ORANGE COUNTY WATER DISTRICT

BUDGET REPORT FY 2024 - 2025

Orange County Water District
Budget Report
Fiscal Year 2024-25

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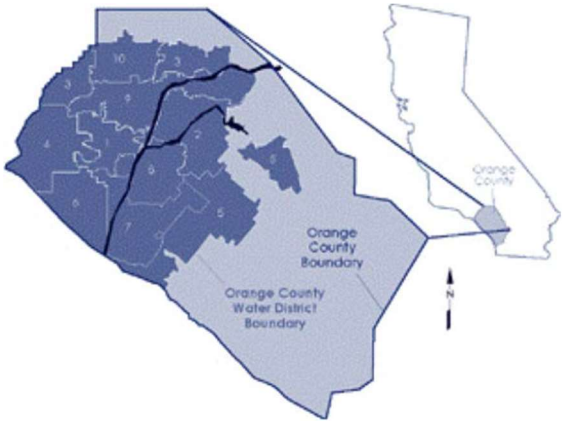
General Manager

ORANGE COUNTY WATER DISTRICT
BUDGET REPORT
FISCAL YEAR 2024-25

OCWD HISTORY AND CHARACTER

ORANGE COUNTY WATER DISTRICT
HISTORY AND CHARACTER

The District receives an average of only 13 to 15 inches of rainfall annually, yet sustains a population of approximately 2.5 million people. The residents and businesses within the District have two primary sources of drinking water. One source is a natural underground reservoir, called the Orange County groundwater basin. The other source, referred to as imported water, comes from Colorado through the Colorado River Aqueduct and from the Sacramento/San Joaquin Delta in Northern California through the State Water Project.



The groundwater basin was used by early settlers to supplement flows from the Santa Ana River.

As the area developed into a thriving agricultural center, the increased demand upon the subsurface water by the county's many wells resulted in a gradual lowering of the water table. In response, the Orange County Water District was formed in 1933 by a special act of the California State Legislature. OCWD manages the groundwater basin that underlies the northwest half of the county, supplying a significant percentage of the District's total water demand. The remaining demand is obtained through the Colorado River Aqueduct and State Water Project via the Metropolitan Water District of Southern California and the Municipal Water District of Orange County.

DISTRICT VITAL STATISTICS

Date of Enactment: 1933
Form of Government: Special District of the State of California
Area (square miles): 381
Employees (full-time equivalent): 226.5

Major Groundwater Producing Agencies:

Anaheim, City of
Buena Park, City of
East Orange County Water District
Fountain Valley, City of
Fullerton, City of
Garden Grove, City of
Golden State Water Company
Huntington Beach, City of
Irvine Ranch Water District
La Palma, City of
Mesa Water District
Newport Beach, City of
Orange, City of
Santa Ana, City of
Seal Beach, City of
Serrano Water District
Tustin, City of
Westminster, City of
Yorba Linda Water District

Section 1
General Manager’s Message

SINCE 1933

ORANGE COUNTY WATER DISTRICT

ORANGE COUNTY'S GROUNDWATER AUTHORITY

April 17, 2024

Board of Directors
Orange County Water District

Subject: BUDGET FOR FISCAL YEAR 2024-25

OVERVIEW

I am pleased to present to the Board of Directors the recommended budget for fiscal year (FY) 2024-25. The budget includes general fund expenditures, debt service, water purchases, refurbishment and replacement items, and capital projects for Board review and consideration. Development of the draft budget began in December 2023 with a Board review of the preparation schedule.

The District's general fund budget has been subdivided into 21 cost centers to provide greater detail. During January, I met with all the District's managers in preparing the budgets for these cost centers.

The draft budget was reviewed at the Board meeting on March 6. Additional meetings and workshops were held on the budget through April with the Board and Groundwater Producers (Producers). The final budget presents the culmination of these meetings and workshops, along with a new review of the budget by me as General Manager, which leads to changes in expenses as shown in Table 1.

The budget describes activities and projects that are primarily a continuation of the District's existing workload. We expect the Groundwater Replenishment System (GWRS) to produce 128,000 acre-feet of water supplies. The budget is based on a Basin Production Percentage (BPP) of 85 percent, which corresponds to approximately 292,000 acre-feet of pumping in FY 2024-25.

Highlights and assumptions of the proposed budget include:

- This plan assumes average hydrology.
- The budget reflects no purchase of MWD untreated full-service water.
- This plan includes paying $58.3 million for producer Per and Polyfluoroalkyl Substances (PFAS) treatment facilities in FY 2024-25. The District is

proposing to use PAYGO funds out of the FY 2024-25 budget to pay for these costs.

- Increase in General Fund expenses by approximately $7.4 million from the prior year.
- Includes $5.4 million of producers' treatment O&M cost for PFAS.
- Four and a half percent cost of living adjustment and three percent merit increase based upon employee performance have been budgeted.
- The District's full-time headcount will remain 226½.
- The groundwater basin's projected June 30, 2024 accumulated overdraft is estimated at approximately 168,000 acre-feet (af).

Table 1

PROPOSED CHANGES TO DRAFT FY 2024-25 BUDGET

ITEM	ADDITION/(REDUCTION)	NOTES
General Fund Budget	$1,500	Updated cost of District membership.
General Fund Budget	$25,000	Updated cost of future water demand study.

The recommended budget would require an increase in the Replenishment Assessment (RA) to $688 per acre-foot for FY 2024-25 from the current year's RA of $624. Table 1A provides a summary of the proposed budget:

Table 1A

2024-25 PROPOSED BUDGET

EXPENDITURES	BUDGETED FY 23-24 ($ MILLIONS)	PROPOSED FY 24-25 ($ MILLIONS)
General Fund	97.8	105.2
Debt Service	44.4	46.5
Water Purchases	6.2	6.0
New Equipment	0.3	0.9
Capital Improvement Program	101.1	59.4
Refurbishment and Replacement Expenditures	15.5	23.6
Contribution to R&R fund & PAYGO Reserve	9.7	7.0
Retiree Health Insurance Trust	0.6	0.6
Producer's PFAS O&M	3.5	5.4
Total	**$279.1**	**$254.6**

BUDGET DETAILS

The Orange County Water District strives to improve the efficiency of all aspects of its operations in its continuing efforts to increase the water quality and reliability of Orange County's local water resources at the lowest possible cost. The FY 2024-25 budget reflects the wide range of programs necessary to accomplish the District's primary mission of proactively managing the Orange County groundwater basin. The following sections provide highlights of the budget.

EXPENDITURES

GENERAL FUND BUDGET - $105.2 MILLION

The District has 21 cost centers and their proposed activities for the year are provided in detail in later sections of this document.

The District continually attempts to minimize increases to the General Fund by taking actions such as limiting administrative personnel, reviewing operations, maximizing outside funding opportunities, and reviewing all vacant positions before they are refilled. The General Fund budget contains the expenses of operating a number of facilities including:

The GWRS Advanced Water Purification Facility
Green Acres Project (GAP)
Talbert seawater barrier injection facilities
Water quality monitoring well maintenance and sampling
Laboratory
Recharge operations in Anaheim and Orange
Alamitos seawater barrier injection facilities
Prado Wetlands and water conservation programs

The District's total salary and benefit costs are projected to be $43.5 million, which is allocated as follows: $42.7 million to the General Fund and $0.8 million to capital projects. As described in the Work Plans, the budget proposes a headcount of 226½.

WATER PURCHASE BUDGET - $6.0 MILLION

The proposed FY 2024-25 water budget is $6.0 million and calls for abstaining from purchasing any untreated full-service water from the Metropolitan Water District (MWD) due to the PFAS issue. Staff expects groundwater pumping to continue to remain depressed due to the impending Environment Protection Agency (EPA) establishment of a 4 ng/L maximum containment level (MCL) for some PFAS compounds in early 2024. To offset this decline in revenues, due to reduced pumping, the District will not purchase any MWD untreated water.

Debt Service Budget - $46.5 Million

The District will have approximately $830.8 million in outstanding debt at the start of the budget year. This year's total debt service budget will be $46.5 million, comprised of

$16.5 million of fixed rate debt, $5.2 million of variable rate debt, $15.0 million in SRF debt payments, $8.9 million of commercial paper debt, which includes $8.5 million in principal reduction and $0.9 million for debt administration. Variable rate debt interest has been budgeted at 4 percent. The District will utilize $46.5 million from RA/property tax revenues to meet this obligation.

The District bonds hold very high credit ratings of AAA from Standard & Poor's and Fitch along with an Aa1 rating from Moody's. The ratings assigned by these three agencies have a direct impact on the District's ratepayers. The District's high credit ratings translate into lower annual interest payments and reduced letter of credit fees on its variable rate debt and commercial paper.

RETIREE HEALTH INSURANCE TRUST FUND - $0.6 MILLION

The new GASB standards required the District to receive a new actuarial study in June 2022, with a measurement date of June 30, 2021. The actuarial study determined the District's net OPEB liability and the new actuarially determined contributions (ADC) to provide the retiree medical benefit. The Board has directed funding for this liability to our PARS trust per the actuarial study measured as of June 30, 2021.

The trust fund is estimated to have a value of approximately $30 million at the end of the current budget year. The recommended FY 2024-25 budget includes $0.6 million to continue fully funding the District's ADC. This cost is also referred to as Other Post Employment Benefits (OPEB).

Replacement and Refurbishment (R&R) Fund Budget - $27.0 Million

The District has over $1.5 billion in existing plant and equipment. These facilities annually depreciate and require replacement and refurbishment to maintain their capabilities. In October 1998, the District formally established an R&R Fund.

In 2004 the R&R program was downsized to only include infrastructure type assets. The amount of money annually transferred into the R&R program was reduced from $4.5 million to $2.8 million with this change. The transfer amount has been growing by seven percent annually to provide sufficient funds to meet future expected R&R expenditures. The annual contribution also increased by $4.5 million with the construction of the GWR System.

The total contribution in FY 2024-25 will be $27.0 million. The R&R program and model were formally reviewed and updated in 2019 with various departments.

Actual expenditures from the fund vary significantly each year depending upon which District assets have reached the end of their useful life and need to be replaced, or which assets can extend their lives by refurbishment. In FY 2024-25, the proposed R&R expenditures are $23.6 million.

The R&R Program Fund balance is expected to increase from an estimated $105.8 million on June 30, 2024 to $110.0 million on June 30, 2025.

Capital Projects Budget - $59.4 Million

The District prepares a multi-year CIP budget to support its mission. The CIP budget spans five years and provides expected capital expenditures over the 5-year period. The CIP budget is comprised of twenty-seven projects totaling $59.4 million in FY 2024-25. These projects are funded through long-term debt, grants, and RA revenue or current revenue (PAYGO) rather than borrowed funds. Details of the CIP are provided in Section 8 of the budget book.

The projects for example are necessary to:

- Remediate PFAS to meet California Drinking Water Standards
- Support basin production by increasing recharge capacity and operational flexibility.
- Protect the coastal portion of the basin.

The CIP program and the capitalization of expenditures comply with the adopted District policy in October 2000, which: (1) defines the types of expenditures that can be capitalized; and (2) uses long-term debt to fund the projects. Each project included in the CIP must be individually reviewed and approved by the Board prior to design and construction.

NEW CAPITAL EQUIPMENT ITEMS - $0.9 MILLION

This budget includes small equipment items such as laboratory equipment, machines, tools, computers and software, pumps, equipment, etc. These items are funded using current revenues.

A detailed list of these items is provided in Section 9 of the budget book.

PFAS O&M EXPENDITURE - $5.4 MILLION

This budget includes $5.4 million towards the reimbursement of 50% Share of a PFAS Treatment Operating Cost. The PFAS Treatment Facilities and Program Agreement that OCWD has executed with eleven Groundwater Producers calls for the District to pay 50% of the PFAS treatment facilities operating cost up to the current fiscal year maximum adjusted cost. This rate is automatically adjusted annually on July 1st per the agreement by the percentage differential based on the last two annual indices set forth in the Bureau of Labor Statistics Consumer Price Index for All Urban Consumers - Los Angeles-Long Beach-Anaheim. The rate is currently $86.83 and can be expected to increase by approximately 3.5% on July 1, 2024 to $89.86 per acre-foot.

The staff estimated amount of PFAS treated groundwater is 98,000 acre-feet with a treatment operating cost share estimate of $5.4 million.

REVENUES

ASSESSMENTS - $200.8 MILLION RA; $2.75 MILLION BASIN EQUITY ASSESSMENT

All water pumped out of the groundwater basin will be assessed the RA on a dollar per acre-foot basis of $688. The RA is expected to generate $200.8 million in revenue for FY 2024-25 based on 292,431 acre-feet of total anticipated basin production at an 85 percent BPP.

The Basin Equity Assessment (BEA) rate is calculated for each Producer based on the treated full service MWD water rate and each Producer's individual energy cost to pump groundwater. The BEA is assessed annually in September for all groundwater production above the BPP. For FY 2024-25, $2.75 million of BEA revenue is expected to be received.

AD VALOREM PROPERTY TAXES – $35.8 MILLION

The District expects to receive approximately $35.8 million in property taxes collected within the service area.

The County of Orange assesses and collects the taxes and transfers them to the District at various times during the year. This revenue source is dedicated to the District's debt service expenditure.

INVESTMENT REVENUE – $3.9 MILLION

The District's cash reserves generate investment revenues. The majority of cash reserves are invested in short-term securities per the District's Investment Policy.

Investment revenues have been estimated at $3.0 million for the General Fund. Approximately $0.8 million of the investment revenues are generated by and for the R&R program, $0.1 million will be generated from water funds.

MISCELLANEOUS REVENUES – $11.4 MILLION

MISCELLANEOUS REVENUES ARE COMPRISED OF NUMEROUS ITEMS INCLUDING:

Water sales from the Green Acres Project (GAP)	$2.7 M
Annexation fees	$1.7 M
Rents & leases	$1.7 M
Other grants and misc. items	$5.3 M
Total	$11.4 M

RESERVES

The District maintains cash reserves to ensure its financial integrity so that the groundwater basin can be successfully managed and protected. Cash reserves ensure that:

- The District has sufficient funds for cash flow purposes.
- Funds are available for unexpected events.

- Funds are available to make necessary replacements and refurbishments to the District's infrastructure.
- The District has access to debt programs with very low interest costs.
- A financial hedge is in place to balance the amount of outstanding variable rate debt that the District has issued in case interest rates rise.

The District has developed policies that result in the establishment of the reserve and operating fund levels shown in Table 2. The net effect of the proposed budget would be an increase of $16.9 million to total District reserves, an increase of $4.2 million in the Replacement and Refurbishment fund, $3.6 million increase in PAYGO, and a combined increase of $9.1 million in the Operating reserve fund and Operating fund.

Table 2
Operating Reserves Levels

Reserve	Beginning FY 23-24 ($/million)	Projected Year-end FY 23-24 ($/million)	Projected Year-end FY 24-25 ($/million)
R&R Fund	96.1	105.8	110.0
Emergency Response Fund	4.0	4.0	4.0
G.W. Contamination Cleanup	18.6	18.0	18.0
Contingencies Reserve Fund	3.0	3.0	3.0
SRF Loan Reserve Fund	2.0	2.0	2.0
Water Reserve Fund	4.3	1.0	1.0
PAYGO Fund	53.1	40.0	43.6
Operating Reserve Fund (15% of operating budget)	24.1	22.0	23.6
Sub-total	**205.2**	**195.8**	**205.2**
Operating Fund			
Operating Fund	84.3	71.0	78.5
TOTAL	**289.5**	**266.8**	**283.7**

COST CUTTING EFFORTS

Staff has been and will continue to work to reduce District costs to minimize rate increases. Examples of current and prior cost cutting efforts include:

- Locked in low electricity cost with power supplier via Direct Access.
- The District continues negotiating payment term discounts with vendors.
- Prepaying the 2019A Notes six months early.
- The GWRS RO cleaning process has been optimized to reduce citric acid usage as membranes age.

- Utilize Single Use Accounts to pay vendors.
- Applied for and received low cost WIFIA loan for Producer's PFAS Treatment Facilities.
- Utilized CP program to minimize MWD rate increase on FY 2017-18 in-lieu program.
- Worked with SWRCB to eliminate the reserve fund requirement for state revolving fund loan for the GWRS Final Expansion project.
- Worked with the USEPA WIFIA management to reset the WIFIA loan interest rate from 3.06% to 1.04% for the GWRSFE Project.

CONCLUSION

The proposed FY 2024-25 budget represents an expenditure plan that is fiscally sound and incorporates significant budget reductions while supporting necessary programs. As part of the District's commitment to provide local groundwater producers with a reliable, high-quality water supply at the lowest reasonable cost, the following areas will continue to be emphasized:

- Minimize administrative and overhead type costs;
- Protect the coastal portion of the groundwater basin;
- Increase local water supplies where economical; and
- Maintain the financial health and integrity of the District.

Respectfully submitted,

John C. Kennedy
General Manager

Section 2
Summaries

Combined Summary
Sources and Uses of Funds
General Fund Budget Summary
General Fund Budget Comparison
District Memberships
OCWD Headcount
Key Financial Metrics

Orange County Water District
Combined Summary
Fiscal Year 2024-25

Revenues		
Property Taxes	$	35,807,406
Replenishment Assessment	$	200,858,622
Basin Equity Assessment	$	2,750,000
Facility Revenue from Other Agencies (GAP)	$	2,722,941
Investment Revenues	$	3,853,831
Rent, Royalties and Others	$	3,700,154
Grants	$	5,000,000
Total Revenues/Others	**$**	**254,692,954**

Appropriations		
General Fund	$	105,197,500
PFAS O&M Expenditure	$	5,400,000
New Equipment	$	893,000
Water Purchases	$	6,029,880
Retiree Health Trust	$	640,000
Debt Service	$	46,525,883
Capital Projects (Debt & PAYGO funded)	$	59,383,777
R&R Fund Expenditures	$	23,642,858
Appropriation to Capital reserves	$	3,616,223
Appropriation to R&R reserves	$	3,363,833
Total Appropriations	**$**	**254,692,954**

Sources and Uses of Funds
Fiscal Year 2024-25

Uses		Sources							
	Total	Replenishment Assessment	Basin Equity Assessment	Taxes	GAP Revenues	Investment Revenue	Rent & Others	Grants	Total
General Fund	$ 105,197,500	$ 95,782,028			$ 2,722,941	$ 3,003,831	$ 3,688,700		$ 105,197,500
PFAS O&M Expenditure	$ 5,400,000	$ 5,400,000							$ 5,400,000
New Equipment	$ 893,000	$ 893,000							$ 893,000
Water Purchases	$ 6,029,880	$ 3,229,880	$ 2,750,000			$ 50,000			$ 6,029,880
Debt Service	$ 46,525,883	$ 10,707,023		$ 35,807,406			$ 11,454		$ 46,525,883
Retiree Health Trust	$ 640,000	$ 640,000							$ 640,000
Capital Projects (Debt & PAYGO funded)	$ 59,383,777	$ 54,383,777						$ 5,000,000	$ 59,383,777
Appropriation to Capital reserves	$ 3,616,223	$ 3,616,223							$ 3,616,223
R&R Fund Expenditures	$ 23,642,858	$ 22,842,858				$ 800,000			$ 23,642,858
Appropriation to R&R reserves	$ 3,363,833	$ 3,363,833							$ 3,363,833
	$ 254,692,954	$ 200,858,622	$ 2,750,000	$ 35,807,406	$ 2,722,941	$ 3,853,831	$ 3,700,154	$ 5,000,000	$ 254,692,954

General Fund Budget Summary
Fiscal Year 2024-25

Cost Center #	Cost Center	Salaries & Benefits	Services & Supplies	FY 24-25 Proposed Budget
1010	General Manager's Office	626,810	1,876,905	2,503,715
1012	Public Affairs	1,470,795	666,450	2,137,245
1016	Information Services	2,139,695	1,339,000	3,478,695
1018	Board Administration	1,513,680	511,147	2,024,827
1022	Purchasing	851,088	47,980	899,068
1024	Finance	2,317,987	113,900	2,431,887
1030	Human Resources	901,406	260,880	1,162,286
1034	Safety & Risk Management	507,207	1,793,925	2,301,132
1036	Water Quality	2,277,381	343,800	2,621,181
1038	Laboratory	5,814,449	1,964,190	7,778,639
1040	Research & Development	1,703,538	526,380	2,229,918
1044	Planning and Watershed Management	1,014,914	1,206,850	2,221,764
1045	Local Resources	357,205	3,600	360,805
1046	Regulatory Affairs	621,543	417,400	1,038,943
1050	Water Production/GWR System	12,226,725	47,079,120	59,305,845
1060	Recharge Operations	3,270,183	2,093,700	5,363,883
1062	Wetland Operations	310,401	229,000	539,401
1069	Property Management	172,350	184,188	356,538
1070	Engineering	1,051,196	63,100	1,114,296
1075	Hydrogeology	2,693,482	1,050,600	3,744,082
1080	Natural Resources	888,178	695,350	1,583,528
	Total (Rounded)	**$ 42,730,000**	**$ 62,467,000**	**$105,198,000**

General Fund Budget Comparison
Fiscal Year 2024-25

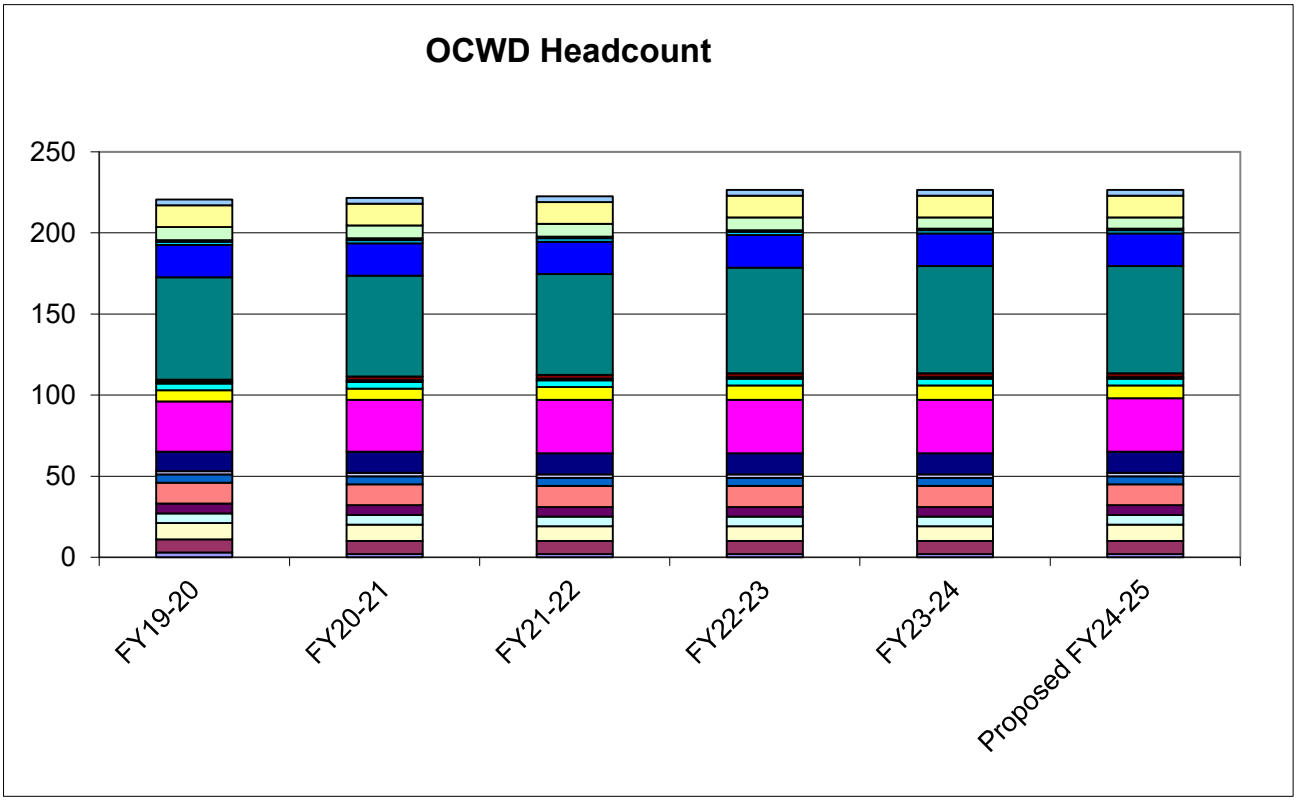
Cost Center #	Cost Center	FY 2024-25 Proposed Budget	FY 2023-24 Budget	Difference Over(Under)	% Increased or (Decreased)
1010	General Manager's Office	2,503,715	2,202,159	301,556	13.69%
1012	Public Affairs	2,137,245	2,083,956	53,289	2.56%
1016	Information Services	3,478,695	2,907,024	571,671	19.67%
1018	Board Administration	2,024,827	1,726,780	298,048	17.26%
1022	Purchasing	899,068	854,360	44,708	5.23%
1024	Finance	2,431,887	2,342,663	89,223	3.81%
1030	Human Resources	1,162,286	1,086,760	75,525	6.95%
1034	Safety & Risk Management	2,301,132	1,713,425	587,707	34.30%
1036	Water Quality	2,621,181	2,401,447	219,734	9.15%
1038	Laboratory	7,778,639	6,856,725	921,914	13.45%
1040	Research & Development	2,229,918	2,270,237	(40,320)	-1.78%
1044	Planning & Watershed Management	2,221,764	1,660,724	561,040	33.78%
1045	Local Resources	360,805	344,562	16,243	4.71%
1046	Regulatory Affairs	1,038,943	1,059,943	(21,000)	-1.98%
1050	Water Production/GWR System	59,305,845	55,658,127	3,647,718	6.55%
1060	Recharge Operations	5,363,883	4,953,286	410,597	8.29%
1062	Wetland Operations	539,401	565,554	(26,153)	-4.62%
1069	Property Management	356,538	332,306	24,231	7.29%
1070	Engineering	1,114,296	1,265,182	(150,886)	-11.93%
1075	Hydrogeology	3,744,082	3,999,120	(255,038)	-6.38%
1080	Natural Resources	1,583,528	1,549,755	33,773	2.18%
	Total (rounded)	**$ 105,198,000**	**$ 97,834,000**	**$ 7,364,000**	**7.53%**

DISTRICT MEMBERSHIPS
FISCAL YEAR 2024-25

ORGANIZATION	AMOUNT
AMERICAN MEMBRANE TECHNOLOGY ASSOCIATION	600
AMERICAN WATER WORKS ASSOCIATION (AWWA)	2,100
ASSOCIATION OF CALIFORNIA CITIES - ORANGE COUNTY (ACC-OC)	5,300
ASSOCIATION OF CALIFORNIA WATER AGENCIES (ACWA)	35,000
ASSOCIATION OF CALIFORNIA WATER AGENCIES FOUNDATION	10,000
ASSOCIATION OF METROPOLITAN WATER AGENCIES (AMWA)	23,500
CAL DESAL	5,000
CAL STATE FULLERTON DEMOGRAPHICS	57,500
CALIFORNIA DATA COLLABORATIVE	16,500
CALIFORNIA GROUNDWATER COALITION	10,500
CALIFORNIA MUNICIPAL UTILITIES ASSOCIATION (CMUA)	13,500
CALIFORNIA SPECIAL DISTRICTS ASSOCIATION (CSDA)	9,500
CALIFORNIA WATER EFFICIENCY PARTNERSHIP (SRF LOAN)	6,200
CHAMBERS OF COMMERCE	5,000
CLEAN WATER SOCAL	2,800
COMMUNITY WATER SYSTEMS ALLIANCE	10,000
GROUNDWATER RESOURCES FOUNDATION (GRA)	1,500
INDEPENDENT SPECIAL DISTRICTS ASSOCIATION (ISDOC)	100
ORANGE COUNTY WATER ASSOCIATION	250
PROFESSIONAL MEMBERSHIPS (ASCE & WEF)	500
SANTA ANA RIVER FLOOD PROTECTION AGENCY (SARFPA)	1,300
SCRIPPS WATER AFFILIATES GROUP	25,000
SOUTHERN CALIFORNIA SALINITY COALITION (NWRI)	10,000
SOUTHERN CALIFORNIA WATER COALITION	5,000
SOUTHWEST MEMBRANE OPERATORS ASSOCIATION	500
URBAN WATER INSTITUTE	1,350
WATER EDUCATION FOUNDATION	8,000
WATER RESEARCH FOUNDATION	178,500
WATEREUSE ASSOCIATION	20,000
SUSTAIN SOCAL	1,500
DISTRICT MEMBERSHIPS TOTAL	**466,500**

