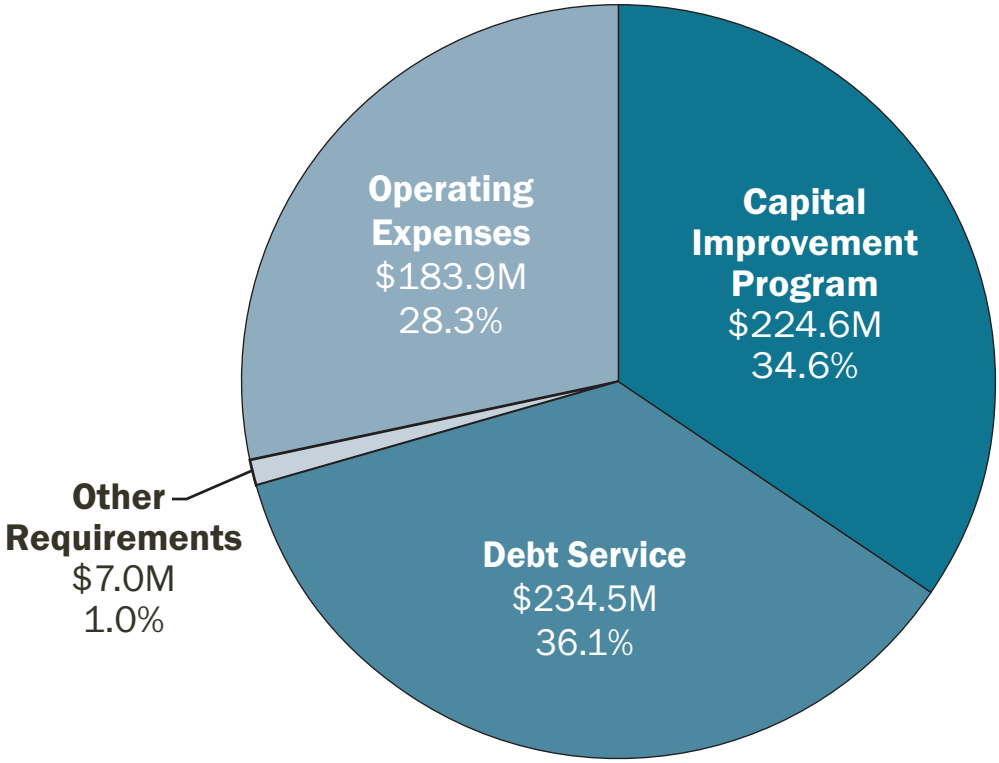
Refinancing COPs can be beneficial to OC San when there is maturing or callable issues. In the current low interest rate environment, OC San can realize savings by issuing refunding COPs in the amount of $163.8 million. No new money debt issuances are being proposed as the $3.0 billion in future replacement, 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 – $19.1M

Other revenue includes self-insurance assessments for workers' compensation and general liability coverage as well as reimbursements from other agencies for shared CIP and operating costs and 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 Adopted	2021-22 Adopted	2021-22 Proposed
Capital Improvement Program, Net	$147.6	$240.8	$224.6
Operating Expenses	174.3	174.5	183.9
Debt Service*	72.8	168.9	234.5
Other Requirements	6.1	6.5	7.0
Total Funding Uses	$400.8	$590.7	$650.0

**The fiscal year 2021-22 debt service amount includes payment of $163.8 million for maturing and callable debt for the refunding COPs.*

2021-22 BUDGET UPDATE

OC San budgets its funds in four distinct areas:

Operating Expenses - $183.9M

The proposed budget allocates resources to operate, maintain and manage our sewage collection, treatment, recycling and disposal system, and for any associated administrative or technical requirements.

Capital Improvement Program (CIP) - $224.6M

To provide an appropriate level of service to OC San's ratepayers, large capital improvements are required. The CIP provides for the management and implementation of these improvements. The CIP budget includes specific projects, cost estimates, and timelines. The gross CIP project budgets for 2021-22 total $234.6 million; however, the CIP cash outlays, net of savings and deferrals, is $224.6 million.

Debt Service - $234.5M

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. Currently, OC San is on track to pay off its $909.6 million outstanding debt by 2044.

Other Requirements - $7.0M

This item includes an allocation for future replacement, rehabilitation, and refurbishment projects where detailed job plans have not yet been prepared. Also included, 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.

COLLECTION, TREATMENT AND RECYCLING PROCESS OVERVIEW

OC San collects wastewater from 479 square miles and approximately 2.6 million residents and a 1.8-million-person-employment in central and northwest Orange County. The wastewater is conveyed through 15 pump stations and gravity sewers to either Reclamation Plant No. 1 in Fountain Valley or Treatment Plant No. 2 in Huntington Beach. After the wastewater reaches one of the two treatment facilities, it undergoes preliminary treatment where large solids, rags, non-dispersible materials, and plastics are removed when the wastewater passes through bar screens. Then it flows through aerating grit chambers that remove coffee grounds, sand, seeds, and gravel. All matter collected in the preliminary treatment is taken by a contractor to a landfill.

Primary treatment consists of wastewater settling in large clarifying basins; chemicals enhance the solids settling. The solids are scraped from the bottom and skimmed from the top of the clarifiers and then sent to digestion. Primary treated wastewater is then pumped to secondary treatment where it is processed using activated sludge and trickling filters. The secondary solids collection process is similar to the primary treatment solids collection process. All the resulting water from the secondary treatment processes at Plant No. 1 is sent to the Orange County Water District (OCWD) for recycling/reuse after purification by the Groundwater Replenishment System (GWRS). Plant No. 2 secondary effluent is discharged into the ocean. With the final expansion of the GWRS in 2023, reclaimable Plant No. 2 secondary effluent will be conveyed to the GWRS as another source of specification water.

All of the solids collected during primary and secondary treatment are sent to digesters for solids processing. Primary solids and secondary solids remain for an average of 18 days at 98 degrees Fahrenheit in the digesters and are decomposed by anaerobic bacteria into two main products, biosolids and methane. The methane gas generated during the natural decomposition of the solids in the digesters is used to fuel the Central Power Generation Systems and produce electricity used to operate both treatment plants. The solids, with settling enhanced by the addition of chemical coagulants, are treated, and then dewatered to a cake. The caked biosolids are then hauled from the treatment plants and recycled by composting, by use as a land application, or by use at a local landfill that produces methane.

Approximately 120 million gallons per day of secondary effluent from Reclamation Plant No. 1 is sent to the OCWD for reclamation in its two treatment and distribution systems. OCWD uses the secondary effluent in two ways: The first is GWRS. The GWRS is the largest water purification project of its kind in the world; 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, 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. Multiple projects in design and construction will contribute to the final expansion program that will increase the conveyance of reclaimable secondary effluent from Plant No. 2 to GWRS and increase production to 130 million gallons per day of recycled water.

Since the 1970's, OC San, as an environmental agency, has always recycled and reused by-products of its treatment processes for the benefit of the health and the environment of the people in its service area.

2021-22 BUDGET UPDATE

STRATEGIC PLANNING

Introduction

Driven by the mission, vision, core values, and the Strategic Plan, OC San continues 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.

Mission Statement

The Mission Statement is the basic foundation that defines why we exist.

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

Vision Statement

The Vision Statement supports the Mission Statement by expressing a broad philosophy of what the Orange County Sanitation District strives to achieve now and in the future in the delivery of services to our customers, vendors, other agencies, the general public and each other.

Orange County Sanitation District will be a leader in:

- Providing reliable, responsive, and affordable services in line with customer needs and expectations.
- Protecting public health and the environment utilizing all practical and effective means for wastewater, energy, and solids resource recovery.
- Continually seeking efficiencies to ensure that the public's money is wisely spent.
- Communicating our mission and strategies with those we serve and all other stakeholders.
- Partnering with others to benefit our customers, this region, and our industry.
- Creating the best possible workforce in terms of safety, productivity, customer service, and training.

Core Values

Our Core Values support the Mission and Vision Statements by expressing the values, beliefs, and philosophy that guides our daily actions. They help form the framework of our organization and reinforce our professional work ethic.

Honesty, Trust, and Respect

We aspire to the highest degree of integrity, honesty, trust, and respect in our interaction with each other, our suppliers, our customers, and our community.

Teamwork and Problem Solving

We strive to reach OC San goals through cooperative efforts and collaboration with each other and our constituencies. We work to solve problems in a creative, cost-effective and safe manner, and we acknowledge team and individual efforts.

Leadership and Commitment

We lead by example, acknowledging the value of our resources and using them wisely and safely to achieve our objectives and goals. We are committed to act in the best interest of our employees, our organization, and our community.

Learning/Teaching – Talents, Skills and Abilities

We continuously develop ourselves, enhancing our talents, skills, and abilities, knowing that only through personal growth and development will we continue to progress as an agency and as individuals.

Recognition/Rewards

We seek to recognize, acknowledge and reward contributions to OC San by our many talented employees.

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, and focused engineering study efforts. 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

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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.

Strategic Plan

In November 2019, the Board of Directors adopted a new 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 fourteen topic areas that define our responsibilities and the services we provide. These areas are:

- Business Principles
  - Budget Control and Fiscal Discipline
  - Asset Management
  - Cybersecurity
  - Property Management
- Environmental Stewardship
  - Energy Independence
  - Climate and Catastrophic Event Resiliency
  - Food Waste Treatment
  - Water Reuse
  - Environmental Water Quality, Stormwater Management and Urban Runoff
- Wastewater Management
  - Chemical Sustainability
  - Biosolids Management
  - Constituents of Emerging Concern
- Workplace Environment
  - Resilient Staffing
  - 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 updating of the Strategic Plan in November 2021, 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.

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Asset Management

In December 2002, the Orange County Sanitation District (OC San) Board adopted their "Asset Management Strategic Plan and Framework Analysis" (Strategic Plan). The Strategic Plan defined Asset Management for OC San as; "to create and acquire, maintain, rehabilitate, replace and augment these valuable wastewater assets in the most cost effective (lowest life cycle cost) sustainable manner at the level of service required by present and future generations of regulators and customers at an acceptable level of risk."

OC San is committed to providing services for its ratepayers 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. 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.

Asset management has evolved into a comprehensive decision-making framework that encompasses engineering planning, design and construction of quality facilities, optimized operation, proper maintenance, and planned refurbishment and disposal 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 ratepayers at the lowest lifecycle cost.

OC San's Asset Management Program focuses on identifying short, medium and long-term planning of systems to ensure the proper rate structure is in place to support sustainable operations. OC San's condition assessment studies are conducted based on service life and service conditions. This is important aspect of the program and have yielded tangible benefits in reduced risk levels and an improved capital planning approach. The Asset Engineers use condition assessment data along with maintenance data in Maximo Computer Maintenance Management System (CMMS) to update and maintain the Asset Registries. The Registries include installation date, condition and remaining useful life estimates for all of OC San's critical assets.

The Engineering Planning Division has been maintaining a medium to long-term (up to 20 years) Capital Improvement Program (CIP) by creating specific project plans for the refurbishment, rehabilitation or replacement for each asset area. The Asset Registries help guide the scope and timing of these medium to long-term CIP projects.

This medium-term management 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 the twenty-years, the unknown amount of capital that is in need of rehabilitation is expected to be drastically reduced and replaced by more specific estimated capital needs.

Complementing the medium-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 are consistently reviewing their area assets, utilizing their criticality, condition information, maintenance history and engineering judgment, 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 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 has planned for decreased capital projects for expansion and increased renewal expenditures in the future relative to past expenditure levels. Additional focus is given to ensuring that appropriate operation and maintenance strategies are being applied that consider the different ages of assets being maintained.

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Asset Valuation

The replacement valuation for all of OC San's assets has been updated in January 2020. The table below presents the current replacement values of OC San's assets. The replacement value represents the cost in August 2017 dollars to completely rebuild all the assets to a new condition.

Valuation	Plants	Collection	Total
Replacement Value (in billions)	$7.2	$3.5	$10.7

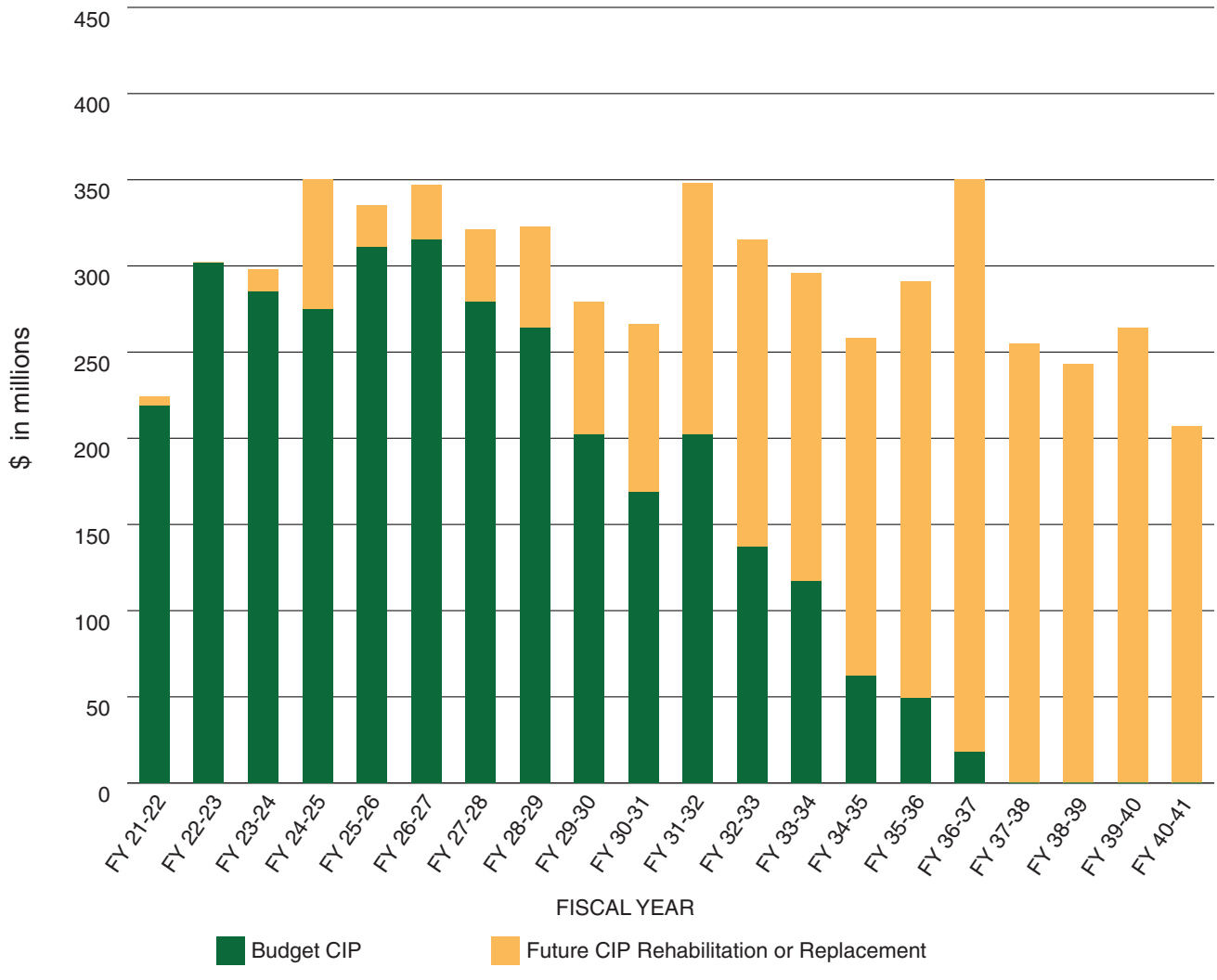
The 2020 replacement value is estimated to be $10.7B. In 2012, the prediction was $6.2B. It is projected that the replacement value will increase as the Capital Improvement Program continues and OC San tracks its assets in a progressive manner. The major reasons for this, the 2020 valuation was significantly detailed and thorough compared to the past.

Planned CIP Outlays

The following chart shows the 20-year CIP outlay which includes current and predicted future Capital Improvement Program projects.

OC San's capital improvement and maintenance programs are focused on maintaining our infrastructure to ensure that our mission is delivered reliably and that our facilities are managed in a way that minimizes overall life cycle costs.

20 Year CIP Outlay



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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, closed-circuit television (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 fiscal year 2020-21 the following maintenance activities are projected to be completed:

- Cleaned 42 miles of regional sewer lines on a cleaning schedule.
- CCTV video inspection of 75 regional system manholes.
- CCTV video inspection of 50 miles of regional sewer pipeline.
- Completed 83% of scheduled preventative maintenance work.
- Managed odor control chemical expenditures to 93% of budget.
- Continued to implement emergency preparedness bypass pumping plan for pump stations.

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 $9 million.

The following activities and goals are planned for fiscal year 2021-22:

- Major valve replacement at three Pump Stations.
- 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 85% 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 $15 million.

Collection System Capital Improvement Projects:

Our collections projects go through 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, upgrade facilities to meet current codes and standards, and in some instances to increase flow capacity due to observed increases in stormwater infiltration and/or growth in localized portions of our service area.

One of the larger projects is the Newhope-Placentia Trunk Replacement (Project No. 2-72) which is taking place in the cities of Fullerton and Anaheim. Seven miles of sewer along State College Boulevard, from Yorba Linda Boulevard to Orangewood Avenue, will be upsized to accommodate the flow necessary to allow the abandonment of the Yorba Linda Pump Station which has reached the end of its useful life. After analyzing the system, it is not practical to update the facility due to the high costs of rehabilitation and the limitation to utilize the flow for reclamation. Currently, flow is diverted into the

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Santa Ana River Interceptor instead of the Newhope-Placentia line due to the existing insufficient capacity, thus preventing the use of flow for the Groundwater Replenishment System. The project also includes modifications to existing diversion structures to add flexibility to the collection system and divert additional reclaimable flows. Construction is scheduled for completion in Summer 2021. The project has a current budget of $126 million.

Another large-scale project is the Rehabilitation of the Western Regional Sewers (Project No. 3-64) This project is comprised of three separate contracts that encompass the western region of OC San's service area. This project covers an area of over 20 miles of sewer pipelines and associated manholes primarily in the public rights of way in the cities of Anaheim, Buena Park, Cypress, La Palma, Seal Beach, and unincorporated Orange County. Staff has worked and will work closely with the involved cities throughout the design of these projects. Community outreach has also taken place during the design phase to identify and mitigate risks before construction occurs. City coordination and community outreach will continue throughout construction. This Project includes the Orange Western Sub-trunk Rehabilitation that covers approximately 13,000 feet of pipe. Also, the Los Alamitos Trunk Sewer Rehabilitation covers approximately 24,000 feet. Two of the contracts are to begin construction during this Budget Book's fiscal year. The project budget is $82 million.

At the southern edge of the previously mentioned project, the Seal Beach Pump Station (Project No. 3-62 & 3-67) also requires attention to properly support the western region of our service area. Not only are the electrical and safety codes significantly different from when the station was first constructed in the early 1970s, but many of the electrical, mechanical, and control system components are becoming obsolete, so long-term maintenance is no longer an option. One of the sewer force main pipes is too risky to operate and the others useful life is near its end. The two-sewer force main pipes (2.5 miles long) and the pump station will be replaced. Odor control facilities will be added to reduce system corrosion and minimize public impacts. The Force Main construction is underway and will be completed Fall 2022 and the Pump Station is currently under design. The budget for these projects is $131 million.

Plant 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 FY2020-2021 include increased collaboration with asset management efforts as well as the centralization of preventive maintenance optimization, and maintenance planning, scheduling and coordination to integrate with the CIP.

Throughout the Plants, more than 12,400 preventative maintenance activities were performed. In addition, the following significant maintenance and repair activities are projected to be completed in fiscal year 2020-21:

- Completed major maintenance service of 16 remaining primary sedimentation basins for increased reliability at Plant No. 1.
- Major overhaul of one gas compressor at each Plant.
- Cleaned four digesters at Plant No. 1 and three at Plant No. 2.
- Overhauled Main Sewage Pump motors at the Plant No. 2 Headworks.
- Overhauled 6 secondary clarifiers at Plant No. 2.
- Replaced secondary clarifier inlet gates at Plant No. 2.
- Replaced the truckloading augers, valves and sliding frame systems at Plant No. 2.
- Completing the overhaul of the Steam Turbine at Plant No. 2.

Total costs for the treatment plant maintenance is greater than $23 million.

Looking forward to fiscal year 2021-22, there are more than 12,600 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. In addition, staff will be utilizing predictive technologies such as vibration analysis to measure imbalance in rotating equipment, thermography to detect heat signatures, oil analysis to predict imminent failure of equipment and lubricant degradation, and ultrasonic analysis to measure material flaws. These predictive technologies will not only improve how maintenance is performed but will also provide decision

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making information to support the OC San Capital Improvement Plan.

In addition to normal maintenance activities, OC San is planning the following major activities for fiscal year 2021-22:

- 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.
- Cleaning of three digesters at Plant No. 1 and three at Plant No. 2.

The total cost for these proposed plant maintenance activities is greater than $19 million.

Reclamation Plant No. 1 Capital Improvement Projects:

These projects are intended to rehabilitate or reconstruct major components of our treatment process.

One of the largest projects is the Headworks Rehabilitation at Plant No. 1 (Project No. P1-105). The facility is almost 30 years old, so a comprehensive refurbishment is required in order to extend its life. Facilities to be rehabilitated include 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. The project will also include demolition of the original Headworks No. 1 facilities and the unused Chlorine Building pumps. Construction is scheduled to break ground Summer 2021. The total budgeted cost for this project is $340 million.

Project No. P1-133 Primary Clarifiers Reliability Improvements at Plant No. 1 will increase the operating reliability of the rectangular primary clarifiers along with the replacement of equipment that is beyond its useful life. The Project is scheduled to begin construction in March 2022 and the total budget is $14 million.

Treatment Plant No. 2 and Joint Facility Capital Improvement Projects:

Plant No. 2 will be the site of many construction projects over the coming decade. A few of these projects include:

The Primary Treatment Rehabilitation Project (Project No. P2-98) will rehabilitate or replace primary clarifiers, influent pipes, construct new primary effluent pipes, and rehabilitate and upgrade the odor control systems. There are 14 primary clarifiers at Plant No. 2. The ·"A-Side" clarifiers are the first set of four clarifiers constructed in the 1960's. The A-Side Primary Clarifiers Replacement project not only constructs four new primary clarifiers, it also includes the construction of two primary sludge pump stations, odor treatment complex, electrical distribution center, electrical and fiber systems, and process controls. The current A-Side clarifiers have dome covers and measure 140-feet in diameter and 21-feet high from the ground surface. The four new circular clarifiers will have aluminum flat covers instead of the dome shape, with hinged panels to allow for operator observation and maintenance access Construction of the first phase is underway, and the next phase will be completed by 2026. The total project budget is $195 million.

Digester Gas Facilities Rehabilitation, Project No. J-124, will rehabilitate digester gas facilities at Plants No. 1 and 2 to meet current and future OC San needs such as Air Quality Management District and National Fire Protection Association regulations, and future projected gas production. As a resource recovery agency, the digester gas facilities at both plants capture, clean, and compress digester gas from the treatment process and converts it to power the Central Generation facilities. Design on this project will continue to the next year with anticipated construction to commence in Fall 2022. The Project budget is $173 million.

Support Facilities Projects:

The Administration Building does not have sufficient office space to accommodate employees resulting in personnel being spread throughout the plant in temporary trailers. Furthermore, the Administration Building is approaching 60 years old and require extensive rehabilitation and upgrades to meeting

current building code and permit requirements. Some of the temporary trailers have been in use since the 1990s. The Headquarters Complex (Project No. P1-128) will construct a new building, which will be located north of Ellis Ave. across from Plant No. 1, will consolidate employees and business functions, and will also preserve valuable land at Plant No. 1 for future process needs, as identified by the 2017 Facilities Master Plan. This project is currently in Bid/Award phase as of June 2021. The total project budget is $167.5 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 to develop and support CIP Projects. Below are two examples of current ongoing studies.

The Central Laboratory Building at Plant No. 1 was originally constructed in 1989. It is a two-story building of approximately 36,000 square feet. There are various issues associated with the building. The current layout is presenting challenges for newer testing and regulatory requirements. Other issues include: the building originally constructed without a formal review process by the local city building departments; and seismic issues that are projected to result in significant cost impacts in modifying the existing building. This Study will help make the determination to rehabilitate the existing structure verses a new building.

Recent efforts have revealed issues towards the ability to overhaul the existing engines at the Central Generation Facilities. This study will provide a market analysis and determine if OC San can successfully perform the bottom-end overhauls and if OC San is on a sustainable path to reliably operate and maintain the Cen Gen Facility engines for the next 20 years. Planning Studies Program Budget: $28.7 million.

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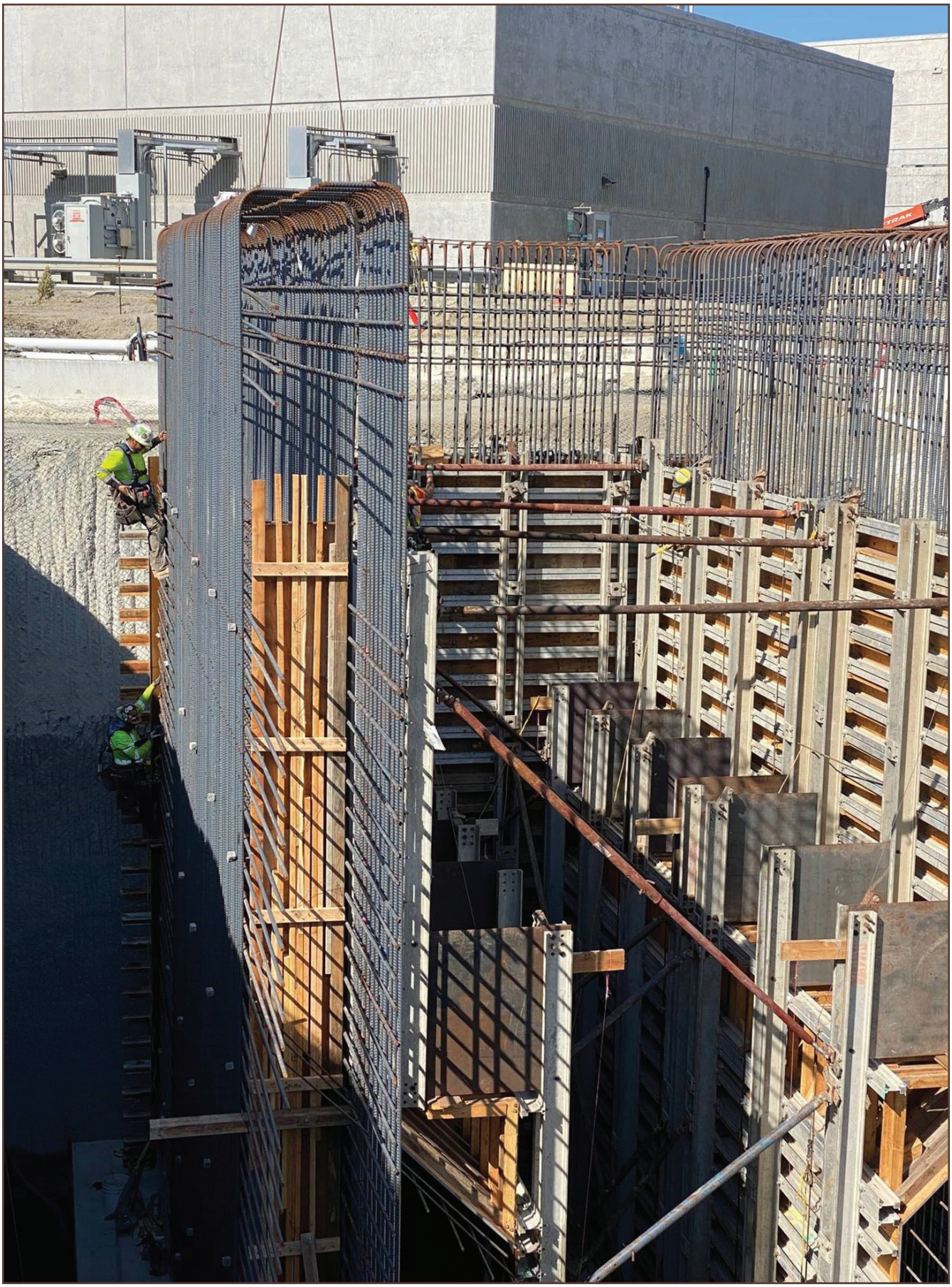

CAPITAL IMPROVEMENT PROGRAM

CIP Budget Request Summary

This is an update to the Fiscal Year 2020-22 two-year budget. With $10.7 billion of aging assets requiring constant investment and attention, OC San is focusing its efforts on the continued refinement of its asset management-based engineering planning process. This process has been used to propose project modifications to efficiently package projects for execution. OC San staff is working to carefully identify all the necessary scope of work items in the planning phase of projects to assist with successful CIP execution that will also reduce future construction change orders and other project risks. Through this, a rolling 20-year Capital Improvement Program is maintained.

The Project Management Controls System staff work with the project managers and management throughout the year to manage the scope, schedule, budget, risk and other key project indicators for each project. The information is collected monthly and compiled in the Project Management Office Sharepoint website. This information is then readily available during the budgeting process to minimize the time and effort needed to prepare and update the CIP portion of the overall budget.

Annually, as part of the CIP budget validation and prioritization process, OC San staff review each ongoing CIP project to ensure that the scope of the project is appropriate, and that the cost estimates are up to date. All projects in the CIP program have been prioritized based on risk exposure. Projects that would present a higher risk if they were delayed are given a higher priority. The CIP budget process is continually improved and further refined as the OC San improves the CIP project management controls system.

The validated CIP includes 64 large capital projects with a total 10-year estimated cashflow expenditure of $3.0 billion, not including reimbursables. This represents a net $123 million increase from the 2020-21 CIP estimate. For a listing of capital projects and their budgets, see "Summary of Capital Requirements" in the appendix. As a part of this cashflow, there are also smaller Projects that fall under budgets that are listed as M-FE, , M-STUDIES, M-RESEARCH, M-MC-IT:

- 40 – Facilities Engineering Projects (consist of smaller design costs)
- 17 – Planning and Research Studies
- 3 – Information Technology Support budget

During this budget validation process, projects budgets are modified to account for newly discovered issues. In some cases, more accurate construction cost estimates were developed at the preliminary design level when more project details have been defined. For example, a detailed cost estimate for the Los Alamitos Sub-Trunk Extension Project (No. 3-68) revealed the need to increase the budget from $84 million to $117 million. Note this Project is scheduled to start in 2025.

Four projects have been created totaling $294 million. These projects are:

- 6-20 - Fairview Trunk Rehabilitation
- P1-139 - Standby Generator Feeders for Plant No. 1 Secondary Systems
- P1-140 - Activated Sludge-1 and Secondary Clarifier Rehabilitation
- P2-139 - Emergency Overflow Wingwalls Rehabilitation at Plant No. 2

Project 6-20 was recently discovered when a sewer video inspection revealed structural defects that required the Project start within the next year. P1-140 was created from two older Projects that were to start in the Future. Current Asset Management Assessments revealed the need to rehabilitate this facility sooner than later.

There are no projects that were not identified in the FY 2020-22 budget book, that have since been approved by the OC San Board of Directors.

As part of the budget update process, the following projects are cancelled or closed:

Cancelled: None

Closed:

- P1-101 - Sludge Dewatering and Odor Control at Plant 1
- P2-110 - Consolidated Demolition and Utility Improvements at Plant 2
- P1-115 - Title 24 Access Compliance and Building Rehabilitation Project
- 6-17 - District 6 Trunk Sewer Relief
- 2-41-8 - SARI Rock Stabilizers Removal
- 2-65 - Newhope - Placentia Trunk Grade Separation Replacement

Following within the appendix are descriptions and justifications for the capital improvement projects which are new projects proposed for this Fiscal Year 2021-22 budget update. For a description of ongoing projects, see Section 8 of the Fiscal Years 2020-21 and 2021-22 Budget (last year's book).

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DEBT FINANCING PROGRAM

Debt Financing

Due to the potential magnitude of the capital improvement program, it is 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, 2021, the total outstanding COP indebtedness will be $909.6 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 were reduced by 8.7 percent, 7.2 percent, 7.3 percent, 6.8 percent, 6.9 percent, 6.6 percent, 6.2 percent, and 5.9 percent for the federal fiscal years ended 2013, 2014, 2015, 2016, 2017, 2018, 2019 and 2020, respectively.

Dedicated Funding Source

In 1992 and 2004 the Board of Directors formalized the dedication of certain funding sources. To ensure 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 Moody's and Fitch 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 ratios 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 at 4.13 for fiscal year 2021-22.

Future Financings

No new money debt issuances are being proposed over the next fiscal year as the $3.0 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.

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OPERATING EXPENSES

Summary of Operating and Maintenance Expenses (in millions)

Category	2020-21 Adopted	2020-21 Projected	2021-22 Adopted	2021-22 Proposed
Salaries and Benefits	$102.1	$102.4	$107.3	$108.1
Contractual Services	19.2	18.6	19.4	19.2
Repairs and Maintenance	28.4	28.1	24.2	29.7
Operating Materials & Supplies	21.5	21.4	21.3	22.0
Utilities	8.4	9.4	8.4	9.3
Professional Services	5.7	4.2	5.8	6.9
Other Materials, Supplies, Services	2.8	2.4	2.9	3.4
Self-Insurance Requirements	2.2	2.2	2.2	2.2
Administrative Expenses	2.0	1.9	1.9	2.1
Training and Meetings	1.1	0.5	1.0	0.8
Research and Monitoring	1.3	1.1	1.4	1.5
Printing and Publications	0.4	0.3	0.4	0.4
Cost Allocation	(20.8)	(20.7)	(21.7)	(21.7)
Total Operating Expenses	$174.3	$171.7	$174.5	$183.9

Salaries, Wages, and Benefits – $108.1M

Salaries and Wages – The proposed budget for Full Time Equivalent (FTE) positions for 2021-22 reflects no increase of FTEs from the 2020-21 approved staffing level of 639.0 FTEs. Provision has been made in these salary projections to comply with the terms of the most recently adopted Memorandum's 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 be flat in fiscal year 2021-22 from 10.02 percent to 9.8 percent. As a result of OC San's Board of Director's actions to reduce the unfunded actuarial accrued liability, OC San's contribution rate is among the lowest in the county.

Group Insurance – These expenses include OC San's share (approximately $15,414 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 2022.

Contractual Services – $19.2M

The treatment plants currently produce about 550 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 2021-22 biosolids budget is $13.1 million, approximately 68 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 – $29.7M

This item, which is for parts and services for repair

of plant and collection facilities and annual service contracts, is expected to increase $1.6 million, or 5.7 percent above the 2020-21 projected costs of $28.1 million.

Planned repairs include: digester cleaning ($3.4 million); Sunflower trunk repairs ($3.3 million); centrifuge overhaul ($2.0 million); secondary clarifier repairs ($1.6 million); and digester maintenance projects ($1.0 million).

Operating Materials and Supplies – $22.0M

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 be $10.7 million, a decrease of $500,000 from the 2021-22 projected costs due to price increases.

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 2021-22 budget for these chemicals is $7.6 million, approximately $1.2 million more than the 2020-21 projected costs.

Utilities – $9.3M

During fiscal year 2021-22, the overall cost for utilities, a significant component of the operating budget, is anticipated to decrease by $100,000 as follows:

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 fiscal year 2021-22 natural gas budget is $1.0 million, 11.8 percent lower than the projected 2020-21 costs. CenGen engine natural gas usage is expected to increase during the summer months in order to reduce peak electricity demand.

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 2021-22 proposed budget of $6.7 million is 1.9 percent higher than the 2020-21 projected costs due to price increases and the use of centrifuges.

Staff have the opportunity to optimize power usage by either purchasing supplemental natural gas or electricity, whichever costs less.

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

- 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 2021-22 is $1.0 million, approximating the projected 2020-21 costs.

Professional Services – $6.9M

Professional Services includes General Counsel, special labor counsel, audit and miscellaneous accounting services, legislative advocacy, engineering, and other technical consulting services. The 2021-22 proposed budget is 64.3 percent higher than the 2020-21 projected cost mainly due to project delays from COVID-19 pandemic, increases of engineering services, safety assessments, lab certification and audit, PFAS monitoring and studies, and consulting services.

Other Material, Supplies, Services – $3.4M

This category of costs includes an appropriation for 2021-22 of $2.2 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 for the property and general liability self-insurance programs.

OPERATING EXPENSES

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 $100 million for perils of flood, subject to a self-insurance retention of $250,000. OC San is partially self-insured for earthquake but does carry $25 million in coverage on seven 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.

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.

Administrative Expenses – $2.1M

These accounts include supplies, postage, technical journals and publications, forms, small office equipment, and small computer items that cost less than $5,000 per item and exclude items that are capitalized.

Training and Meetings – $0.8M

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 has been reduced from previous highs of 2.0 percent to approximately 1.0 percent of budgeted regular salaries due to savings achieved in part through the use of online courses.

Research and Monitoring – $1.5M

The budget for research and monitoring expenditures is maintained at approximately $1.5 million each year. It consists 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 – $0.4M

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 – ($21.7M)

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.