OCWD Headcount

Cost Center	FY19-20	FY20-21	FY21-22	FY22-23	FY23-24	Proposed FY24-25
General Manager's Office	3	2	2	2	2	2
Public Affairs	8	8	8	8	8	8
Information Services	10	10	9	9	9	10
Board Administration	6	6	6	6	6	6
Purchasing	6	6	6	6	6	6
Finance	13	13	13	13	13	13
Human Resources	5	5	5	5	5	5
Safety & Risk Management	2	2	2	2	2	2
Water Quality	12	13	13	13	13	13
Laboratory	31	32	33	33	33	33
Research & Development	7	7	8	9	9	8
Planning & Watershed Management	4	4	4	4	4	4
Local Resources	1	1	1	1	1	1
Regulatory Affairs	1.5	2.5	2.5	2.5	2.5	2.5
Water Production/GWR System	63	62	62	65	66	66
Recharge Operations	20	20	20	20	20	20
Wetland Operations	2	2	2	2	2	2
Property Management	1	1	1	1	1	1
Engineering	8	8	8	8	7	7
Hydrogeology	13.5	13.5	13.5	13.5	13.5	13.5
Natural Resources	3.5	3.5	3.5	3.5	3.5	3.5
	220.5	221.5	222.5	226.5	226.5	226.5



ORANGE COUNTY WATER DISTRICT

KEY FINANCIAL METRICS

JUNE 30, 2023 THROUGH JUNE 30, 2025

	2023 Actual	Forecast/ 2024 Budget	2025 Budget
TOTAL CASH AND INVESTMENTS (UNRESTRICTED)	$ 289,526,304	$ 266,800,000	$ 283,700,000
TOTAL OPERATING EXP. AND DEBT SVE FROM BELOW	130,996,980	136,334,189	149,300,383
DAYS CASH RATIO	***807***	***714***	***694***
COVERAGE RATIO:			
Replenishment assessments	$ 135,370,694	$ 178,757,325	$ 200,858,622
CUP revenue	-	-	-
Reclaimed water revenue	2,429,591	3,007,816	2,722,941
Property tax	35,807,406	33,616,551	35,807,406
Legal settlement revenue	3,500,000	-	-
Rental income, net of expenses	1,729,446	1,678,873	1,700,000
Operating grants	716,741	-	-
Investment revenue	7,782,227	6,926,553	3,853,831
Other revenues	3,659,100	4,645,134	1,988,700
Total YTD revenues	190,995,206	228,632,251	246,931,500
Budgeted annual revenue less YTD revenue	-	-	-
Operating expenses including litigation expenses	93,651,480	102,928,700	112,106,610
Operating expenses budgeted for the rest of the FY	-	-	-
Total Expenditures	93,651,480	102,928,700	112,106,610
Net revenues	97,343,726	125,703,551	134,824,890
Annual debt service	37,345,510	33,405,489	37,193,773
ALL-IN ADS COVERAGE RATIO	***2.6***	***3.8***	***3.6***

Section 3
Operations and Cost Center Descriptions

Organizational Structure
Cost Center Profiles

OPERATIONS AND COST CENTER DESCRIPTIONS
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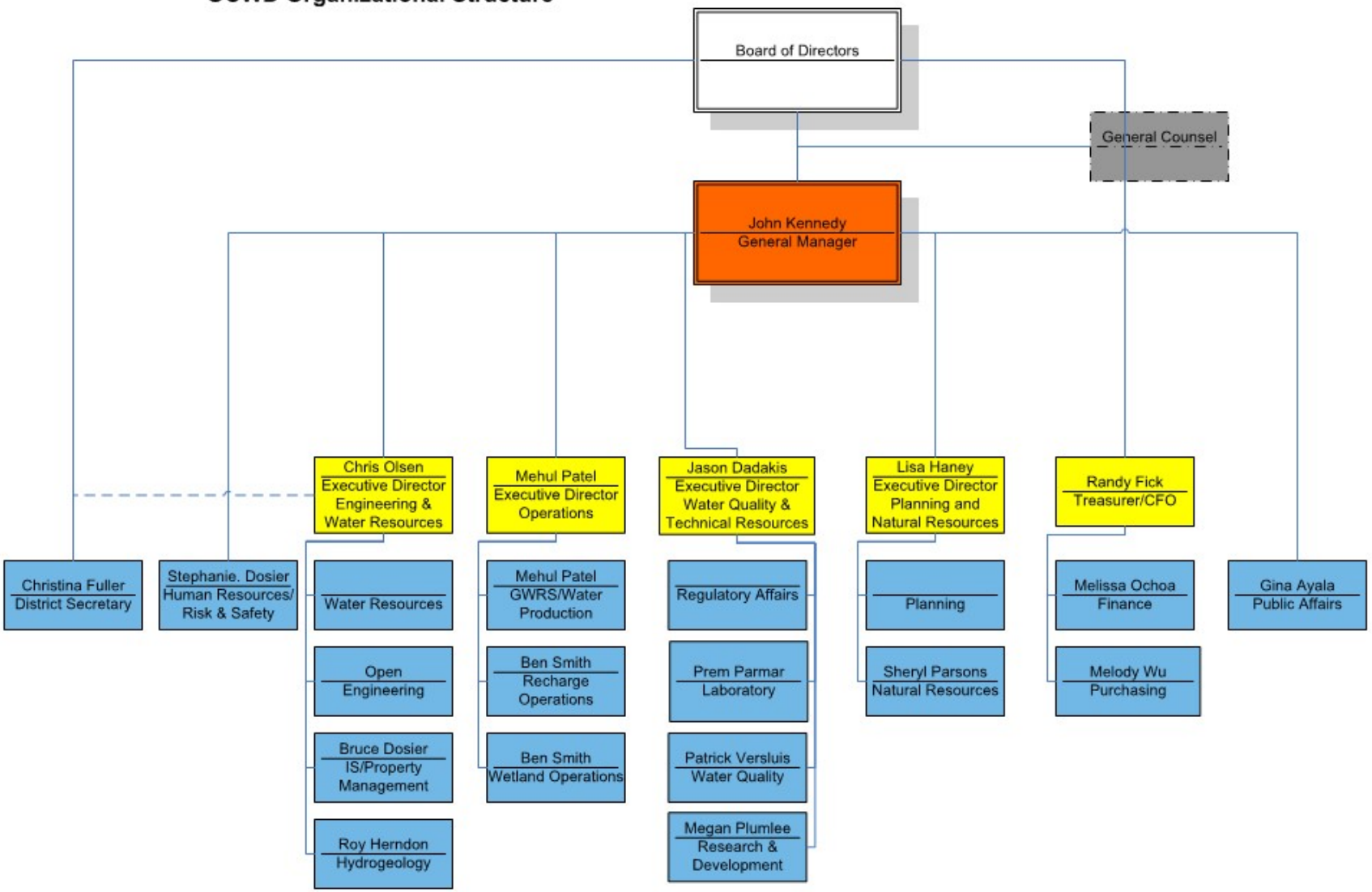
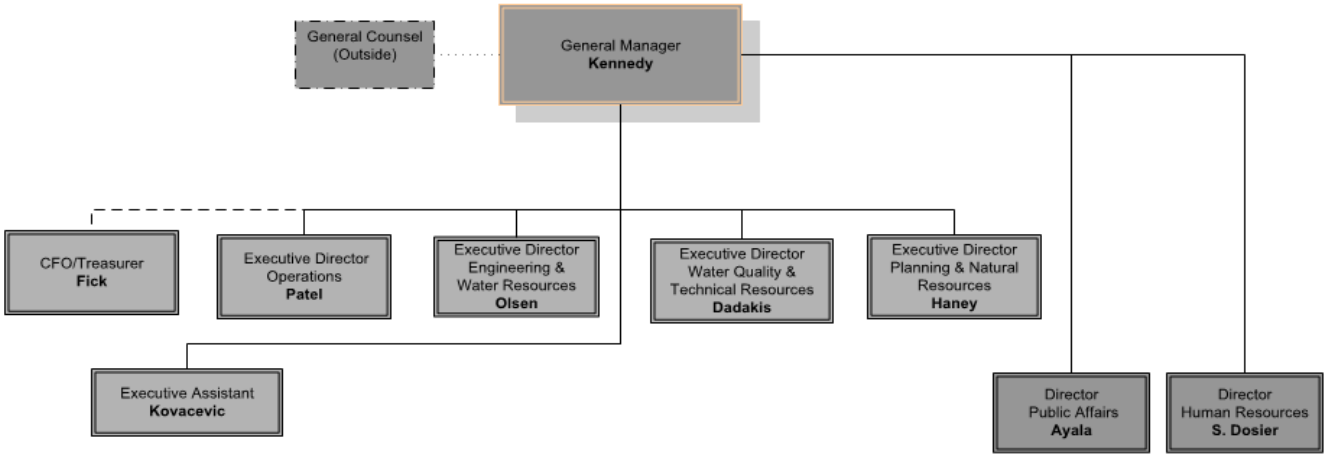
OCWD Organizational Structure



OFFICE OF THE GENERAL MANAGER



Summary Information

Existing Staff – 2 FTEs

1 – General Manager

1 – Executive Assistant

Mission

Implement the policies of the Board of Directors.

Key Issues for FY 2024-25

- Continue implementation of the PFAS policy by completing the construction of wellhead treatment for the initial 62 wells for 15 affected Groundwater Producers.
- Complete a feasibility study for a seawater barrier project at the Sunset Gap.
- With Board approval, secure funding for OCWD if a state bond is developed for the 2024 election work.
- Support the operation of the Groundwater Replenishment System's (GWRS) first year at its full capacity of 130 million gallons per day.
- Continue to advocate for funding at the State and Federal level for the study of Atmospheric Rivers which supports Forecast Informed Reservoir Operations (FIRO) and the pilot study conducted for the District at Prado Dam.
- Continue to support legal efforts in the North Basin, South Basin, IRWD and PFAS groundwater contamination cases.
- Continue advocacy to make sure that PFAS receives an exemption for water and wastewater agencies if listed as a hazardous substance subject to CERCLA.

- Secure grant or low-interest loan funding for all capital projects through State and Federal programs.

Account Information	FY 2022-23 Actual	FY 2023-24 Budget	FY 2024-25 Proposed Budget
Salaries and Benefits	596,659	554,669	626,810
Services and Supplies	1,924,829	1,647,490	1,876,905
Total	**$2,521,488**	**$2,202,159**	**$2,503,715**

I FY 2024-25 Major New Initiatives/Programs

- Review the District's 500,000 acre-foot accumulated overdraft floor.
- Review and assess the Natural Resources programs behind Prado Dam.
- Begin design activities for the next 40-45 wells that will require PFAS treatment systems due to the EPA's new 4 ppt MCLs.

II Core Activities

The General Manager's Office is charged with directing the activities of 226.5 full-time employees in their efforts to manage and protect the Orange County groundwater basin, which supplies 82% of the water used by 2.5 million people living in northern Orange County.

Core activities include:

- Implementing and communicating the policies of the Board of Directors.
- Supporting and preparing for Board and Committee meetings.
- Managing organizational issues.
- Managing outside legal services.
- Coordinating legislative activities.
- Providing external communications.
- Coordinating with the Groundwater Producers.
- Participation in WateReuse CA and the WateReuse Association to help support District initiatives and policy development for potable reuse.
- Attend the Santa Ana Water Project Authority (SAWPA) meetings and engage the member agency's general managers in upper Santa Ana watershed activities.
- Coordinate with the Municipal Water District of Orange County (MWDOC) on Metropolitan Water District of Southern California (MWD) issues.

III Non-Core Activities

- Numerous requests for presentations and tours of District facilities.

IV Group Goals for FY 2024-25

Lawsuits – Actively manage and pursue legal actions and settlements regarding:

- PFAS litigation.
- North Basin Groundwater Protection Project.
- South Basin Groundwater Protection Project.
- Irvine Ranch Water District litigation.

Legislation - Advocate for the District's legislative interests at the federal, state, and local levels. Actively monitor and aggressively support/oppose legislation impacting the District's operations as necessary.

- *Federal:* Continue working with the Army Corps of Engineers (ACOE) to pursue additional water conservation and study Forecast Informed Reservoir Operations (FIRO) as a tool for water conservation. Work with the Environmental Protection Agency (EPA) to secure additional State Revolving Funds (SRF) for California and the Water Infrastructure Finance and Innovation Act (WIFIA) loan program. Engage in any PFAS related legislation that could affect the District. Continue working with federal legislators to secure funding for District projects and visit legislators and legislators' staff in Washington, D.C.
- *State:* Work with the Association of California Water Agencies (ACWA), SAWPA, California Special Districts Association (CSDA), WateReuse CA, and others to monitor potential legislation concerning water quality, prevention of shifting property tax revenue, and oppose legislating local issues; support good governance measures; monitor and apply for infrastructure/resource bond funding opportunities; monitor and take positions on legislation of importance to the District such as regulations concerning PFAS, and visit legislators and legislators' staff in Sacramento.
- *Local:* Work with local agencies, organizations, (including the Orange County Business Council [OCBC], Orange County Association of California Cities [ACC-OC] and Orange County Council of Government [OCCOG]), elected officials and their staff members to protect the District's interests and operations. Meet with County supervisors and local city council members.

GWRS Operation – Achieve production of 128,000 acre-feet.

Organizational – Work to improve the recruitment and retention of employees.

Metropolitan Water District of Southern California (MWD) – Actively participate in the development of new policies dealing with groundwater issues, change the policy to allow pumping of non-MWD potable supplies to be pumped into MWD pipelines, and provide technical assistance to MWD for its So Cal Pure Water Recycled Water Project.

Grant Funding – Actively pursue any source of grant funding for selected projects.

V Pending Activities

- Active participation in WateReuse CA, WateReuse Association, The Water Research Foundation, and ACWA.
- Actively pursue operational efficiencies and explore additional opportunities for supply to the groundwater basin.
- Continue to develop relationships with both SAWPA and non-SAWPA upper Santa Ana River watershed agencies.

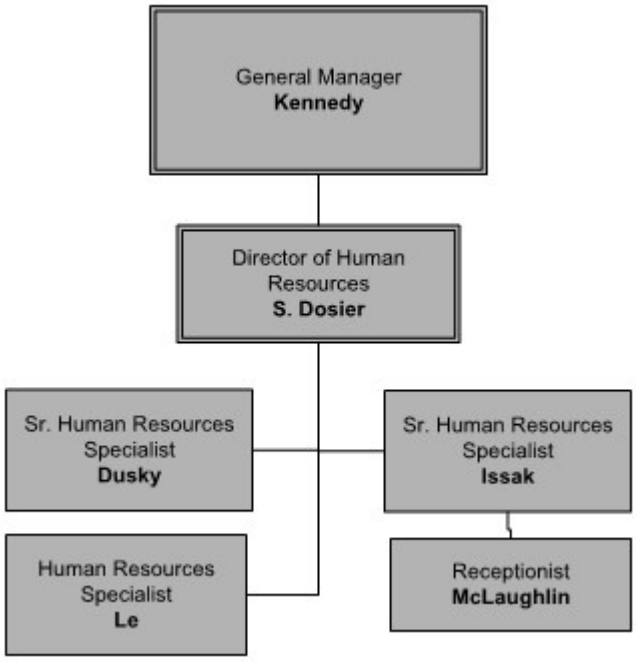
VI Staff Addition Needed for FY 2024-25

None

VII Future Issues

None

HUMAN RESOURCES



Summary Information

Existing Staff - 5 FTEs

1 ─ Director of Human Resources
2 – Senior Human Resources Specialists
1 – Human Resources Specialist
1 – Receptionist

Mission

Manage the District's Human Resources program to integrate human values with water management objectives.

Key Issues for FY 2024-25

- Review of new performance review software/forms.
- Succession Planning.
- Leadership Development.
- Department Cross-Training.

Account Information	FY 2022-23 Actual	FY 2023-24 Budget	FY 2024-25 Proposed Budget
Salaries and Benefits	839,218	825,180	901,406
Services and Supplies	207,399	261,580	260,880
Total	**$1,046,617**	**$1,086,760**	**$1,162,286**

I FY 2024-25 Major New Initiatives/Programs

- Develop a succession plan.
- Review of Performance Evaluation Process and online systems.
- In-House Training Programs.

II Core Activities

The Human Resources Department is primarily responsible for the District programs that integrate the human value with water management objectives.

Core activities include:

- Negotiations with OCEA.
- District recruitment efforts including placements, resume reviews, interviews, background investigations, and coordinating pre-employment physicals and drug testing.
- Safety and Risk Management oversight.
- Manage all District insurance programs including health, liability, property, workers compensation, fiduciary, and crime. Manage any claims submitted against the District.
- Training: safety, supervisor, and general staff training.
- Ongoing HRIS and Timekeeping System administration and implementation.
- Implement new programs to meet new mandates.
- Policy development and management - Staff, must monitor federal and state employment-related laws and regulations to ensure that business practices and policies stay current, and the District is fully compliant.
- Benefits Administration - Work with brokers to ensure competitive health insurance programs. Act as liaison for all benefit issues between employees and carriers.
- Retirement program administration.
- Compensation Administration - This includes market surveys and compensation policy development and administration.
- Mandated Programs - This includes programs mandated by federal and state guidelines. Unemployment insurance benefits program, Department of Transportation drug and alcohol program, training programs, among others.

- Employee Relations - This includes employee discipline, employee documentation, employee counseling, and representing the District at employment related hearings.
- General Personnel Administration - This includes keeping all required documentation of all employees and filing appropriate federal and state reports. Also, participate in surveys and special reports as requested by managers.
- Employee morale programs such as Employee of the Quarter/Year Program and Employee Recognition Program.

III Non-Core Activities

None

IV Group Goals for FY 2024-25

- Update LOA procedures and documents.
- Update Performance Evaluation System/Process.
- Develop succession plan.
- Continue to expand the training program for managers and supervisors.

V Pending Activities

None

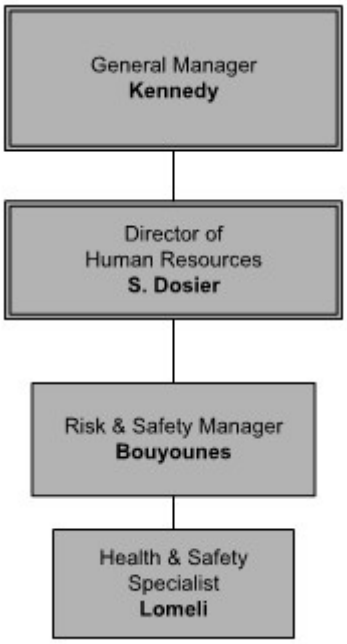
VI Staff Addition Needed for FY 2024-25

None

VII Future Issues

None

SAFETY AND RISK MANAGEMENT



Summary Information

Existing Staff - 2 FTEs

1 – Risk & Safety Manager

1 – Health & Safety Specialist

Mission

It is the mission of the Risk and Safety Department to support all functions of the Orange County Water District to help ensure a safe and healthy workplace. This is achieved through maintaining a safe and healthy working condition by fostering a culture focused on awareness, open communication, safety education, and management support.

A partnership with management and staff who are aware of risks and are empowered to contribute and work in a manner that protects human health and the environment.

Key Issues for FY 2024-25

- Regulatory gaps for fixed ladders.
- Hazard Mitigation Plan.
- New Cal/OSHA Workplace Violence Prevention.
- New training & documentation software program.

Account Information	FY 2022-23 Actual	FY 2023-24 Budget	FY 2024-25 Proposed Budget
Salaries and Benefits	397,104	428,800	507,207
Services and Supplies	1,413,206	1,284,625	1,793,925
Total	**$1,810,310**	**$1,713,425**	**$2,301,132**

I FY 2024-25 Major New Initiatives/Programs

- Coordinate fixed ladder assessment with consultant to identify regulatory gaps, provide corrective actions, and implement modifications to comply with Cal/OSHA regulations.
- Conduct ladder safety training for all applicable employees.
- Conduct an assessment to identify gaps in the Contractor Safety Program and work with appropriate managers to develop an action plan for correcting the gaps.
- Implement the new Cal/OSHA Workplace Violence program (SB 553) to include facility assessments for all three locations, a written program, and training for all employees.
- Plan a tabletop drill with all members of the Emergency Operations Center (EOC) to prepare and comply with OCWD's Emergency Response Plan.
- Organize high angle fall rescue training for OCWD Confined Space & Fall rescue team.
- Implement new training software. Risk & Safety staff to organize all training documentation to insert into the new training software. This includes but is not limited to certifications, sign in sheets, Vector Solutions training, and all other training records. Staff to receive training on the new software system.
- Cal/OSHA/Facility assessment by 3rd party consultant. Approximately every 5 years, an assessment is conducted to identify any gaps and to ensure compliance with Cal/OSHA and Labor Code regulations.
- In coordination with WEROC, the District's Hazard Mitigation Plan is required to be updated.
- Implement the Records Retention Policy. Clean up records and identify those that need to be sent for destruction.

II Core Activities

- Health and Safety training for New Hires.
- Ongoing and refresher safety training.
- Confined Space Rescue Drills.
- Complete and submit OSHA 300A online.
- Complete and post OSHA 300A log.
- Submit the annual NIMS Data Collection Report.

- Conduct inspections and audits to ensure compliance and departments are implementing corrective actions to prevent or reduce incidents.
- Organize and conduct Safety Review Team meetings.
- Organize and conduct Emergency Response Team (ERT) meetings and training.
- Respond to ongoing environmental, health, safety, and security issues and incidents.
- Schedule, organize, and conduct annual fire drills for all locations.
- Complete and submit CERS Business Plans for all three locations.
- Complete and submit EPA ID reports for all three EPA ID numbers.
- Conduct office ergonomic assessments and provide equipment and recommendations to reduce ergonomic-related risks.
- Manage the Safety Shoe Program.
- Review contractors' safety forms and follow up as needed.
- Organize and conduct annual respiratory medical questionnaires, fit testing, and training.
- Online OSHA log submittal.
- Manage Workers' Compensation program.
- Organize and schedule pressure vessel inspections for permit renewal.
- Evaluate and procure needed safety supplies/equipment.
- Oversee security companies at Fountain Valley and Field Headquarters.
- Conduct forklift training initially and every 3 years.
- Spill Prevention and Control & Counter Measures (SPCC) annual training.
- Ongoing updates to the Risk and Safety website.
- Conduct monthly security alarm testing.
- Participate in WEROC.
- Submit Letters of Arrest.
- Update Extension 3300 Binder for the front desk and Control Room.
- Managers/supervisors safety training.

III Non-Core Activities

Non-core activities, continuing education, and networking:

- Participate in PASMA (Public Agency Safety Management Association) meetings and conferences.
- Participate in IEC/OC (Industrial Environmental Coalition of Orange County).
- Participate in ASSP (American Society of Safety Professionals) meetings and conferences.
- Participate in WUSMA (Water Utilities Safety Managers' Association).

IV Group Goals for FY 2024-25

- Conduct inspections and audits.
- Review and update safety programs.
- Follow up on work-related incidents.
- Comply with regulatory updates.
- Provide training and communication to staff.
- Manage security program.

V Pending Activities

None

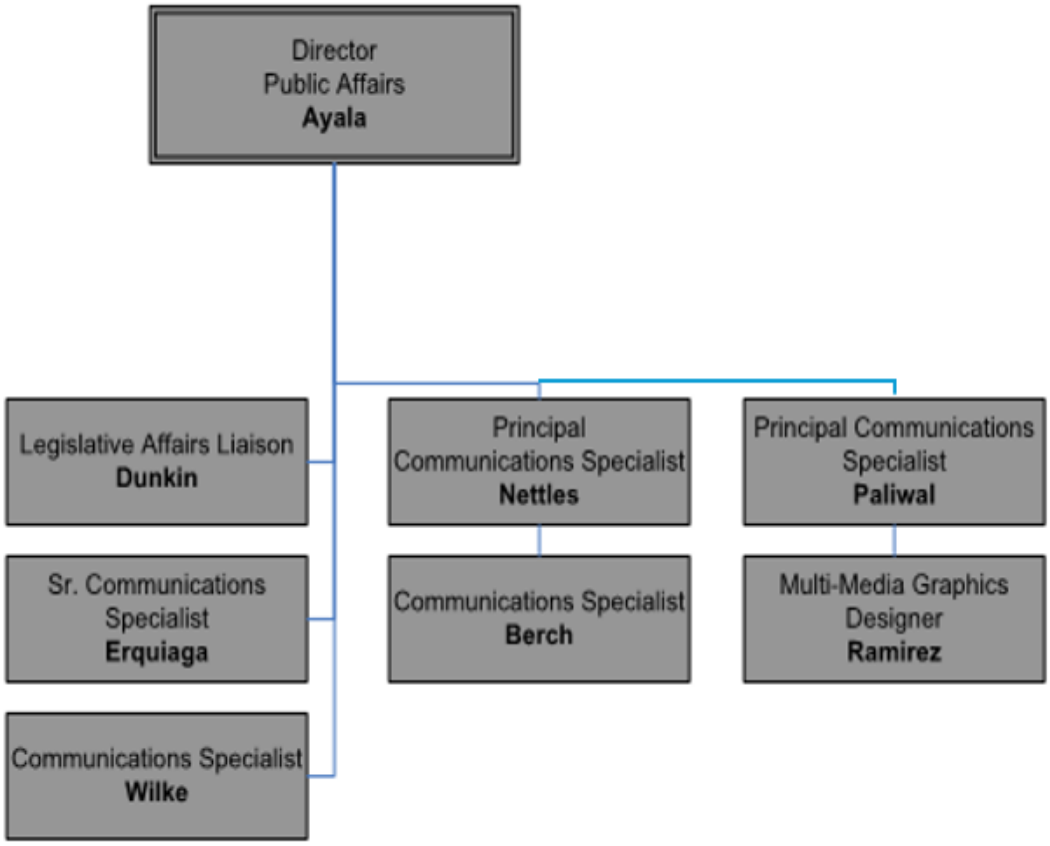
VI Staff Addition Needed for FY 2024-25

Temporary Administrative Assistant

VII Future Issues

None

PUBLIC AFFAIRS



Summary Information

Existing Staff – 8 FTEs

1 – Director of Public Affairs
1 – Legislative Affairs Liaison
2 – Principal Communications Specialists
1 – Senior Communications Specialist
2 – Communications Specialists
1 – Multi-Media Graphics Designer

Mission

To demonstrate OCWD's value to community stakeholders; to inform stakeholders about District projects and highlight programs, projects, and achievements that demonstrate the District's commitments to water quality, water supply and reliability, sound financial management, industry leadership and innovation, sound planning, transparency and environmental stewardship; to provide communications support for OCWD board, general manager and staff; and, forge and maintain relationships and

partnerships with producers (water retailers), elected officials, related professional membership associations, key community organizations, media, and other stakeholders.

Key Issues for FY 2024-25

- PFAS funding, education, and outreach.
- EPA Orange County North Basin Superfund Site.
- Forecast Informed Reservoir Operations (FIRO).
- Water Resources Development Act.
- Implementing the board-adopted legislative strategy.
- Legislative advocacy.
- Solicit funding for District projects.
- Continue robust virtual and in-person outreach.
- Social media campaigns.
- Crisis communications.
- Exploration of consolidation.
- School education programs: Prado and Next Generation Water Leaders.
- Speakers Bureau.
- Facility tours.
- Construction outreach.
- Positive media relations.
- Employee engagement.
- Collaborations with producers, elected officials, and local organizations.
- Distinguishing OCWD's role in OC and Southern California's water industry.

Account Information	FY 2022-23 Actual	FY 2023-24 Budget	FY 2024-25 Proposed Budget
Salaries and Benefits	1,221,594	1,337,756	1,470,795
Services and Supplies	799,102	746,200	666,450
Total	**$2,020,696**	**$2,083,956**	**$2,137,245**

I FY 2024-25 MAJOR NEW INITIATIVES/PROGRAMS

- PFAS communication and education materials.
- Work with legislators, legal counsel, and legislative consultants to secure current and retroactive funding for PFAS and seawater intrusion projects.
- Educate newly elected officials about OCWD's role and expertise in water and forge relationships with new members and their staff.
- Provide education and outreach to support consolidation.
- Commemorate significant OCWD and GWRS milestones through events, communication campaigns, and outreach.
- Enhance website.
- Offer employees enhanced learning opportunities and engagement initiatives.