2021-22 BUDGET UPDATE

DEPARTMENTS SUMMARY

Expenses by Department (in millions)

Department	2020-21 Budget	2021-22 Originally Proposed	Percent Change	2021-22 Updated Proposed	Percent Change
Administration Units:					
General Manager's Office	$4.3	$4.4	2.3%	$4.1	(4.9%)
Human Resources	6.6	7.0	6.1%	7.2	2.5%
Administrative Services	27.7	28.5	2.9%	30.1	5.5%
Sub-Total	*$38.6*	*$39.9*	*3.4%*	*$41.4*	*3.8%*
Operating Units:					
Environmental Services	19.3	20.3	5.2%	21.2	4.6%
Engineering	5.6	5.6	0.0%	5.4	(3.2%)
Operations & Maintenance	110.8	108.7	(1.9%)	115.9	6.6%
Sub-Total	*$135.7*	*$134.6*	*(0.8%)*	*$142.5*	*5.9%*
Total	$174.3	$174.5	0.1%	$183.9	5.4%

Staffing by Department (FTEs)

Department	2020-21 Budget	2021-22 Originally Proposed	Percent Change	2021-22 Updated Proposed	Percent Change
Administration Units					
General Manager's Office	18.00	18.00	0.0%	15.00	(16.7%)
Human Resources	26.00	26.00	0.0%	26.00	0.0%
Administrative Services	101.00	101.00	0.0%	102.00	1.0%
Sub-Total	*145.00*	*145.00*	*0.0%*	*143.00*	*(1.4%)*
Operating Units					
Environmental Services	93.00	93.00	0.0%	93.00	0.0%
Engineering	117.00	117.00	0.0%	116.00	(0.9%)
Operations & Maintenance	284.00	284.00	0.0%	287.00	1.1%
Sub-Total	*494.00*	*494.00*	*0.0%*	*496.00*	*0.4%*
Total FTEs	639.00	639.00	0.0%	639.00	0.0%

2021-22 BUDGET UPDATE

ADMINISTRATION UNITS

General Manager's Office
Budget $4.1M – Staffing 15 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.

Human Resources
Budget $7.2 – 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 $30.1M – Staffing 102 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.

OPERATING UNITS

Environmental Services
Budget $21.2M – 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 $5.4M – Staffing 116 FTEs

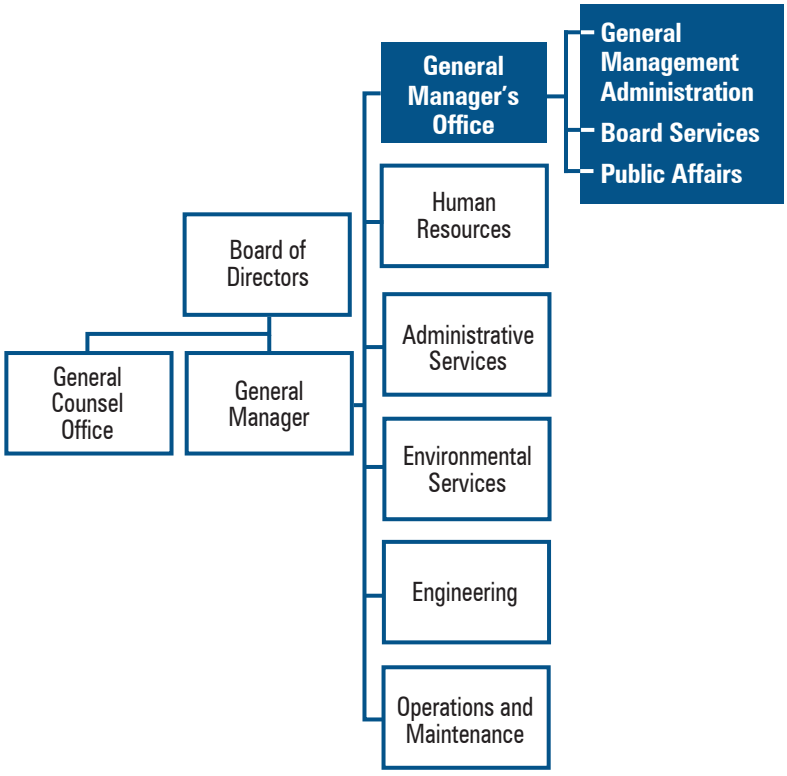
The Engineering Department is responsible for the planning and execution of the OC San's capital improvement program and asset management program.

Operations and Maintenance
Budget $115.9M – Staffing 287 FTEs

The Operations and Maintenance Department is responsible for the operation and maintenance of the 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 addition of eight new positions to support an increasing maintenance workload.

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 OC San. The General Manager reports directly to the Board of Directors and provides general oversight to all agency operations, interagency relations, legislative activities, and communications. The General Manager directly oversees Human Resources, Board Services, and Public Affairs.

Board Services promotes public trust and ensures transparency by preparing and publishing agendas and notices in accordance with legal requirements; accurately recording and preserving the legislative actions; safeguarding vital, historic and permanent records of OC San; and providing exceptional customer service and support to the Board of Directors, OC San staff, and the general public in a courteous, timely and efficient manner.

Public Affairs communicates information about OC San in a timely, accurate, and accessible way to employees, the Board of Directors, the general public, the wastewater industry, and the news media.

2021-22 BUDGET UPDATE

Operating Expense

Category	2020-21 Budget	2021-22 Adopted	2021-22 Proposed
Personnel	$2,670,000	$2,790,200	$2,688,522
Supplies	160,400	126,000	123,000
Professional & Contractual Services	1,017,400	1,017,400	926,400
Research & Monitoring	-	-	-
Repairs & Maintenance	-	-	-
Utilities	-	-	-
Other	559,170	535,930	518,880
Cost Allocation	(117,360)	(117,360)	(117,360)
Total	$4,289,610	$4,352,170	$4,139,442

Budget Overview

The fiscal year 2021-22 budget for the General Manager's Office reflects a decrease of 4.9 percent over the originally adopted budget. The decrease is primarily due to decreases in costs for personnel, training, and document archival for engineering library project being allocated out to Information Technology division.

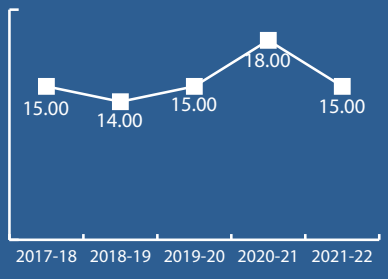
Performance Objectives / Measures

- Ensure that the Board approved Strategic Plan is implemented.
- Provide leadership development opportunities reaching at least 70 percent of staff.
- Maintain the Special District Leadership Foundation (SLDF) District Transparency Certificate of Excellence.
- Respond to 100 percent of public records requests within seven business days.
- Provide information to Board of Directors through the General Manager's monthly report and the new Board Member orientation.
- Provide services and implement programs that meet communication needs of OC San's external audience by reaching a minimum of 3,000 people per year.

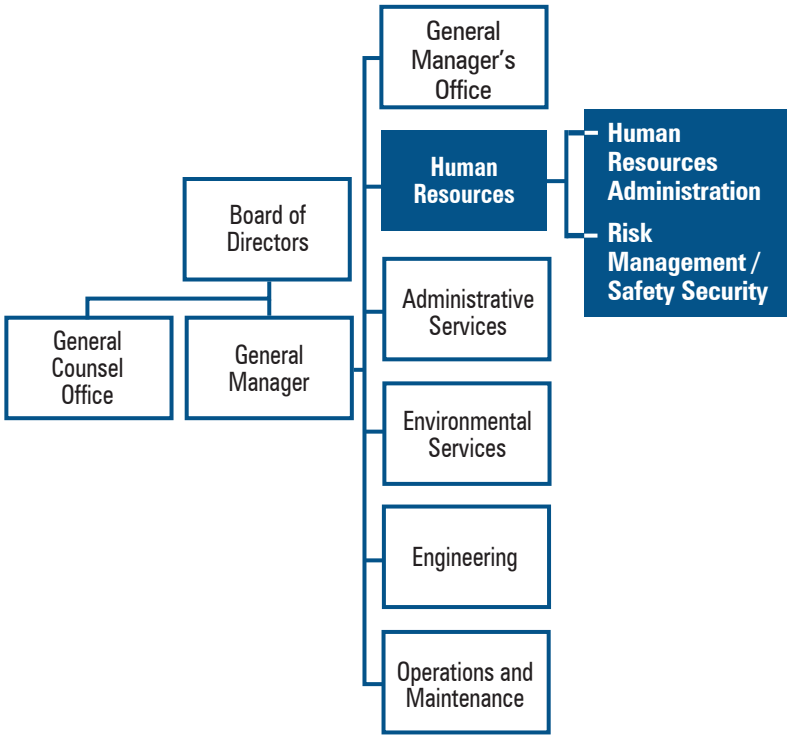
Authorized FTE Positions

Managers	2.00
Supervisors /Professionals	7.00
Administrative /Clerical	5.00
Technical Services	1.00
Total	15.00

Staffing Trends



HUMAN RESOURCES DEPARTMENT



Service Description

Human Resources is a full-service department responsible for all aspects of Human Resources and Risk Management administration that ensures a productive and safe workplace and maintain programs that support a positive 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 by delivering high quality services with an emphasis on customer satisfaction as a key objective.

Human Resources Administration oversees all human resources functions, including Benefits Administration, Classification and Compensation, Employee and Labor Relations, Workers Compensation, Employee Development/Performance Management, and Recruitment and Selection. Benefits Administration administers and maintains employee benefits and the reasonable accommodation program. Classification and Compensation is a vital function that ensures a competitive and fair compensation system and an equitable classification structure. Employee and Labor Relations works to enhance the employment relationship by providing professional assistance and guidance on labor agreements, policies, laws and work-related issues. Workers Compensation provides medical care and benefits to employees who become ill or injured in the course of employment. Employee Development/Performance Management manages and coordinates District-wide legally mandated training programs; and oversees the employee performance program. 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 finances and human resources of OC San. It identifies and addresses potential risk to the organization and provides solutions for mitigating or reducing the risk. The major areas of responsibility include insurances, occupational safety and health, security, and emergency preparedness. Safety is a priority for OC San, and this area includes comprehensive safety training programs, safe working practices, and quarterly facility inspections. Security and emergency preparedness programs include the oversight of OC San's contracted security services, planning emergency drills, and ensuring OC San has the necessary programs, supplies and training in preparation for an emergency. These programs ensure OC San provides a secure, safe and healthy work environment for OC San staff, contractors, and visitors.

2021-22 BUDGET UPDATE

Operating Expense

Category	2020-21 Budget	2021-22 Adopted	2021-22 Proposed
Personnel	$4,003,400	$4,244,200	$4,371,762
Supplies	234,200	234,200	234,200
Professional & Contractual Services	3,137,456	3,325,625	3,373,625
Research & Monitoring	-	-	-
Repairs & Maintenance	4,550	4,550	14,050
Utilities	-	-	-
Other	717,562	654,820	644,370
Cost Allocation	(1,486,070)	(1,486,070)	(1,486,070)
Total	$6,611,098	$6,977,325	$7,151,937

Budget Overview

The fiscal year 2021-22 budget for the Human Resources Department reflects a 2.5 percent increase from the originally adopted budget. The increase is primarily due to increases in personnel costs, medical insurance, employee benefits, repairs materials, and industrial hygiene services. The overall increase is partially offset by a decrease in training costs.

Performance Objectives / Measures

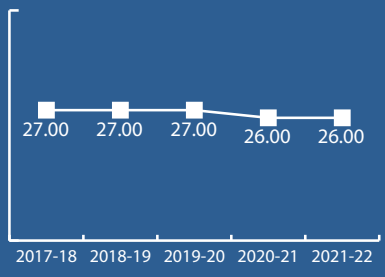
- Work with upper management to resolve issues at the lowest level through conflict resolution training and techniques.
- Reduction in injury rates through monitoring and partnering with departments to implement effective safety and health systems and processes.
- Completion of quarterly safety training, near miss and building inspection status reports.
- 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

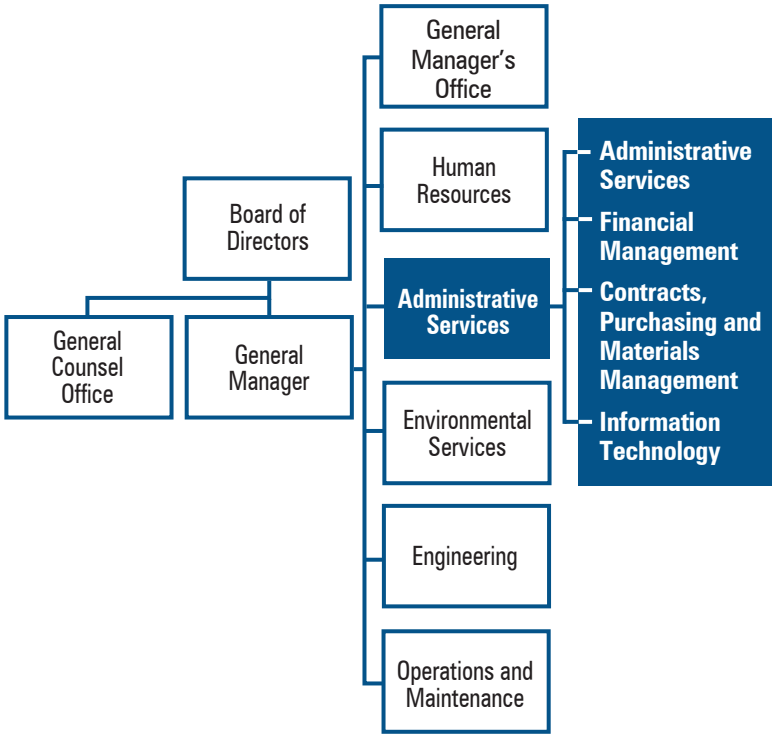
Managers..... 2.00
Supervisors /Professionals ... 20.00
Administrative /Clerical..... 4.00

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.

2021-22 BUDGET UPDATE

Operating Expense

Category	2020-21 Budget	2021-22 Adopted	2021-22 Proposed
Personnel	$16,818,400	$17,856,800	$17,794,580
Supplies	2,476,650	2,476,650	2,523,450
Professional & Contractual Services	2,557,738	2,216,472	3,205,715
Research & Monitoring	-	-	-
Repairs & Maintenance	2,922,078	3,048,921	3,580,271
Utilities	1,284,732	1,286,915	1,289,103
Other	2,637,545	2,634,923	2,702,516
Cost Allocation	(984,770)	(984,770)	(986,770)
Total	$27,712,373	$28,535,911	$30,108,865

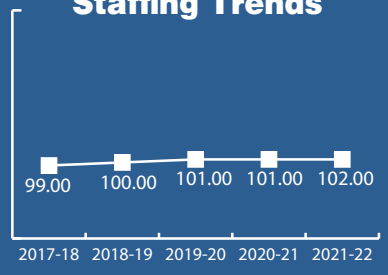
Budget Overview

The fiscal year 2021-22 budget for the Administrative Services Department reflects a 5.5 percent increase from the originally adopted budget. The increase is primarily due to increases in costs for medical insurance, janitorial services, property management fee, rental repair services & water, freight, temporary services, software upgrade, projects deferred from prior year, service agreements cost adjustments, new software/ hardware, maintenance renewal for GIS, and project transferred from capital to operating. The overall increase is partially offset by a decrease in personnel and retirement costs.

Authorized FTE Positions

Managers	4.00
Supervisors /Professionals	63.00
Technical Services	12.00
Administrative /Clerical	23.00
Total	102.00

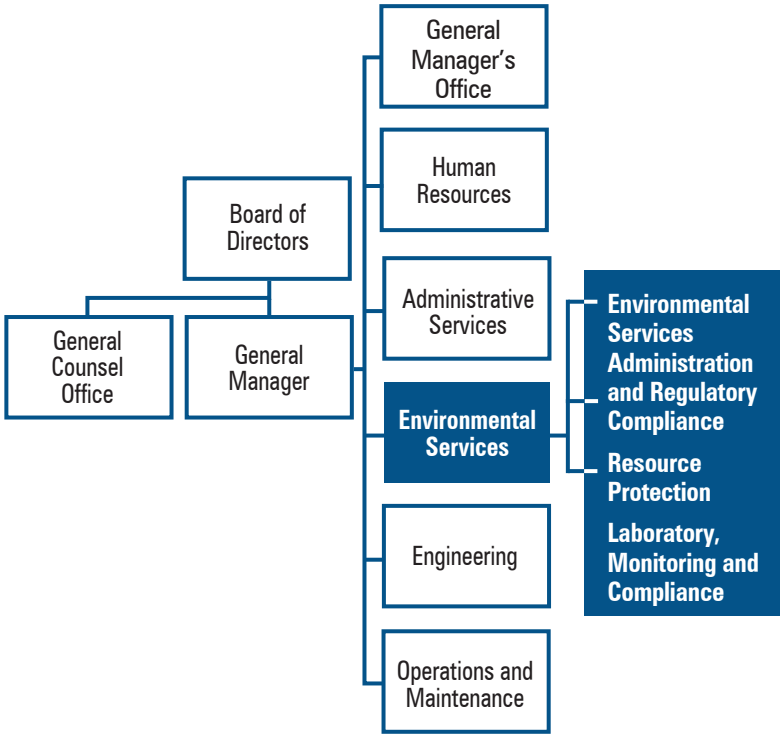
Staffing Trends



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 advocate 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.

2021-22 BUDGET UPDATE

Operating Expense

Category	2020-21 Budget	2021-22 Adopted	2021-22 Proposed
Personnel	$14,577,300	$15,274,800	$15,372,316
Supplies	1,961,250	1,874,100	2,246,650
Professional & Contractual Services	946,635	1,153,683	1,437,683
Research & Monitoring	1,304,700	1,428,700	1,547,700
Repairs & Maintenance	370,747	380,910	380,910
Utilities	-	-	-
Other	175,065	170,505	222,842
Cost Allocation	(20,790)	(22,800)	(22,800)
Total	$19,314,907	$20,259,898	$21,185,301

Budget Overview

The fiscal year 2021-22 budget for the Environmental Services Department reflects an increase of 4.6 percent from the originally adopted budget. The increase is primarily attributable to increases in medical insurance, memberships, temporary & outside lab services, air quality audit, new environment compliance requirement support, emission study, aging vessel repairs, PFAS sewer shed study, NPDES renewal, certification fees lab audit, and accreditation & assessment fees.

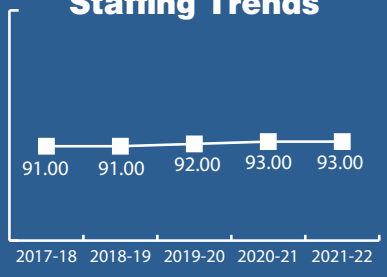
Performance Objectives / Measures

- 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 three years.
- Complete 100 percent of Safety Scorecard requirements each quarter.

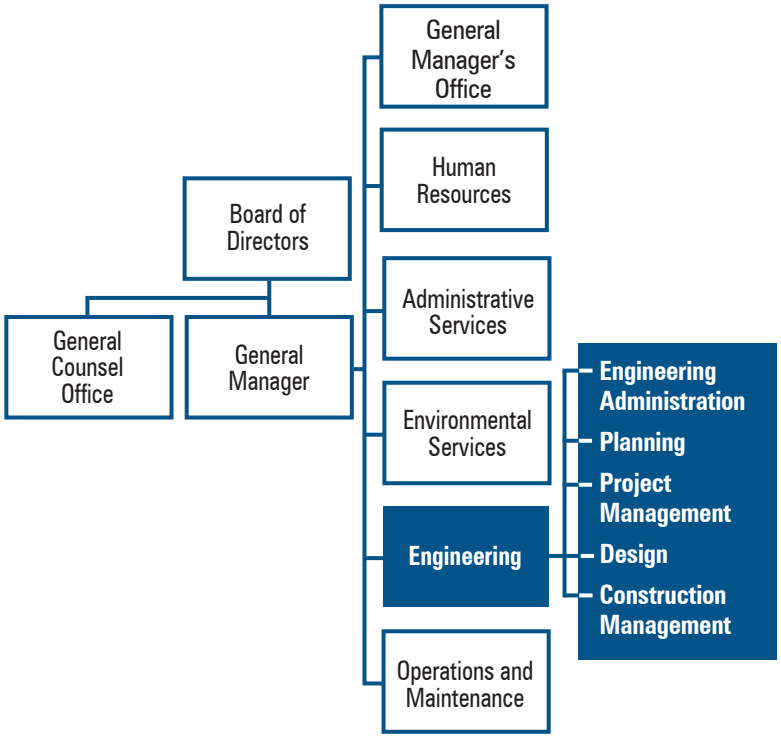
Authorized FTE Positions

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 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.

2021-22 BUDGET UPDATE

Operating Expense

Category	2020-21 Budget	2021-22 Adopted	2021-22 Proposed
Personnel	$21,638,300	$22,640,100	$22,566,438
Supplies	39,765	40,415	42,415
Professional & Contractual Services	1,590,615	1,595,615	1,491,615
Research & Monitoring	-	-	-
Repairs & Maintenance	3,900	3,900	3,900
Utilities	-	-	-
Other	377,515	301,280	297,665
Cost Allocation	(18,076,310)	(18,954,190)	(18,954,190)
Total	$5,573,785	$5,627,120	$5,447,843

Budget Overview

The fiscal year 2021-22 budget for the Engineering Department reflects a 3.2 percent decrease from the originally adopted budget primarily due to decreases in personnel and retirement costs, training, operating materials & supplies, legal, and engineering costs. The overall decrease was partially offset by increases of regulatory operating fees and minor furniture and fixtures.

Performance Objectives / Measures

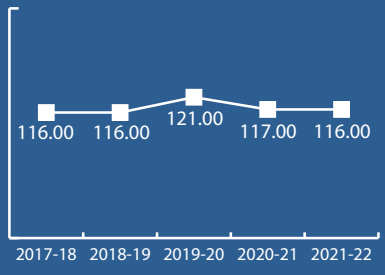
- Expend 90 to 105 percent of project annual Capital Improvement Program cash flows.
- Manage operating expenditures to within 90 to 100 percent of the approved budget.
- Ensure that reporting divisions achieve 90 percent of individual performance objectives.
- Prepare and maintain a 20-year District-wide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

Authorized FTE Positions

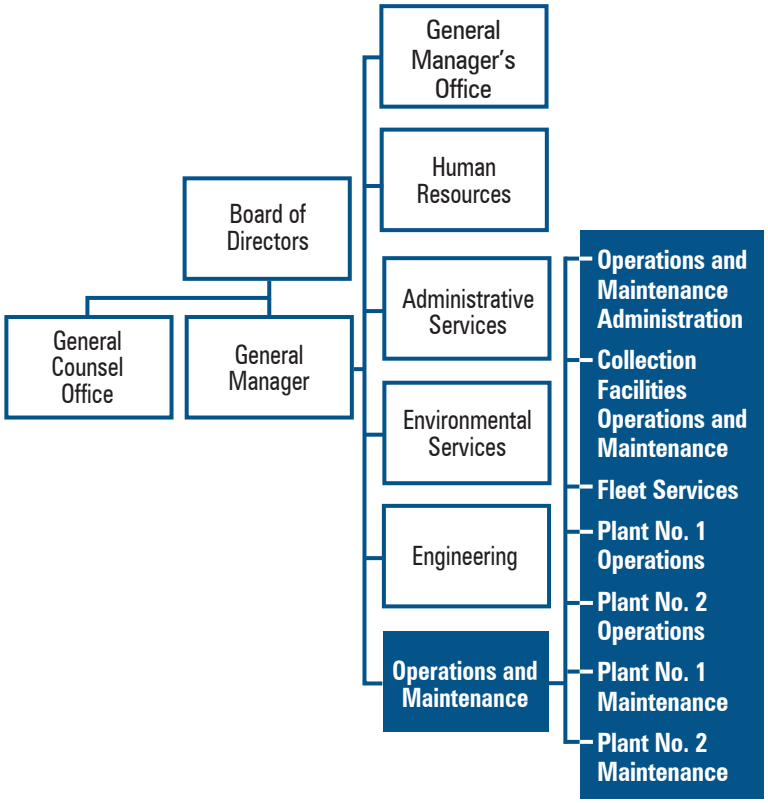
Managers..... 5.00
Supervisors /Professionals ... 83.00
Administrative /Clerical..... 28.00

Total 116.00

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.

2021-22 BUDGET UPDATE

Operating Expense

Category	2020-21 Budget	2021-22 Adopted	2021-22 Proposed
Personnel	$42,374,400	$44,448,200	$45,308,222
Supplies	20,304,496	20,354,881	20,996,570
Professional & Contractual Services	15,731,988	15,936,619	15,616,600
Research & Monitoring	-	-	-
Repairs & Maintenance	25,071,370	20,740,526	25,738,215
Utilities	7,080,222	7,091,923	8,040,623
Other	391,677	290,876	363,146
Cost Allocation	(140,410)	(145,890)	(145,890)
Total	$110,813,743	$108,717,135	$115,917,486

Budget Overview

The fiscal year 2021-22 budget for the Operations and Maintenance Department reflects a 6.6 percent increase from the originally adopted budget. The increase is primarily due to increases in personnel costs, group insurances, minor furniture & fixtures, various chemicals, engineering services, consultant support, tools, solids removal, repairs & maintenance costs, and utilities. The overall increase was partially offset by a decrease in retirement costs.

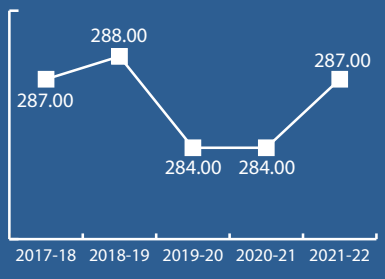
Performance Objectives / Measures

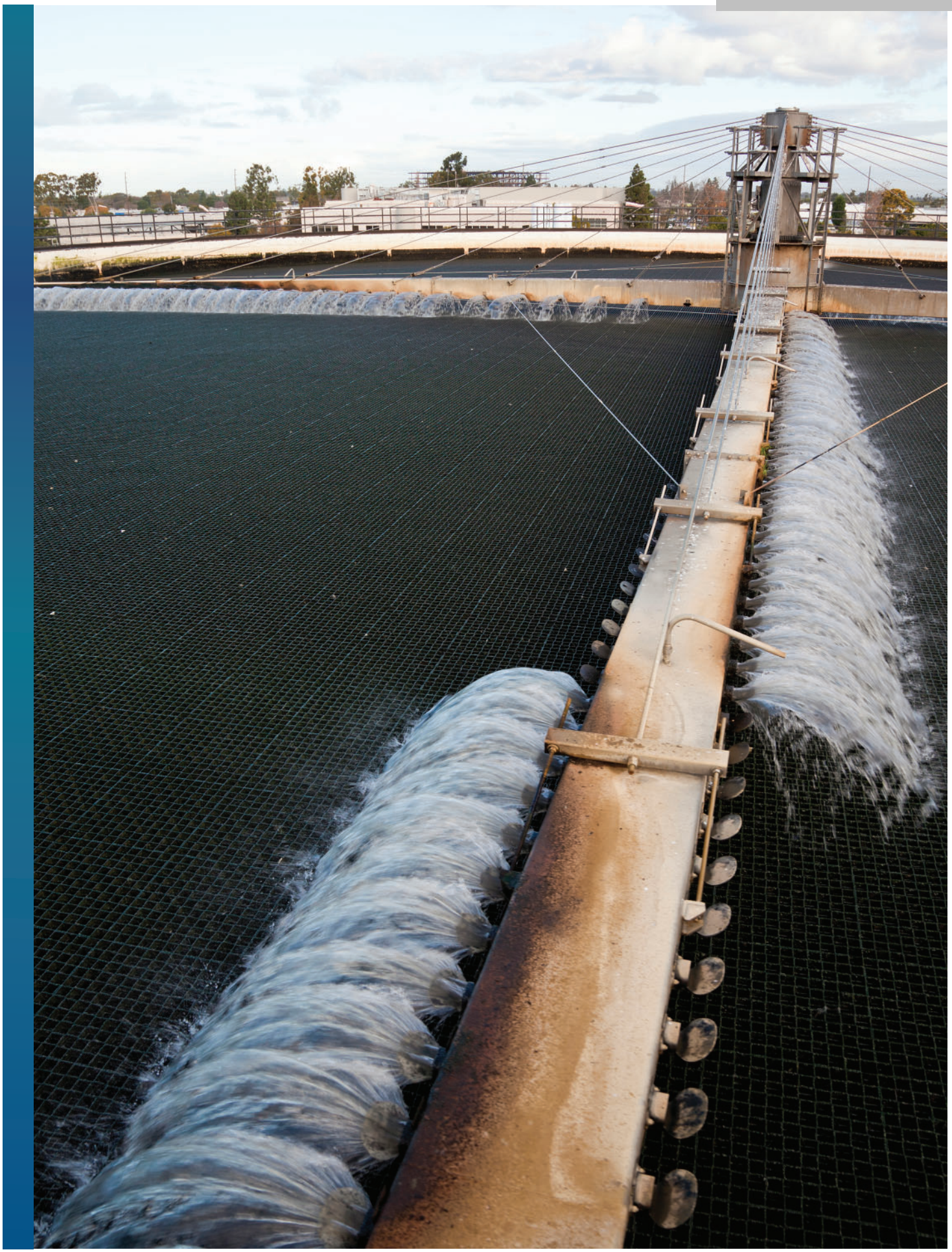
- Achieve 100 percent compliance with water, solids, air, and energy permits and regulatory requirements.
- Achieve 100 percent compliance level of 90 to 100 percent of the Levels of Service targets.
- Manage operating expenditures to within 96 to 100 percent of the approved budget.

Authorized FTE Positions

Managers	5.00
Supervisors /Professionals	72.00
Administrative /Clerical	6.00
Technical	1.00
Operations & Maintenance	203.00
Total	287.00

Staffing Trends





APPENDIX

Cash Flow Projection

Orange County Sanitation District

Consolidated Cash Flow Projections

Ref	Description	Preliminary 21-22	Preliminary 22-23	Preliminary 23-24	Preliminary 24-25	Preliminary 25-26	Preliminary 26-27
	Revenues:						
1	General User Fees	301,839,390	306,495,847	313,036,193	319,612,771	326,225,725	332,875,570
2	Permitted User Fees	12,621,177	12,768,845	12,990,000	13,211,000	13,432,000	13,652,000
	IRWD O&M Assessment	4,648,984	4,543,049	4,577,880	4,743,530	4,885,830	5,032,410
	IRWD Capital Assessment	7,905,000	10,639,000	10,034,000	9,967,000	11,816,000	12,250,000
	IRWD Solids Assessment	6,100,000	5,500,000	1,375,000	-	-	-
3	IRWD Assessments	18,653,984	20,682,049	15,987,000	14,711,000	16,702,000	17,282,000
4	SAWPA Assessments	2,653,000	2,759,000	2,842,000	2,927,000	3,015,000	3,105,000
5	Property Taxes	103,214,240	106,310,667	109,499,987	112,784,987	116,168,537	119,653,593
6	New COP Issues	163,775,355	-	-	-	-	-
7	Interest Revenues	14,516,000	14,132,000	13,391,000	12,827,000	11,960,000	10,703,000
8	Capital Facilities Capacity Charges	16,739,034	17,308,000	18,673,000	19,441,000	19,517,000	19,597,000
9	Other Revenues	23,291,030	20,060,825	16,901,000	17,250,000	17,609,000	17,975,000
10	**Revenues**	**657,303,210**	**500,517,233**	**503,320,180**	**512,764,758**	**524,629,262**	**534,843,163**
	Requirements:						
11	Oper & Mtce Exp (3.0% yr)	183,950,874	180,550,649	185,967,000	191,546,000	197,292,000	203,211,000
12	Capital Improvement Program (CIP)	234,588,954	328,766,646	309,047,000	302,025,000	338,629,000	361,394,000
13	Less: CIP Savings & Deferrals	(15,028,451)	(26,513,683)	(25,367,501)	(26,439,366)	(27,555,283)	(46,289,914)
14	Allocation for Future Rehabilitation	5,000,000	-	1,360,405	7,565,109	24,612,756	32,900,727
15	COP Debt Service	70,731,000	70,124,000	70,126,000	70,116,000	70,126,000	68,226,000
16	Reduction of Long-Term Liabilites	163,775,355	-	-	-	-	-
17	Other Requirements	6,951,253	6,440,000	2,940,000	2,940,000	2,940,000	2,940,000
18	**Requirements**	**649,968,985**	**559,367,612**	**544,072,904**	**547,752,743**	**606,044,473**	**622,381,813**
19	**Revenues-Requirements**	**7,334,225**	**(58,850,379)**	**(40,752,724)**	**(34,987,985)**	**(81,415,211)**	**(87,538,650)**
	Accumulated Funds:						
20	Beginning of Year	971,304,483	978,638,708	919,788,329	879,035,605	844,047,620	762,632,409
21	**End of Year**	978,638,708	919,788,329	879,035,605	844,047,620	762,632,409	675,093,759
22	**Consolidated Reserve Policy**	548,665,000	541,568,000	540,023,000	542,442,000	544,698,000	546,983,000
23	**Over (Under) Reserve Policy***	**429,973,708**	**378,220,329**	**339,012,605**	**301,605,620**	**217,934,409**	**128,110,759**
	Excess (Shorfall) in Reserves	429,973,708	378,220,329	339,012,605	301,605,620	217,934,409	128,110,759
	Sewer Service User Fees:						
24	Avg SFR Annual User Fee	$343	$347	$353	$359	$365	$371
25	Percentage Change	1.18%	1.17%	1.73%	1.70%	1.67%	1.64%
26a	SFR noticed 4-2003						
26b	PV of SFR Annual Fee @ 5%	$322.86	$311.11	$299.75	$290.41	$281.29	$272.37
	Added EDUs	2,763	2,771	2,780	2,788	2,796	2,805
26	Equivalent Dwelling Units	923,730	926,501	929,281	932,069	934,865	937,670
27	SFR Connection Fee	$4,601	$4,973	$5,346	$5,719	$5,736	$5,753
	Conn. Fee- Indust.	$2,072	$2,078	$2,084	$2,090	$2,096	$2,102
28	Outstanding COPs	$909,620,000	$846,180,000	$814,495,000	$781,240,000	$746,365,000	$709,770,000
	Average Daily Flow, mgd	188	188	188	188	188	188
	Reserve Policy						
29	50% Next Year Operating Expense	91,975,000	90,275,000	92,984,000	95,773,000	98,646,000	101,606,000
30	10% Next Year Operating Expense	18,395,000	18,055,000	18,597,000	19,155,000	19,729,000	20,321,000
31	100% Next Year AUG COP Svc.	23,741,000	22,980,000	18,289,000	17,625,000	16,862,000	16,201,000
32	50% average ten-year CIP Balance	148,592,000	148,592,000	148,592,000	148,592,000	148,592,000	148,592,000
33	Debt Svc @ 10% Outstanding COP	90,962,000	84,618,000	81,450,000	78,124,000	74,637,000	70,977,000
34	Self Funded Insurance @ $100M	100,000,000	101,170,000	102,920,000	104,670,000	106,418,000	108,163,000
35	Repl & Refurb	75,000,000	75,878,000	77,191,000	78,503,000	79,814,000	81,123,000
36	*Reserve Reduction (in accordance with Board action allowing a $40M reduction to total res				-	-	-
37	Total	548,665,000	541,568,000	540,023,000	542,442,000	544,698,000	546,983,000
	COP Ratios						
38	Sr Lien Coverge, Min 1.25	4.14	4.32	4.26	4.30	4.39	4.57

Orange County Sanitation District

Consolidated Cash Flow Projections

Ref	Description	Preliminary 27-28	Preliminary 28-29	Preliminary 29-30	Preliminary 30-31	10-Year Total
	Revenues:					
1	General User Fees	342,562,000	349,285,000	356,046,000	362,844,000	3,310,822,496
2	Permitted User Fees	13,873,000	14,094,000	14,315,000	14,535,000	135,492,022
	IRWD O&M Assessment	5,183,370	5,338,870	5,499,050	5,664,020	50,116,993
	IRWD Capital Assessment	11,339,000	11,385,000	9,878,000	9,396,000	104,609,000
	IRWD Solids Assessment	-	-	-	-	12,975,000
3	IRWD Assessments	16,522,000	16,724,000	15,377,000	15,060,000	167,701,033
4	SAWPA Assessments	3,198,000	3,294,000	3,392,000	3,493,000	30,678,000
5	Property Taxes	123,243,000	126,940,000	130,748,000	134,670,000	1,183,233,011
6	New COP Issues	-	-	-	-	163,775,355
7	Interest Revenues	9,606,000	8,739,000	8,235,000	8,171,000	112,280,000
8	Capital Facilities Capacity Charges	19,673,000	19,749,000	19,830,000	19,906,000	190,433,034
9	Other Revenues	18,351,000	18,736,000	19,131,000	19,535,000	188,839,855
10	**Revenues**	**547,028,000**	**557,561,000**	**567,074,000**	**578,214,000**	**5,483,254,806**
	Requirements:					
11	Oper & Mtce Exp (3.0% yr)	209,307,000	215,586,000	222,054,000	228,716,000	2,018,180,523
12	Capital Improvement Program (CIP)	339,646,032	315,447,626	229,372,053	183,851,312	2,942,767,623
13	Less: CIP Savings & Deferrals	(60,415,911)	(51,096,452)	(26,444,445)	(14,356,378)	(319,507,384)
14	Allocation for Future Rehabilitation	42,904,593	59,099,990	77,708,409	97,434,615	348,586,604
15	COP Service	72,377,000	72,373,000	72,374,000	77,224,000	713,797,000
16	Reduction of Long-Term Liabilites	-	-	-	-	163,775,355
17	Other Requirements	2,940,000	2,940,000	2,940,000	2,940,000	36,911,253
18	**Requirements**	**606,758,714**	**614,350,164**	**578,004,017**	**575,809,549**	**5,904,510,974**
19	**Revenues-Requirements**	**(59,730,714)**	**(56,789,164)**	**(10,930,017)**	**2,404,451**	**(421,256,168)**
	Accumulated Funds:					
20	Beginning of Year	675,093,759	615,363,045	558,573,881	547,643,864	971,304,483
21	End of Year	615,363,045	558,573,881	547,643,864	550,048,315	550,048,315
22	Consolidated Reserve Policy	549,225,000	551,009,000	547,558,000	549,946,000	549,946,000
23	**Over (Under) Reserve Policy***	**66,138,045**	**7,564,881**	**85,864**	**102,315**	**102,315**
	Excess (Shorfall) in Reserves	66,138,045	7,564,881	85,864	102,315	102,315
	Sewer Service User Fees:					
24	Avg SFR Annual User Fee	$377	$383	$389	$395	
25	Percentage Change	1.62%	1.59%	1.57%	1.54%	
26a	SFR noticed 4-2003					
26b	PV of SFR Annual Fee @ 5%	$267.93	$259.23	$250.75	$242.50	
	Added EDUs	2,813	2,821	2,830	2,838	
26	Equivalent Dwelling Units	940,483	943,304	946,134	948,972	
27	SFR Connection Fee	$5,770	$5,787	$5,804	$5,821	
	Conn. Fee- Indust.	$2,108	$2,114	$2,120	$2,126	
28	Outstanding COPs	$673,280,000	$630,815,000	$586,230,000	$539,415,000	
	Average Daily Flow, mgd	188	188	188	188	
	Reserve Policy					
29	50% Next Year Operating	104,654,000	107,793,000	111,027,000	114,358,000	
30	10% Next Year Operating	20,931,000	21,559,000	22,205,000	22,872,000	
31	100% Next Year AUG COP Svc.	15,368,000	14,572,000	13,632,000	12,646,000	
32	50% average ten-year CIP Bal.	148,592,000	148,592,000	148,592,000	148,592,000	
33	DSR @ 10% Outstanding COP	67,328,000	63,082,000	58,623,000	53,942,000	
34	SFI @ $100M	109,915,000	111,663,000	113,416,000	115,163,000	
35	Repl & Refurb	82,437,000	83,748,000	85,063,000	86,373,000	
36	*Reserve Reduction	-		(5,000,000)	(4,000,000)	
37	Total	549,225,000	551,009,000	547,558,000	549,946,000	
	COP Ratios					
38	Sr Lien Coverge, Min 1.25	4.39	4.45	4.49	4.27	