- Enhance Next Generation Water Leaders education program for middle and high school students.
- ACWA engagement and support of ACWA president.
- H2O Learning Center improvements.
- Implement OCWD branding guidelines across all District departments.
- Develop media training program for board members and executive staff.
- Increase outreach and participation in chambers and civic organizations.
- Update OCWD photo assets and photo management (locations, infrastructure, staff, projects, etc.)

II CORE ACTIVITIES

- Continue to build awareness and support for OCWD's programs and projects by communicating with key elected officials, community leaders, civic organizations, stakeholders, businesses, environmental groups, etc.
- Manage editorial calendars for websites, social media, newsletters, director articles, and other publications to keep information timely.
- Continue to support and advocate for funding for Forecast Informed Reservoir Operations (FIRO) and increase the deviation behind Prado Dam.
- Continue to provide support to PFAS workgroup.
- Implement the board adopted legislative platform.
- Monitor proposed new legislation or amendments to bills that may impact OCWD.
- Continue to increase social media presence by creating strategic partnerships and recognizing OCWD's staff, board, projects, and programs.
- Continue proactive media relations program, including distributing press releases, contacting, and meeting with new local reporters, coordinating media tours, and monitoring news media.
- Produce monthly Hydrospectives newsletter.
- Maintain leadership in WateReuse Communications Collaborative Workgroup.
- Continue construction outreach – provide support to all departments doing new and/or regular maintenance projects.
- Apply for grants and awards for District projects and programs and aid other departments in their grant applications.
- Video production and graphics for corporate digital and print collateral.
- Orange County Water Summit.
- Children's Water Education Festival.
- Groundwater Adventure Tour.
- OCWD virtual webinars.
- Continue to produce press releases.

- Co-lead planning and implementation of monthly WACO meetings.
- Organize events, meetings and workshops that promote District programs, milestones, and partnerships.
- Continue to edit and maintain content of OCWD, Children's Water Education Festival and OC Water Summit websites.
- Continue to participate in and lead various water associations' working groups/committees (ACWA, WRA, CSDA, ISDOC, SAWPA, CMUA, etc.).
- Maintain and update hallway interactive displays and videos as needed.
- Conduct annual Groundwater Adventure Tour of OCWD facilities for groundwater producers, general managers, elected, and community members.
- Improve communications between OCWD Public Affairs Department and producers' public information representatives to generate a positive, mutually beneficial relationship and increase the clarity of wholesaler/retailer messages.
- Be responsive to the needs of community neighbors impacted by OCWD construction, operations, or projects, so that they understand the need for the work and so that impacts are mitigated as much as possible.
- Ensure OCWD's innovations are noted in trade publications by developing relationships with key trade press.
- Keep elected officials and their staff members up-to-date and supportive of OCWD issues and needs.
- Build recognition, trust, and awareness of OCWD in leading community organizations.
- Inform stakeholders about District projects and highlight programs, projects, and achievements that demonstrate the District's commitments to water quality, water supply and reliability, sound financial management, industry leadership and innovation, and environmental stewardship.
- Provide communications support to OCWD Board, general manager, staff, and all departments.
- Communicate effectively, both internally and externally, about OCWD and its mission.
- Forge and maintain relationships and partnerships with producers, elected officials, related professional membership associations, businesses, key community organizations, environmental groups, media, and other stakeholders.
- Crisis communications.
- Other related activities.

III NON-CORE ACTIVITIES

- Support of outside water industry agencies American Water Works Association, Water Research Foundation, WateReuse (California and National), Association of California Water Agencies, California Municipal Utilities Association, National Water Research Institute, etc., for research support, collaboration, etc.

IV GROUP GOALS FOR FY 2024-25

- Make enhancements to the tour program (onsite and virtual).
- Increase local speakers bureau activities.
- Communicate regularly with producers.
- Assist with PFAS workgroup efforts.
- Proactive legislative advocacy.
- Implement new engaging social media campaigns.
- Create more videos.
- Maintain proactive, responsive, and positive media relations.
- Identify positive branding and outreach opportunities for the District and leadership.
- Forge new, meaningful relationships and partnerships for the District.

V PENDING ACTIVITIES

None

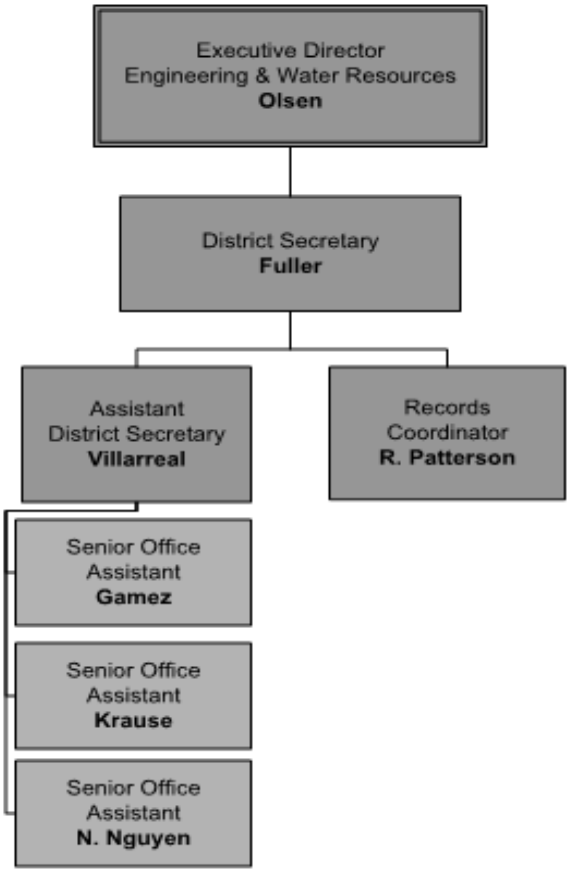
VI STAFF ADDITION NEEDED FOR FY 2024-25

None

VII FUTURE ISSUES

None

BOARD ADMINISTRATION



Summary Information

Existing Staff - 6 FTEs

1 – District Secretary
1 – Assistant District Secretary
1 – Records Coordinator
3 – Senior Office Assistants

Mission

Maintain and manage official District documents and records, compile, and prepare Board and Committee agendas and minutes. Perform other statutory duties as set forth in the District Act and Fair Political Practices Commission, including Conflict of Interest filings and publication of required legal notices.

Key Issues for FY 2024-25

- Continue to implement the Record Retention Policy.
- Review and replace outdated record policies.
- Include other District departments as appropriate in electronic records management system.
- Continue inventory of records held at Iron Mountain.
- Continue incorporation of regulatory reports held within the OCWD Library into the RMS.

Account Information	FY 2022-23 Actual	FY 2023-24 Budget	FY 2024-25 Proposed Budget
Salaries and Benefits	1,312,659	1,388,040	1,513,680
Services and Supplies	771,214	338,740	511,147
Total	**$2,083,873**	**$1,726,780**	**$2,024,827**

I FY 2024-25 Major New Initiatives/Programs

- Continue implementation of the District-wide records Management/ Document Imaging system.
- Box destruction under the District-wide retention policy.

II Core Activities

- The primary function of the Board Administration Department is to maintain all official District documents and records, to compile and prepare Board and Committee agendas and minutes to ensure compliance with all applicable state and federal laws, and to perform other statutory duties as set forth in the District Act, including Conflict of Interest filings and publication of required legal notices.
- Another prime function is Records Management, which includes recording, filing, indexing, and maintaining a database of Board records for District-wide use.
- The Copy room staff provides District-wide administrative support (mailroom, copy production and meeting setup) to all Departments.

III Non-Core Activities

Non-core activities (secondary priority compared to core activities) conducted by Board Administration include:

- Director's support – travel and event management, expense reporting, meeting scheduling, and mail processing.
- Management support – assist with research and preparation of submittals for Board consideration.
- Maintenance of Board Policy Manuals and District Act.

IV Group Goals for FY 2024-25

- Continue implementation of Records Retention Policy: Meet with District staff to implement departmental records retention policies utilizing new electronic records management system, and develop procedures for key staff related to scanning, accessing, and transmitting electronic records.
- Training of District personnel on the use of Records Management System: The Department will train new District staff in ways to access records through RMS.
- Library documents: Continue scanning government reports contained in the OCWD library into the Records Management System.

V Staff Addition Needed for FY 2024-25

None

VI Future Issues

- Archival of District historical records.
- Inventory of boxes held in storage at Iron Mountain.
- Scanning of OCWD Library regulatory reports.

LOCAL RESOURCES

Summary Information

Existing Staff – 1 FTE

1 – Executive Director of Engineering and Local Resources

Mission

Coordinate and manage basin management programs with Groundwater Producers. Assist with managing the financial and water budgets of the District. Coordinate water purchases from other agencies. Recommend the annual Replenishment Assessment, Basin Production Percentage, Production Limitation, and Basin Equity Assessment. Monitor and represent the District at MWD and MWDOC meetings. Coordinate MWD storage programs. Assist with the annual budget preparation. Manage grant/loan activities with appropriate funding agencies (Department of Water Resources, State Water Resources Control Board, MWD through MWDOC, and others). Assist with issues related to projects for creating new water supplies.

Key Issues for FY 2024-25

- Monitor Metropolitan Water District water programs.
- Continue constructing Producer PFAS treatment systems.
- Secure grant sources for construction of the PFAS treatment systems.
- Assist with developing a plan to prevent seawater intrusion in the Sunset Gap.
- Provide analysis and reports to the Board as required regarding the possible consideration of consolidating with MWDOC.
- Work with LAFCO and its consultant regarding its study on consolidating OCWD and MWDOC.
- Closely monitor groundwater production given the impact due to PFAS and wells being taken out of service.
- Consider an emergency water supply deal with Moulton Niguel Water District and other interested South Orange County agencies.

Account Information	FY 2022-23 Actual	FY 2023-24 Budget	FY 2024-25 Proposed Budget
Salaries and Benefits	370,928	340,962	357,205
Services and Supplies	113	3,600	3,600
Total	**$371,041**	**$344,562**	**$360,805**

I FY 2024-25 Major New Initiatives/Programs

None

II Core Activities

The Local Resources Department is primarily responsible for managing various local and imported water programs. The core activities of the group are:

- Interact, represent, and process agreements with outside agencies such as MWD, MWDOC, the local groundwater producers (i.e., water retailers), State of California (State Water Resources Control Board and Department of Water Resources), and others.
- Administer any funding programs for current and future phases of the GWR System.
- Administer and/or develop special programs such as basin management programs with groundwater producers.
- Attend and represent the District at MWD Committee meetings.
- Administer the Coastal Pumping Transfer Program when implemented.
- Monitor available MWD water supplies for purchase and water rates.
- Establish the annual Replenishment Assessment, Basin Production Percentage, and Basin Equity Assessment collections.
- Meet with Groundwater Producers as necessary to update District activities.
- Update and track Producer water demands periodically.
- Assist in managing the BEA exemption/reduction program for groundwater treatment projects.
- Evaluate new water supply projects.
- Assist the Finance Department in preparing debt issuance documents.
- Process annexation requests.
- Process and administer Basin Equity Assessment exemption projects.
- Prepare and administer the water purchase budget and in-lieu water purchase program.
- Administer monthly groundwater producers' meetings.

- Recommend the annual RA and BPP to the Board.
- Provide long-term RA, BPP, and capital project projections.
- Manage the MWD Conjunctive Use Storage and Cyclic Storage programs with MWD and MWDOC.
- Act as a liaison with MWDOC.
- Provide presentations to various groups, cities, rating agencies, and water districts.
- Assist the Finance Department in maintaining and updating the District's financial model.
- Review documents prepared by the Public Affairs staff.
- Assist with the production of monthly in-lieu invoices and annual Basin Equity Assessment reports.
- Administer MWDOC/OCWD Joint Planning Committee meetings.
- Manage and oversee the preparation of Board and Committee agendas and packets.
- Monitor the Center for Demographic Research activities.

III Non-Core Activities

None

IV Group Goals for FY 2024-25

- Complete construction of PFAS treatment systems for the first 62 Producer wells.
- Assist legal counsel with the IRWD lawsuit.
- Complete the SRF PFAS funding agreements.
- Submit a revised PFAS project to the USBR for potential grant funding.
- Obtain grants to assist in funding the PFAS treatment systems.
- Aggressive pursuit of grant opportunities for all capital projects, especially funding opportunities through Proposition 1.
- Monitor the progress of the MWD Carson Indirect Potable Reuse project and determine the District's participation if the project moves forward.
- Continue to maintain close working relations with the Groundwater Producers to prevent issues from developing.
- Work with WRD to secure an understanding between both staff on the amount of water being lost to the LA groundwater basin.
- Administer the SARCCUP program.

- Determine how the new state law regarding Producer water demands will impact expected future wastewater flows to GWRS.
- Complete the FY 2023-24 Engineers Report.
- Prepare all documents and resolutions necessary to set the FY 2024-25 RA, BPP, BEA, and Production Limitations.
- Finalize the South Basin CEQA documents.
- Review options and issues with potential MNWD pilot storage program.
- Develop a remediation plan for the Sunset GAP seawater intrusion issue.

V Pending Activities

None

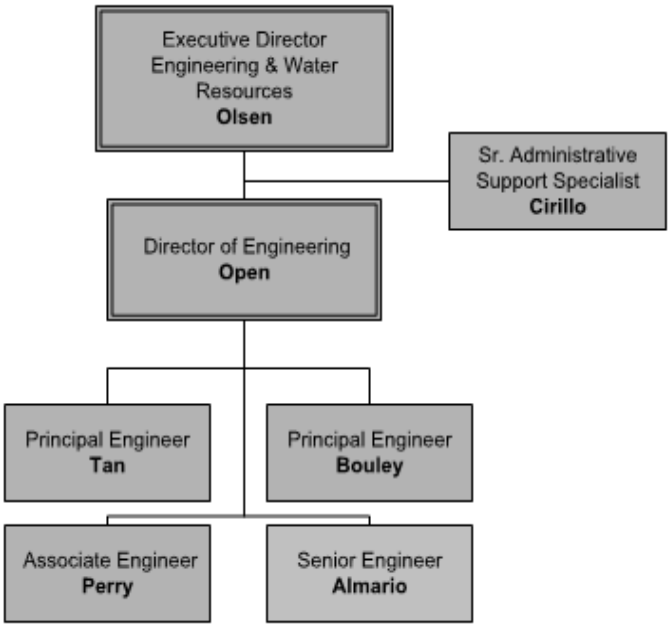
VI Staff Addition Needed for FY 2024-25

None

VII Future Issues

None

ENGINEERING



Summary Information

Existing Staff - 6 FTEs

1 – Director of Engineering
2 – Principal Engineers
1 – Senior Engineer
1 – Associate Engineer
1 – Senior Administrative Support Specialist

Mission

Plan, design, and manage the construction of the District's repair/rehabilitation and improvement projects.

Key issues for FY 2024-25

- PFAS Treatment Systems Program – This program will provide financial assistance to the Groundwater Producers to comply with the MCLs for per- and polyfluoroalkyl substances (PFAS) that was established as part of the PFAS National Drinking Water Regulation. The program calls for the District to take the lead in funding, designing, and constructing the necessary PFAS treatment systems which may include granular activated carbon or ion exchange treatment for impacted Groundwater Producers. Design work and construction activities are currently underway and will continue for several years.

- Santiago Basin Repairs – This includes performing repairs to the southeast corner of Santiago Basin and completing the Santiago Pump Station Modifications to maintain recharge capacity in Santiago Basin.
- Anaheim Lake Valve Vault – This includes replacing two 48-inch valves and actuators for five valves. Additionally, all valves will be placed in a vault for future ease of use and maintenance.
- Santa Ana GAP Reservoir – This includes replacing the roof and waterproofing at the Gap Reservoir in Santa Ana. The walls and structure will be reinforced to meet current structural requirements.

Account Information	FY 2022-23 Actual	FY 2023-24 Budget	FY 2024-25 Proposed Budget
Salaries and Benefits	937,390	1,191,082	1,051,196
Services and Supplies	38,686	74,100	63,100
Total	**$976,076**	**$1,265,182**	**$1,114,296**

I FY 2024-25 Major New Initiatives/Programs

- First Round PFAS Treatment Systems Program – These treatment systems would be owned and operated by individual Groundwater Producers. Forty-six Producer wells with treatment systems are currently in operation with the first one starting in June 2021. The remaining treatment systems are in some level of design or in the middle of construction.
- Second Round PFAS Treatment Systems Program – Approximately 40-45 additional wells are impacted by the MCL established as part of the PFAS National Primary Drinking Water Regulation. Treatment system design and construction for these additional wells will continue for the next several years.

II Core Activities

The Engineering Department is responsible for planning, designing, and managing the construction of the District's improvement projects. Projects range from small in-house modifications for existing facilities to major water treatment, pumping and conveyance facilities including PFAS Treatment Systems for Producers within OCWD's service area. Engineering staff may perform the planning, designing and construction management or may manage outside consultants performing these functions. Departmental staff provides engineering support as needed for the daily operations of the District, including Water Production, Forebay Recharge, Prado Operations, Seawater Barrier Operations and Property Management. Engineering staff also review proposed projects of other agencies that may impact District operations or lands.

Core activities include:

- Implement the Capital Improvement Program, including PFAS treatment projects for various Producers.

- Implement the repair and replacement of District infrastructure.
- Plan new projects to increase the yield of the basin and protect water quality.
- Support operations of Forebay, Prado Wetlands, Green Acres Plant, GWRS, and Seawater Intrusion Barriers.
- Data analysis of operations.
- Permit compliance support.
- Operational improvement input.
- Facility improvement construction.
- Utility conflict analysis and research.
- Preparation of the Annual Engineer's Report.
- Manage the District's as-built drawings.
- Support for the Recharge Enhancement Working Group (REWG).

III Non-Core Activities

Non-core activities (secondary priority compared to core activities) conducted by the Engineering group include:

- Monitoring Producer operations and maintenance costs for PFAS treatment reimbursements.
- Monitoring outside water reuse project operational activities.
- Monitoring regulations and legislative affairs activities of the WateReuse Organization.
- Publishing operational data in journals and conference proceedings.
- Participating in technical review committees.

IV Group Goals for FY 2024-25

- PFAS Treatment Systems Program – Design and construction of treatment systems for per- and polyfluoroalkyl substances (PFAS). Removal will continue over the next few years for our impacted Groundwater Producers.

V Pending Activities

None

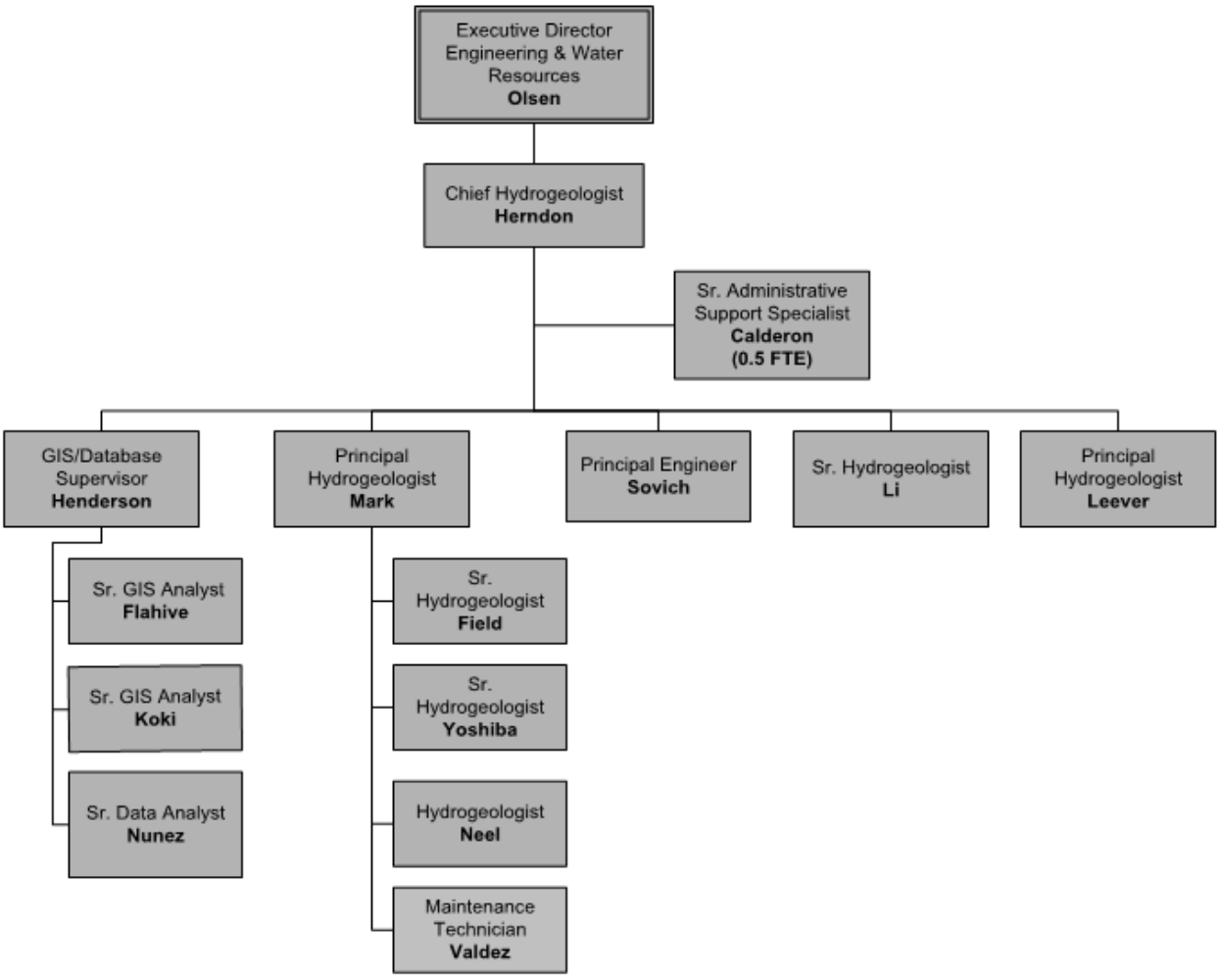
VI Staff Addition Needed for FY 2024-25

- Senior Civil Engineer

VII Future Issues

- Implementation of Recharge Enhancement Working Group Projects.

HYDROGEOLOGY



Summary Information

Existing Staff - 13.5 FTEs

1 – Chief Hydrogeologist
1 – Principal Engineer
2 – Principal Hydrogeologists
3 – Senior Hydrogeologists
1 – Hydrogeologist
1 – GIS/Database Supervisor
2 – Senior GIS Analysts
1 – Senior Data Analyst
1 – Maintenance Technician
0.5 – Administrative Support Specialist (shared with Regulatory Affairs)

Mission

Define the physical characteristics of basin aquifers, determine groundwater flow pathways, and provide analyses and recommendations necessary to manage groundwater production, recharge, groundwater quality protection and remediation, seawater intrusion, and water levels within the basin.

Key Issues for FY 2024-25

- Complete a feasibility study on seawater intrusion control options for the Sunset Gap, including injection water supply alternatives, extraction, and injection well and pipeline location accessibility, and estimated costs.
- Complete a programmatic EIR and prepare an interim remedial action plan (IRAP) to address groundwater contamination in the South Basin area. The draft EIR and IRAP will be circulated for public comment prior to being brought to the OCWD Board for consideration of approval.
- Staff anticipates receiving and providing comments on a proposed plan prepared by the USEPA for an interim remedy to address groundwater contamination in the North Basin area.

Account Information	FY 2022-23 Actual	FY 2023-24 Budget	FY 2024-25 Proposed Budget
Salaries and Benefits	2,535,004	2,485,520	2,693,482
Services and Supplies	1,076,160	1,513,600	1,050,600
Total	**$3,611,164**	**$3,999,120**	**$3,744,082**

I FY 2024-25 Major New Initiatives/Programs

- Complete preparation of a feasibility study to evaluate options to control seawater intrusion in the Sunset Gap, including developing estimated costs for different options, and injection water supply.
- Provide technical review and support to a brackish groundwater supply investigation near the coast in the Talbert Gap.
- Evaluate the potential to operate the basin at a higher accumulated overdraft. Potential issues associated with increasing the basin storage operating range up to 700,000 AF of accumulated overdraft will be identified and evaluated, e.g., seawater intrusion, drought resiliency, well pumping levels, and land subsidence.

II Core Activities

The objectives of the Hydrogeology group are to define the physical and chemical characteristics of basin aquifers, determine groundwater flow pathways, and provide analyses and recommendations necessary to manage groundwater production, recharge, quality, and water levels within the basin.

Core functions include:

- Basin-wide water level monitoring program of over 300 wells and trend analysis. This data is used for numerous applications, including the annual calculation of basin storage in support of the Annual Engineer's Report and compliance with the state Sustainable Groundwater Management Act (SGMA).
- Refinement and operation of the basin groundwater flow model are used to evaluate the effects of basin management alternatives, proposed well fields, recharge projects, and pumping variations.
- Evaluation of the Talbert and Alamitos seawater barriers' performance.
- Evaluation of seawater intrusion in the Bolsa and Sunset gaps.
- Enhancement and maintenance of the Water Resources Management System (WRMS) database and geographic information system (GIS).
- GIS analysis, map production, and database support for projects, planning, reports, and presentations.
- Technical support and assistance for groundwater producers.
- Preparation of the monthly Water Resources and annual Santa Ana River Watermaster reports. Funds for contracting with the U.S. Geological Survey to collect SAR flow measurements are budgeted annually. These measurements are essential for the preparation of the Watermaster reports, storage operations at Prado Dam, and calculation of recharge volumes.
- Participate in Santa Ana River Watermaster meetings, including determination of annual Santa Ana River base flow and storm flow.
- Review and evaluation of site-specific groundwater contamination investigations and cleanups overseen by regulatory agencies.
- Hydrogeologic analysis of recharge project feasibility studies.
- Evaluation of RA/BEA exemption requests.

III Non-Core Activities

Give presentations on groundwater management practices and processes to industry professionals, schools, universities, and other organizations.

IV Group Goals for FY 2024-25

The following programs are highlighted as major activities encompassed within or in addition to the core group activities listed above:

Sunset Gap Seawater Intrusion – Conduct a feasibility study to evaluate injection water supply options, extracted groundwater use/disposal options, facilities siting, and estimate costs to control seawater intrusion in the Sunset Gap.

South Basin Groundwater Protection Project – Prepare a programmatic environmental impact report and an interim remedial action plan to address VOC contamination in shallow groundwater.

North Basin Groundwater Protection Project – Under USEPA oversight, OCWD completed a feasibility study of interim remedial alternatives to address VOC contamination. Staff anticipates receiving and reviewing a proposed interim remedial action plan (IRAP) prepared by USEPA. The IRAP will be implemented by business entities identified by USEPA. The performance of OCWD extraction well EW-1 will continue to be monitored as it reduces the spread of VOCs.

Basin-Wide Geologic Cross-Sections – To support revision of the basin groundwater model, staff plans to update existing and construct new geologic cross-sections with data from production and monitoring wells constructed over the last 25 years (when most of the basin-wide cross-sections were prepared).

Water Resources Management System (WRMS) – Continue streamlining water level, water quality, groundwater production, and spatial information management processes. Develop additional user tools for map preparation, data display and retrieval, e.g., data and graphs from the Water Resources and Watermaster reports.

Talbert Model Calibration – Improve calibration of the Talbert groundwater flow model such that it can be used to evaluate future Talbert barrier injection well location and replacement scenarios.

Litigation Support – Provide support as needed for the PFAS and South Basin cost recovery actions.

Alamitos Gap Seawater Intrusion – Participate in the Alamitos Barrier Joint Management Committee, including evaluation of barrier O&M activities and performance.