Capital Improvement Program Summary

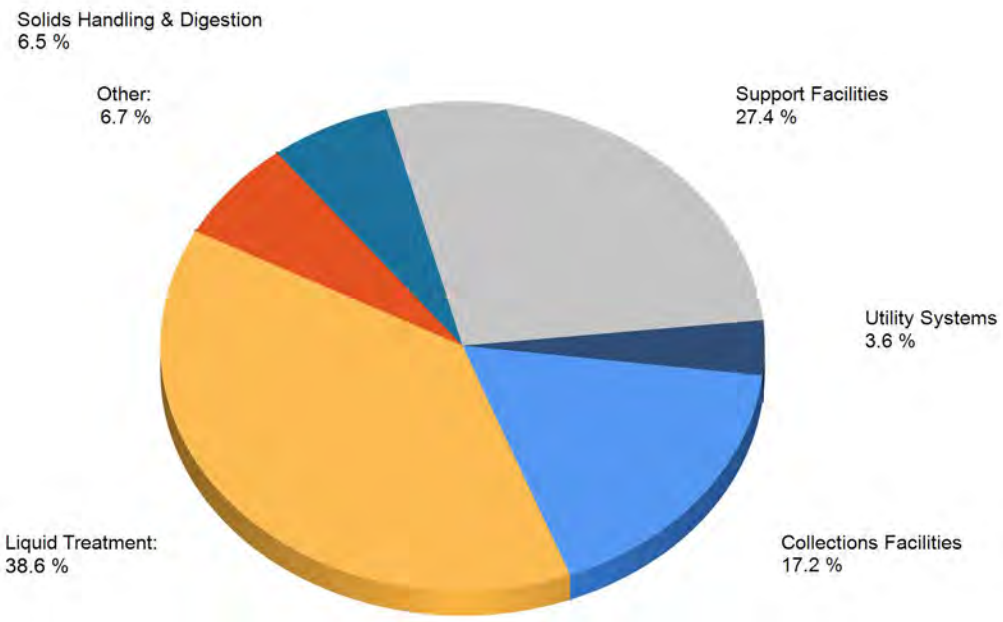
			% Change
Approved FY 2021-22 Outlay	$	261,945,634	
New Projects		673,103	0.3%
Additions to Existing Projects		20,478,630	7.8%
Deductions from Existing Projects		(48,508,413)	(18.5%)
Proposed Outlay for FY 2021-22		234,588,954	(10.4%)
Less: CIP Savings & Deferrals		($15,028,451)	(5.7%)
Allocation for Future Rehab.		5,000,000	1.9%
Proposed Net CIP Outlay	$	$224,560,503	(14.2%)
Approved FY 2020-21 Total CIP Budget Authority	$	4,179,541,800	
New Projects		294,000,000	6.9%
Additions to Existing Projects		160,356,001	3.8%
Deductions from Existing Projects		(378,952,003)	(8.9%)
FY 2021-22 Proposed Total CIP Budget Authority	$	4,254,945,798	1.8%

2021-22 Budget Update

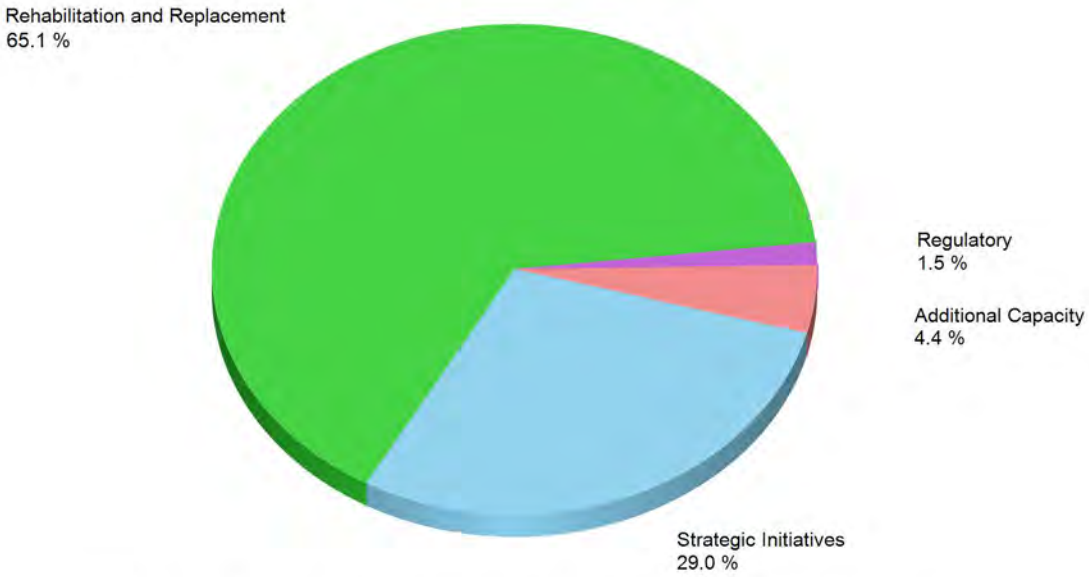
Project Summary FY 2021-22

Item	Rehabilitation and Replacement	Strategic Initiatives	Additional Capacity	Regulatory	Total Budget
Collections Facilities	$ 30,708,828	$ 1,951,374	$ 7,803,195	$ 21,696	$ 40,485,093
Solids Handling & Digestion	9,506,512	5,718,377	-	-	15,224,889
Support Facilities	33,194,642	28,560,521	1,200,196	1,200,196	64,155,555
Utility Systems	7,742,169	742,028	-	-	8,484,197
Liquid Treatment:					
Headworks	33,064,764	8,481,733	-	-	41,546,497
Ocean Outfall Systems	6,013,451	17,979,971	-	-	23,993,422
Primary Treatment	20,600,018	303,402	-	-	20,903,420
Secondary Treatment	4,078,207	-	-	-	4,078,207
Liquid Treatment Subtotal	63,756,440	26,765,106	-	-	90,521,546
Other:					
Information Management Systems	5,249,148	1,183,849	-	16,283	6,449,280
Strategic & Master Planning	1,642,080	1,026,301	410,520	1,026,301	4,105,202
Others	946,400	959,567	946,400	946,400	3,798,767
Research	-	806,894	-	-	806,894
Water Management Projects	-	309,211	-	-	309,211
Process Related Special Projects	-	-	-	248,320	248,320
Other Subtotal	7,837,628	4,285,822	1,356,920	2,237,304	15,717,674
Grand Total	**$ 152,746,219**	**$ 68,023,228**	**$ 10,360,311**	**$ 3,459,196**	**$ 234,588,954**
Less: CIP Savings & Deferrals					**($15,028,451)**
Allocation for Future Rehab.					**$ 5,000,000**
Proposed Net CIP Outlay					**$ 224,560,503**

Capital Improvement Expenditure Graphs



FY 2021-22 Capital Improvement Program Outlay by Process - $234.6 Million
Net CIP Outlay - $224.6 Million



FY 2021-22 Capital Improvement Program Outlay by Driver - $234.6 Million
Net CIP Outlay - $224.6 Million

2021-22 Budget Update

Summary of Capital Requirement - Collection System Improvement Projects

	Project Number	Original Total Project Budget	Revised Total Project Budget	Approved 2021-22 Outlay	Proposed 2021-22 Outlay	Project Status
Collections Facilities						
Santa Ana Trunk Sewer Rehab	1-23	$ 54,620,000	$ 54,620,000	$ 1,051,179	$ 914,334	Not Started
Greenville-Sullivan Trunk Impr.	1-24	48,600,000	48,600,000	371,204	286,363	Not Started
Edinger Pump Station Repl.	11-33	10,153,000	13,500,000	275,917	74,449	Not Started
Slater Pump Station Rehab	11-34	26,622,000	31,000,000	600,988	235,537	Not Started
SARI Rock Stabilizers Removal	2-41-8	4,860,000		4,210		Revised
Taft Branch Capacity Impr.	2-49	14,000,000	16,800,000	724,782	1,422,835	Started
Newhope - Placentia Trunk Grade Separation Repl.	2-65	4,300,000		11,357		Continuing
Newhope-Placentia Trunk Repl.	2-72	112,000,000	112,000,000	10,278,948	5,662,265	Started
Yorba Linda Dosing Station Installation	2-73	14,080,000	11,000,000			Not Started
Beach Relief Trunk/Knott Interceptor/Miller Holder Trunk Rehab	3-60	35,132,000	35,132,000			Not Started
Westminster Blvd Force Main Repl.	3-62	44,000,000	44,000,000	11,582,220	8,458,681	Started
Rehab of Western Regional Sewers	3-64	70,000,000	82,000,000	12,848,669	13,051,457	Started
Interstate 405 Widening Project Impacts on OCSD Sewers	3-66	250,000	250,000	62,102	21,696	Started
Seal Beach Pump Station Repl.	3-67	78,900,000	87,000,000	2,093,648	2,133,205	Started
Los Alamitos Sub-Trunk Extension	3-68	84,124,000	117,000,000			Not Started
Crystal Cove Pump Station Rehab	5-66	13,200,000	13,200,000			Not Started
Bay Bridge Pump Station Repl.	5-67	74,000,000	74,000,000	1,145,952	3,814,704	Started
Newport Beach Pump Stations Pressurization Impr.	5-68	4,300,000	4,300,000	343,555	327,102	Started
District 6 Trunk Sewer Relief	6-17	7,250,000				Revised
Fairview Trunk Sewer Rehab	6-20		17,000,000		187,716	New
MacArthur Pump Station Rehab	7-63	9,800,000	9,800,000			Not Started
Main Street Pump Station Rehab	7-64	39,450,000	37,000,000			Not Started
Gisler-Red Hill Interceptor & Baker Force Mains Rehab	7-65	21,000,000	39,000,000	1,763,122	772,900	Started
Sunflower & Red Hill Interceptor Repairs	7-66	4,700,000	6,999,997	2,553,194	2,704,438	Started
MacArthur Force Main Impr.	7-68	2,468,000	3,500,000	54,349	417,411	Started
North Trunk Impr.	7-69	9,200,000	10,000,000			Not Started
Collections Facilities Total Budget		**787,009,000**	**867,701,998**	**45,765,396**	**40,485,093**	

Summary of Capital Requirements

Summary of Capital Requirement - Treatment System Improvement Projects

	Project Number	Original Total Project Budget	Revised Total Project Budget	Approved 2021-22 Outlay	Proposed 2021-22 Outlay	Project Status
Ocean Outfall Systems						
Ocean Outfall System Rehab	J-117	166,000,000	166,000,000	23,477,550	23,933,041	Started
Sodium Bisulfite Station Rehab at P2	P2-135	3,834,000	3,834,000	206,659	60,381	Not started
Emergency Overflow Pipes & Wingwall Rehab at P2	P2-139		4,200,000			New
Ocean Outfall Systems Total		**169,834,000**	**174,034,000**	**23,684,209**	**23,993,422**	
Information Management Systems						
Process Control Systems Upgrades	J-120	33,000,000	37,000,000	4,987,341	3,406,549	Started
Project Mgmt. Information System	J-128	2,280,000	2,280,000	565,864	294,481	Started
Information Technology Capital Program	M-MC-IT	10,000,000	10,000,000	1,012,782	1,778,736	Started
EAM Software & Process Implementation	SP-100	7,500,000	9,200,000		448,311	Started
Geographic Information System	SP-15	4,700,000	4,568,000	59,709	16,283	Started
Process Control Systems Upgrades Study	SP-196	3,400,000	3,400,000	7,806	504,920	Started
Information Management Systems Total		**60,880,000**	**66,448,000**	**6,633,502**	**6,449,280**	
Utility Systems						
Digester Gas Facilities Repl.	J-124	173,000,000	173,000,000	3,736,720	1,398,801	Started
Natural Gas Pipelines Repl. at P1 & P2	J-127	1,610,000	2,000,000	105,734	221,883	Started
Central Generation Engine Overhauls at P1 & 2	J-135	26,000,000	44,000,000	1,521,979	3,788,815	Started
Power Building Structural Seismic Impr. at P1 & 2	J-136	7,080,000	5,400,000	239,060	161,114	Not started
Electrical Power Distribution System Impr.	J-98	26,500,000	26,500,000	2,075,970	2,107,681	Started
Central Generation Rehab at P1	P1-127	68,452,000	68,452,000			Not started
Uninterruptible Power Supply Impr. at P1	P1-132	7,000,000	7,000,000	584,761	625,925	Started
12.47 kVSwitchgear Repl. at Central Generation at P1	P1-136	14,800,000	17,000,000			Not started
Network & Server Relocation at P1	P1-138	3,027,000	13,000,000	228,012	179,978	Not started
Standby Generator Feeders for P1 Secondary Systems	P1-139		2,800,000			New
Consolidated Demolition & Utility Impr. at P2	P2-110	30,000,000		16,281		Revised
Central Generation Rehab at P2	P2-119	108,000,000	108,000,000			Not started
Warehouse, Electrical Substation & 12kV Service Center Repl. at P2	P2-126	65,000,000	64,999,999	3,415,000		Started
Utility Systems Total		**530,469,000**	**532,151,999**	**11,923,517**	**8,484,197**	
Process Related Special Projects						
Safety Impr. Program	J-126	16,000,000	16,000,000	13	248,320	Started
Process Related Special Projects Total		**16,000,000**	**16,000,000**	**13**	**248,320**	
Support Facilities						
Laboratory Rehab at P1	J-133	44,200,000	44,200,000			Not started
Small Construction Projects Program	M-FE	65,000,000	90,000,000	10,104,836	12,001,957	Started
Operations & Maintenance Capital Program	M-SM-CAP	15,622,000	15,622,000	1,089,947	2,022,639	Started

2021-22 Budget Update

Summary of Capital Requirement - Treatment System Improvement Projects

	Project Number	Original Total Project Budget	Revised Total Project Budget	Approved 2021-22 Outlay	Proposed 2021-22 Outlay	Project Status
Support Facilities						
Title 24 Access Compliance & Building Rehab Project	P1-115	18,400,000				Continuing
Headquarters Complex	P1-128	167,500,000	167,499,999	42,138,713	45,106,221	Started
South Perimeter Security & Utility Impr. at P1	P1-134	10,000,000	10,000,000	4,607,510	3,852,526	Started
Support Buildings Seismic Impr. at P1	P1-137	23,730,000	23,730,000	519,477	776,979	Started
Collections Yard Relocation	P2-127	1,840,000	1,900,000	106,701	39,814	Not started
Operations & Maintenance Complex at P2	P2-138	95,000,000	95,000,000	1,150,713	355,419	Not started
Support Facilities Total		**441,292,000**	**447,952,000**	**59,717,897**	**64,155,555**	
Water Management Projects						
GWRS Final Expansion Coordination	J-36-2	1,132,000	1,332,000	265,666	309,211	Started
Water Management Projects Total		**1,132,000**	**1,332,000**	**265,666**	**309,211**	
Research						
Research Program	M-RESEARCH	8,500,000	8,500,000	729,331	806,894	Started
Research Total		**8,500,000**	**8,500,000**	**729,331**	**806,894**	
Strategic & Master Planning						
Planning Studies Program	M-STUDIES	28,652,000	28,652,000	1,488,527	4,105,202	Started
Strategic & Master Planning Total		**28,652,000**	**28,652,000**	**1,488,527**	**4,105,202**	
Solids Handling & Digestion						
Sludge Dewatering & Odor Control at P1	P1-101	197,000,000				Revised
Digester Ferric Chloride Piping Repl. at P1	P1-135	1,360,000	1,360,000	1,021,560	723,747	Started
Interim Food Waste Receiving Facility	P2-124	6,300,000	6,300,000	3,946,321	3,201,672	Started
TPAD Digester Facility at P2	P2-128	455,000,000	455,000,000	13,009,017	10,066,820	Started
Digester P, Q, R, & S Repl.	P2-129	165,900,000	165,900,000			Not started
Digesters Rehab at P2	P2-137	40,632,000	40,632,000	1,547,988	537,702	Started
Sludge Dewatering & Odor Control at P2	P2-92	90,477,000	90,476,999	583,093	694,948	Started
Solids Handling & Digestion Total		**956,669,000**	**759,669,000**	**20,107,979**	**15,224,889**	
Headworks						
Headworks Rehab at P1	P1-105	406,000,000	340,000,000	49,765,501	33,064,764	Started
Headworks Modification at P2 for GWRS Final Expansion	P2-122	32,000,000	32,000,000	8,633,144	8,481,733	Started
Headworks Total		**438,000,000**	**372,000,000**	**58,398,645**	**41,546,497**	
Primary Treatment						
Primary Sedimentation Basins No. 3-5 Repl. at P1	P1-126	117,700,000	127,000,000	185,465	459,659	Started
Primary Sedimentation Basins No. 6-31 Reliability Impr. at P1	P1-133	10,100,000	14,000,000	1,295,242	606,804	Started
B/C-Side Primary Sedimentation Basins Rehab at P2	P2-133	279,842,000	279,842,000			Not started
Primary Treatment Rehabiliation at P2	P2-98	237,000,000	195,000,000	26,239,796	19,836,957	Started
Primary Treatment Total		**644,642,000**	**615,842,000**	**27,720,503**	**20,903,420**	

Summary of Capital Requirements

Summary of Capital Requirement - Treatment System Improvement Projects

	Project Number	Original Total Project Budget	Revised Total Project Budget	Approved 2021-22 Outlay	Proposed 2021-22 Outlay	Project Status
Secondary Treatment						
Return Activated Sludge Piping Repl. at Activated Sludge P1	P1-129	10,300,000	9,300,000	217,032	144,269	Started
Activated Sludge-1 Aeration Basin & Blower Rehab at P1	P1-140		270,000,000		485,387	New
Return Activated Sludge Piping Repl. at P2	P2-123	10,800,000	10,000,000	2,174,218	3,285,100	Started
Activated Sludge Aeration Basin Rehab at P2	P2-136	65,600,000	65,600,000	501,296	163,451	Not started
Secondary Treatment Total		**86,700,000**	**354,900,000**	**2,892,546**	**4,078,207**	
Others						
Capital Improvement Program Mgmt. Services	SP-195	700,000	700,000	26,903	13,167	Started
Others Total		**700,000**	**700,000**	**26,903**	**13,167**	
Total Treatment and Disposal Projects		**3,383,470,000**	**3,378,181,000**	**213,589,238**	**190,318,261**	
Total Collections Facilities		**787,009,000**	**867,701,998**	**45,765,396**	**40,485,093**	
Capital Equipment Purchases		**9,062,800**	**9,062,800**	**2,591,000**	**3,785,600**	
Total		**$ 4,179,541,800**	**$4,254,945,798**	**$261,945,634**	**$234,588,954**	
Less: CIP Savings & Deferrals					**($15,028,451)**	
Allocation for Future Rehab.					**$5,000,000**	
Proposed Net CIP Outlay					**$224,560,503**	

2021-22 Budget Update

CIP New Project Descriptions

Project Name & Number	Fairview Trunk Sewer Rehabilitation - 6-20		
Project Category	Collections Facilities	Project Budget:	$17,000,000

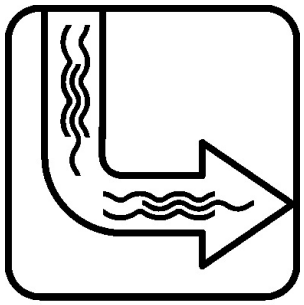
Description

This project will rehabilitate the entire west parallel sewer of the Fairview Trunk and repair other portions. The project includes the rehabilitation of 9,489 feet of 12-inch to 27-inch sewer with 48-inch to 84-inch manholes along Fairview Road in the City of Costa Mesa. The project also includes spot repairs in the same vicinity.

Justification

Rehabilitation of existing trunk sewer main is necessary to address identified structural deficienices.

The project budget is $17,000,000. The project's estimated construction contract cost is $7,960,000. The impacts to operational budgets have not yet been determined.



Collections Facilities

Project Name & Number	Standby Generator Feeders for Plant No. 1 Secondary Systems - P1-139		
Project Category	Utility Systems	Project Budget:	$2,800,000

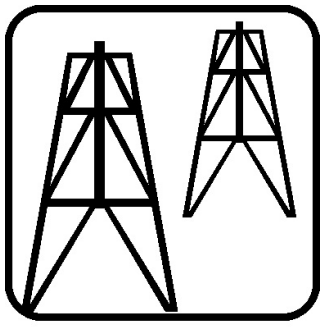
Description

P1-105 Project “Headworks Rehabilitation at Plant 1” will install Medium Voltage Back Up Generators to support Plant 1 Loads, including Blower Building 1 and Power Building 2 standby loads. This project will demolish existing diesel standby generators, fuel storage tanks, associated cabling and power distribution equipment at Blow Building 1 and Power Building 2. It will also provide new medium voltage feeders, power transformers to refeed standby loads at Blower Building 1 and Power Building 2.

Justification

The purpose of this project is to rehabilitate the existing standby diesel generator infrustructure and Standby Power distribution System in Blower Building 1 and Power Building 2 and phase out aged generators with overheating problems

The project budget is $2,800,000. The project's estimated construction contract cost is $1,380,000. The impacts to operational budgets have not yet been determined.



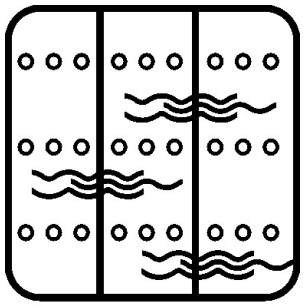
Utility Systems

CIP New Project Descriptions

Project Name & Number	Activated Sludge-1 Aeration Basin and Blower Rehabilitation at Plant No. 1 - P1-140		
Project Category	Secondary Treatment	Project Budget:	$270,000,000

Description

This project will perform a comprehensive rehabilitation of the Activated Sludge Facility No. 1 (AS-1) at Plant No. 1. This project will demolish the Primary Effluent Pump Station No. 1 (PEPS) and associated piping, replace all major mechanical, electrical and instrumentation equipment and perform structural rehabilitation. The facilities in this project include Blower Building No. 1, Aeration Basins Nos. 1-10, Return Activated Sludge Pump Station and Secondary Clarifiers Nos. 1-26. A new Mixed Liquor Recycle (MLR) pump station and associated piping is also included in this project.



Secondary Treatment

Justification

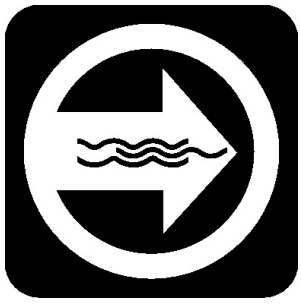
Built in the early 1970s, the AS-1 facility is nearing the end of its useful life. A major rehabilitation of AS-1 will ensure reliable service for next 20 plus years. PEPS will no longer be needed when the Primary Sedimentation Basins Nos. 3-5 Replacement Project, P1-126, is completed. A new MLR pump station is required to convert AS-1 from a partial to a full denitrification process which will remove nitrates and improve effluent water quality.

The project budget is $270,000,000. The project's estimated construction contract cost is $162,640,000. The impacts to operational budgets have not yet been determined.

Project Name & Number	Emergency Overflow Pipes and Wingwall Rehabilitation at Plant No. 2 - P2-139		
Project Category	Ocean Outfall Systems	Project Budget:	$4,200,000

Description

Plant No. 2 has emergency overflow weirs consisting of four reinforced concrete pipes that can discharge into the Santa Ana River through two concrete wingwall structures. This project will include rehabilitation of concrete and rebar of the wingwalls and foundation slabs. Because both wingwalls are located by the Santa Ana River, this work will require permits from various agencies.



Ocean Outfall Systems

Justification

A Planning Study conducted a structural investigation on the wingwalls and concluded that both of the structures appear to be in a gradually deteriorating condition. If the current level and rate of deterioration are not addressed, the remaining service life of each structure will be greatly impacted and could potentially require replacement within approximately 10 years.

The project budget is $4,200,000. The project's estimated construction contract cost is $2,290,000. The impacts to operational budgets have not yet been determined.

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Capital Equipment Budget Summary

Capital Equipment Budget
2021-22

Department	Trucks & Vehicles 09410000	Other Mobile Eq 09410001	Machine Eq & Tools 09410002	Comm Equipment 09410003
Information Technology	$ -	$ -	$ -	$ -
Resource Protection	45,000	-	11,600	-
Environmental Laboratory & Ocean Monitoring	-	-	-	-
Design	-	-	-	-
Construction Management	33,300	-	-	-
Collection Facilities O&M	-	-	-	-
Fleet Services	1,055,000	407,400	-	-
Plant No. 1 Operations	-	-	-	-
Plant No. 2 Operations	-	-	-	-
Plant No. 1 Maintenance	93,600	-	191,300	-
Plant No. 2 Maintenance	66,600	-	43,700	-
Total Proposed Capital Equipment	$ 1,293,500	$ 407,400	$ 246,600	$ -

Capital Equipment Budget
2021-22

Department	Instr / Test Equipment 09410004	Safety & Traffic Eq 09410005	Office Fix & Eq 09410006	Computer Equipment 09410007	2021-22 Proposed Budget
Information Technology	$ -	$ -	$ -	$ -	$ -
Resource Protection	-	-	-	-	56,600
Environmental Laboratory & Ocean Monitoring	1,592,900	-	-	-	1,592,900
Design	21,600	-	-	-	21,600
Construction Management	-	-	-	-	33,300
Collection Facilities O&M	25,000	-	-	48,500	73,500
Fleet Services	-	-	-	-	1,462,400
Plant No. 1 Operations	-	-	-	-	-
Plant No. 2 Operations	-	-	-	-	-
Plant No. 1 Maintenance	150,100	-	-	-	435,000
Plant No. 2 Maintenance	-	-	-	-	110,300
Total Proposed Capital Equipment	$ 1,789,600	$ -	$ -	$ 48,500	$3,785,600

Capital Equipment Budget Summary

Capital Equipment Budget Detail

Division	Equipment Type	Proposed Equip. Budget
620 - Resource Protection		
	Heavy Duty Service Truck	45,000
	All Weather Refrigerated Sampler	11,600
	Total	$ 56,600
630 - Environmental Laboratory & Ocean Monitoring		
	Fourier Transform Infrared Sectroscopy (FTIR)	110,000
	Triple Quadrupole GC/MS (Gas Chromatography Mass Sectrometry)	308,000
	Acoustic Doppler Current Profiler (ADCP)	49,200
	Phytoplankton Autosampler	163,400
	Ocean Acidification and Hypoxia Sensors (6)	211,600
	Triple Quadrupole GC/MS	308,000
	Hach Refrigerated Auto-Sampler	18,500
	Acoustic Doppler Current Profiler (ADCP)	49,200
	Phytoplankton Autosampler	163,400
	Ocean Acidification and Hypoxia Sensors (6)	211,600
	Total	$ 1,592,900
760 - Design		
	PLC Test Units	21,600
	Total	$ 21,600
770 - Construction Management		
	Mid-size Truck or Small SUV for Construction Projects	33,300
	Total	$ 33,300
820 - Collection Facilities O&M		
	Providence Photonics QL320	$ 25,000
	FLIR GF77a - Optical Gas Imaging Camera	$ 48,500
	Total	$ 73,500
822 - Fleet Services		
	Heavy Duty Speciality Truck - Sewer Pull Rig	260,000
	Light Duty Trucks (12)	450,000
	Medium Duty Trucks (2)	135,000
	Sedans & Van (Pass) (6)	210,000
	Electric Carts O&M (21)	407,400
	Total	$ 1,462,400
870 - Plant No. 1 Maintenance		
	Medium Duty Truck	46,800
	Medium Duty Truck	46,800
	Aaladin Model 2260E Parts Washer	47,300
	Pipe and Angle Bender	20,800
	Quincy QGS 75 Rotary Air Compressor	123,200
	Beamex Multi-Calibrator (5)	130,300
	Portable External Flowmeter with Transducers	19,800
	Total	$ 435,000
880 - Plant No. 2 Maintenance		
	Sedans (2)	66,600
	Olymus IPLEX GX/GT Borescope	43,700
	Total	$ 110,300
	Total Proposed 2021-22 Capital Equipment Budget	**$ 3,785,600**

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Levels of Service

	FY 19-20 Results	Level of Service Target
Protecting Public Health Protecting public health and the environment utilizing all practical and effective means for wastewater, energy, and solids resource recovery.		
Accept dry weather runoff diversion flows without imposing fees	1.4 MGD	Up to 10 MGD
Maximum Individual Cancer Risk to off-site residents, per one million people (for each treatment plant)	Plant No. 1 – 2.24 Plant No. 2 – 1.76	<10 <10
Notices of violation (NOV) with air, land, and water permits	2	0
Respond to collection system spills within 1 hour	100%	100%
Sanitary sewer spills per 100 miles	0.0	< 2.1
Contain sanitary sewer spills within 5 hours	100%	100%
Meet secondary treatment standards	BOD 5.4 mg/L TSS 5.3 mg/L	BOD 25 mg/L TSS 30 mg/L
Frequency of unplanned use of emergency one-mile (78-inch diameter) outfall (per year during dry weather)	0	0
Compliance with core industrial pretreatment requirements	100%	100%
Stakeholder Understanding and Support Communicating OCSD's mission and strategies with those we serve and all other stakeholders.		
Meet GWRS specification requirements for Plant No. 1 secondary effluent	3.2 NTU	5 NTU
Provide specification effluent available to the Groundwater Replenishment System to maximize production of purified water	100%	100%
Managing and Protecting the Public Funds Continually seeking efficiencies to ensure that the public's money is wisely spent.		
Annual user fees sufficient to cover all O&M Requirements	100%	100%
Actual collection, treatment, and disposal costs per million gallons	6%	≤ 10% of budget
Maintain AAA Bond Rating	100%	100%

2021-22 Budget Update

	FY 19-20 Results	Level of Service Target
Providing Exceptional Customer Service Providing reliable, responsive and affordable services in line with customer needs and expectations.		
Treatment plants odor complaint response within 1 hour	95%	100%
Collection system odor complaint response within 1 working day	100%	100%
Number of odor complaints: • Reclamation Plant No. 1 • Treatment Plant No. 2 • Collection System *Under normal operating conditions	10 7 9	0 0 12
Respond to public complaints or inquiries regarding construction projects within 1 day	100%	100%
Respond to all biosolids contractor violations within a week of violation notice	100%	100%
Organizational Effectiveness Creating the best possible workforce in terms of safety, productivity, customer service, and training.		
Employee injury incident rate – per 100 employees	2.85	<4.8 Industry Average
Meet mandatory OSHA training requirements	100%	>95%
Achieve annual agency target of days away from work, days of restricted work activity, or job transferred as a result of a work-related injury or illness	0.89	<2.9
Training hours per employee	30	45 per year

Self-Funded Insurance Plans

SELF-FUNDED INSURANCE PLANS

The General Liability and Property program and the Workers' Compensation program provide for OCSD to be partially self-insured for general liability and workers' compensation. The in-lieu premiums charged to the operating divisions are the revenue source for these programs. Expenses primarily consist of settlement claims, legal fees and excess loss insurance premiums. Ending Reserve Balances are projected at $100 million.

General Liability and Property

- OCSD's current excess general liability insurance coverage is $40 million per occurrence and aggregate, with a self-insured retention of $750,000.
- OCSD's current property insurance coverage is $800 million for perils of fire and $100 million for perils of flood, subject to a self-insured retention of $500,000. OCSD is partially self-insured for earthquake, but does carry $25 million in coverage on 15 key structures with a $5 million deductible. OCSD also has a $50 million sublimit for builder's risk under the property insurance program to ensure upcoming construction projects are adequately covered.
- In order to maintain the reserve balance of $98 million for the General Liability and Property program, appropriations for in-lieu premiums charged to operating divisions are recommended at $2,140,000 for FY 2021-22.

Workers' Compensation

- OCSD's current excess workers' compensation coverage has unlimited statutory coverage per occurrence and $4 million employer's liability per employee with a self-insured retention of $1 million per person per occurrence.
- In order to maintain the reserve balance of $2 million for the Workers' Compensation program, appropriations for in-lieu premiums charged to operating divisions are recommended at $800,000 for FY 2021-22.

	FY 2021-22 Self-Insurance Program Budget		
DESCRIPTION OR ACCOUNT TITLE	General Liability & Property Program	Workers' Compensation Program	Total Self-Insurance Program
Beginning Reserves	$ 98,000,000	$ 2,000,000	$ 100,000,000
Revenues			
In-Lieu Premiums	2,140,000	780,000	2,920,000
Miscellaneous Other Revenue	-	-	-
Service Department Allocation	-	-	-
Total Revenues	2,140,000	780,000	2,920,000
Expenses			
Benefits/Claims	40,000	430,000	470,000
Contractual Services	-	-	-
Legal Services	40,000	80,000	120,000
Professional Services	20,000	60,000	80,000
Policy Premium Expense	2,509,393	271,860	2,781,253
Total Expenses	2,609,393	841,860	3,451,253
Excess Revenue (Expenses)	(469,393)	(61,860)	(531,253)
Ending Reserves	$ 97,530,607	$ 1,938,140	$ 99,468,747

2021-22 Budget Update

Historical Staffing Summary

Department and Division Name	Authorized FTEs 2017-18	Authorized FTEs 2018-19	Authorized FTEs 2019-20	Authorized FTEs 2020-21	Proposed FTEs 2021-22
General Manager's Office					
General Management Administration	5.00	4.00	4.00	5.00	3.00
Board Services	5.00	5.00	5.00	7.00	6.00
Public Affairs	5.00	5.00	6.00	6.00	6.00
Department Subtotal	**15.00**	**14.00**	**15.00**	**18.00**	**15.00**
Human Resources Department					
Human Resources Administration	16.00	16.00	16.00	16.00	16.00
Risk Management/Safety/Security	11.00	11.00	11.00	10.00	10.00
Department Subtotal	**27.00**	**27.00**	**27.00**	**26.00**	**26.00**
Administrative Services Department					
Administrative Services	3.00	3.00	3.00	1.00	2.00
Financial Management	19.00	19.00	19.00	24.00	24.00
Contracts, Purchasing and Materials Management	32.00	32.00	32.00	31.00	31.00
Information Technology	45.00	46.00	47.00	45.00	45.00
Department Subtotal	**99.00**	**100.00**	**101.00**	**101.00**	**102.00**
Envrionmental Services Department					
Environmental Services Administration & Regulatory Compliance	2.00	2.00	2.00	2.00	11.00
Resource Protection	37.00	37.00	37.00	37.00	37.00
Environmental Laboratory & Ocean Monitoring	52.00	52.00	53.00	54.00	45.00
Department Subtotal	**91.00**	**91.00**	**92.00**	**93.00**	**93.00**
Engineering Department					
Engineering Administration	2.00	2.00	3.00	5.00	5.00
Planning	15.00	14.00	18.00	15.00	15.00
Project Management	17.00	16.00	17.00	21.00	21.00
Design	53.00	54.00	52.00	36.00	34.00
Construction Management	29.00	30.00	31.00	40.00	41.00
Department Subtotal	**116.00**	**116.00**	**121.00**	**117.00**	**116.00**
Operations and Maintenance Department					
Operations and Maintenance Administration	3.00	3.00	2.00	3.00	4.00
Collection Facilities Operations & Maintenance	26.00	26.00	26.00	29.00	28.00
Fleet Services	8.00	8.00	8.00	8.00	9.00
Plant No. 1 Operations	61.00	62.00	62.00	54.00	55.00
Plant No. 2 Operations	51.00	50.00	50.00	52.00	53.00
Plant No. 1 Maintenance	62.00	61.00	86.00	85.00	85.00
Maintenance Reliability and Planning	28.00	28.00	-	-	-
Plant No. 2 Maintenance	48.00	50.00	50.00	53.00	53.00
Department Subtotal	**287.00**	**288.00**	**284.00**	**284.00**	**287.00**
Grand Total - All Departments*	**635.00**	**636.00**	**640.00**	**639.00**	**639.00**