V Pending Activities

None

VI Staff Additions for FY 2024-25

None

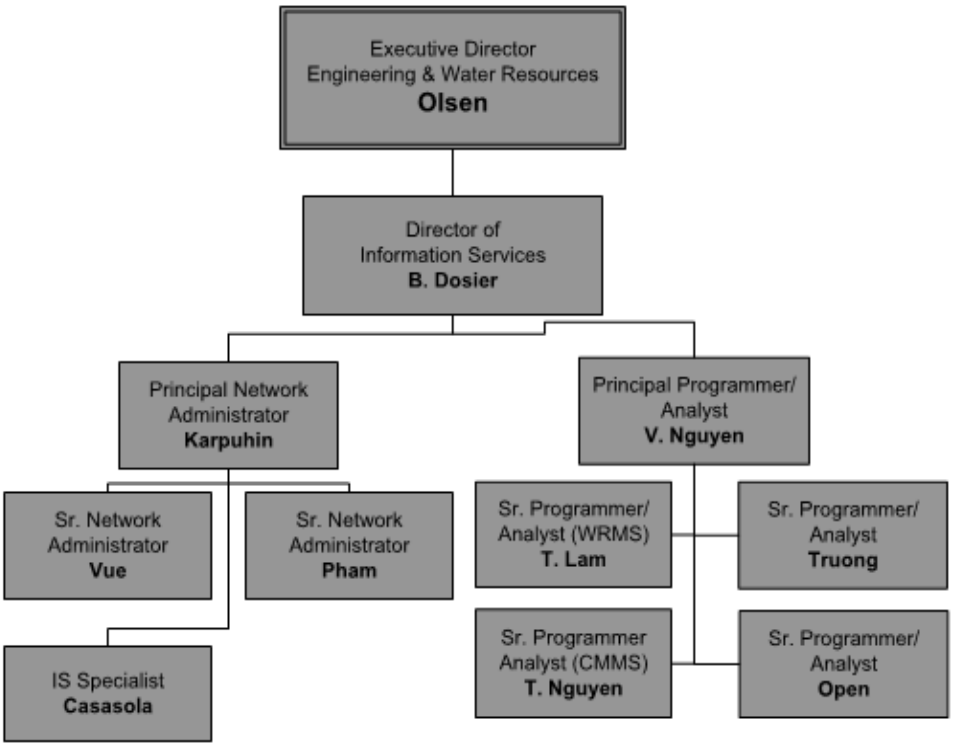
VII Future Issues

In the next two to three years, issues involving the Hydrogeology group that the District will need to consider include:

- Implementation of a seawater intrusion control project in Sunset Gap will require coordination with the Naval Weapons Station, Regional Water Quality Control Board, and other entities involved with nearby groundwater remediation activities.
- Informed from groundwater modeling scenarios, develop, and implement a phased multi-year plan to replace Talbert Barrier injection wells that have exceeded their useful life.

- Coordination with state regulatory agencies and stakeholders on a proposed interim remedial action plan for the South Basin groundwater contamination.
- Coordination with USEPA and stakeholders in support of implementing interim remedial measures by responsible parties to address the North Basin groundwater contamination.
- Continued maintenance and evaluation of the District's aging monitoring well network, including well refurbishment and replacement as necessary.

INFORMATION SERVICES



SUMMARY INFORMATION

Existing Staff - 10 FTEs

1 – Director of Information Services
1 – Principal Programmer/Analyst
1 – Principal Network Administrator
4 – Senior Programmers/Analysts
2 – Senior Network Administrators
1 – Information Services Specialist

Mission

Manage and support information systems, services, and communication assets used by District staff and third parties in support of basin management goals and objectives.

Key Issues for FY 2024-25

- Major upgrades will be required for the IBM Maximo Computerized Maintenance Management System (CMMS).

- Audiovisual equipment in the Boardroom and conference rooms have reached end-of-life and are no longer supported by the manufacturer and require replacement.

Account Information	FY 2022-23 Actual	FY 2023-24 Budget	FY 2024-25 Proposed Budget
Salaries and Benefits	1,831,343	1,779,524	2,139,695
Services and Supplies	995,863	1,127,500	1,339,000
Total	**$2,827,206**	**$2,907,024**	**$3,478,695**

I FY 2024-25 Major New Initiatives/Programs

- Upgrade Maximo Computerized Maintenance Management System.

II Core Activities

Information Services (IS) is a staff support organization that manages and supports District information systems, services, and communication assets used by District staff and third parties in support of basin management goals and objectives.

- **Network support:** Managing and supporting the various components of the enterprise-wide network infrastructure spanning the Fountain Valley, Anaheim, and Prado facilities. These are composed of Ethernet hubs, routers, switches, wi-fi access points, Ethernet and fiber-optic cabling, and data communication services which connects all the facilities.
- **Server management:** Managing and supporting physical, virtual, cloud-based, and Microsoft Windows Server based network computer systems that support databases, core enterprise software applications, Intranet, Internet, and other information services.
- **Cloud-based systems:** Managing and supporting Microsoft cloud-based systems such as Office 365 and other office support systems as well as Microsoft Azure, which is used for various applications by District staff in the field.
- **Core enterprise systems support:** Managing, supporting and programming for the District's core enterprise software applications such as the JDE Financial Information System used by Finance and other departments for tracking and reporting the financial and purchasing transactions of the District, the Water Resources Management System (WRMS) used for tracking, analyzing and mapping data collected from the District basin, the Computerized Maintenance Management System (Maximo) used by Water Production to manage the maintenance requirements of the AWPF, and the Lab Information System (LIMS) used by the Laboratory to track water samples from the District basin and for complying with regulatory reporting.

- **Operations:** Performing routine and non-routine system operations including network and server system administration, managing user accounts, managing server disk space and load balancing, performing daily, weekly, and monthly computer system backups and restores, and telephone system administration.
- **System maintenance:** Performing system maintenance, repairs, and upgrades for network and servers, desktop and laptop computers as well as managing maintenance and license agreements for District hardware, software, and information services.
- **Programming and Technical IS Projects:** Managing, supporting, and programming for interdepartmental projects including special computer system projects for various departments. IS also provides analytical, programming, technical and training support to those who use District information systems.
- **Staff support:** Providing support to District staff for network and server issues, core enterprise software applications, email system, Microsoft Office software, desktop and laptop computers, and a variety of other digital mobile equipment including iPads and iPhones. Providing remote support for users working in distributed off-site work locations.
- **Telecommunications:** Managing and supporting voice and data communication services, including the Cisco Voice over Internet Protocol (VoIP) telephone and voicemail system, all communication equipment and lines connecting the District to various telephone system carriers, voice and data service contracts, District-issued cell phones, smartphones and videoconferencing communications. IS also manages and supports the enterprise-wide data lines connecting the Anaheim and Prado facilities with the Fountain Valley campus, various SCADA locations throughout the basin and Internet connectivity to District staff and third parties.
- **System security:** Ongoing management of system security including administration of an appropriate level of firewall protection to prevent unauthorized intrusion to the District network from the Internet and the administration and monitoring of centralized District-wide anti-malware software and services to prevent the spread of destructive and non-destructive computer viruses and “spam” email. As new forms of security threats emerge on the Internet, IS analyzes the risk and determines the appropriate steps and actions necessary to respond.
- **Audio/Visual:** Managing and supporting the District’s sophisticated network controlled multi-component audio-visual equipment composed of LED screens, amplifiers, switchers, transmitters, receivers, and control devices.
- **Websites:** Ongoing technical support for District-related websites, including resolving technical issues with websites, hosting services, Internet registration services, and reputation management services.

III Non-Core Activities

None

IV Group Goals for FY 2024-25

- **Improvements to WRMS:** Build the Water Resources Report (WRR) application; convert WRMS Oracle Forms to Windows/Web Forms. Work with GIS staff in upgrading ArcGIS Server, SDE, ArcGIS Portal, and GeoCortex to the latest version.
- **Upgrade District enterprise systems:** Perform major upgrade to IBM Maximo Computerized Maintenance Management System (CMMS).
- **Replace obsolete network hardware:** Replace network switches that have reached end-of-life.
- **Replace obsolete audiovisual equipment:** Replace obsolete end-of-life audiovisual hardware and systems in the Boardroom, C2 and C3 conference rooms.
- **Replace obsolete Windows computers:** Continue Windows computer refresh program to replace Windows 10 computers with Windows 11 compatible computers in anticipation of Windows 10 end-of-life in 2025.
- **Improvements to Laboratory and Water Quality Systems:** Continued improvements to the Citrus Laboratory Information System (LIMS) and other Laboratory and Water Quality systems.
- **Upgrade Oracle Database**: Upgrade of legacy Oracle database system supporting District's enterprise systems.
- **Continue improvements to systems and email security:** Audit Information Services system security and implement improvements. Develop written system and security policies.
- **Continued network improvements:** Continued network improvements, optimization, and resiliency, including improving communications at Prado field office (firewall replacement and dedicated communication line).
- **Continue disaster recovery improvements:** Refresh/review hardware and technologies used for district disaster recovery Improve testing of Disaster Recovery Capabilities; continue to assess disaster recovery capabilities for the Forebay Operations Supervisory Control, Data Acquisition (SCADA) system and the AWPF Delta V process control system.
- **Telecommunications improvements at Prado and Field Headquarters –** refresh/renew telecommunication equipment perhaps utilizing Microsoft Teams**.**
- **Technical and security training:** Continued focus on training and cross-training for Information Services staff. Continuously train staff on detecting security threats that may enter through email, and by other means.

V Pending Activities

Major activities that are not being implemented include:

- Performing analytics to determine usage of District websites.
- Ongoing monitoring and configuring websites for Search Engine Optimization (SEO).
- Information Services provides little to no support for the Forebay SCADA system and the AWPF Delta V process control system.

VI Staff Addition Needed for FY 2024-25

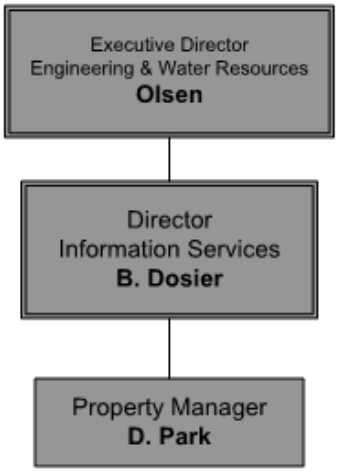
None

VII Future Issues

In the next two to three years, the District will need to consider:

- ***Windows 10 computers:*** Windows 10 computers reach end-of-life in 2025 and need to be replaced prior to the end-of-life date to eliminate or reduce security threats.
- ***Increased Internet security threats:*** Measures to provide security against emerging Internet threats continue to increase, resulting in dedicating additional hardware, software, and staff resources to address the emerging security issues.
- ***Cloud-based services***: enterprise systems are increasingly moving away from on-premises servers and toward cloud-based systems. As this develops, we will require reviewing in the future.
- ***Staff Training:*** Staff training to implement and support newer systems and keeping up with fast-moving Information Systems trends.

PROPERTY MANAGEMENT



Summary Information

Existing Staff - 1 FTE

1 – Property Manager

Mission

To manage the District's real estate assets in a manner that provides revenue to the District and preserves or adds value to the assets while supporting basin management objectives.

Key issues for FY 2024-25

- Potential use of District properties in Anaheim for the Orange County River Walk.
- Potential solicitation of developers for Imperial Highway property.

Account Information	FY 2022-23 Actual	FY 2023-24 Budget	FY 2024-25 Proposed Budget
Salaries and Benefits	156,519	159,043	172,350
Services and Supplies	177,615	173,263	184,188
Total	**$334,134**	**$332,306**	**$356,538**

I FY 2024-25 Major New Initiatives/Programs

- Negotiate property instruments with the City of Anaheim in support of the OC River Walk project.
- Potential solicitation of developers for Imperial Highway property.

II Core Activities

The Property Management Department is primarily responsible for managing over 3,700 acres of the District's real estate assets, negotiating and managing licenses, leases, easements, and deeds for use of the District's real estate assets by other parties including local and state agencies. The department also protects the District's property rights, processes land use entitlements to add value to the assets, acquires real estate, property rights, and rights-of-ways for use as recharge basins, well-sites, pipelines or other uses in support of basin management goals and objectives.

- **Property Management**: Administrative management of the District's real estate including inspections, fire department vegetation control, and neighbor interaction.
- **Develop Property Use Agreements:** Negotiating and managing licenses, leases, easements, rights-of-ways, and exclusive negotiating agreements with other parties. Monitor collected rents, fees, and agreement compliance audits.
- **Maintain Property Rights**: Coordination with staff, law enforcement, local, state, and federal agencies to keep District land free of hazards and trespassers by securing the property with fencing, locks, and gates. Post "No Trespassing" signs and other signage as appropriate. Verify District property boundary lines to determine if trespassing or encroachment is occurring on District property. Monitor Land Use and zoning modifications by municipalities and assess any possible impact on District real estate.
- **Manage Real Estate Acquisitions and Sales:** Managing the acquisition or sale process for real estate or property rights; negotiating purchase agreements, real estate broker agreements, agreements for new well sites and new construction projects, and other related documents; acquiring and evaluating appraisals and title reports; determining legal descriptions, property owners and rights to be acquired.
- **Manage Land Use Entitlements**: Managing the Land Use Entitlement process such as Zoning and General Plan changes with appropriate cities.
- **Coordinate the Property Management Committee**: Development of agendas for the monthly Property Management Committee meetings of the Board of Directors, including writing all staff reports.

III Non-Core Activities

Non-core activities (secondary priority compared to core activities) conducted by the Property Management group include:

- Provide data and information to outside agencies and organizations.

IV Group Goals for FY 2024-25

- **OC River Walk:** Negotiate property instruments with the City of Anaheim in support of the OC River Walk project.
- **Potential solicitation of developers for Imperial Highway property**: Continue work in preparing the Imperial Highway property to solicit potential developers.
- **Lease Agreements with District Lessees:** Negotiate lease renewal with; Raahauge Shooting Enterprises Pheasant Lease (September 30, 2024); Raahauge Duck Hunting Lease (June 30, 2025); Prado Basin Duck Club (June 30, 2025).
- **Caltrans Decertification at Burris Basin:** Continue negotiation with California Department of Transportation (Caltrans) for the acquisition and/or long-term lease for Caltrans property at Burris Basin property.
- **SR 91 Improvement Project between La Palma Avenue and SR 55:** Negotiate potential easement with Orange County Transportation Authority on District property for the SR 91 Freeway Bridge widening over the Santa Ana River; and negotiate potential easement on District property for relocation of Southern California Gas Company pipeline due to SR 91 improvement project.
- **Prado properties:** Explore potential acquisition of leased property adjacent to District Prado properties in Riverside County.

V Pending Activities

Major activities that are reduced, not being implemented, or conducted include:

- Research and pursuit of creative lease opportunities to generate revenue for the District.
- Proactively monitor zoning and sphere of influence issues on District property.

VI Staff Addition Needed for FY 2024-25

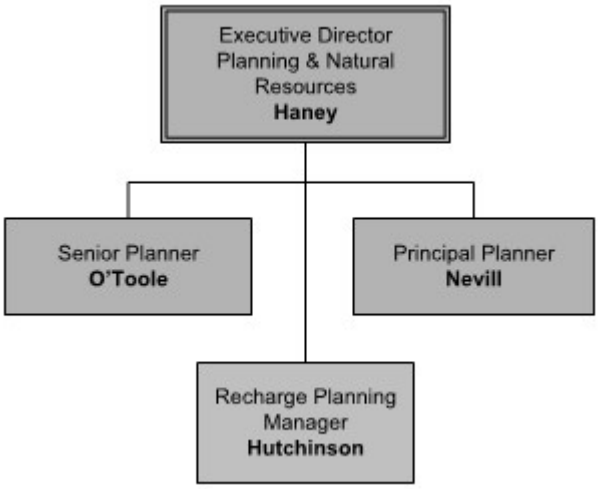
None

VII Future Issues

In the next one to two years, the District will need to consider the following:

- Increased requests from other agencies for the use of District land.
- Consideration of other long-term opportunities to lease District land at higher lease rates.

PLANNING AND WATERSHED MANAGEMENT



Existing Staff - 4 FTEs

1 – Executive Director of Planning and Natural Resources
1 – Principal Planner
1 – Senior Planner
1 – Recharge Planning Manager

Mission

The Planning and Watershed Management department responsibilities encompass a comprehensive spectrum, from envisioning and planning facilities to ensuring compliance with environmental project standards. Key areas of focus include bolstering stormwater capture at Prado Dam, obtaining permits from resource agencies, executing watershed management initiatives, fostering collaboration with stakeholders and regulators, presenting water rights reports to the State Water Resources Control Board, and compliance with the Sustainable Groundwater Management Act.

Key Issues for FY 2024-25

- **Enhancing Stormwater Capture at Prado Dam:**
  - Collaborate with the Army Corps to develop the Implementation framework and tools for Forecast Informed Reservoir Operations (FIRO) that will feed into the formal update of the Water Control Manual for Prado Dam later.
  - Complete the application process and seek approval for a 5-year minor deviation of the Prado Dam Water Control Manual to 508 feet to facilitate testing and potential permanent integration of FIRO.

- **Remediation Planning for Former Shooting Areas in Prado Basin:**
  - Conclude comprehensive planning and environmental documentation for the remediation of former shooting areas within Prado Basin. Ongoing collaboration with DDTC to scope and design the work needed for final approval before implementation.
- **Integrated Regional Water Management (IRWM) in Orange County:**
  - Collaborate with Orange County stakeholders to implement Integrated Regional Water Management (IRWM) initiatives, fostering coordinated and sustainable water resource management.
- **Watershed Management:**
  - Engage with watershed stakeholders to strengthen collaboration and understanding.
  - Actively participate in key initiatives such as the Upper Santa Ana River Watershed Habitat Conservation Plan, Basin Monitoring Program Task Force, and Imported Water Recharge.
- **Continued Initiatives and Compliance:**
  - Maintain active involvement in the development of the Upper Santa Ana River Habitat Conservation Plan which will provide permit coverage for projects in the Prado watershed area.
  - Conduct environmental compliance documentation projects in support of Engineering for anticipated additional PFAS treatment projects.

Account Information	FY 2022-23 Actual	FY 2023-24 Budget	FY 2024-25 Proposed Budget
Salaries and Benefits	885,517	989,174	1,014,914
Services and Supplies	801,017	671,550	1,206,850
Total	**$1,686,534**	**$1,660,724**	**$2,221,764**

I FY 2024-25 Major New Initiatives/Programs

Project Summary: Update and Refinement of Long-Term Planning:
Revise and enhance what was previously known as the Long-Term Facilities Plan (LTFP) to create an updated and comprehensive long-term planning document. This document will meticulously outline priority projects and activities that the staff will undertake over the next five years. The objective is to ensure the sustainable and efficient management of the groundwater basin. Further details and specifications will be developed to provide a clear roadmap for achieving long-term goals and addressing evolving challenges in water resource management.

- Conduct a thorough review of existing infrastructure and facilities to identify potential upgrades or modernization efforts.
- Explore innovative technologies and strategies for groundwater management and recharge.
- Engage stakeholders and experts in collaborative sessions to gather diverse perspectives and insights.
- Assess the environmental impact of proposed projects and ensure alignment with sustainability goals.
- Establish key performance indicators (KPIs) to measure the success and impact of the proposed initiatives.
- Seek public input and community engagement to incorporate local perspectives and needs.
- Collaborate with relevant agencies and institutions to leverage expertise and resources for successful implementation.

This major initiative aims to not only update the planning framework but also to elevate it to a dynamic and adaptable document that guides the District's efforts in sustainable groundwater management effectively. The detailed planning document will serve as a strategic guide, aligning the District's activities with long-term environmental and community needs.

Project Summary: Prado Wetlands Strategic Planning

The Prado Wetlands Strategic Planning project is a comprehensive initiative aimed at charting the future course for the Prado Wetlands, with a focus on sustainable management based on future projected flow dynamics, environmental conservation obligations, and investigate opportunities for developing regulatory credit systems to offset water quality or habitat obligations. This strategic plan seeks to leverage the unique ecological attributes of Prado Wetlands while addressing emerging challenges and opportunities.

- Implement measures to protect and sustain biodiversity, fostering a resilient and healthy wetland ecosystem.
- Develop sustainable water management practices to maintain the delicate balance of water levels, ensuring the longevity of the wetlands.
- Explore eco-friendly approaches to address issues such as invasive species, pollution, and habitat degradation.
- Establish educational programs and outreach initiatives to promote the value of the Natural Resource Department that supports operational needs of the District while balancing the environmental sustainability of sensitive species and habitats

- Assess and upgrade existing infrastructure to enhance the wetlands' functionality, including water control structures, trails, and interpretive signage.
- Incorporate innovative technologies for data collection and monitoring to support adaptive management strategies.
- Ensure alignment with local, state, and federal regulations pertaining to wetland management and conservation.
- Collaborate with relevant agencies to secure necessary permits and approvals for proposed enhancements.
- Develop a long-term vision for Prado Wetlands that considers climate change impacts, ensuring adaptability to evolving environmental conditions.
- Establish protocols through active research projects for ongoing monitoring and adaptive management to address unforeseen challenges.

The Prado Wetlands Strategic Planning project aspires to create a roadmap for the sustainable coexistence of ecological conservation, community engagement, and responsible recreation within the Prado Wetlands. Through collaborative efforts and strategic foresight, the project aims to secure this area as an asset for Water Conservation and Stormwater capture projects at Prado and to meet emerging water quality challenges such as Nitrogen, Selenium, PFAS, and TDS.

Project Summary: Prado Dam Sediment Removal Strategic Plan for Enhanced Stormwater Capture

The Prado Dam Sediment Removal Strategic Plan is a targeted initiative designed to optimize stormwater capture efficiency behind Prado Dam by addressing sedimentation challenges. This comprehensive plan aims to enhance the dam's storage capacity, ensuring its long-term functionality in managing stormwater flows while safeguarding downstream ecosystems.

- Analyze sediment composition to inform strategic removal efforts.
- Develop a phased sediment removal strategy to systematically address identified accumulation areas while minimizing ecological impact.
- Enhance the dam's stormwater storage capacity by implementing targeted sediment removal, increasing the volume available for capturing and managing stormwater runoff.
- Utilize hydraulic modeling to optimize the reservoir's design parameters for improved efficiency.

- Engage with relevant stakeholders, including environmental agencies, local communities, and regulatory bodies, to incorporate diverse perspectives.
- Foster collaboration with experts in sediment management, engineering, and environmental science to ensure the plan's effectiveness.
- Ensure compliance with all relevant environmental regulations and obtain necessary permits for sediment removal activities.

The Prado Dam Sediment Removal Strategic Plan envisions a resilient and sustainable future for stormwater management, ensuring the continued effectiveness of Prado Dam. Through strategic sediment removal, the project aims to optimize the dam's performance and contribute to the overall health of the watershed.

Project Summary: Santa Ana River Arundo Removal Strategic Plan

The Santa Ana River Arundo Removal Strategic Plan is a comprehensive initiative aimed at systematically addressing the invasive Arundo donax species along the Santa Ana River. Arundo removal is crucial for restoring and maintaining the health of the river ecosystem, preserving water resources, and mitigating the potential negative impacts on surrounding habitats.

- In partnership with watershed stakeholders, conduct a thorough survey to assess the extent and severity of Arundo donax infestations along the Santa Ana River.
- Identify priority areas for removal based on ecological sensitivity, water conservation priorities, and potential downstream impacts.
- In partnership with watershed stakeholders, develop a strategic plan outlining the most effective and environmentally sustainable methods for Arundo donax removal.
- Prioritize the use of non-chemical and eco-friendly approaches to minimize harm to the natural ecosystem.
- Engage with local communities, environmental organizations, regulatory agencies, and other stakeholders to garner support and ensure a collaborative approach and apply for grant funding opportunities to support the initiative.
- Establish partnerships with relevant entities to leverage resources, expertise, and involvement in the Arundo removal efforts.
- Collaborate with watershed stakeholders to establish a comprehensive monitoring program and dashboard to track the effectiveness of Arundo removal efforts.

- Implement adaptive management strategies, adjusting removal techniques based on real-time data and evolving environmental conditions.
- Develop educational programs to inform the public about the ecological importance of Arundo removal.
- Develop a plan for habitat restoration in areas where Arundo removal occurs to encourage the re-establishment of native vegetation.
- Implement revegetation strategies to stabilize banks, reduce erosion, and enhance overall ecosystem health.
- In partnership with watershed stakeholders, establish a robust data management system to record and analyze information related to Arundo removal activities.
- Regularly report progress to stakeholders, regulatory agencies, and OCWD management.
- Develop a sustainable, long-term maintenance plan to prevent Arundo reinfestation.
- Explore community engagement strategies for ongoing monitoring and early detection of potential regrowth.

The Santa Ana River Arundo Removal Strategic Plan envisions improved water flow within the river system, enhanced biodiversity, increased water capture for groundwater recharge, and increased resilience to invasive species.

II Core Activities

The Planning and Watershed Management Department hold primary responsibility for the District's long-term planning, coordination with agencies above Prado Dam, watershed management, and the preparation of essential environmental documents. Core activities encompass:

- Collaborating with the Army Corps of Engineers to enhance stormwater capture at Prado Dam.
- Preparing environmental documents, such as Environmental Impact Reports.
- Conducting long-range planning for future District activities and facilities.
- Planning new projects and programs for increased basin yield and water quality protection (collaborating with Engineering and Hydrogeology).
- Safeguarding the quantity and quality of Santa Ana River (SAR) flows.
- Securing environmental permits for District projects, including Clean Water Act Section 404 permits and California Department of Fish and Game 1600 permits.
- Ensuring compliance with the Sustainable Groundwater Management Act (SGMA).

- Evaluating innovative methods to enhance the performance of surface recharge facilities in Anaheim and Orange.
- Interacting with upstream agencies, wastewater agencies, groundwater management agencies, and regulatory bodies concerning Santa Ana River issues.
- Leading Integrated Regional Water Management activities and participating in Upper Santa Ana Watershed Habitat Conservation Plan development.
- Participating in task forces related to basin wide water quality under the auspices of the Santa Ana Watershed Project Authority (SAWPA).
- Monitoring the implementation of stormwater NPDES ("MS4") permits in Orange, Riverside, and San Bernardino Counties.
- Overseeing the cleanup of the Stringfellow hazardous waste plume in Riverside County and other contamination sites in the upper watershed that may pose a threat to the Santa Ana River.
- Maintaining permits from resource agencies for operations and maintenance activities at Prado Wetlands and recharge facilities in Anaheim and Orange.
- Managing and reporting on the District's Santa Ana River and Santiago Creek water rights.
- Reviewing environmental documents from agencies in the watershed concerning potential impacts on District operations and the watershed.
- Managing data collection and reporting to ensure compliance with existing permit obligations.

III Non-Core Activities

None

IV Group Goals for FY 2024-25

Forecast Informed Reservoir Operations (FIRO) Implementation:

- Collaboration with the Army Corps, Scripps, and other partners to design an implementation plan and series of tools to help inform Prado dam operations to enhance stormwater capture and conservation.
- Focusing on FIRO implementation at Prado Dam, with the final goal contingent on the modification and adoption of the Water Control Manual by the Army Corps.

Deviation to Capture Stormwater at Elevation 508 Feet at Prado Dam:

- Complete the application process and seek approval for a 5-year minor deviation of the Prado Dam Water Control Manual to 508 feet to facilitate testing and potential permanent integration of FIRO.

Prado Basin Implementation Study:

- Collaborating with the Army Corps on ecosystem restoration and elevating flood season stormwater capture elevation at Prado Dam.
- Advancing to the Preconstruction Engineering and Design (PED) phase after completing the Feasibility Study in May 2021 and securing authorization in WRDA 2022.

Integrated Regional Water Management (IRWM):

- Continuing studies and analysis with the County of Orange, OC SAN, and other stakeholders.
- Exploring additional diversions to the sewer system from flood control channels through an Urban Runoff Optimization Study.

Santa Ana River Conservation and Conjunctive Use Program (SARCCUP):

- Focusing on developing the institutional structure to manage and operate the water bank, ongoing Arundo removal and maintenance, and equipping new production wells.

SAR Water Rights:

- Awaiting a decision from the State Water Resources Control Board (SWRCB) in 2024 regarding the extension of the deadline and potential shifts in water rights.

Recharge Facility Planning:

- Collaborating on the Riverbed Filtration Demonstration project and exploring options to increase the performance of various recharge facilities.

Upper Santa Ana River Habitat Conservation Plan (HCP):

- Anticipating the finalization and approval of the HCP by the US Fish and Wildlife Service and CA Department of Fish and Wildlife in FY 2023-24.

Santa Ana River Flow Estimates:

- Continuing to monitor proposed projects in the upper watershed and collaborating with agencies to evaluate potential impacts on flow rates in the Santa Ana River.