Historical Staffing Detail

Division & Position	Authorized FTEs 2017-18	Authorized FTEs 2018-19	Authorized FTEs 2019-20	Authorized FTEs 2020-21	Proposed FTEs 2021-22
General Manager's Office					
110 General Management Administration					
General Manager	1.00	1.00	1.00	1.00	1.00
Assistant General Manager	1.00	1.00	1.00	2.00	-
Principal Staff Analyst	1.00	1.00	1.00	-	-
Records Management Specialist	1.00	-	-	-	-
Administration Manager	-	-	-	1.00	1.00
Secretary to the General Manager	1.00	1.00	1.00	1.00	1.00
Total General Management Administration	5.00	4.00	4.00	5.00	3.00
120 Board Services					
Clerk of the Board	1.00	1.00	1.00	1.00	1.00
Records Management Specialist	-	-	-	1.00	-
Deputy Clerk of the Board	1.00	1.00	1.00	-	-
Assistant Clerk of the Board	-	-	-	1.00	1.00
Data Management Technician I	-	-	-	1.00	1.00
Program Assistant	2.00	2.00	2.00	2.00	2.00
Office Assistant	1.00	1.00	1.00	1.00	1.00
Total Board Services	5.00	5.00	5.00	7.00	6.00
140 Public Affairs					
Administrative Manager	-	-	1.00	-	-
Public Affairs Supervisor	1.00	1.00	-	-	-
Principal Public Affairs Specialist	-	-	1.00	1.00	1.00
Senior Public Affairs Specialist	1.00	1.00	1.00	1.00	1.00
Public Affairs Specialist	1.00	1.00	1.00	2.00	2.00
Administrative Assistant	1.00	1.00	1.00	1.00	1.00
Graphics Designer	-	1.00	1.00	1.00	1.00
Graphics Coordinator	1.00	-	-	-	-
Total Public Affairs	5.00	5.00	6.00	6.00	6.00
Total General Manager's Office	**15.00**	**14.00**	**15.00**	**18.00**	**15.00**
Human Resources Department					
160 Human Resources Administration					
Director of Human Resources	1.00	1.00	1.00	1.00	1.00
HR and Risk Manager	1.00	1.00	1.00	1.00	1.00
Human Resources Supervisor	-	2.00	2.00	2.00	2.00
Principal Human Resources Analyst	2.00	2.00	2.00	2.00	2.00
Senior Human Resources Analyst	5.00	4.00	4.00	4.00	4.00
Human Resources Analyst	4.00	4.00	4.00	4.00	4.00
Human Resources Assistant	1.00	2.00	2.00	2.00	2.00
Program Assistant	2.00	-	-	-	-
Total Human Resources Administration	16.00	16.00	16.00	16.00	16.00
161 Risk Management/Safety/Security					
Safety & Health Supervisor	1.00	1.00	1.00	1.00	1.00
Principal Financial Analyst	1.00	1.00	1.00	-	-
Safety & Health Specialist	1.00	1.00	2.00	2.00	2.00
Security & Emergency Planning Specialist	1.00	1.00	1.00	1.00	1.00
Occupational Health Nurse	1.00	1.00	1.00	-	-
Senior Safety & Health Representative	2.00	2.00	1.00	2.00	2.00
Senior Construction Inspector	-	-	-	1.00	1.00
Safety & Health Representative	3.00	3.00	3.00	2.00	2.00
Administrative Assistant	1.00	1.00	1.00	1.00	1.00
Total Risk Management/Safety/Security	11.00	11.00	11.00	10.00	10.00
Total Human Resources Department	**27.00**	**27.00**	**27.00**	**26.00**	**26.00**

2021-22 Budget Update

Division & Position	Authorized FTEs 2017-18	Authorized FTEs 2018-19	Authorized FTEs 2019-20	Authorized FTEs 2020-21	Proposed FTEs 2021-22
Administrative Services Department					
210 Administrative Services					
Director of Finance & Administrative Services / Treasurer	1.00	1.00	1.00	-	-
Assistant General Manager	-	-	-	-	1.00
Principal Financial Analyst	1.00	-	-	-	-
Principal Staff Analyst	-	1.00	1.00	-	-
Administrative Assistant	-	-	-	1.00	1.00
Executive Assistant	1.00	1.00	1.00	-	-
Total Administrative Services	3.00	3.00	3.00	1.00	2.00
220 Financial Management					
Controller	1.00	1.00	1.00	1.00	1.00
Accounting Supervisor	3.00	3.00	3.00	3.00	3.00
Principal Accountant	2.00	2.00	2.00	2.00	2.00
Principal Project Controls Analyst	-	-	-	1.00	1.00
Principal Staff Analyst	-	-	-	4.00	4.00
Senior Accountant	2.00	2.00	2.00	2.00	2.00
Senior Staff Analyst	1.00	1.00	1.00	1.00	2.00
Accountant	2.00	2.00	2.00	2.00	1.00
Staff Analyst	1.00	-	-	-	-
Payroll Technician	2.00	2.00	2.00	2.00	2.00
Accounting Assistant II	5.00	6.00	6.00	6.00	6.00
Total Financial Management	19.00	19.00	19.00	24.00	24.00
230 Contracts, Purchasing and Materials Management					
Contracts & Purchasing Manager	1.00	1.00	1.00	1.00	1.00
Contracts Supervisor	1.00	1.00	1.00	1.00	1.00
Principal Contracts Administrator	2.00	2.00	2.00	2.00	2.00
Purchasing Supervisor	1.00	1.00	1.00	1.00	1.00
Materials Control Supervisor	1.00	1.00	1.00	1.00	-
Senior Contracts Administrator	3.00	3.00	3.00	3.00	3.00
Principal Buyer	1.00	-	1.00	1.00	1.00
Contracts Administrator	3.00	3.00	3.00	3.00	3.00
Senior Buyer	1.00	3.00	2.00	2.00	3.00
Buyer	3.00	2.00	2.00	2.00	2.00
Contracts/Purchasing Assistant	5.00	5.00	5.00	4.00	4.00
Senior Staff Analyst	-	-	-	1.00	1.00
Lead Storekeeper	2.00	2.00	2.00	2.00	2.00
Senior Storekeeper	3.00	3.00	3.00	3.00	3.00
Storekeeper	5.00	5.00	5.00	4.00	4.00
Total Contracts, Purchasing and Materials Management	32.00	32.00	32.00	31.00	31.00
250 Information Technology					
Information Technology Systems and Operations Manager	1.00	1.00	1.00	1.00	1.00
Information Technology Supervisor	3.00	3.00	3.00	3.00	3.00
Principal Information Technology Analyst	6.00	7.00	7.00	7.00	7.00
Senior Information Technology Analyst	10.00	10.00	10.00	10.00	10.00
Information Technology Analyst III	6.00	6.00	7.00	8.00	7.00
Records Management Specialist	-	1.00	1.00	-	-
Data Management Technician II	7.00	7.00	7.00	6.00	7.00
Information Technology Analyst II	3.00	3.00	3.00	3.00	3.00
Data Management Technician I	4.00	4.00	4.00	3.00	3.00
Staff Analyst	1.00	1.00	1.00	1.00	1.00
Administrative Assistant	1.00	1.00	1.00	1.00	1.00
Information Technology Technician II	1.00	1.00	1.00	2.00	2.00
Information Technology Technician I	1.00	1.00	1.00	-	-
Program Assistant	1.00	-	-	-	-
Total Information Technology	45.00	46.00	47.00	45.00	45.00
Total Administrative Services Department	**99.00**	**100.00**	**101.00**	**101.00**	**102.00**

Historical Staffing Detail

Division & Position	Authorized FTEs 2017-18	Authorized FTEs 2018-19	Authorized FTEs 2019-20	Authorized FTEs 2020-21	Proposed FTEs 2021-22
Envrionmental Services Department					
610 Environmental Services Administration & Regulatory Compliance					
Director of Environmental Services	1.00	1.00	1.00	1.00	1.00
Pr Environmental Specialist	-	-	-	-	1.00
Regulatory Specialist	-	-	-	-	3.00
Senior Regulatory Specialist	-	-	-	-	2.00
Sr Environmental Specialist	-	-	-	-	3.00
Executive Assistant	1.00	1.00	1.00	1.00	1.00
Total Environmental Services Admin. & Regulatory Compliance	2.00	2.00	2.00	2.00	11.00
620 Resource Protection					
Engineering Manager	1.00	1.00	1.00	1.00	1.00
Engineering Supervisor	2.00	2.00	2.00	2.00	2.00
Senior Engineer	1.00	2.00	2.00	2.00	2.00
Engineer	5.00	4.00	4.00	5.00	5.00
Source Control Supervisor	1.00	1.00	1.00	1.00	1.00
Associate Engineer	3.00	3.00	3.00	2.00	2.00
Principal Environmental Specialist	3.00	3.00	3.00	3.00	3.00
Lead Source Control Inspector	1.00	1.00	1.00	1.00	1.00
Senior Environmental Specialist	1.00	1.00	1.00	1.00	1.00
Source Control Inspector II	7.00	7.00	7.00	6.00	6.00
Source Control Inspector I	2.00	2.00	2.00	3.00	3.00
Administrative Assistant	2.00	2.00	2.00	2.00	1.00
Environmental Technician	3.00	3.00	3.00	3.00	4.00
Program Assistant	4.00	4.00	4.00	4.00	4.00
Office Assistant	1.00	1.00	1.00	1.00	1.00
Total Resource Protection	37.00	37.00	37.00	37.00	37.00
630 Environmental Laboratory & Ocean Monitoring					
Environmental Lab & Ocean Monitoring Manager	1.00	1.00	1.00	1.00	1.00
Environmental Supervisor	4.00	4.00	4.00	4.00	4.00
Senior Regulatory Specialist	1.00	1.00	2.00	2.00	-
Senior Scientist	3.00	3.00	3.00	3.00	-
Regulatory Specialist	2.00	3.00	3.00	3.00	3.00
Scientist	1.00	1.00	1.00	2.00	2.00
Associate Engineer	1.00	1.00	1.00	-	-
Principal Environmental Specialist	8.50	8.00	8.00	9.00	8.00
Senior Environmental Specialist	18.50	18.00	18.00	18.00	15.00
Boat Captain	1.00	1.00	1.00	1.00	1.00
Environmental Specialist	7.00	7.00	7.00	7.00	7.00
Administrative Assistant	1.00	1.00	1.00	1.00	1.00
Environmental Technician	3.00	3.00	3.00	3.00	3.00
Total Environmental Laboratory & Ocean Monitoring	52.00	52.00	53.00	54.00	45.00
Total Environmental Services Department	**91.00**	**91.00**	**92.00**	**93.00**	**93.00**

2021-22 Budget Update

Division & Position	Authorized FTEs 2017-18	Authorized FTEs 2018-19	Authorized FTEs 2019-20	Authorized FTEs 2020-21	Proposed FTEs 2021-22
Engineering Department					
710 Engineering Administration					
Administrative Assistant	-	-	-	1.00	1.00
Assistant General Manager	-	1.00	1.00	-	-
Director of Engineering	1.00	-	1.00	1.00	1.00
Principal Staff Analyst	-	-	-	1.00	1.00
Staff Analyst	-	-	-	1.00	1.00
Executive Assistant	1.00	1.00	1.00	1.00	1.00
Total Engineering Administration	2.00	2.00	3.00	5.00	5.00
740 Planning					
Engineering Manager	1.00	1.00	1.00	1.00	1.00
Engineering Supervisor	2.00	2.00	2.00	2.00	2.00
Senior Engineer	3.00	3.00	3.00	2.00	2.00
Engineer	3.00	3.00	6.00	7.00	7.00
Principal Financial Analyst	1.00	-	-	-	-
Principal Staff Analyst	1.00	2.00	2.00	1.00	1.00
Associate Engineer	2.00	1.00	2.00	1.00	1.00
Engineering Associate	1.00	1.00	1.00	1.00	1.00
Administrative Assistant	1.00	1.00	1.00	-	-
Total Planning	15.00	14.00	18.00	15.00	15.00
750 Project Management					
Engineering Manager	1.00	1.00	1.00	1.00	1.00
CIP Project Manager	-	-	-	1.00	1.00
Engineering Supervisor	-	1.00	1.00	2.00	2.00
Capital Improvement Program Project Manager	9.00	9.00	9.00	-	
Senior Engineer	1.00	1.00	2.00	11.00	11.00
Principal Project Controls Analyst	1.00	1.00	1.00	-	-
Engineer	-	-	-	3.00	3.00
Engineering Associate	-	-	-	1.00	1.00
Principal Staff Analyst	2.00	2.00	2.00	-	-
Cost Estimator	-	-	-	-	-
Planner/Scheduler	-	-	-	-	-
Assoicate Engineer	-	-	-	1.00	1.00
Engineering Assistant II	1.00	-	-	-	-
Administrative Assistant	1.00	1.00	1.00	1.00	1.00
Office Assistant	1.00	-	-	-	-
Total Project Management	17.00	16.00	17.00	21.00	21.00
760 Design					
Engineering Manager	1.00	1.00	1.00	1.00	1.00
Engineering Supervisor	5.00	4.00	4.00	4.00	4.00
Senior Engineer	7.00	7.00	7.00	12.00	11.00
Construction Inspection Supervisor	2.00	2.00	2.00	-	-
Engineer	13.00	13.00	13.00	8.00	7.00
Senior Cost Estimator	-	1.00	1.00	-	-
Senior Planner/Scheduler	-	1.00	1.00	-	-
Associate Engineer	3.00	4.00	4.00	2.00	2.00
Cost Estimator	1.00	-	-	-	-
Planner/Scheduler	1.00	-	-	-	-
Senior Construction Inspector	5.00	5.00	5.00	-	-
Assistant Engineer	1.00	-	-	-	-
Engineering Associate	1.00	1.00	1.00	-	-
Senior Staff Analyst	2.00	2.00	1.00	-	-
Construction Inspector	5.00	6.00	6.00	-	-
Engineering Assistant II	3.00	4.00	4.00	-	-

Historical Staffing Detail

	Authorized FTEs 2017-18	Authorized FTEs 2018-19	Authorized FTEs 2019-20	Proposed FTEs 2020-21	Proposed FTEs 2021-22
Information Tech Analyst II	-	-	-	1.00	1.00
Information Tech Analyst III	-	-	-	1.00	1.00
Administrative Assistant	2.00	2.00	2.00	1.00	1.00
Principal Info Tech Analyst	-	-	-	3.00	3.00
Senior Info Tech Analyst	-	-	-	3.00	3.00
Engineering Assistant I	1.00	1.00	-	-	-
Total Design	53.00	54.00	52.00	36.00	34.00
770 Construction Management					
Engineering Manager	1.00	1.00	1.00	1.00	1.00
Engineering Supervisor	2.00	2.00	2.00	2.00	2.00
Senior Construction Insp Supv	1.00	1.00	1.00	-	-
Senior Engineer	6.00	6.00	7.00	2.00	2.00
Principal Info Tech Analyst	4.00	4.00	4.00	-	-
Engineer	4.00	4.00	4.00	5.00	7.00
Senior Info Tech Analyst	3.00	3.00	3.00	-	-
Information Tech Analyst III	1.00	1.00	1.00	-	-
Senior Construction Inspector	2.00	3.00	3.00	7.00	7.00
Information Tech Analyst II	1.00	1.00	1.00	-	-
Construction Insp Supervisor	-	-	-	3.00	3.00
Construction Inspector	4.00	3.00	3.00	9.00	10.00
Engineering Assistant II	-	-	-	4.00	3.00
Senior Cost Estimator	-	-	-	1.00	1.00
Senior Planner/Scheduler	-	-	-	1.00	1.00
Planner/Scheduler	-	-	-	1.00	1.00
Associate Engineer	-	-	-	2.00	2.00
Administrative Assistant	-	1.00	1.00	2.00	1.00
Total Construction Management	29.00	30.00	31.00	40.00	41.00
Total Engineering Department	**116.00**	**116.00**	**121.00**	**117.00**	**116.00**
Operations and Maintenance Department					
810 Operations and Maintenance Administration					
Director of Operations & Maintenance	1.00	1.00	-	1.00	1.00
Assistant General Manager	-	-	-	-	1.00
Senior Staff Analyst	1.00	1.00	1.00	1.00	1.00
Staff Analyst	1.00	1.00	1.00	1.00	1.00
Total Operations and Maintenance Administration	3.00	3.00	2.00	3.00	4.00
820 Collection Facilities Operations & Maintenance					
Engineering Manager	1.00	1.00	1.00	-	-
Maintenance Manager	-	-	-	1.00	1.00
Engineering Supervisor	-	-	-	-	1.00
Maintenance Supervisor	2.00	2.00	2.00	2.00	1.00
Lead Mechanic	5.00	5.00	5.00	5.00	5.00
Administrative Assistant	1.00	1.00	1.00	1.00	1.00
Senior Mechanic	8.00	8.00	8.00	7.00	7.00
Mechanic	8.00	8.00	8.00	8.00	7.00
Sr Environmental Specialist	-	-	-	1.00	1.00
Senior Engineer	-	-	-	1.00	1.00
Associate Engineer	-	-	-	-	1.00
Pr Environmental Specialist	-	-	-	1.00	1.00
Environmental Technician	-	-	-	1.00	1.00
Office Assistant	1.00	1.00	1.00	1.00	-
Total Collection Facilities Operations and Maintenance	26.00	26.00	26.00	29.00	28.00
822 Fleet Services					
Maintenance Supervisor	1.00	1.00	1.00	1.00	1.00
Lead Mechanic	1.00	1.00	1.00	1.00	1.00
Automotive/ Heavy Equipment Technician	3.00	3.00	3.00	4.00	4.00
Mobile Crane Operator	2.00	2.00	2.00	2.00	2.00
Program Assistant	-	-	-	-	1.00
Automotive/ Heavy Equipment Assistant	1.00	1.00	1.00	-	-
Total Fleet Services	8.00	8.00	8.00	8.00	9.00

Historical Staffing Detail

Division & Position	Authorized FTEs 2017-18	Authorized FTEs 2018-19	Authorized FTEs 2019-20	Authorized FTEs 2020-21	Proposed FTEs 2021-22
830 Plant No. 1 Operations					
Operations Manager	1.00	1.00	1.00	1.00	1.00
Engineering Supervisor	1.00	1.00	1.00	-	-
Chief Plant Operator	1.00	1.00	1.00	1.00	1.00
Senior Engineer	1.00	1.00	1.00	1.00	2.00
Principal Information Technology Analyst	-	-	-	-	-
Staff Analyst	-	-	-	-	1.00
Engineer	2.00	1.00	1.00	1.00	1.00
Operations Supervisor	6.00	7.00	7.00	7.00	7.00
Principal Staff Analyst	-	1.00	1.00	1.00	1.00
Control Center Operator	-	-	-	2.00	-
Scientist	1.00	1.00	1.00	-	-
Associate Engineer	2.00	2.00	2.00	2.00	2.00
Principal Environmental Specialist	1.00	1.00	1.00	-	-
Information Technology Analyst III	-	-	-	-	-
Assistant Engineer	1.00	1.00	1.00	-	-
Senior Environmental Specialist	1.00	1.00	1.00	-	-
Information Technology Analyst II	-	-	-	-	-
Lead Plant Operator	4.00	4.00	4.00	4.00	4.00
Lead Power Plant Operator	1.00	1.00	1.00	1.00	1.00
Power Plant Operator II	4.00	4.00	4.00	4.00	4.00
Senior Plant Operator	15.00	14.00	14.00	15.00	12.00
Administrative Assistant	1.00	1.00	1.00	1.00	1.00
Plant Operator	15.00	16.00	16.00	13.00	17.00
Environmental Technician	1.00	1.00	1.00	-	-
Control Center Technician	2.00	2.00	2.00	-	-
Total Plant No. 1 Operations	61.00	62.00	62.00	54.00	55.00
840 Plant No. 2 Operations					
Chief Plant Operator	1.00	1.00	1.00	1.00	1.00
Operations Supervisor	7.00	7.00	7.00	7.00	7.00
Lead Plant Operator	4.00	4.00	4.00	4.00	4.00
Lead Power Plant Operator	1.00	1.00	1.00	1.00	1.00
Power Plant Operator II	4.00	4.00	4.00	4.00	4.00
Senior Plant Operator	14.00	14.00	14.00	13.00	16.00
Administrative Assistant	1.00	1.00	1.00	1.00	1.00
Plant Operator	19.00	18.00	18.00	21.00	19.00
Total Plant No. 2 Operations	51.00	50.00	50.00	52.00	53.00

Historical Staffing Detail

Division & Position	Authorized FTEs 2017-18	Authorized FTEs 2018-19	Authorized FTEs 2019-20	Authorized FTEs 2020-21	Proposed FTEs 2021-22
870 Plant No. 1 Maintenance					
Engineering Manager	-	-	1.00	1.00	1.00
Maintenance Manager	1.00	1.00	1.00	-	-
Engineering Supervisor	-	-	1.00	-	-
Maintenance Superintendent	1.00	1.00	1.00	1.00	1.00
Senior Engineer	-	-	1.00	-	-
Engineer	-	-	1.00	1.00	1.00
Maintenance Supervisor	6.00	6.00	7.00	8.00	8.00
Associate Engineer	-	-	1.00	1.00	1.00
Maintenance Specialist	-	-	11.00	14.00	13.00
Lead Electrical Technician	3.00	3.00	3.00	3.00	4.00
Lead Heavy Equip Mechanic	1.00	1.00	1.00	-	-
Lead Instrumentation Technician	-	-	1.00	1.00	1.00
Reliability Maintenance Technician	-	-	5.00	5.00	5.00
Electrical Technician II	8.00	8.00	8.00	8.00	8.00
Instrumentation Technician II	6.00	6.00	7.00	9.00	9.00
Lead Mechanic	2.00	2.00	2.00	2.00	2.00
Machinist	1.00	1.00	1.00	1.00	1.00
Administrative Assistant	1.00	1.00	1.00	1.00	1.00
Senior Mechanic	18.00	17.00	18.00	18.00	18.00
Senior Heavy Equip Mechanic	-	-	2.00	-	-
Welder/Fabricator	3.00	3.00	3.00	3.00	3.00
Lead Facilities Worker	1.00	1.00	1.00	1.00	1.00
Electrical Technician I	1.00	1.00	2.00	2.00	2.00
Instrumentation Technician I	3.00	3.00	2.00	1.00	1.00
Facilities Worker/Builder	2.00	2.00	2.00	2.00	2.00
Facilities Worker/Painter	1.00	1.00	1.00	1.00	1.00
Mechanic	1.00	1.00	1.00	1.00	1.00
Maintenance Worker	2.00	2.00	-	-	-
Total Plant No. 1 Maintenance	62.00	61.00	86.00	85.00	85.00
875 Maintenance Reliability and Planning					
Engineering Manager	1.00	1.00	-	-	-
Engineering Supervisor	1.00	1.00	-	-	-
Senior Engineer	3.00	3.00	-	-	-
Engineer	4.00	4.00	-	-	-
Maintenance Supervisor	1.00	1.00	-	-	-
Associate Engineer	2.00	2.00	-	-	-
Maintenance Specialist	11.00	11.00	-	-	-
Reliability Maintenance Technician	5.00	5.00	-	-	-
Total Maintenance Reliability and Planning	28.00	28.00	-	-	-

2021-22 Budget Update

Division & Position	Authorized FTEs 2017-18	Authorized FTEs 2018-19	Authorized FTEs 2019-20	Authorized FTEs 2020-21	Proposed FTEs 2021-22
880 Plant No. 2 Maintenance					
Maintenance Superintendent	1.00	1.00	1.00	1.00	1.00
Maintenance Supervisor	5.00	5.00	5.00	6.00	6.00
Lead Electrical Technician	2.00	2.00	2.00	2.00	2.00
Lead Instrumentation Technician	2.00	2.00	2.00	2.00	2.00
Electrical Technician II	7.00	7.00	7.00	7.00	7.00
Instrumentation Technician II	8.00	8.00	7.00	6.00	6.00
Lead Mechanic	2.00	2.00	2.00	3.00	3.00
Administrative Assistant	-	1.00	1.00	1.00	1.00
Senior Mechanic	14.00	15.00	14.00	16.00	16.00
Lead Facilities Worker	1.00	1.00	1.00	1.00	1.00
Electrical Technician I	1.00	1.00	2.00	2.00	2.00
Instrumentation Technician I	-	-	1.00	2.00	2.00
Facilities Worker/Builder	1.00	1.00	1.00	1.00	1.00
Facilities Worker/Painter	1.00	1.00	1.00	1.00	1.00
Mechanic	1.00	1.00	1.00	1.00	1.00
Maintenance Worker	2.00	2.00	2.00	1.00	1.00
Total Plant No. 2 Maintenance	48.00	50.00	50.00	53.00	53.00
Total Operations and Maintenance Department	**287.00**	**288.00**	**284.00**	**284.00**	**287.00**
Grand Total, All Departments	**635.00**	**636.00**	**640.00**	**639.00**	**639.00**

Historical Staffing Detail

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Appropriations Limit

Article XIIIB of the California State Constitution, more commonly referred to as the Gann Initiative or Gann Limit, was approved by California voters in 1979. The Gann Limit placed limits on the amount of proceeds of taxes that state and local governmental agencies can receive and appropriate (authorize to spend) each year.

The limit is different for each agency and the limit changes each year. The annual limit is based on the amount of tax proceeds that were authorized to be spent in fiscal year 1978-79 in each agency, modified for changes in inflation and population in each subsequent year.

Proposition 111 was passed by the State's voters in June 1990. This legislation made changes to the manner in which the Appropriations Limit is to be calculated:

The annual adjustment factors for inflation and population have been changed. Instead of using the lesser of California per capita income, or U.S. CPI, each agency may choose either the growth in the California per capita income, or the growth in assessed valuation due to new non-residential construction within the agency. For population, instead of using only the population growth of an agency, each agency may choose to use the population growth within its county. These are both annual elections.

The revised annual adjustment factors will be applied to the 1986-87 limit for most agencies and each year in between in order to calculate the 1990-91 limit. The actual limits for the intervening years, however, are not affected.

Expenditures for "qualified capital outlay", which are capital assets with a value of more than $100,000 and an expected life of 10 years or more, are excluded from the limit.

An agency which exceeds the limit in any one year may choose to not give a tax refund if they fall below the limit in the next fiscal year. They then have two more years to refund any remaining excess or to obtain a successful override vote.

In certain situations, proceeds of taxes may be spent on emergencies without having to reduce the limit in future years.

Each agency also conducts a review of its Appropriations Limit during its annual financial audit.

The law requires a governing body to annually adopt, by resolution, an appropriations limit for the following year, along with a recorded vote regarding which of the annual adjustment factors have been selected. The Orange County Sanitation District's appropriations limit and annual adjustment factors are adopted at the same meeting as the budget. The adjustment factors used for 2021-22 are the weighted average change in city population and the change in state per capita personal income.

The following table shows the annual appropriations limit for each of the last two fiscal years and for 2021-22. The increase in the limit is based upon population changes ranging from negative 1.86 percent to positive 0.02 percent for representative cities within the Orange County Sanitation District's service area and a per capita personal income change of 5.73 percent, as provided by the State Department of Finance.

Annual Appropriation Limits:

2019-20	$114,427,648
2020-21	$118,695,799
2021-22	$124,166,799

As a result of the July 1998 consolidation of the Orange County Sanitation District, a single limit is presented in contrast to individual limits shown in years prior to 1998. Population changes for representative cities have continued to be used in order to ensure consistency and to eliminate significant population growth in parts of the county outside of Orange County Sanitation District's service area. This method results in a lower limit than using the county-wide change.

Miscellaneous Statistics

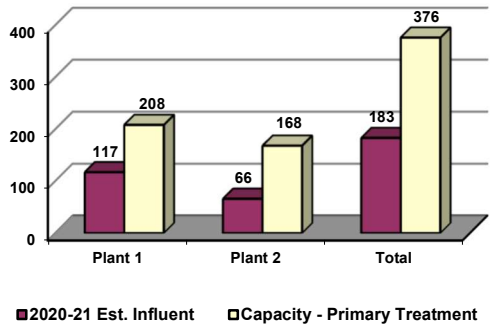
General Information

Year of Formation 1948
Form of Government ..... County Sanitation District
Authority ..... Section 4700 et. seq. ..... California Health & Safety Code
Service Area ..... 479 sq. miles
Service Population ..... Approximately 2.6 million
2020-21 Assessed Value ..... $494.2 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
2021-22 Authorized Staff (Full-Time Equivalent) 639

Treatment Information

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



2019-20 Influent BOD:
Plant No. 1 ..... 297 milligrams per liter
Plant No. 2 ..... 233 milligrams per liter

2019-20 Influent Suspended Solids:
Plant No. 1 ..... 340 milligrams per liter
Plant No. 2 ..... 305 milligrams per liter

2019-20 Effluent BOD ..... 11 milligrams per liter

2019-20 Effluent Suspended Solids ..... 5 milligrams per liter

2019-20 Biosolids Produced & Reused ..... 209,000 wet tons

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

2020-21 Estimated Average Daily Influent:
Plant No. 1 ..... 117 mgd
Plant No. 2 ..... 66 mgd
TOTAL ..... 183 mgd

2020-21 Estimated Electricity Generated:
Plant No. 1 ..... 35,596,000 kWh
Plant No. 2 ..... 56,222,000 kWh
TOTAL ..... 91,818,000 kWh

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

Financial Information

	2019-20 Actual	2020-21 Projected	2021-22 Originally Proposed	2021-22 Updated Proposed
Fees and Charges:				
One-Time 3-Bedroom Residence Connection	$4,601.00	$4,973.00	$5,346.00	$5,346.00
Average Annual Single-Family Residence Fee	$339	$339	$343	$343
Local SRF Fee	$108	$108	$108	$108
District's Avg. Share of Ad Valorem Property Tax	1.58%	1.60%	1.60%	1.60%
Cost to Collect, Treat, & Dispose of One Million Gallons	$ 2,421.83	$ 2,575.14	$2,542.56	$2,680.72

Summary of COP Issues:			
May 2010A New Money	$ 80,000,000	August 2014A Refunding	56,080,000
November 2010C New Money	157,000,000	February 2015A Refunding	127,510,000
October 2011A Refunding	75,370,000	March 2016A Refunding	136,830,000
March 2012A Refunding	100,645,000	February 2017A Refunding	65,815,000
August 2012B Refunding	8,170,000	November 2018A Refunding	102,200,000
		Total Outstanding COP Balance 7/1/21	$ 909,620,000

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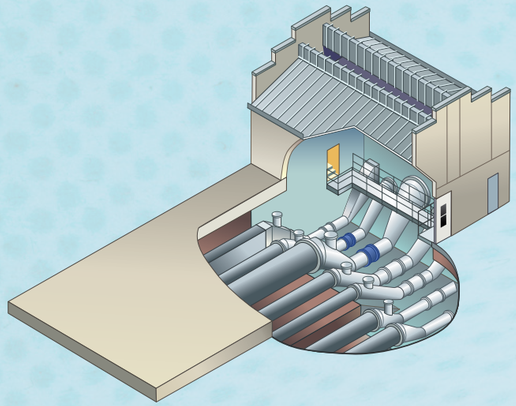
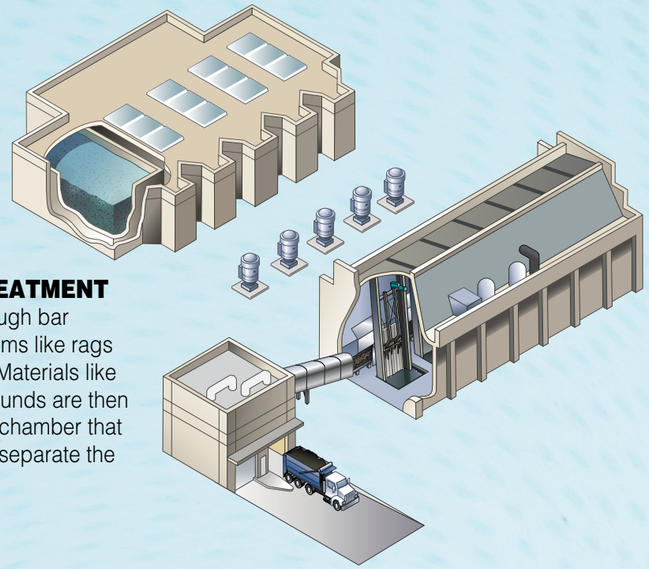
Orange County Sanitation District

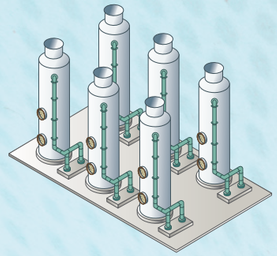
Wastewater Treatment Process



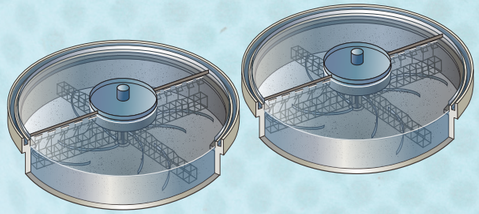
1. METERING AND DIVERSION
Wastewater enters our plant at 2.5 - 5 mph through pipes up to 10 feet in diameter. High tech equipment monitors the temperature, pH, conductivity, and flow of the incoming wastewater.



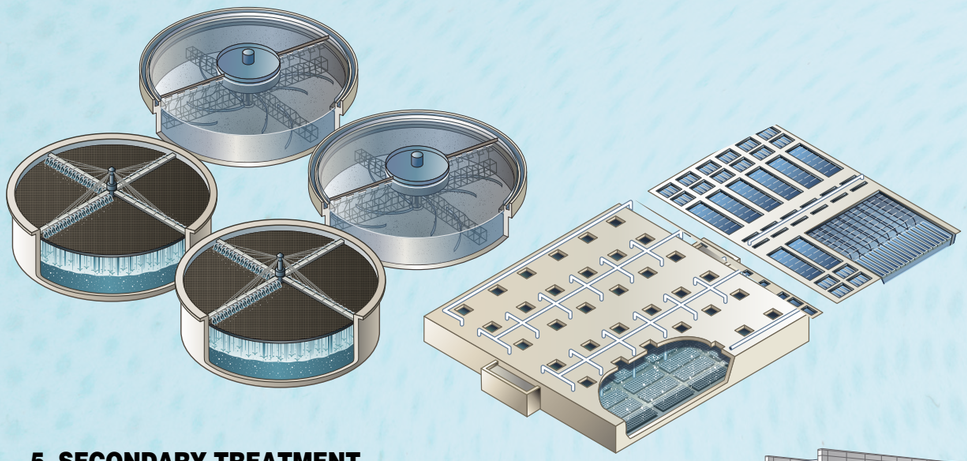
2. PRELIMINARY TREATMENT
Raw sewage passes through bar screens that trap large items like rags that cannot be recycled. Materials like egg shells and coffee grounds are then removed through the grit chamber that uses high pressure air to separate the gritty material.



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.

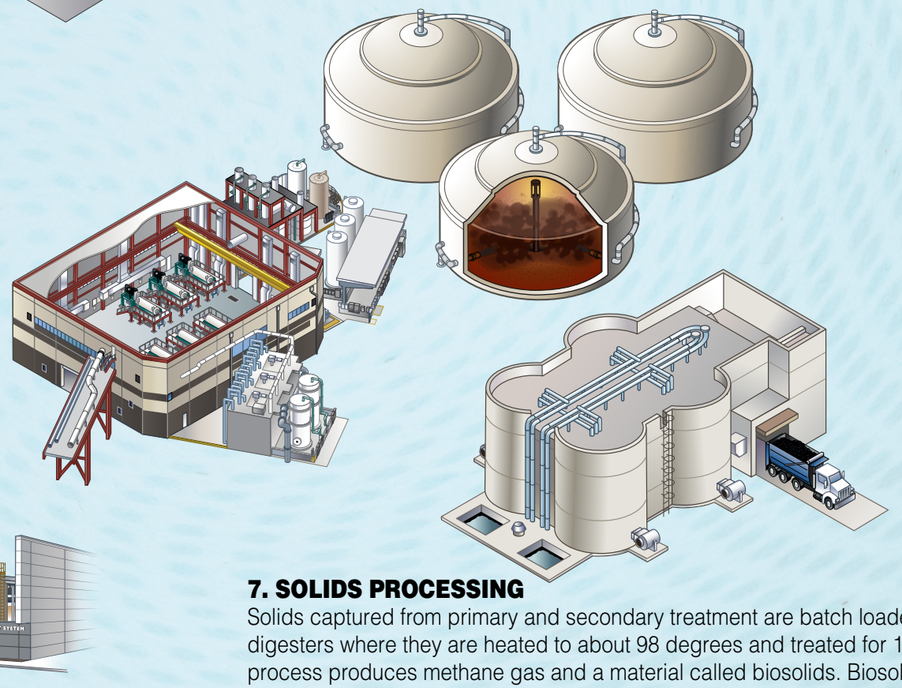


4. PRIMARY TREATMENT
Primary clarifiers or settling basins, slow the water down to allow the solids in the wastewater that readily settle or float to be separated from the water being treated. Collector arms that move along the top and the bottom remove over 80 percent of the influent wastewater solids.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

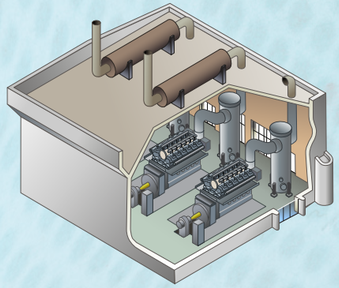


5. SECONDARY TREATMENT
Trickling filters and aeration basins are used to further clean the water. In trickling filters the water is sprayed over a honeycomb type material upon which aerobic bacteria grow. As the water trickles down, the microorganisms consume the solids that were not removed through 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 OCSD 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.

OCSAN
ORANGE COUNTY SANITATION DISTRICT

PA 05/2020

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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
California, 92708-7018
714.962.2411
www.ocsan.gov

OCSAN
ORANGE COUNTY SANITATION DISTRICT

05/2021