Environmental Analyses and Permitting:

- Anticipating environmental analyses for new projects and engaging in permitting activities.

Watershed Management:

- Participating in task forces administered by SAWPA, including the Basin Monitoring Program Task Force, Salinity Management and Imported Water Recharge Workgroup, and Middle Santa Ana River Bacterial Indicators TMDL.
- Contributing to the development and implementation of watershed plans for North and Central Orange County, monitoring activities in the Chino Groundwater Basin, and overseeing the implementation of 'hydraulic control' in the Chino Basin.

Water Demand Forecast Study with MWDOC:

- Planning a study, cost-sharing with MWDOC, to estimate future water demands for Urban Water Management Plans. Anticipated to occur in early 2025.

V Pending Activities

None

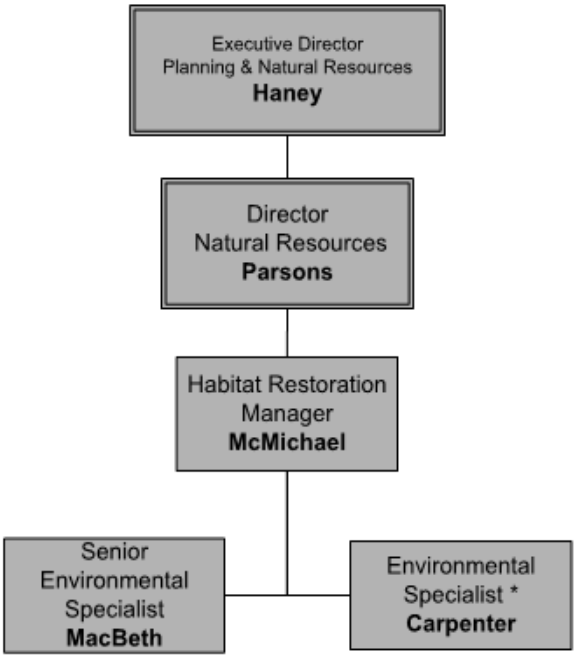
VI Staff Addition Needed for FY 2024-25

None

VII Future Issues

None

NATURAL RESOURCES



Summary Information

Existing Staff – 3.5 FTEs

1 – Director of Natural Resources

1 – Habitat Restoration Manager (Principal Environmental Specialist)

1 – Senior Environmental Specialist

0.5 – Environmental Specialist (*Cost Shared 50% with SAWA)

Mission

The Natural Resource Department is responsible for habitat and species permits related to operational water management in the Santa Ana River Watershed. We ensure seamless operation through implementation and renewals of permits for the operation of recharge basins and support environmental obligations related to water conservation initiatives behind Prado Dam. The department strategically contributes to the formulation of required environmental plans for District projects, operations, and land use while prioritizing district needs and considerations. With a focus on maintaining an Arundo-free zone, safeguarding endangered species, and analyzing the sustainability impacts of water conservation efforts, the department collaboratively engages with watershed stakeholders to uphold the shared responsibility for the long-term well-being of the Santa Ana River Watershed.

Key issues for FY 2024-25

- Coordinate with Army Corps and resource agencies regarding Enhanced Water Conservation in Prado Basin, including a deviation request for Forecast Informed Reservoir Operations at Prado Dam while environmental documentation and permits are pending.
- Continue partnerships for additional Arundo control on the SAR while raising public awareness of the issues and benefits. Assist with control of Prado Arundo and formulation of a plan for future Arundo management and maintenance fund.
- Gather background information and explore possible development of a fire management plan for the Prado Basin.
- Continue to develop documentation of the environmental value of the Prado Basin under current management including Water Conservation, potentially by highlighting population health of key indicator species groups, such as raptors including nesting American Bald Eagles.
- Complete restoration in Burris and Santiago Basins for 2022 and 2023 RGP 90 mitigation and Cities of Anaheim and Yorba Linda Projects therein.
- Assist in the preparation of permit applications and negotiate conditions cooperatively with other Departments and Regulators for various District projects, including sediment removal in Prado Basin, water conservation, the Corps Feasibility Study, and District operational activities including RGP implementation and monitoring.
- Represent the District on the Santa Ana Watershed Association Board and various other task forces and planning groups such as the Santa Ana Sucker Conservation Team.
- Monitor endangered birds and manage Natural Resources in the Prado Basin and on other District properties; organize watershed-wide monitoring of select endangered populations, documenting the annual population status of the largest least Bell’s vireo population in existence.
- Refine data gathering and reporting on OCWD maintenance activities in the recharge area of the river and at Prado under permits with the U.S. Army Corps of Engineers, agreements with California Department of Fish and Wildlife, and California Regional Water Quality Control Board.
- Continue to seek alternative compliance locations for Santa Ana Sucker restoration currently applied to Sunnyslope Creek and other activities as per OCWD - California Department of Fish and Wildlife Agreement and Biological Opinion from the USFWS.
- Maintain, monitor, and report upon mitigation requirements and other habitat restoration sites that were set aside to offset potential effects of District projects and activities.
- Monitor and assist in attempted control of Quagga Mussels and other potentially harmful invasive species.
- Maintain operations permits for endangered species work.

Account Information	FY 2022-23 Actual	FY 2023-24 Budget	FY 2024-25 Proposed Budget
Salaries and Benefits	803,631	869,505	888,178
Services and Supplies	799,241	680,250	695,350
Total	**$1,602,872**	**$1,549,755**	**$1,583,528**

I FY 2024-25 Major New Initiatives/Programs

Project Description: Integrated Environmental Modeling for Enhanced Habitat Conservation

The Integrated Environmental Modeling Project is an innovative initiative aimed at constructing a comprehensive model that intertwines advanced weather forecasting, habitat and species monitoring data, and prolonged retention of stormwater behind Prado Dam. This innovative approach seeks to quantifiably assess the habitat and species impacts resulting from extended stormwater retention, ultimately informing, and optimizing conservation strategies and operational management decisions while supporting natural resources.

- Utilize innovative FIRO weather forecasting technologies for precise insights into future weather patterns, enhancing the accuracy of anticipating stormwater inflows.
- Integrate continuous monitoring data on habitat conditions and species dynamics around Prado Dam, capturing ecological changes over time and evaluating trends and drivers.
- Investigate the effects of prolonged stormwater retention behind Prado Dam, assessing quantifiable metrics like water quality, temperature, and nutrient levels.
- Develop a data-driven modeling system to quantify impacts on habitat and species resulting from extended stormwater retention, considering biodiversity, water-dependent species behavior, and overall ecosystem health.
- Generate scenario-based predictions with the integrated model to simulate diverse stormwater retention durations, analyzing potential variations in habitat conditions and species behavior.
- Optimize habitat conservation strategies using model outputs, tailoring water retention practices to balance ecosystem health, species conservation, and water resource management goals.
- The integrated model would provide data-driven insights into the complex relationships among weather patterns, stormwater retention, and habitat dynamics, guiding evidence-based conservation practices.
- Contribute to optimizing water management strategies, ensuring sustainable water resource use while prioritizing habitat and species conservation.

- Develop quantifiable metrics empowering decision-makers to make informed choices on stormwater retention practices, achieving a harmonious balance between ecological preservation and water resource utilization.

The Integrated Environmental Modeling Project is a required innovative endeavor to perform water conservation in conjunction with USACE at Prado Dam. This project is at the intersection of environmental science, technology, and conservation, with the overarching goal of developing a tool for informed decision-making related to regulatory oversight and water conservation.

Project Description: Adaptive Habitat Management for Santa Ana Sucker Repopulation

The Adaptive Habitat Management Project is designed to proactively create and manage habitats to facilitate the repopulation of threatened Santa Ana Suckers in the river above Prado Dam, particularly in areas where the species currently faces challenges. This initiative employs adaptive strategies to ensure the dynamic and responsive development of habitats that are conducive to the natural needs of Santa Ana Suckers, aiming to bolster their populations in regions where their presence is currently limited or nonexistent.

- Develop adaptive habitat designs tailored to the specific needs of Santa Ana Suckers, encompassing essential features such as substrate composition, water flow dynamics, and vegetation cover.
- Implement continuous monitoring of Santa Ana Sucker populations in newly created habitats and research to understand their behavioral patterns, breeding preferences, and habitat requirements. Use this data to inform adaptive management strategies.
- Establish adaptive management protocols that allow for real-time adjustments to habitat conditions based on ongoing monitoring and research findings. This ensures that the created habitats evolve in response to the changing needs of Santa Ana Suckers.
- Engage local communities and stakeholders in the habitat creation process. Foster understanding and support for Santa Ana Sucker conservation through educational programs, workshops, and community outreach initiatives.
- Collaborate with relevant regulatory agencies to ensure compliance with environmental regulations and permit requirements. Seek approvals and guidance to enhance the success of the habitat creation and repopulation efforts.
- The project aims to document a measurable increase in Santa Ana Sucker populations in a targeted area, contributing to the overall conservation of this threatened species.

The Adaptive Habitat Management Project stands as a long-standing compliance requirement that has not yet been fulfilled and allows the District to embark on a required compliance pathway as part of its obligations associated with water conservation work at Prado Dam.

Project Description: Klir Software Implementation for Natural Resources Department Management

The Natural Resources Klir Software Implementation Project aims to enhance the efficiency, compliance, and overall effectiveness of the department by implementing Klir software. This comprehensive software solution will be utilized to document and track regulatory obligations, ensure compliance, manage staff responsibilities for long-term retention, facilitate onboarding training, and provide valuable business management metrics related to productivity and resource allocation.

- Utilize Klir software to centralize and systematically track regulatory obligations pertinent to the Natural Resources Department. This includes permits, reporting requirements, and compliance deadlines, ensuring a proactive and organized approach to regulatory adherence.
- Implement Klir's features for documenting and organizing staff responsibilities within the Natural Resources Department. This includes creating clear task assignments, defining roles, and establishing accountability measures to streamline operations.
- Leverage Klir's capabilities to create a systematic and secure long-term retention plan for critical documents and data. Ensure seamless knowledge transfer and continuity, particularly when staff members retire or transition, by documenting processes, procedures, and institutional knowledge.
- Integrate Klir into the department's onboarding process to facilitate efficient training for new staff members. Use the platform to create and manage training modules, track progress, and ensure that new team members are adequately oriented to their responsibilities and compliance requirements.
- Utilize Klir's analytical tools to generate business management metrics related to productivity, resource allocation, and compliance performance. Utilize these insights to identify areas for improvement, optimize resource utilization, and enhance overall departmental efficiency.

Klir's centralized tracking system will ensure that the Natural Resources Department stays informed and proactive in meeting regulatory obligations, reducing the risk of non-compliance. Business management metrics provided by Klir will empower departmental leadership with data-driven insights, enabling informed decision-making, resource optimization, and continuous improvement. The Natural Resources Klir Software Implementation project represents a

strategic investment in leveraging Klir software to elevate the operational efficiency, compliance, and overall effectiveness of the department.

II Core Activities

- Manage wildlife habitat and populations as per mitigation requirements and regulatory permit compliance.
- Monitor and manage fish populations to enhance nesting seabird reproductive success in the Burris Basin.
- Participate in the Upper Santa Ana Habitat Conservation Plan (HCP) led by San Bernardino Valley Municipal Water District, resulting in permits for three District covered activities.
- Implement and report Sucker conservation, restoration, and native fish establishment efforts.
- Interacting with outside agencies such as the U.S. Fish and Wildlife Service (FWS), Army Corps of Engineers (ACOE), SAWPA, and local governmental agencies, etc., in representing OCWD interests in environmental planning.
- Interacting with other departments and regulatory agencies to ensure the environmental compliance of District projects and activities.
- Administering and overseeing natural resources management efforts, removal of Arundo, and other invasives from the SAR Watershed.
- Seeking outside funding and administering expenditure of those funds.
- Interfacing with non-governmental organizations in the SAR Watershed.
- Monitor endangered birds on District lands per permit requirements, including the management of seasonal contractors.
- Santa Ana Sucker monitoring and conservation.
- Collaborate with experts in monitoring shot hole borer beetle damage to riparian trees in Prado and throughout the watershed.
- Permit maintenance.
- Oversight and cooperation with contractors, interns, and partners to maximize efficiency in the attainment of mission and goals.
- Reporting and tracking of regulatory achievements of the District's Natural Resources Program to the Regulatory Agencies and the public.

III Non-Core Activities

- Production and dissemination of educational materials.
- Conduct educational tours of District wildlands.

IV Group Goals for FY 2024-25

Monitor Endangered Bird Populations in the Prado Basin and Watershed – The department leads the monitoring of endangered birds in the Prado Basin and the SAR Watershed. This activity also keeps the District in compliance

with Regulatory Permits for Water Conservation and other District projects. Endangered bird populations, including Bald Eagles, will be monitored, and managed in the Prado Basin and throughout most of the SAR Watershed.

Mitigation/Habitat Restoration in Prado Basin and OC – Staff will prepare, implement, monitor, and report upon habitat restoration and wildlife populations in compliance with permit conditions for Prado Water Conservation and other District projects and activities.

Ongoing Removal of Arundo – Staff will help manage and monitor the efforts to keep Arundo out of Prado Basin and the watershed.

Monitor and Control Problematic Invasive Species – Quagga Mussels, Polyphagous Shot Hole Borers, and other non-native species that have the potential to cause great harm in the watershed will be monitored and cooperatively controlled when possible.

Prepare Permits for District Projects and Activities – Prepare permit applications and negotiate conditions cooperatively with Engineering, Planning, and staffs of other Departments for various District projects including Prado sediment removal, Enhanced Water Conservation at Prado, Burris Basin, and other facilities and operations as needed.

Educational Material – Natural Resources staff will continue to compile interpretive materials including reports, tours, and presentations.

V Pending Activities (Not Being Addressed Due to Insufficient Resources)

Major activities that are not being implemented include:

Monitoring of Tamarisk in the Prado Basin – Tamarisk is a non-native plant interfering with flood control, water flow, habitat restoration, and endangered bird management.

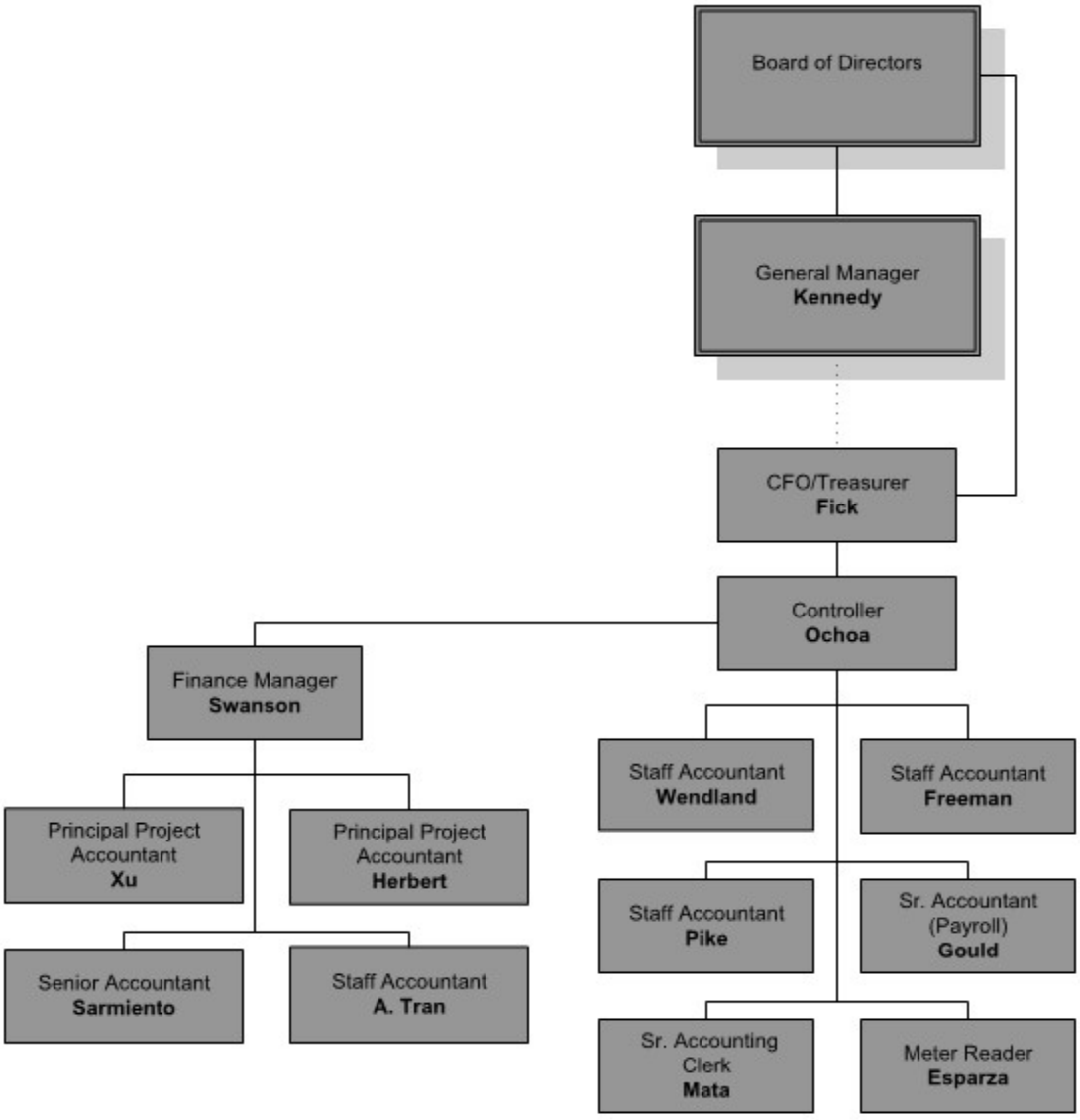
VI Staff Addition Needed for FY 2024-25

None

VII Future Issues

Organize Data in Preparation for Publication – Staff are organizing and analyzing existing data in preparation for potential publication of watershed vireo information in a scientific journal.

FINANCE



Summary Information

Existing Staff - 13 FTEs

1 – CFO/Treasurer
1 – Controller
1 – Finance Manager
2 – Principal Project Accountants
1 – Senior Accountant
1 – Senior Accountant (Payroll)
4 – Staff Accountants
1 – Senior Accounting Clerk
1 – Meter Reader

Mission

To perform the District's accounting, finance, and treasury functions. To maintain the District's strong financial position, high credit ratings, reliable reporting of budgets, revenues, expenditures, and investments, ensure that adequate financial controls are in place to accurately record financial transactions, communicate financial results, and protect the District's assets. In addition, to ensure the financial records are maintained in accordance with generally accepted accounting principles and guidelines as established by state and federal agencies.

Key Issues for FY 2024-25

- Adapt District finances to fund Producer PFAS related projects.
- Issue debt to efficiently fund OCWD's CIP at the lowest possible cost and optimize the debt program by refinancing debt to reduce debt service costs.
- Manage OCWD's Investment Portfolio per the Board approved Investment Policy.
- Continue to ensure that internal controls are in place to provide assurance that assets are safeguarded, and financial information is fairly stated.
- Review and update existing procedures and establish new procedures that will help expand the group's analysis and reporting capabilities.
- Submit the Annual Comprehensive Financial Report (ACFR) to the Government Finance Officers Association for their award program.

Account Information	FY 2022-23 Actuals	FY 2023-24 Budget	FY 2024-25 Proposed Budget
Salaries and Benefits	2,167,248	2,185,413	2,317,987
Services and Supplies	73,579	157,250	113,900
Total	**$2,240,827**	**$2,342,663**	**$2,431,887**

I FY 2024-25 Major New Initiatives/Programs

- Continue to increase rebate earnings from wider use of the District's purchasing card/single-use account program.
- Manage short-term debt proceeds to fund PFAS projects.
- Initiate continued efforts in the Finance department to securitize and store documents electronically to help reduce increasing storage costs.

II Core Activities

The Finance Department is primarily responsible for the District's accounting, finance, and treasury functions, including debt and investment management. This includes financial planning and analysis for rate setting, budgeting, financial reporting, payroll, accounts payable and accounts receivable, as well as working with various internal and external groups and agencies.

The core activities of the department are:

Accounts Payable:

- Ensuring all payments and reimbursements are done timely, accurately, and in compliance with policies and procedures along with state and federal regulations.
- Maximize vendor discounts and rebates on invoice payments.
- Prepare and submit quarterly sales and use tax returns and annual vendor 1099 tax forms, timely and accurately with current regulations.
- Prepare and complete all annual reporting for District travel and expense expenditures in a timely manner.

Accounts Receivable:

- Process accounts receivable invoices and incoming payments timely, accurately, and in compliance with financial policies and procedures.
- Validate and process the District's Replenishment Assessment (RA) and Basin Equity Assessment (BEA) Water Production Statement completed by the Producer, including any special water program billings.
- Analyze meter read data for inconsistencies and comparability to water production statements filed by the producers.
- Track and collect all grant invoices for the District's general fund and capital projects.

Payroll:

- Process the District's bi-weekly and monthly payroll accurately and timely.
- Responsible for quarterly and year end federal and state payroll tax filings.
- Responsible for employee retirement and benefit payments, and other employee-related costs administered through the payroll system.
- Responsible for processing and distributing employee year end W-2 forms.

Meter Reader:

- Routinely reads water, electric, and hour meters on Producer wells in an accurate and timely manner.

Treasury Functions:

- Continue to manage the treasury functions of the District, which includes ensuring all debt related payments are made timely for all debt issuances, state loans, and commercial paper. In addition, maintain compliance with all continuing disclosure requirements, review and renew all necessary debt administrative services including bank letters of credit, rating agency monitoring, trustee administration, and any other debt-related maintenance services.

- Prepare monthly cash and investment holdings report.
- Manage and invest the District's cash in-house daily to meet the District's cash needs. This includes an annual review of the District's investment policy with the Admin/Finance Committee.
- Maintain and update the monthly rolling cash forecast model.
- To monitor, track, and report the District's Reserve Funds.
- Monitor and analyze investment activity to ensure fiscal responsibility and superior bond ratings.
- Debt issuances – to initiate, support, analyze, and complete the execution of all necessary debt financing needs for the District's capital projects.

Budgetary Control Functions:

- Prepare the District's annual budget.
- Prepare and present quarterly budget versus actual variance analysis report to the Board.
- Track and account for all the costs approved by the Board during the year.
- Provide account analysis to various department personnel.

Capital Projects and Fixed Asset Accounting:

- Account and track all Capital Projects and Fixed Assets.
- Safeguard Fixed assets.
- Continue to review and update the R&R model.
- Continue to review and work with various financial scenarios to make recommendations to seek and obtain the most economical financing to support the District's capital projects.
- Prepare reimbursement or drawdown of loans/debt for various projects.
- Monitor, track, execute, and complete Prop 1A grant billings for the District's general fund and capital projects.

General Accounting Functions:

- Maintain the general ledger.
- Maintain the District's rate model with the Local Resources department.
- Account for and audit various BEA exemption programs.
- Account for and audit various PFAS O&M program payments to various producers.
- Prepare and present the ratio analysis annually to the Board.
- Provide monthly water production cost analysis to the water production department.
- Prepare and update water quality legal cost reports on a quarterly basis.
- Complete the financial information necessary for the District's annual Engineer's Report.

- Working with external independent auditors to complete the District's annual fiscal year-end audit, pension plan audits, single audits (as necessary), and work with other outside agency auditors to fulfill any additional audit requirements.
- Complete and submit the District's Annual Comprehensive Financial Report (ACFR) to GFOA for a possible Certificate of Achievement for Excellence in Financial Reporting award.

III Non-Core Activities

- Children's Water Festival Accounting.
- OC Water Summit Accounting and tracking.
- Contract administration and building maintenance billing operations for MWDOC occupancy expenses.

IV Group Goals for FY 2024-25

- Review and update documentation of procedures for all accounting functions.
- Review the Producer meter calibration reporting program and procedures.
- Complete monthly closing of the general ledger, all account reconciliations, and accruals in a timely manner.
- Complete the annual independent audit and all necessary audit schedules more efficiently to complete the year-end audit on a timely basis.
- Review the general ledger and all ledger accounts to ensure that revenues and expenses have been posted properly. This includes analyzing and researching any discrepancies and unusual variances.
- Initiate efforts to securitize and store documents electronically to help reduce increasing storage costs.
- Discover new efforts to streamline all processes and to continue to strengthen internal controls throughout the District in accordance with "Best Practices".
- Utilize financial modeling to analyze and support the District's annual RA/BEA rates established and approved by the Board on an annual basis. On-going forecasting and projections of revenue and expenses.
- Provide project accounting analysis for all the District's capital projects and work with all project managers to ensure that all project costs are properly accounted for and are within the project budget. This also reduces the burden currently placed on each project manager to provide financial analysis support for their projects.
- Record, monitor, and ensure proper accounting for the District's fixed assets and inventories monthly, including the proper accounting for

depreciation and transferring assets from work in progress as projects are completed.

- Look for refinancing opportunities for an economic benefit to the District.
- Complete annual filings and certification of compliance with circular OMB-133 for all grant funding sources when required.
- Manage and audit litigation settlement and expense accounting.
- Review and update all the assets in the R&R model.
- Cross-train staff to provide better coverage, and to strengthen accounting internal controls with the ability to “rotate” staff in certain functions.

V Pending Activities

None

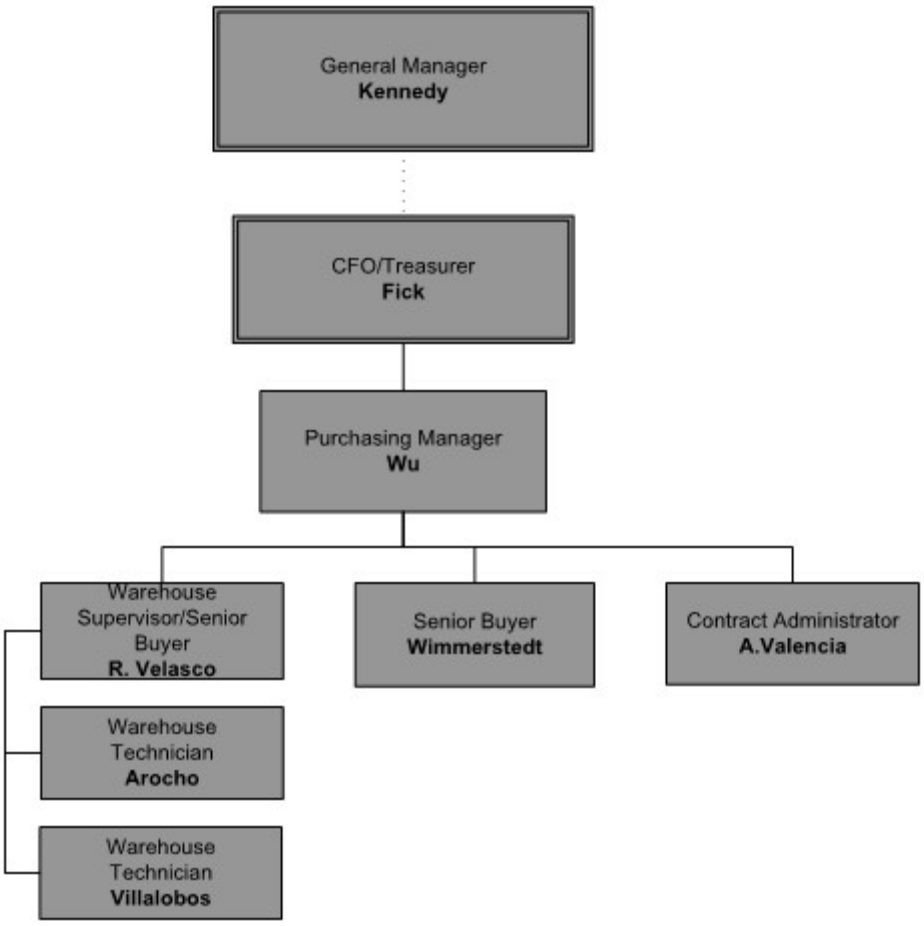
VI Staff Addition Needed for FY 2024-25

None

VII Future Issues

None

PURCHASING



Summary Information

Existing Staff - 6 FTEs

1 – Purchasing Manager

1 – Warehouse Supervisor/Senior Buyer

1 – Senior Buyer

2 – Warehouse Technicians

1 – Contract Administrator

Mission

The Mission of the Purchasing Department is to procure reliable quality services and products, at the best cost in a timely manner, using ethical procurement standards, and following approved policies and procedures to achieve a high level of assistance for the District.

Key Issues for FY 2024-25

None

Account Information	FY 2022-23 Actual	FY 2023-24 Budget	FY 2024-25 Proposed Budget
Salaries and Benefits	760,298	804,880	851,088
Services and Supplies	51,256	49,480	47,980
Total	**$811,554**	**$854,360**	**$899,068**

I FY 2024-25 Major New Initiatives/Programs

- Create a Purchasing Procedure Manual to include purchase orders, contracts, agreements, and District equipment which will be submitted for approval.
- Implement a contract management process, tracking and reporting tool.
- Implement an electronic filing and tracking system within our retention policies for purchase orders including the requisition, quotes, correspondence, and backup, to help reduce storage and paper supply costs.

II Core Activities

The Purchasing Department is responsible for:

- Purchasing goods and services.
- Assisting all departments with the issuance of a request for proposals (RFP) and request for quotes (RFQ) for goods and services.
- Maintaining the warehouse and parts cage.
- Managing inventory.
- Preparing, processing, and administering the District's public works contracts and professional service agreements.
- Obtaining and tracking insurance certificates for contracts, agreements, and purchase orders.
- Maintaining filing system for purchase orders, contracts, and agreements.
- Identifying, obtaining Board approval, disposing of the surplus, and preparing surplus receipt report.
- Maintaining records for District vehicles and equipment; assigning District identification numbers.
- Locating new sources for procurement of materials, supplies and services.

- Preparing and issuing Requests for Proposals (RFP's) and Requests for Quotations (RFQ's) for services and products to obtain the best pricing and good quality.
- Meeting with each Department Manager quarterly to discuss requests and problems to ensure quality service is being provided.
- Meeting with the project managers to discuss contracts and agreements so that (1) we can process the documents expeditiously and address the agreement language issues that arise; and (2) provide an update on the status of the agreements/contracts, as needed.
- Reviewing and updating warehouse, purchase order, and agreement service procedures and improve on receiving activities.
- Administrating for purchasing card program, addressing issues that may arise, and monitoring cards.
- Administrating fuel cards and personal identification numbers (PIN).
- Checking safety procedures for warehouse receiving and storing goods, including chemicals.
- Assisting Departments for procurement of Department special needs/events.
- Completing formal procedures manual to be submitted for approval.

III Non-Core Activities

Non-core activities conducted by the Purchasing Department include:

- Meet with purchasing personnel from other water agencies to share information on new vendors, pricing, procedures, etc.
- Attend seminars on procurement and warehousing for updated information to save money while still obtaining quality products.

IV Group Goals for FY 2024-25

- Improve warehouse procedures and material handling; improve warehouse storage at FHQ.
- Assessment of all District vehicles – Prepare a detailed report and analysis.
- Surplus – Research and implement procedure for cost-effective disposal of obsolete items and update surplus receipt report.
- Implement a procedure for fully electronic purchase orders from requisition through payment.

V Pending Activities

- Preparation of a formal Procedures Manual for Purchasing (In progress).

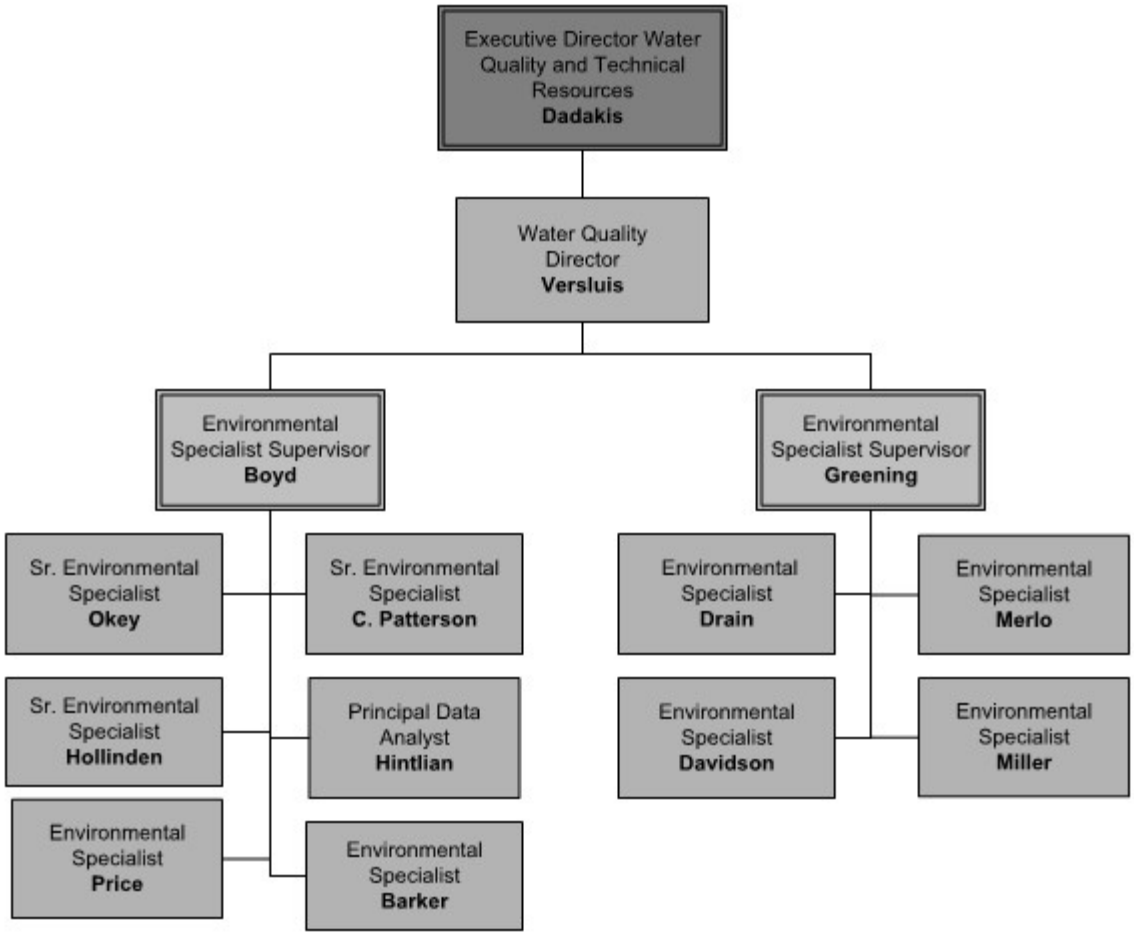
VI Staff Addition Needed for FY 2024-25

None

VII Future Issues

- Additional warehouse space/warehouse cleanup.

WATER QUALITY



Summary Information

Existing Staff - 13 FTEs

1 – Director of Water Quality
2 – Environmental Specialist Supervisors
3 – Senior Environmental Specialists
1 – Principal Data Analyst
6 – Environmental Specialists

Mission

Plan, coordinate, and implement water quality monitoring programs to (1) protect and evaluate groundwater basin and groundwater recharge supply conditions and (2) comply with regulatory requirements for the Groundwater Producers' (GWPs) drinking water wells, treatment systems, water recycling, and waste discharge permits.

Key Issues for FY 2024-25

- PFAS Treatment Facility Monitoring: The Department will continue to perform key portions of the required water quality compliance monitoring for per- and polyfluoroalkyl substances (PFAS) Treatment Facilities operated by the GWPs. The monitoring required to comply with the Division of Drinking Water regulations includes, facility start-up monitoring, initial performance monitoring, routine monthly and quarterly monitoring, and additional monitoring required before and after treatment media change-outs.
- GWP PFAS Monitoring Orders: The Department will continue to provide support to GWPs for PFAS monitoring orders issued by the Division of Drinking Water (DDW), including both performing the monitoring and requesting a reduction or recission of the requirements where appropriate.
- Federal Unregulated Contaminant Monitoring Rule Phase 5 (UCMR5): On behalf of basin GWPs, OCWD has successfully met the monitoring and reporting requirements for the federal EPA's UCMR1, UCMR2, UCMR3, and UCMR4 programs. The UCMR5 monitoring program will begin in 2023 and will be scheduled over three years. The UCMR5 is required to be scheduled and completed between 2023 and the end of 2025. UCMR5 close Department coordination with GWP's and the District Laboratory to ensure (1) monitoring requirements and established schedules are met, (2) all required quality assurance field samples are collected as required by the specific analytical methods, and (3) all sample results are properly reported by the laboratory and reviewed by Water Quality staff for final reporting in the EPA CDX SDWARS5 system.
- OCWD PFAS Pilot Testing: Water Quality staff will continue to perform monitoring of the R&D Department's PFAS Pilot Treatment projects, currently located near Forebay Headquarters. This includes the new additional Riverbed Filtration System PFAS pilot, which is currently under construction.
- PFAS Groundwater and Surface Water Monitoring: PFAS monitoring will continue with strategic testing of the District's groundwater monitoring wells, surface water sites throughout Orange County, and the upper Santa Ana Watershed in order to better understand PFAS occurrence. PFAS monitoring efforts will likely include working with partners in the upper SAR watershed on projects such as the newly reconstituted SAWPA Emerging Constituents Task Force and coordination of testing at military sites in Orange County such as the former MCAS El Toro base, former MCAS Tustin base, and the Los Alamitos Joint Forces Training Base.
- Microplastics Monitoring: Continue to follow and participate in microplastics workgroups and webinars to ensure OCWD and GWP preparedness for future drinking water microplastics monitoring and reporting requirements in California. Anticipated FY 23-24 monitoring requirements in the District's service area are expected to be limited to surface water treatment sites and thus would not fall within the District's monitoring obligation for GWPs source groundwater monitoring requirements.

- Planning and Coordinating Water Quality/Laboratory Workload: The Department manages, tracks, schedules, and coordinates the District's compliance and non-compliance monitoring sample load, which are subject to (1) Laboratory resources and analytical capacity, (2) GWRS and MBI monitoring activities, (3) GWP operations and drinking water well state/federal monitoring schedules, and (4) other on-going District projects, research, or focused studies, etc. These programs and available resources must be considered in weekly, monthly, quarterly, and annual planning and associated workload scheduling for both sample collection and laboratory analysis.

Account Information	FY 2022-23 Actual	FY 2023-24 Budget	FY 2024-25 Proposed Budget
Salaries and Benefits	2,004,427	2,019,347	2,277,381
Services and Supplies	334,973	382,100	343,800
Total	**$2,339,400**	**$2,401,447**	**$2,621,181**

I FY 2024-25 Major New Initiatives/Programs

Field support and resources will be needed to monitor water quality from existing locations or new monitoring wells to be constructed for the projects listed below, pending Board approval. These are listed as potential programs/projects for planning projections only.

- Expanded PFAS Monitoring and Producer Support: The completion of many additional planned PFAS Treatment Facilities will continue to increase the monitoring responsibilities for the Water Quality Department. Also, any new DDW PFAS Monitoring Orders issued to Groundwater Producers will require expanded testing and coordination with Division of Drinking Water regulators. Assistance with monitoring at the OCWD PFAS Pilot facility will also continue to test various PFAS treatment media options and assess pilot treatment results.
- Water Quality Evaluation of Storm Water Runoff and Coordination with the County of Orange: The Planning and Watershed Department continues to work with the County of Orange on storm water diversion and capture projects. The Water Quality Department has been asked to assist in ongoing field monitoring and assessment of storm water diversion sites such as the Chantilly storm channel. The County has discussed collaboration with OCWD and the City of Orange, which may include water quality monitoring and analysis to address groundwater quality before and after infiltration.

II Core Activities

The Water Quality Group is primarily responsible for (1) implementing water quality monitoring programs to protect and evaluate basin conditions, including emerging contaminants; (2) providing technical and field support for compliance programs, District projects, and research investigations; (3) disseminating water quality information and assisting with expansion and update of the WRMS

database (historic and new water quality data); (4) reviewing and commenting on relevant water regulatory and compliance issues (e.g., drinking water, stormwater, *de minimis* permits, etc.); and (5) providing support to ensure that the District complies with regulations pertaining to the Safe Drinking Water Act and Clean Water Act amendments.

Core activities include:

- Implementing water quality monitoring programs at groundwater, surface water, and treated water sites for (1) compliance with permits, mandated environmental and drinking water regulations, (2) District projects and research investigations, and (3) evaluating the ambient quality of the groundwater basin.
- Groundwater Producer Drinking Water Well Monitoring: Scheduling and sampling groundwater producer wells for compliance with state/federal drinking water regulations for regulated and unregulated chemicals; reviewing, approving, and reporting chemical data electronically to the state on behalf of the groundwater Producers; assisting with data compilation for the groundwater Producers' Annual Consumer Confidence Report, Public Health Goals Report, and Vulnerability Assessments.
- PFAS Treatment Facility monitoring requirements have begun with the completion and operation of 10 treatment facilities by the end of 2022. There is expected to be more than 35 total separate treatment facilities constructed to address PFAS at GWP wells. A comprehensive monitoring program will be established to ensure coordination with Producers and scheduling of department staff to collect and submit the various required treatment compliance samples.
- Implementing basin wide monitoring to assess ambient conditions and to detect changes in occurrence of both regulated and unregulated constituents within the Orange County Groundwater Basin.
- Overseeing and performing compliance monitoring activities at groundwater monitoring wells specified in the new GWRS permit, including water used for blending/diluent, final product water, and coordinating with contract labs for selected analyses not performed by OCWD's Main Laboratory (e.g., asbestos, dioxin, radioactivity, etc.). GWRS groundwater monitoring activities include both Forebay and Talbert Barrier locations, Mid-Basin Injection, and relevant research investigations associated with tracer and intrinsic studies to (1) establish groundwater flow paths and travel time to the nearest wells (potable and monitoring), (2) assess metal mobilization issues, joint research projects, and (3) assess treatment processes and changes in water quality after time underground, etc. through joint research endeavors. This is a high priority program for the department that includes completing and assisting with (1) reporting of water quality results to separate RWQCB and DDW databases, (2) quarterly regulatory reports, (3) the required Annual GWRS Report, and (4) the NWRI Independent Advisory Panel Meeting and Supplemental Report tech memos. Additional monitoring may be required

future to meet NPDES discharge requirements for discharge to waters of the U.S. such as Santiago Creek and the Santa Ana River in support of the planned future Anaheim Riverwalk project.

- North Basin, Remedial Investigation/Feasibility Study: Continue to implement monitoring activities at monitoring wells to track the volatile organics contaminant (VOC) plume and to provide information for the ongoing and planned future VOC remediation plan being carried out by the District under EPA oversight in the North Basin area of the District.
- South Basin Remedial Investigation/Feasibility Study: Continue to implement water quality monitoring activities at monitoring wells in southeastern Santa Ana to further investigate the extent of VOCs and perchlorate contamination.
- GWRS Metals Mobilization: Continue to implement revised long-term voluntary water quality monitoring activities to assess metal mobilization in groundwater near the GWRS recharge and injection facilities. A monitoring program was initiated as recommended by the NWRI GWRS Independent Advisory Panel to analyze for trace metals (arsenic is one metal of key concern) from selected wells in the vicinity and downgradient of the GWRS recharge basins.
- OCWD Storm Water Permit: Manage the District's GWRS Industrial Storm Water permit to comply with EPA's National Pollutant Discharge Elimination System (NPDES) permit covering storm water management, discharges, water quality monitoring, and reporting requirements. Perform monitoring, site inspection tasks, required reporting, and annual refresher training as approved in the District's Storm Water Pollution Prevention Plan (SWPPP) and WQ monitoring plan. Under the adopted SWRCB stormwater permit, two stormwater sampling events must be conducted between July and December, and January and June. The permit requires preparation of an annual report and regular electronic reporting.
- Santa Ana River Monitoring Program (SARMON): Continue to implement the comprehensive surface and groundwater monitoring program recommended by the SARWQH study and SARMON Independent Advisory Panel (IAP). Monitoring activities include sites on the Santa Ana River (SAR), Santiago Basin, and selected downgradient monitoring wells to provide data on travel time and to assess water quality changes that may occur after recharging water from the Santa Ana River. Monitoring activities are regularly updated and revised based on the ongoing review of reported sample results. One specific focus of the monitoring program is to continue to monitor and evaluate the occurrence of Contaminants of Emerging Concern (CECs). Also, Santa Ana River diversion flowing into and out of the District's Prado Wetlands are monitored to evaluate changes in water quality and to evaluate treatment effectiveness technical tasks for the SARMON program include but are not limited to assisting with the preparation of the periodic report summarizing SAR monitoring results in cooperation with the Regulatory Affairs Department.

- Coastal Seawater Intrusion Program: Continue to implement water quality monitoring activities to help assess possible seawater intrusion in areas such as the Talbert Gap, Bolsa Gap, and Sunset Gap. Recent monitoring results have shown seawater migration landward in the Sunset Gap and impacts to Huntington Beach drinking water wells. In recent years, the District has constructed over 30 new monitoring wells for the semi-annual monitoring program for the Bolsa and Sunset Gap areas alone.
- Implementing a surface and groundwater quality monitoring program to assure the continued safety of the Santa Ana River as source water for groundwater replenishment (SARMON monitoring activities).
- Ensuring compliance with the District's NPDES general *de minimis* dewatering permit covering PFAS pilot testing and groundwater monitoring-related discharges, including weekly notification, sampling, treatment of purged and discharged groundwater (as needed), data analysis, and preparing monthly compliance reports.
- Reviewing and approving new water quality data for the District's WRMS database, compiling, and analyzing data for reports and internal staff, the Board, and groundwater Producers.
- Coordinating with the Regional and State Water Quality Control Boards to provide appropriate water quality data to assess compliance with Basin Plan objectives for the SAR, TMDL issues, and other water quality river issues relevant to the protection of the OCWD groundwater basin.
- Performing semi-annual water quality monitoring of coastal wells to assess the extent of seawater intrusion; coordinating with Hydrogeology on reviewing and revising the program as new data becomes available.
- Assisting with field data collection for the semi-annual basin wide water level monitoring program to identify threats to the basin (i.e., groundwater overdraft, seawater intrusion, etc.) and provide groundwater elevations of basin aquifers measured six times annually.
- Fulfilling water quality and water resources information and data requests from the public, groundwater Producers, and regulatory agencies; responding to special data requests for external site investigations and litigations.
- Tracking, reviewing, and addressing new emerging contaminants of concern; evaluating basin water quality conditions for emerging contaminants, assessing management and response strategies, coordinating with Public Affairs and groundwater Producers with water quality information.
- Preparing reference materials and presentations on water quality issues, participating on advisory committees specific to water quality issues of concern to OCWD and Groundwater Producers.
- Reviewing proposed regulations such as federal and state maximum contaminant levels (MCLs), state Notification and Response Levels, Public Health Goals (PHGs), unregulated chemicals, NPDES permits, emergency regulations, etc. relevant to the District and groundwater drinking water source monitoring.

- Responding to and coordinating with regulatory agencies on emergencies and hazardous material spills, firefighting run-off, etc. that may affect groundwater quality. Perform WQ monitoring as needed to assess potential discharge impacts to recharge facilities or groundwater.
- Assisting with the preparation of regulatory compliance reports and other water quality reports.

III Non-Core Activities

Non-core activities (secondary priority compared to core activities) conducted by the Water Quality Group include:

- Serving on water quality and project advisory committees for ACWA, AWWA CA/NV, etc. on emerging water quality issues relevant and beneficial to OCWD as managers of the groundwater basin, preparing for water resources emergencies (i.e., earthquakes), etc.
- Assisting other water agencies and Public Affairs in addressing water quality issues, emerging contaminants, and tracking and assisting in preparing comments on proposed relevant drinking water-related regulations.
- Provide enhanced staff development (internal and external) and mentoring to take on higher-level duties and responsibilities; enhance and broaden cross-training to increase flexibility and ability to respond to changing conditions.

IV Group Goals for FY 2024-25

- Improved Water Quality Monitoring Efficiency
  - Assess new methods and strategies to increase field productivity without compromising the quality and integrity of sample collection.
  - Research and evaluate new software and methods to improve tracking and scheduling of Water Quality monitoring programs (e.g., Klir program or similar software).
  - Coordinate with Laboratory staff on the next phase of its LIMS development to ensure efficient workflow between departments.
  - Improve sample collection equipment and sampling procedures; review, revise, and finalize standard operating procedures and implement processes to increase efficiency and productivity. Continue with evolving department-wide cross-training programs.
  - Evaluate options to streamline specific monitoring programs for broader coverage, increase efficiency, and reduce sample load to the laboratory.
  - Continue to research and improve mobile carbon treatment systems and equipment decontamination procedures. Forecast optimum schedules to change-out spent carbon in mobile treatment units to avoid breakthrough and to address new contaminants (e.g., PFAS) requiring removal prior to discharge.

- Research new technologies for automating field data collection and documentation tasks.
- Conduct Field Site Inspections to observe and optimize safe practices and correct procedural drift.

- Standard Operating Procedures (SOPs): Review and update department SOPs and conduct periodic refresher training.
- Provide additional surface water and storm water monitoring including:
  - Storm water monitoring of the Santa Ana River and tributaries to OCWD's recharge facilities.
  - Non-point source water quality monitoring on the river and tributaries near OCWD's recharge facilities.
  - Quarterly or monthly water quality monitoring of upper SAR watershed wastewater discharges; investigate water quality issues originating from the upper watershed that may potentially affect the Orange County groundwater basin (e.g., PFAS, 1,4-Dioxane, chlorate, NDMA, and other emerging constituents).
- Effectively Administer Water Quality Monitoring Programs: Ensure water quality sample collection is performed with high quality and analyzed for (1) compliance with mandated drinking water quality regulations and regulatory permits, (2) District projects and investigations, and (3) evaluating the quality of the basin (e.g., seawater intrusion in coastal areas). Evaluate new emerging chemicals of concern and coordinate with the Laboratory to implement 2023-24 compliance monitoring requirements for drinking water sources, UCMR5 monitoring requirements, GWRS compliance monitoring locations, focused studies, and to ensure maximum use of resources for both departments. Work with Laboratory to schedule analyses effectively and efficiently for new changes to testing frequency within GWRS groundwater and SARMON programs.
- Efficient and High Quality Data Management Activities: Ensure new data is reviewed with high-quality assurance and approved into the WRMS database for end-users; submit Producer compliance data electronically to the SWRCB Division of Drinking Water (DDW) CLIP database; prepare GWRS compliance data for regular electronic submission to the DDW CLIP and State/Regional Board GeoTracker databases; prepare annual water quality schedules for DDW and groundwater Producers; prepare annual data summaries for groundwater producers for the Annual Consumer Confidence and triennial Public Health Goal reports; prepare annual water quality data summary for OCWD's Engineer's Report, GWRS quarterly/annual reports, and SARMON biennial report; prepare and submit Annual Industrial Stormwater report and compliance stormwater monitoring results electronically.
- Water Quality Regulatory Activities: Review proposed state or federal drinking water standards (MCL), state notification levels; evaluate potential impacts to groundwater basin monitoring requirements and Groundwater Producers, including regulatory compliance schedules; track ad comment on proposed

non-drinking water regulations relevant to OCWD's activities (e.g., state NPDES general permits, stormwater permit, etc.).

- Water Quality Protection: Activities include tracking, reviewing and addressing new chemicals of concern, evaluating basin conditions or source waters potentially used for groundwater replenishment; monitor and review media and research reports; coordinate with regulatory agencies on upcoming new water quality issues; provide field water quality monitoring support for Board approved projects that authorize construction of new monitoring wells for District projects and investigations.
- Aquatic Weed and Pesticide Control: When needed, assist Forebay Operations with implementation or monitoring associated with the continued use of non-chemical methods to address pests (e.g., midges at recharge basins) and vegetative growth at the wetlands in lieu of a chemical application. Non-chemical strategies avoid (1) coverage under the SWRCB aquatic weed and pesticide NPDES permits, (2) pre- and post-water quality monitoring and analysis of the applied aquatic pesticides, (3) preparation of regulatory reports, and (4) issues of the District applying chemicals to water bodies potentially tributary to the river and/or underlying groundwater.

V Pending Activities

Major activities that are reduced, not being implemented, or conducted include:

- Develop and implement a standardized, stream-lined process for providing water quality sample results and other data to Producers or other agencies. OCWD completes thousands of sampling events each year with thousands of analytical records created that must be reported to Producers and other agencies. These data reports are typically customized and generated with little automation. It would be more efficient to develop a secure, easy-to-access on-demand portal or reporting system that allows retrieval of these water quality records by the Producers directly.
- Implement more enhanced quality assurance data review protocols for data analysis and tracking of water quality concerns to identify developing water quality issues (e.g., increase in color, seawater intrusion, volatile organics, SAR monitoring, upper watershed, etc.); provide notification to OCWD managers and stakeholders; prepare semi-annual reports, as needed.
- Develop and prepare an annual Water Quality report of the basin (deferred for several years) – strive to prepare an initial report with multi-department input in the near future.
- Active attendance and involvement with water associations and agencies on water quality issues relevant to OCWD and groundwater Producers.

VI Staff Addition Needed for FY 2024-25

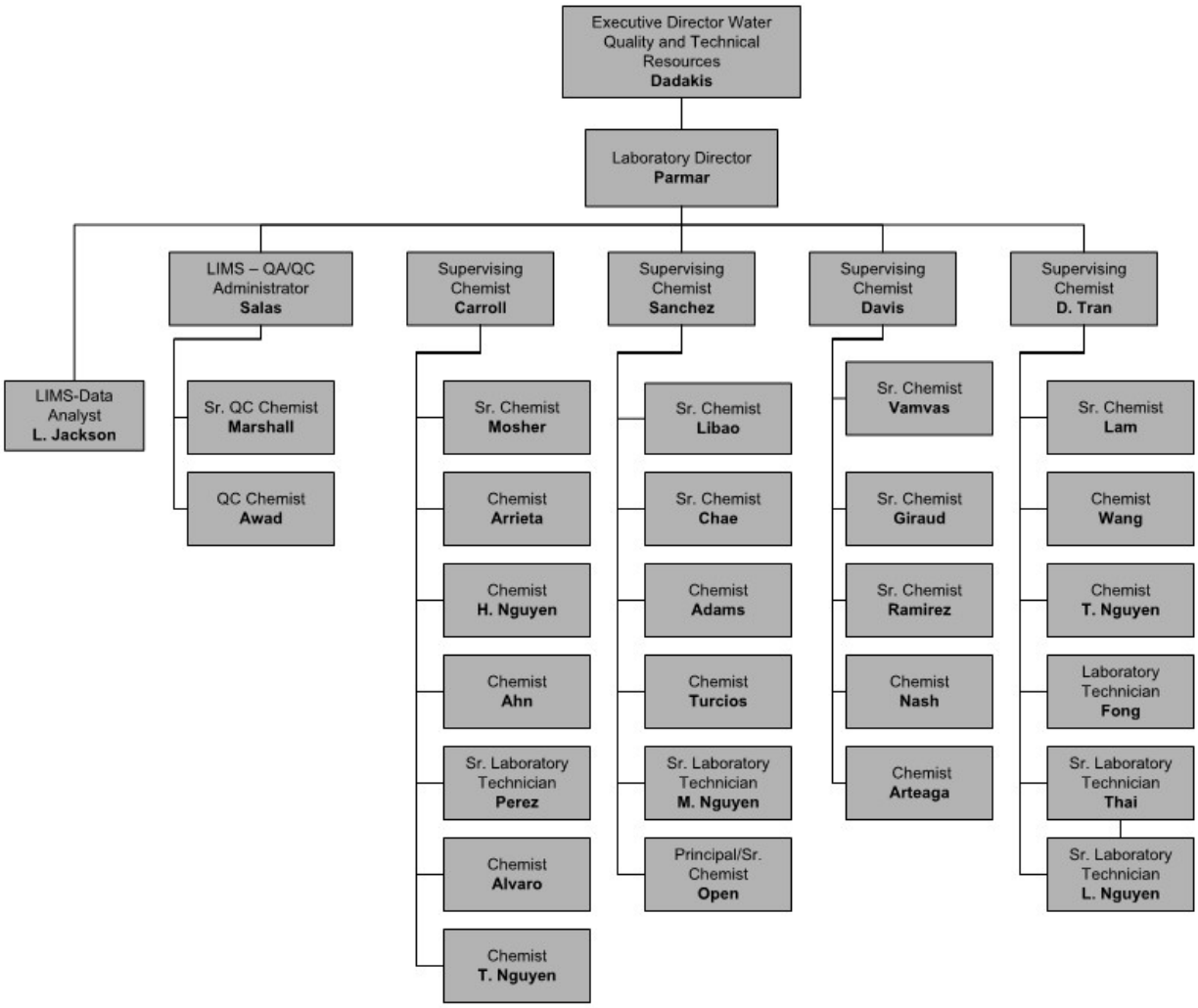
None

VII Future Issues

In the next several years, the District will need to consider the following issues and the associated resources and costs:

- Evaluate and assess resources and monitoring requirements for PFAS Treatment Facilities. The additional responsibility of performing water quality monitoring at the expanding number of PFAS Treatment Facilities on behalf of the Producers will require increased planning, coordination, and resources to meet treatment compliance requirements.
- Evaluate and assess resources and options to meet the increasing new water quality monitoring workload generated by expanding projects, new projects, focused studies, and research partnerships (i.e., PFAS, UCMR5, GWRS injection or spreading, metals mobilization, tracer studies, SBGPP, NBGPP, seawater intrusion, etc.) with existing staff.
- Evaluate and purchase more efficient sampling equipment to improve productivity with field monitoring activities, treatment of purged groundwater, and replace aging vehicles, as needed.
- Adapt to (1) increasing new regulations requiring new monitoring activities, (2) implementing new and relevant research investigations, (3) researching enhanced protocols for equipment decontamination, and (4) assuring high-quality assurance with all field tasks and activities.
- Continue to provide field support for the GWRS project that includes enhanced monitoring activities at select downgradient wells for new areas in the basin, receiving GWRS water to (1) establish baseline conditions, (2) monitor metals mobilization, and (3) evaluate/assess changes in water quality.
- Microplastics: Continue to follow and participate in microplastics workgroups and webinars to ensure OCWD and Producer preparedness for potential microplastics monitoring and reporting requirements that could be established over the next few years in California.

PHILIP L. ANTHONY WATER QUALITY LABORATORY



Summary Information

Existing Staff – 33 FTEs

1 – Laboratory Director
1 – LIMS - QA/QC Administrator
4 – Supervising Chemists
1 – LIMS - Data Analyst
7 – Senior Chemists
1 – Principal/Senior Chemist
11 – Chemists
1 – Senior QC Chemist
1 – QC Chemist
4 – Senior Laboratory Technicians
1 – Laboratory Technician

Mission

Provide high-quality, timely, and efficient analytical services to support the Groundwater Producers' groundwater source water quality monitoring and unregulated contaminant monitoring requirements, as well as the District's water quality testing needs for groundwater quality assessment, operational support monitoring, permit-required water quality monitoring, and applied research in support of Basin management activities.

Key Issues for FY 2024-25

- Laboratory Information Management System (LIMS) – Continue working with IS Department staff on ongoing internal development of Citrus LIMS software. Citrus has been designed to be fully customizable based on the needs of the laboratory and is a significant improvement upon the outdated Aspen LIMS that had been utilized previously for 20+ years. Initial development of Citrus was completed during FY 2022-23 and utilization of Aspen LIMS has been discontinued, allowing lab and IS staff to focus on operating and optimizing Citrus. During FY 2023-24, staff implemented a Citrus LIMS + WRMS cross-database barcode scanning tool for sample collection and labeling that has significantly improved the timeliness of sample data availability to lab staff and overall sample log-in efficiency from previous manual data entry procedures. During FY 2024-25, lab and IS staff will continue to build out and enhance Citrus software with internal resources to meet labs long-term LIMS requirements. Lab staff have created a three-phase plan to prioritize foundational changes and updates to the LIMS system to improve the lab's efficiency and capabilities. Major LIMS functionality improvements planned for Phase 1 to be addressed during FY 2024-25 include:
    - Expansion of the Citrus LIMS + WRMS cross-database barcode scanning tool to schedule and digitally log in GWRS plant samples collected by Operations staff.
    - Develop the ability to report lab data between the required Reporting Limit and Method Detection Limit as is increasingly required by state regulations. Within existing Citrus LIMS, this will require a significant overhaul of the current structure of the data tables and incorporate metadata to create MDL-related reports more easily.
    - Creation of new data structures to more efficiently organize samples based on status (received, prepped, analyzed, re-checked, reported, reviewed, approved). Current structures utilized in Citrus LIMS have been built based on rudimentary Aspen configurations and are significantly outdated; needed enhancements will require the writing of significant new code to identify and track the various sample status conditions. By implementing the barcode scanning functionality during FY 2023-24, LIMS is better set up to store the new statuses. Subsequently develop an updated backlog system based on these sample statuses to allow staff to identify priority samples more effectively, samples that need to be re-analyzed, etc.
    - Improve reporting tools and forms for improved exporting of preliminary lab data in a readable format that is more comprehensive and understandable for non-lab users.

- Continue improvements to the Manual Entry Tool (MET), which utilizes tablet data entry at the bench to upload data directly into LIMS to avoid traditional multi-step data recording and entry practices. Develop and execute a plan to standardize improvements made later in the MET process across methods that were implemented earlier in FY 2023-24.
- Ensure any changes to the lab's analytical methods from internal and external audits can be effectively implemented in Citrus (new RDLs, new blank limits, new QC Type codes for MDL tool).

- Continued compliance with TNI 2016 Standards – In May 2020, the State Water Board's Environmental Laboratory Accreditation Program (ELAP) adopted a new set of laboratory regulations known as the TNI 2016 Standards. In FY 2023-24, the lab became compliant with these new standards prior to the January 1, 2024 deadline. This new set of regulations is designed to be the basis for accreditation for all environmental and water testing laboratories in California. As part of these new regulations, lab staff will need to continue its development of quality systems for the management of document control, traceability of analyses, verification of method and analyst capabilities, purchasing, and more.
  - Regularly revise the lab's Quality Assurance Manual to comply with TNI regulations and to document current lab practices.
  - Continue to develop a coherent architecture of subfolders for the lab's dedicated LabDrive, locking them to avoid unauthorized editing, and migrating the files from existing NLab drive.
  - Continue annual review for all lab technical and non-technical SOPs.
  - Continue to improve upon existing internal audit schedules and checklists. Investigate the possibility of hiring a third party to assist in performing internal audits.
  - Continue to utilize Ideagen Quality Management software to assist on document control and tracking of the many new documents required for TNI compliance.
  - Continue to develop tools and workflows in Citrus LIMS to comply with TNI traceability requirements.
- Federal Unregulated Contaminant Monitoring Rule – UCMR – All Groundwater Producers with > 10,000 service connections must complete the EPA UCMR 5 monitoring requirements from 2023-2025. EPA Methods 533 and 537.1 for PFAS analysis have been included in the final UCMR 5 (2023-2025), as well as lithium analysis by EPA 200.7. The lab began monitoring the UCMR 5 program in March 2023 and will continue monthly until the end of 2025.
- GWRS Permit & Operational Support – The lab continues to generate operational and permit compliance data in support of the GWRS project. While adoption of a new Regional Board permit associated with the GWRS Final Expansion in December 2022 has resulted in a net reduction of GWRS-related monitoring (e.g., quarterly monitoring well sites reduced from 53 to 39) regular operational and compliance monitoring continues to represent a significant workload for the lab, particularly as the quality of the sample matrix changes dependent on the source

water received from OC San. Laboratory staff members continue to coordinate sample loads, emerging chemical compounds, and investigations with the Water Production and Water Quality departments, as well as other departments and OC San.

- Per and Polyfluoroalkyl Substances (PFAS) Monitoring for Drinking Water Samples - In response to DDW-issued 4th round monitoring orders, effective in the first quarter of 2023, many Producers well sites have and will continue to be tested for PFAS compounds. The lab has also been tasked with providing monitoring data for the extensive Producer PFAS wellhead treatment facilities that began to come online in 2021 and are continuing to be constructed within the District's service. Additionally, new, lower federal Maximum Contaminant Levels are expected to be issued by the EPA for a number of PFAS compounds that will initiate further construction and subsequent testing. In addition, the lab is continuing to provide analytical data to support the District's base wide PFAS monitoring efforts, as well as piloting new treatment techniques for the remediation of PFAS. In response to the expected increase in PFAS analytical workload, the lab has continued to train additional staff to perform these complex extractions and analyses, utilizing three LC-MS/MS instruments in tandem.
- PFAS Research & Development - Planned work for FY 2024-25 will include ongoing sampling in support of research related to PFAS in various grant supported studies.
- GWRS Optimization Research & Development – The lab continues to support GWRS–related applied research led by the Research & Development (R&D) Department. Ongoing support includes water quality testing of potential replacement RO membranes during their 6-12-month trial periods. Ongoing grant-funded research projects requiring lab support include those supported by the Water Research Foundation (WRF) and the US Bureau of Reclamation (USBR).
- Santa Ana River Monitoring (SARMON) Program – The SARMON program requires monthly, quarterly, and annual testing at surface water and groundwater monitoring sites for a wide range of inorganic, organic, and microbiological contaminants. Related to SARMON, OCWD has embarked on an effort to better characterize sources of PFAS in Santa Ana River water, particularly storm flow, and these efforts are likely to continue in FY 2024-25.
- Upgrade Laboratory Washroom – The laboratory washroom cabinetry and fixtures primarily made of stainless steel have become severely rusted over due to usage since the opening of the lab building in 2009. During FY 2021-22, staff budgeted $300,000 to address the damaged areas of the room. Following multiple evaluations of the space, through the RFP process staff hired an outside consultant to help redesign the washroom to ensure all updates to the fixtures and new equipment installed comply with necessary OSHA guidelines. Design drawings and cost estimates were completed during FY 2023-24 and construction costs are estimated to increase to properly address all safety and design upgrades that are required. Staff plan to issue an RFP to begin construction of the washroom space during FY 2024-25.

Account Information	FY 2022-23 Actual	FY 2023-24 Budget	FY 2024-25 Proposed Budget
Salaries and Benefits	4,781,867	5,139,170	5,814,449
Services and Supplies	1,806,271	1,717,555	1,964,190
Total	**$6,588,138**	**$6,856,725**	**$7,778,639**

I FY 2024-25 Major New Initiatives/Programs

- Investigate the ability to automate the EPA 522 and EEA 521.1 methods extraction using the Promochrom SPE-03 system (already used for PFAS methods) to increase efficiency and reduce staff labor time and solvent usage. Consider the possibility of combining both methods into one for purposes of discretionary monitoring of NDMA and 1,4-dioxane together.
- Investigate the possibility of a direct injection method for analysis of pharmaceutical and personal care products (PPCPs) to reduce effort and cost applied towards sample extraction.
- Investigate the possibility of a direct injection method for analysis of PFAS to utilize as a screening tool for discretionary monitoring where sample results are not utilized for compliance purposes.
- Prepare to lower reporting limit capabilities for multiple trace metal elements such as hexavalent chromium, arsenic, lead, and mercury in response to proposed State updates to Detection Limits for Purposes of Reporting (DLR) expected to be required in 2024.

II Core Activities

The Philip L. Anthony Water Quality Laboratory provides cost-effective analytical services in support of all monitoring programs and projects required by the District. Water quality data generated by the laboratory provides critical analytical information needed to make timely, accurate decisions for regulatory requirements as well as the direction and support of District policies. Our facility is certified by the State of California and US EPA.

Basic core laboratory activities include:

- Support Groundwater Producer's required drinking water quality compliance testing and source assessments.
- Support for GWRS, Green Acres Project (GAP), and North Basin EW-1 facilities with monitoring for both permit compliance and operational support.
- Support the District's basin-wide groundwater and surface water monitoring programs to provide information supporting basin management. Ensure proper method compliance with state and federal drinking water requirements. Protection of the Basin and the SAR through analytical monitoring.
- Method development using existing methods for emerging contaminants and water quality issues for both GWRS plant and basin-wide concerns.

- Procurement of needed analytical State Certifications with the SWRCB, as well as the development of any needed EPA methodology. Support federal monitoring programs as requested by the Groundwater Producers approved by District management – UCMR.
- Support investigations in both treatment research and in-house analytical methodologies. Provide solutions to improve cost-effectiveness both within plant processes as well as with laboratory procedures.

III Non-Core Activities

The Laboratory's support has always been focused on core activities without many non-required duties. This has been based on years of natural growth in workload, which has caused non-essential tasks to be minimized. Non-core activities (secondary priority compared to core activities) conducted by the Laboratory group include:

- Applied research activities to develop new uncertified research analytical methods.
- Support for public relations tours.

IV Group Goals for FY 2024-25

New Instrumentation:

- A new IC-MS instrument will be required to replace the existing 9-year-old unit that is no longer supported by the manufacturer. This instrument will be utilized for perchlorate analyses in support of Groundwater Producer compliance monitoring requirements, GWRS monitoring requirements, and many other District monitoring programs.
- A new IC instrument is needed to provide redundancy for the lab's anions analyses currently performed solely using an existing 5-year-old instrument that operates daily. The lab conducts anions monitoring primarily in support of Producer Title 22 compliance requirements, as well as the Coastal and Talbert Barrier monitoring programs.
- Two new Promochrom SPE-03 automated extractors and TurboVap concentrators are needed to support an expected increase in PFAS monitoring for Producer treatment facilities.
- A new double-door scientific refrigerator will be required to replace the oldest of 19 fridges in the lab used to store field samples. The refrigerator to be replaced is over 20 years old and has reached the end of its useful life.

Building Upgrades:

- Continue with in-progress redesign and refurbishment of the laboratory washroom stainless steel fixtures. With design plans now completed, an RFP will be issued for construction in FY 2024-25.

GWRS Operational, Research, and Compliance Support:

- The Division of Drinking Water may require the lab to regularly use more labor-intensive methods such as EPA 522 for the analysis of 1,4-dioxane at the part-per-

trillion level and EEA 521.1 for the analysis of nitrosamines such as NDMA and NMOR. The laboratory will investigate the capabilities of existing automated extraction units for their viability to complete the required sample preparation more efficiently for this method. Additionally, the lab will work with ELAP and DDW to investigate a pathway towards receiving accreditation for District-developed in-house methods to be approved for this required monitoring.

SWRCB-ELAP's TNI 2016 Quality Standard:

- As previously referenced, the SWRCB has adopted the TNI 2016 standards and full compliance will be required 2024. The lab received its most recent ELAP audit in June 2023 and will be assessed to TNI standards from this point forward. During FY 2024-25, the lab will continue implementation of the findings identified during the June 2023 audit, while also working to refine various aspects of the lab Quality System with an eye towards continuous improvement. Lab staff will continue to use Ideagen Quality Management software to help with the document control and management required to comply with the new TNI standards.

V Pending Activities

Major activities not being fully supported include:

Outsourced monitoring:

- EPA 548.1 (endothall), EPA 508 (organochlorine pesticides), EPA 515.4 (chlorinated phenoxy acid herbicides), and EPA 556 (formaldehyde), bacteriophage, radioactivity, asbestos, and dioxin monitoring needs are sent out to contract laboratories. This is currently a cost-efficient approach by reducing chemical costs, and staff overtime as many of these tests are required infrequently, especially after recent monitoring program reviews and careful reductions of discretionary monitoring. Based on current sample loads, phenoxy acid herbicides, endothall, and formaldehyde, phage testing does not appear to have an increased focus within District monitoring programs, which would require in-house monitoring.

Research Activities and Agency Meetings:

- The Laboratory continues to provide limited support of District research activities. However, these support requirements must continue to be coordinated with available laboratory resources.

Emerging Contaminant Method Development and Improvement – The laboratory seeks the following improvements and enhancements to its current emerging contaminant methods:

- Lowering the detection limit for sucralose from 100 ppt to 10 ppt or lower, in support of RO removal efficiency demonstration.
- Assessing the possibility of using direct injection for the CEC method to enhance throughput by avoiding sample extraction prior to analysis. Typically, direct injection does not permit the same level of accuracy and sensitivity at very low concentrations yet may be suitable for many District samples. However, newly installed instrumentation during FY 2022-23 may have increased sensitivity to maintain the lab's current reporting limits even without sample extraction/concentration.

VI Staff Additions Needed for FY 2024-25

None

VII Future Issues

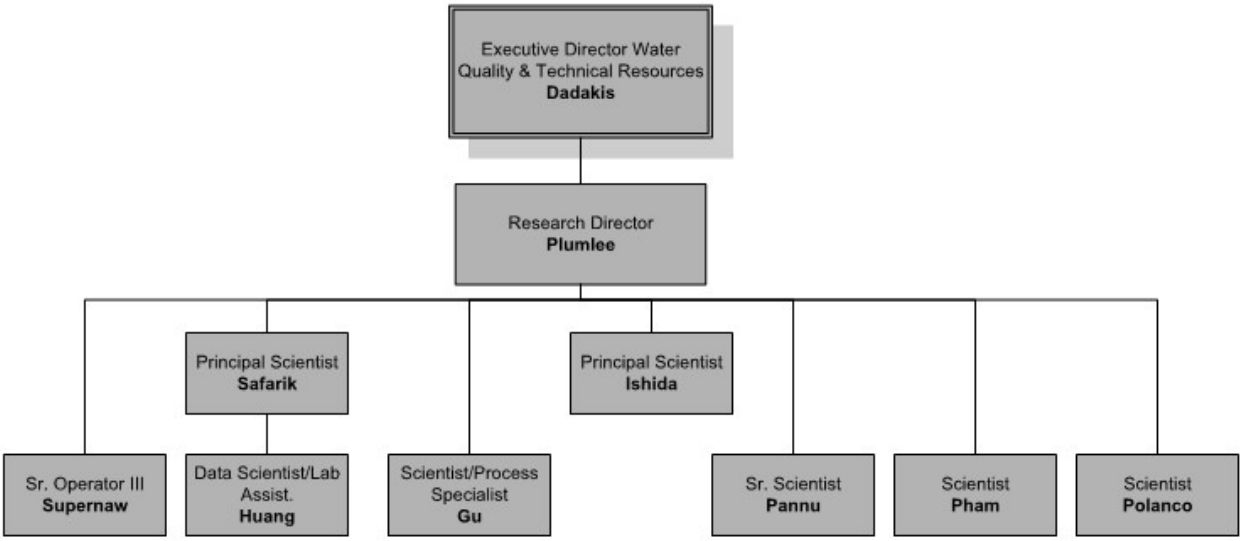
In the next two to three years, issues the District will need to consider include:

- The current lab building is approaching 15 years old, having opened for operation in 2009. Lab management is continuing to assess and more formally determine a replacement schedule for the building's large array of operational equipment. This will include items such as refurbishing existing corroded plumbing throughout the building, ventilation, and vacuum systems, the small-scale reverse osmosis system used to generate lab-grade deionized water for use throughout the lab, and other equipment that is now approaching the end of usable life.
- Continued laboratory support of the Unregulated Contaminant Monitoring Rule (UCMR). UCMR 5 monitoring will run from 2023 until 2025; an annual program audit by EPA and method compliance will be required within the next several budget cycles. The lab began monitoring this program in March 2023.
- Conditions may arise where we need to develop a more sensitive analytical method for 1,4-dioxane, PFAS, sucralose, pharmaceuticals, and other synthetic chemical compounds. LC-MS/MS or GC-MS/MS systems could be utilized to achieve these lower reporting levels.
- The District continues to strengthen our interactions and communications with Orange County Sanitation District's laboratory and source control programs. This relationship has benefited many of the water quality monitoring and characterization projects that have impacted our processes: NDMA formation study, 1,4-dioxane source control, chemicals of emerging concern (CECs), PFAS, etc. We continue to see potential benefits in collaboration and regulatory alignment with OC San divisions, as we further investigate new targets evaluating GWRS performance following the final expansion.
- Constituents of Emerging Concern (CECs) continue to receive political attention as a significant water quality issue. As our laboratory supports the monitoring of this issue, it is important to develop a proper priority setting process by which targets are brought on-line within our analytical monitoring programs. CEC monitoring requires significant analytical support and technical expertise using highly sensitive analytical systems such as LC-MS/MS, IC/MS, and GC/MS/MS, and an enhanced target selection process is needed to effectively keep analytical resources properly addressed.
- Microplastics monitoring may be required in drinking water and more widely required by the Producers in the coming years, with the California State Waterboard currently investigating the health effects of microplastics in drinking water. In September 2021, SWRCB adopted two standardized methods for microplastics analyses by Raman and infrared spectroscopy. Anticipated FY 2024-25 monitoring requirements in the District's service area are expected to be limited to surface water treatment sites and thus would not fall within the District's monitoring obligation for the Groundwater Producers' source groundwater monitoring requirements. However, the lab may need to evaluate the ability to perform these analyses or outsource to a

commercial laboratory should state monitoring requirements expand to recycled water or groundwater.

- Ultra-inert helium gas utilized for nearly all the lab's GC and GC/MS instrumentation continues to be in short supply. The lab will need to consider the possibility of transitioning all analyses to hydrogen gas, whether through compressed air tanks or via purchased gas generators. Currently, the lab utilizes one small-scale hydrogen generator to operate one GC-ECD for DBP analysis. A much larger scale generator would be required to power the other 11 instruments needing this type of carrier gas.

RESEARCH AND DEVELOPMENT



Summary Information

Existing Staff – 9 FTEs

1 – Research Director
2 – Principal Scientists
1 – Senior Operator III
1 – Senior Scientist
1 – Scientist/Process Specialist
2 – Scientists
1 – Data Scientist/Lab Assistant

Mission

Conduct applied research that supports the District's operational, regulatory, and water quality objectives through innovation, technology evaluation, development of new or improved processes and methods, and collaboration with universities and topic experts.

Key Issues for FY 2024-25

- Ongoing evaluation of treatment technologies for removal of per-and polyfluorinated alkyl substances (PFAS) from groundwater and other related PFAS research studies. This will include continuing the ongoing PFAS adsorbent media pilot testing for groundwater as well as efforts in treating surface water for managed aquifer recharge (MAR) applications as well as PFAS destruction. Alternative technologies will continue to be reviewed for potential piloting by R&D.
- In cooperation with Water Production staff, continue research in microfiltration/ultrafiltration (MF/UF), reverse osmosis (RO), and ultraviolet

(UV)/advanced oxidation process (AOP) issues at the Advanced Water Purification Facility (AWPF) that affect the Groundwater Replenishment System's (GWRS) efficiency to help manage GWRS operation and maintenance (O&M) costs and enhance water quality.

- Conduct new or continuing grant-support studies to determine if additional GWRS pathogen (e.g., virus) log removal value (LRV) credits can be documented, namely for the soil aquifer treatment process, as well as ongoing support to regulatory and plant staff related to R&D's prior studies on LRV for the RO and OC San wastewater treatment process.
- Continue to address focus areas recommended by the NWRI GWRS Independent Advisory Panel (IAP). This will include high throughput sequencing (metagenomics) for water quality assessment, and pathogen log removal credits for soil aquifer treatment.
- Continue to seek collaborative partnerships with other research groups (academic and industry) and funding agencies capable of expanding the scope of groundwater recharge, PFAS treatment, and advanced water treatment research at OCWD.

Account Information	FY 2022-23 Actual	FY 2023-24 Budget	FY 2024-25 Proposed Budget
Salaries and Benefits	1,525,772	1,875,382	1,703,538
Services and Supplies	356,920	394,855	526,380
Total	**$1,882,692**	**$2,270,237**	**$2,229,918**

I FY 2024-25 Major New Initiatives/Programs

- R&D will serve as a testbed for three new partner-led projects focused on optimization of RO. Two of these projects (Hazen-led, grant-funded; UC Irvine-led, grant-funded) focus on artificial intelligence (AI) and machine learning (ML) methods to optimize RO operation to reduce energy and cost. One project (Rice University / University of Texas, Austin-led, grant-funded) focuses on addressing RO biofouling. These projects were previously awarded; grant-related contracting is now complete hence first-year testing will occur in FY 2024-25.
- R&D will carry out a new grant-funded research study to evaluate the removal of PFAS from GWRS RO concentrate using IX and other adsorbents via pilot testing and subsequent destruction of PFAS by electrochemical oxidation (EO).
- R&D will collaborate on a new partner-led phase of work on Particle-Induced Gamma Ray Emission (PIGE) to scale up the technology for PFAS analysis and evaluate field deployable water sampling devices.
- R&D will pursue modernization of the RO satellite vessels used for membrane evaluations and the development of an online dashboard for in-house pilots, as related to the Department's ongoing efforts to modernize its Engineering Research Center.

II Core Activities

- Solve problems and research promising technologies to improve GWRS treatment processes, water quality, groundwater recharge, and injection. This includes piloting new technologies and evaluating new analytical methods for detecting contaminants and pathogens.
- Provide support and implementation of strategies to improve percolation for groundwater recharge for both GWRS and Santa Ana River (SAR) flows and increase capture and recharge of SAR flows via more efficient recharge practices.
- Report research progress internally via inter-departmental communications, reports, and via participation in the Recharge Enhancement Working Group (REWG).
- Report research progress externally via publishing and presenting of research findings. R&D will continue outreach and publication of R&D work for the public, as suggested by the Board of Directors, in collaboration with Public Affairs. This will include presentations via the OCWD webinar series.
- Seek external funding.
- Continue Postdoctoral Research Program, which began in FY 2016-17, to conduct research that supports the District's core objectives.

III Non-Core Activities

- Participate in scientific advisory panels, research advisory boards, and research project advisory committees (PACs).
- Provide consulting information to other water agencies, utilities, and regulatory agencies.

IV Group Goals for FY 2024-25

GRANT FUNDED RESEARCH:

R&D continually seeks external research funding from various organizations, often partnering with universities, engineering consulting firms, other utilities, or technology providers to develop proposals.

For FY 2024-25, the following projects have already been funded wholly or partially through external grants, including funding for OCWD labor and/or equipment/supplies:

- ***Evaluation of Bench-Scale Methods to Predict Drinking Water PFAS Removal Performance of Ion Exchange and Novel Adsorbents at Pilot- and Full-Scale*** *[2022 to 2025]* – This project was funded by The Water Research Foundation (WRF) Tailored Collaboration program for an initial 1.5 years with the contract's official start date in early 2022. The project contract was extended into 2024 to allow completion of research tasks for an awarded add-on grant to this project. The project lead is OCWD in collaboration with WQTS (Water Quality and Treatment Solutions) and Jacobs Engineering. This research evaluates a newly available and rapid laboratory method known

as Recirculating Column Isotherm (RCI) to assess IX and novel (alternative) adsorbent performance. This research compares RCI and other laboratory-scale methods, rapid small-scale column testing (RSSCT) and Bottle Point Isotherm (BPI), with pilot-scale data or where available, and full-scale performance data, for IX, and alternative adsorbents. In FY 2024-25, GWRS RO concentrate will be tested using one or more of these techniques, the WRF final project report will be developed, and a journal publication drafted.

- ***Assessment of Multi-Metals Continuous Water Analyzer Based on ED-XRF to Monitor Reverse Osmosis Performance in Potable Water Reuse*** *[2022 to 2024]* – This project is funded by the United States Bureau of Reclamation (USBR) Desalination and Water Purification Research Program Pitch to Pilot for 1.5 years with a contract official start of June 1, 2022. The project lead is OCWD in collaboration with Sailbri Cooper Inc. This project evaluates the benefits and limitations of using a novel online continuous multi-metals water analyzer, Xact 920 to (1) measure strontium to determine RO integrity, and (2) continuously measure mineral scale-forming analytes such as Fe, Si, Ca, S, and P in RO feed water. This novel technology has the potential to increase monitoring efficiency, since water utilities such OCWD will not have to rely on manual grab samples. Data collection was completed in FY 2023-24. In FY 2024-25, the USBR project report will be finalized and a journal publication developed.

- ***Data-Driven Fault Detection and Process Control for Potable Reuse with Reverse Osmosis*** *[2022 to 2025]* – This project is funded by the National Alliance for Water Innovation (NAWI), a Department of Energy (DOE)-funded Research Hub. The project lead is Carollo Engineers in collaboration with OCWD, Yokogawa, West Point, NWRI, Baylor University, and other partners to develop artificial intelligence (AI)-based optimization methods applicable to potable reuse treatment facilities. The cloud or edge-based, semi-autonomous machine learning (ML) technology will be implemented at pilot-scale in FY 2023-24 and FY 2024-25 as Phase/Year 2 of the project at the District's Engineering Research Center (ERC) based on Carollo's data analysis findings from Year 1.

- ***Evaluation of Passive Treatment to Remove PFAS During Groundwater Recharge*** *[2023 to 2025]* – This project is funded by USBR's Desalination and Water Purification Research Program Pitch to Pilot for 1.5 years with a contract start date of March 2023. This project is led by OCWD in partnership with Colorado School of Mines and Jacobs Engineering. The study assesses the ability for adsorbent (media) technologies to remove PFAS in situ in recharge ponds and related infiltration systems (e.g., OCWD's existing pilot riverbed filtration system) during managed aquifer recharge (MAR) of infiltrating surface water (i.e., shallow groundwater) at pilot and demonstration scale. In FY 2024-25, a column system modified from FY 2023-24 to address clogging will continue to be operated as a pilot test to evaluate media treatment of surface water from Warner Basin. The columns also feature

native sand as pre-treatment and employ low flow rates to represent environmental percolation providing longer than typical media contact time.

- ***Real-Time Detection of Volatile Organic Compounds in RO-Based Potable Reuse*** *[2023 to 2025]* – This project is funded by WRF for a two-year contract that began 2023. This project is led by Entanglement Technologies and Southern Nevada Water Authority. OCWD serves as the test site to demonstrate a novel online analyzer developed by Entanglement Technologies for measuring VOCs in the advanced purification treatment train for potable reuse. In FY 2024-25, work will transition from analyzer optimization by Entanglement in their laboratory using OCWD water to begin testing the analyzer at OCWD installed on an RO pilot and/or full-scale RO unit.
- ***Pilot-Scale Evaluation of RO Concentrate (ROC) PFAS Treatment by Adsorption and Electrochemical Oxidation*** *[2023 to 2026]* – This project is funded by USBR's Desalination and Water Purification Research Program Pitch to Pilot for 1.5 years with an estimated contract start date of July 2024. This project is led by OCWD in partnership with Kennedy Jenks, Ovivo, and E2Metrix to evaluate removal and destruction of PFAS in RO concentrate (ROC). At pilot scale, this project will evaluate the effectiveness of adsorbent media such as granular activated carbon (GAC), ion exchange (IX) resins, and novel alternative adsorbents (first step) followed by destruction of the PFAS (second step) via an electrochemical oxidation approach after PFAS extraction from the spent (exhausted) media.
- ***Use of Colloidal Particle Monitoring for Microfiltration/Ultrafiltration Optimization in Water Reuse Facilities*** *[2023 to 2025]* – This project is funded by USBR's Desalination and Water Purification Research Program and began in 2023. The project is led by Kennedy Jenks in partnership with OCWD and Hyperion Analytical to evaluate Hyperion's novel Nanoparticle Tracking Analysis (NTA) instrument to support operation of microfiltration (MF) or ultrafiltration (UF) for potable reuse treatment systems. OCWD is serving as the test site for this study which seeks to field test the technology to: i) directly measure the colloidal particles (i.e., nanoparticles) composition (concentration and size distribution) in MF/UF feed water to facilitate smart backwashing (i.e., colloidal particle count-based backwashing rather than current full-scale GWRS plant approach of fixed time-based backwashing) to minimize membrane fouling; and ii) evaluate use of nanoparticles as a surrogate for pathogen removal for membrane integrity monitoring via online water quality (nanoparticle) monitoring. In FY 2024-25, the project team will evaluate the use of particle counts for integrity monitoring and for informing UF backwash cycle frequency using a UF pilot and develop the project's final report.

- ***Improving RO Recovery through Optimization of Flux and Pump Usage with Real-Time Sensor Connectivity, Data-driven Modeling, and Automation*** *[2023 to 2025]* – This project is funded by USBR's Desalination and Water Purification Research Program Pitch to Pilot for 17 months with a contract start date of April 2023. The project is led by Hazen (engineering consulting firm) in partnership with OCWD and University of Delaware. Currently, data gathering and analysis of RO system performance is largely a manual process and RO trains operate under steady-state conditions without real-time adjustments for flow, pressure, and membrane flux. This conservative design approach, aimed at maximizing water recovery while preventing scaling or fouling, restricts opportunities for efficient operation. The goal of this project is to use connected sensors and real-time data acquisition coupled with machine learning (ML) and the latest in process automation to develop predictive algorithms with automated advisory process controls that can optimize pump energy, membrane flux (i.e., production), RO recovery and RO feed acid dosing and antiscalant dosing to reduce energy, maximize production, and minimize chemical costs while maintaining membrane condition by minimizing fouling and scaling. The technical approach involves building real-time data connectivity and dashboards, developing artificial intelligence (AI)/ML models and automation control strategies, and deploying an AI-based automated system at pilot scale as an advisory support tool. In FY 2024-25, the project team will initiate the project including development of a GWRS RO dashboard and in parallel, an RO pilot dashboard. The latter will support data viewing and predictive analytics for a pilot that (unlike a full-scale plant) can be manipulated according to analysis recommendations.
- ***A Convergent Monitoring Platform for Dynamic Characterization of Reverse Osmosis Membrane Fouling and Demonstration of Innovative Control Strategies*** *[2024 to 2025]* – This project is funded by NAWI and led by Rice University and the University of Texas. OCWD is a subawardee and serving as the test site for this study to characterize RO biofilm maturation dynamics. Other partners are UT Knoxville, ORNL, Carollo, as well as partners representing technologies to be tested, Noria Water and NALA Membranes. In FY 2024-25, among other biofouling-related tasks, the research team will evaluate data from a membrane fouling simulator (MFS) developed by the research team and installed on the District's full-scale RO system feed line.
- ***Particle-Induced Gamma Ray Emission (PIGE) as a Novel Method to Measure PFAS in Water*** [*2024 to 2026]* – This two-year project is funded by the United States Environmental Protection Agency (EPA) Small Business Innovation Research (SBIR) program and is led by a start-up company founded by researchers from the University of Notre Dame. OCWD is a subawardee. An earlier phase of the project was funded by WRF for the University of Notre Dame and OCWD to demonstrate the university's Particle-Induced Gamma Ray Emission (PIGE) method as a practical tool to estimate concentration of total PFAS content in water samples, reported as total

adsorbable organic fluorine (AOF). In FY 2024-25, the new phase of work will evaluate the use of a field-deployable water sampling device developed for use with PIGE.

OTHER RESEARCH:

The projects below are funded/supported internally by OCWD without external grant funding. For some projects consisting of collaboration between OCWD R&D Department staff and a university or technology partner, the project partner may have grant funding that does not include the District, or OCWD may provide funding to the partner to support the research. This is indicated in the summaries below, where applicable.

AWPF PROCESS OPTIMIZATION:

- **AWPF Support** – R&D will continue to engage in short-term research activities on an ad-hoc basis to assist the Water Production and Engineering Departments in testing new approaches and solving problems arising during operation of the AWPF. Examples of applied research under this activity have included:
  - Autopsy (microbial and chemical analysis) of fouled MF and RO membranes from the AWPF and Engineering Research Center (ERC).
  - Advisory support and equipment for controls and sampling apparatus for ongoing AWPF RO bacteriophage monitoring.
  - Annual reports and presentations to the NWRI Independent Advisory Panel (IAP) regarding GWRS performance.
  - Assisting Engineering and Water Production staff to determine mechanisms and solutions for GWRS Pipeline and Barrier Pipeline lining erosion.
  - Assisting Water Production staff to determine mechanisms and source(s) of MBI well fouling.
- **MF/UF Performance/Fouling Research** – R&D will continue to investigate methods to understand and address MF/UF fouling and performance issues. Beyond the MF/UF colloidal particle research noted previously under grant funded studies, in FY 2024-25 this will include:
  - Investigation of the use of alternative (non-chloramine) biocides such as hydrogen peroxide based on findings from grant-funded work completed previously. This work demonstrated that at pilot-scale, use of hydrogen peroxide as a replacement of chloramine in the UF feed performs very favorably (compared side by side with a control UF pilot that utilized standard chloramine) over a long-term study, i.e., lower transmembrane pressure and significantly prolonged membrane cleaning intervals. Staff will pursue full-scale testing if possible.

- As well as evaluation of alternative cleaning chemicals proposed by vendors for UF, MF, and RO. Grant funding may be sought.
- Investigation of MF feedwater fouling potential using online and laboratory analysis tools such as total organic carbon (TOC), Peak C (humics), excitation emission matrix (EEM) and liquid chromatography-organic carbon detection (LC-OCD).
- **Use of Colloidal Particle Monitoring for Microfiltration/ Ultrafiltration Optimization in Water Reuse Facilities** *[2023 to 2025]* – This project is funded by USBR and was noted previously under the section "Grant Funded Projects".

- **RO Performance/Fouling Research** – In addition to grant funded studies related to RO (see previous section) and plant- or pilot-scale (ERC) RO studies (see next section), R&D will continue other investigations of RO performance and fouling. For FY 2024-25, this includes:
  - **Process Control and Optimization of RO Plants Enabled by Direct RO Membrane Monitoring** [*2018 to 2024*] – The Noria Water Technologies RO Spotlight™ uses online, direct membrane surface imaging to track surface coverage and permeate flux changes. OCWD R&D has collaborated with Noria Water for several phases of testing. The goal of the ongoing phase is to demonstrate RO Spotlight™ use in the GWRS AWPF RO facility (full-scale test) for real-time membrane surface scale monitoring with installation at RO unit E01 concentrate line. In FY 2024-25, Noria Water will lead a related study using the RO Spotlight™ in collaboration with District R&D based on USBR funding awarded to Noria Water with OCWD as the host test site.
  - **Pilot Evaluation of High Recovery Flow-Reversal Reverse Osmosis for Municipal Potable Reuse (USBR and SCSC)** *[2021 to 2024]* – This project was previously funded by a USBR Desalination and Water Purification Pitch to Pilot grant awarded to AdEdge Water Technology LLC (now Chart Industries) and a supplemental grant from Southern California Salinity Coalition (SCSC) awarded to OCWD. The grant-funded phase of work was completed in FY 2023-24 and evaluated the feasibility of flow-reversal reverse osmosis (FR-RO) to increase the RO process recovery at GWRS AWPF. In FY 2024-25, staff will prepare a journal manuscript to publish the findings, and the District may initiate a next phase of testing at full-scale subject to cost and GWRS plant performance.
  - **Assessment of Multi-Metals Continuous Water Analyzer Based on ED-XRF to Monitor Reverse Osmosis Performance in Potable Water Reuse** *[2022 to 2024]* – This project is funded by USBR and was noted previously under the section "Grant Funded Projects".

- **Data-Driven Fault Detection and Process Control for Potable Reuse with Reverse Osmosis** *[2022 to 2025]* – This project is funded by NAWI and was noted previously under the section "Grant Funded Projects".
- **Real-Time Detection of Volatile Organic Compounds in RO-Based Potable Reuse** *[2023 to 2025]* – This project is funded by WRF and was noted previously under the section "Grant Funded Projects".
- **Improving RO Recovery through Optimization of Flux and Pump Usage with Real-Time Sensor Connectivity, Data-driven Modeling, and Automation** *[2023 to 2025]* – This project is funded by USBR and was noted previously under the section "Grant Funded Projects".
- **A Convergent Monitoring Platform for Dynamic Characterization of Reverse Osmosis Membrane Fouling and Demonstration of Innovative Control Strategies** *[2024 to 2025]* – This project is funded by NAWI and was noted previously under the section "Grant Funded Projects".

- **Advanced Oxidation Process (AOP) Studies** – On an ongoing basis, R&D completes research aimed at characterizing the chemical dynamics of the GWRS UV/H_2O_2 process and optimizing the performance of the Trojan Technologies UVPhox reactor train through UV pilot reactor studies. In FY 2024-25, AOP research is subject to potential hiring of R&D Postdoctoral Research Associate depending on their area of specialization.

- **Water Quality Characterization at AWPF** – Planned studies related to water quality characterization include:
  - **Characterization of Microbial Communities at AWPF Using Metagenomics** *[2022 to 2024]* – R&D staff are utilizing instrumentation acquired in 2020 to perform DNA sequencing and evaluate new methods for characterizing and quantifying the occurrence of different microbial targets (e.g., bacteria, viruses, and protozoa) that make up the microbial community of GWRS through different treatment stages. This effort will build on prior grant-funded studies and address NWRI IAP encouragement to sequence and evaluate metagenomes (DNA of the microbial population) taken from GWRS water samples. Staff will continue to seek grant funding for this work as well as identify laboratory partners that could provide cost-effective related analysis (e.g., OC San; UC Irvine).

PILOT- AND FULL-SCALE TESTING AT AWPF AND ENGINEERING RESEARCH CENTER:

Pilot- or full-scale testing conducted by R&D Department staff at the AWPF or Engineering Research Center (ERC) is summarized below. These projects tend to be very applied and focused on the demonstration of a technology, operational

approach, or product. Pilot/full-scale studies with grant support were noted in an earlier section.

A list of equipment and systems supporting these activities is presented in Table 1.

- **Low-Pressure Membrane (MF and UF) Pilot-Scale Product Evaluation Program for AWPF** *[2015 to present]* – Over FY 2015-20**,** this program evaluated six low-pressure membrane products (i.e., microfiltration [MF] and ultrafiltration [UF] membranes) for the GWRS to support a product selection decision for the 30-mgd GWRS Final Expansion (GWRSFE). Long-term piloting evaluations for UF products were completed at the OCWD Engineering Research Center (ERC) as well as at OC San Plant No.2 (P2). UF testing at the ERC has not been pursued recently due to focus on other pilot studies as well as ERC pilot upgrades budgeted for FY 2023-24. In FY 2024-25, UF pilot testing will be completed as needed such as to optimize operations given the relatively new (December 2022) AWPF feed water blend related to GWRSFE and would use the new MF/UF pilot from Memcor/Evoqua. The new pilot (UF3) will be commissioned in late FY 2023-24 or FY 2024-25. Other UF piloting for FY 2024-25 may include testing a directly retrofittable UF module from Toray.

- **Antiscalant Testing Program and 3rd Stage RO Monitoring** *[2008 to present]* – The GWRS RO system requires specialty chemicals, including antiscalant and acid, to prevent the precipitation of sparingly soluble minerals that scale the membranes. R&D will continue pilot-scale testing of selected antiscalant products after commissioning the FY 2023-24 upgrades to new RO pilot (RO4) and existing RO pilot 3 (RO3). R&D will also continue to monitor performance using four systems (B01, B02, D01, and A01 3rd Stage Monitoring Vessels) operating within the full-scale GWRS AWPF RO facility.

- **RO Membrane Procurement Program and Satellite Vessel Testing** *[2009 to present]* – Commercial RO membrane products continue to be developed which pose the potential for benefits in enhanced permeability and rejection. R&D evaluates these products through 6-12 month testing using eight “satellite” full-scale RO vessels located in the GWRS RO facility and dedicated to this program. Seven satellite vessels receive RO feed water and one vessel was reconfigured in FY 2019-20 to receive third stage RO feed. Products deemed successful are short-listed for future membrane procurements. In FY 2024-25, R&D will continue testing new, commercially available RO products ahead of potential procurements. Beyond RO membrane procurement, the satellite vessels provide the opportunity to test new RO performance enhancement technologies at full-scale if the technology is available for full-scale elements. In FY 2024-25, R&D anticipates evaluating new technologies (pending readiness of technology providers) such as novel spacers and novel membrane coatings.

Table 1. Summary of Pilot-/Full-Scale UF and RO-Related Testing at ERC or AWPF

Pilot Equipment	FY 2023-24	FY 2024-25
UF pilot #1	Alternative Disinfectants Research Study (USBR)	Pilot upgrades; Collaborator projects
UF pilot #2	Alternative Disinfectants Research Study (USBR)	Pilot upgrades; Collaborator projects
UF pilot #3 *(new pilot received FY 2022-23)*	Commissioning pilot; UF performance and cleaning regime optimization	UF performance and cleaning regime optimization
RO pilot #1	NA (decommissioned)	NA (decommissioned)
RO pilot #2	NA (decommissioned)	NA (decommissioned)
RO pilot #3	Pilot upgrades; Alternative Disinfectants Research Study (USBR)	Antiscalant evaluations/ Collaborator projects
RO pilot #4 *(new pilot received FY 2022-23)*	Pilot upgrades	Antiscalant evaluations/ Collaborator projects
GWRS 3rd-stage RO monitoring vessels (A01, B01, B02 & D01)	Ongoing monitoring	Ongoing monitoring
GWRS RO satellite vessels (A01, A02, B01, B02, C01, C02, D01, D02)	1st and 3rd stage position RO products or improvement technology performance tests	1st and 3rd stage position RO products or improvement technology performance tests

As reflected in the above table, during FY 2023-24 several upgrades and maintenance activities were completed for select ERC pilots to modernize equipment, improve staff efficiency, increase data security, and maintain good functionality, as well as to accommodate and treat the new GWRS Final Expansion source water (e.g., greater salinity) related to the new addition of OC San Plant 2 effluent. This included adding interstage booster pump to RO pilot #3 and replacing the main high-pressure pump for RO pilot #4. New human machine interfaces (HMIs) and programmable logic controllers (PLCs) were added to various pilots. RO pilots #1 and #2 were decommissioned. Pilot modifications were completed in-house as well as through a contractor, KDC Systems, budgeted in FY 2023-24. Selected satellite pressure vessel systems in the GWRS RO plant were upgraded to include new paddlewheel flow meters for permeate and concentrate flows with signal output capability.

Related commissioning for these upgrades may extend into FY 2024-25 as needed. Additional modernization efforts planned for FY 2024-25 include:

- Select satellite pressure vessel systems in the GWRS RO plant will be upgraded to have flow rate signal recorded via data loggers.
- R&D will also explore options to construct an online data dashboard for various pilots and monitoring stations at the ERC and RO AWPF building.

FOREBAY O&M:

- **Desilting Demonstration Project Phase III Support** *[2013 to present]* – Led by the Planning Department, this project assesses the field-scale performance of a subsurface passive collection unit (riverbed filtration system) placed below the off-river facilities to desilt Santa Ana River (SAR) water and provide this as recharge water to Olive Basin. In FY 2018-19, a pilot collector unit was installed below the live river system to assess performance in high-flow conditions with higher suspended solids loading. Field Research Laboratory (FRL) staff provides support to this project in the form of water sample collection and analyses (total suspended solids [TSS], turbidity, and temperature). Staff also conduct hydraulic testing to compare performance by changing experiment configurations (opening and closing of lateral valves to watch performance comparison). Efforts by the Planning Department and R&D to demonstrate the performance of the live river system will be ongoing in FY 2024-25.

PFAS:

- **PFAS Adsorbent Treatment Technology Pilot** *[2019 to present]* – Per- and polyfluoroalkyl substances (PFAS) have been found in many Producer drinking water wells within the Orange County Basin. In FY 2019-20, the District initiated a pilot testing program to evaluate granular activated carbon (GAC), ion exchange resins (IX), and novel alternative adsorbents as a treatment remedy for Groundwater Producers. An Evoqua pilot system was installed to treat water from the District's Bessie non-potable well located immediately adjacent to Warner Basin ("Phase I" testing). In FY 2023-24, R&D FRL staff continued operating the pilot in Phase III and IV to evaluate additional IX and alternative adsorbent media. In FY 2024-25, staff will continue the pilot at this location or at an alternative location (e.g., at a Producer well site). Sampling support will continue to be provided by the Water Quality Department with analysis by the Laboratory Department. Continued advisory support will be provided by the consulting engineering firm Jacobs.
- **Particle-Induced Gamma Ray Emission (PIGE) as a Novel Method to Measure PFAS in Water (WRF)** [*2024 to 2026]* – This project is funded by EPA and was noted previously under the section "Grant Funded Projects".
- **Evaluation of Bench-Scale Methods to Predict Drinking Water PFAS Removal Performance of Ion Exchange and Novel Adsorbents at Pilot-**

and Full-Scale *[2022 to 2025]* – This project is funded by WRF and noted previously under the section "Grant Funded Projects".

- **Evaluation of Passive Treatment to Remove PFAS During Groundwater Recharge** *[2023 to 2025]* – This project is funded by USBR and was noted previously under the section "Grant Funded Projects".
- **Pilot-Scale Evaluation of RO Concentrate (ROC) PFAS Treatment by Adsorption and Electrochemical Oxidation** *[2023 to 2026]* – This project is funded by USBR and was noted previously under the section "Grant Funded Projects".
- **Evaluation of Supercritical Water Oxidation (SCWO) for Destruction of Spent IX Waste from PFAS Treatment** *[2023 to 2026]* – SCWO is a potential treatment solution to destroy the spent IX resin waste generated from the various Producer wellhead treatment systems constructed by OCWD to remove PFAS from groundwater before drinking water distribution. SCWO is a physical-thermal process relying on the unique reactivity and transport properties of water above 374°C and 3200 psi. At this temperature and pressure, it is expected that PFAS bound to the spent resin will be destroyed. In FY 2024-25, R&D staff will continue to interview technology providers to identify candidates suitable for this unique application of SCWO that otherwise has historically been used for hazardous liquid concentrates. Pending the availability of a full-scale SCWO reactor, this project will include testing provided by 374Water to destroy spent IX resin from a local IX PFAS treatment system.

GWRS O&M:

- **Injection Well Fouling and Pipeline Integrity Issues** *[2013 to present]* – R&D staff will continue to provide ad hoc support for Barrier Operations, including microscopic, biological, and biochemical analysis, as well as analysis of field or operational performance data as necessary. This includes assisting Water Production/Barrier staff in evaluating and monitoring particle sloughing in the GWRS Pipeline and Barrier Pipeline and assisting Water Production/Barrier staff in evaluating the effect of Mid Basin Injection Well (MBI) fouling as the function of particle sloughing from the GWRS Pipeline.
- **Removal of Microbial Indicators by Soil Aquifer Treatment During GWRS Recharge** *[2021 to 2025]* – This study evaluates target pathogen removal during groundwater recharge, i.e., removal via soil aquifer treatment. Work includes literature review, laboratory benchtop and in-situ diffusion chamber measurements of virus inactivation and decay. The overall objective is to determine virus log removal values (LRVs) during soil aquifer treatment to potentially be applied toward AWPF regulatory requirements for virus removal (a minimum of 12 log of virus removal required from raw OC San influent to potable well extraction). Planning began in FY 2021-22 and has included review by the GWRS Independent Advisory Panel (IAP) that recommended OCWD collect site-specific data rather than make a credit proposal solely based on available related literature evidence of decay rates. In FY 2024-25,

work will include execution of a test plan after review and approval by the GWRS IAP.

PRADO WETLANDS SUPPORT:

- **Prado Wetland Research on Biobarriers** *[2017 to present]* – In this study, initially funded by the National Institutes for Water Resources/United States Geological Survey (NIWR/USGS), OCWD is collaborating with the Colorado School of Mines (Mines) to investigate the enhancement of nitrate attenuation in seven parallel shallow open water treatment wetlands. This effort follows upon the Prado Open Water Unit Process (POWUP) Wetlands project carried out with collaborators from CSM and the larger ReNUWIt National Science Foundation ERC. The objectives are to reduce the design footprint and increase the reliability of the engineered wetland by enhancing biological contaminant transformation via passive hydrologic manipulation utilizing microbially active treatment "biobarriers." Field-scale system construction is completed, and assessment of nitrogen fate and transport and quantification of microbial processes is ongoing. OCWD has provided ongoing multi-year in-kind support for construction costs, operation and maintenance, and limited data coordination and analyses. R&D is coordinating this effort with the Natural Resources Department and together these departments will continue providing support for this study as needed in FY 2024-25.

COLLABORATIVE STUDIES AS PARTICIPATING UTILITY:

OCWD regularly participates in collaborative research with universities and other partners, often facilitated by R&D staff, in which OCWD provides water samples, data, operating history, serves on the Project Advisory Committee (PAC) or related technical committee, and/or other support as an in-kind contribution to a partner-led study. Planned projects of this nature in FY 2024-25 include the following, with the prime OCWD point of contact listed. For completeness, the below list includes projects that OCWD is or will be a participating utility for irrespective of whether the primary contact is an R&D staff member.

The Water Research Foundation (WRF)

- WRF Research Advisory Committee (Megan Plumlee)
- WRF Water Utility Research Community (WURC), Steering Committee (Megan Plumlee)
- Understanding the Impacts of Wastewater Treatment Performance on Advanced Water Treatment Processes and Finished Water Quality, WRF 4833 (Mehul Patel)
- Considerations and Blending Strategies for Drinking Water System Integration with Alternative Water Supplies, WRF 4953 (Mehul Patel)
- Integration of High-Frequency Performance Data for Microbial and Chemical Compounds Control in Potable Reuse Treatment Systems, WRF 4954 (Mehul Patel)

- Demonstration of Pathogen Removal Credits in Wastewater Reuse: 21st Century Guidance Materials for Study Plans and Reporting, WRF 5047 (Julio Polanco)
- Give Membranes the Virus Removal Credit They Deserve, Using Rapid In-Field Molecular Based Methods, WRF 5209 (Julio Polanco)
- Viral Pathogen and Surrogate Approaches for Assessing Treatment Performance in Water Reuse, WRF 5126 (Claire Johnson)
- Cost-Effective Approaches for Control of Multiple Constituents of Emerging Concern (CECs), WRF 5171 (Claire Johnson)
- Unlocking the Nationwide Potential for Water Reuse, WRF 5197 (Claire Johnson)
- Cal-Val Guide to Treatment Credits for Indirect Potable Reuse in California, WRF TC23-19 (Jason Dadakis)

Department of Energy (DOE) National Alliance for Water Innovation (NAWI) (Energy-Water Desalination Hub led by Lawrence Berkeley National Laboratory)

- NAWI Industry Advisory Council (IAC) (Megan Plumlee, Chair)
- *Electrocoagulation/Electrooxidation to Accelerate Cost-Effective Potable Water Reuse* led by Professor Shankar Chellam at Texas A&M University (Jana Safarik)
- *Selective Electrocatalytic Destruction of PFAS using a Reactive Electrochemical Membrane System* led by Professor Brian Chaplin at the University of Illinois at Chicago (Han Gu)
- *Wastewater Pretreatment for Potable Reuse* (NAWI 5.20) led by NALA Membranes (Megan Plumlee, Jana Safarik, Han Gu)
- *222 nm KrCl Driven Advanced Oxidation for Reverse Osmosis Pretreatment: Fouling Control and Chemical/Pathogen Abatement* led by Professor Karl Linden at University of Colorado, Boulder (Megan Plumlee)
- *Optimization of RO Feed Pretreatment Train Enabled by Machine Learning* led by Professor Samanvaya Srivastava at UCLA (Han Gu)

U.S. Centers for Disease Control and Prevention (CDC)

- District participation in the Water Quality Panel (WQP) advising the UC Irvine-led study regarding PFAS in drinking water in Orange County, '*Multi-Site Study of the Health Implications of Exposure to PFAS-Contaminated Drinking Water Department of Health and Human Services*' (Jason Dadakis)

U.S. Environmental Protection Agency (EPA)

- Novel Quantitative Methods for Indigenous Viruses in Wastewater: Improving the Assessment of Water Reuse Treatment Performance (Julio Polanco)
- Closing PFAS Analytical Gaps: An Inter-Method Evaluation of Total Organofluorine Techniques for AFFF-Impacted Water, University of California-Berkeley and USEPA (Meeta Pannu)

Water UCI (UC Irvine) Industry-University Cooperative Research Center (IUCRC)

- District serves as a member of the Water UCI Industry Advisory Board (Megan Plumlee)
- District participation in UCI-led research study coordinated by Water UCI on PFAS occurrence in OC San wastewater collection system (Megan Plumlee, Meeta Pannu)

National Science Foundation (NSF)

- *Tools to Assess the Mechanisms and Full Potential of UV-ARPs for the Treatment of PFAS in Water* grant led by Professor Garrett McKay at Texas A&M University in collaboration with Professor Stephen Mezyk at California State University, Long Beach (Meeta Pannu)

United States Department of the Interior / Bureau of Reclamation (USBR)

- Desalination and Water Purification Research (DWPR) Pitch to Pilot – "*Development of Multiparameter Direct Water Quality Monitoring System to Achieve the Circular Society for Water*" led by Professor Keisuke Ikehata at Texas State University (Megan Plumlee)

Groundwater Resources Association (GRA)

- GRA Technical Committee member (Meeta Pannu)
- GRA PFAS Subcommittee Chair (Meeta Pannu)

Isle Utilities

- Isle Utility PFAS Partnership Project (Megan Plumlee, Meeta Pannu, Han Gu)
- Isle Water Quality Sensors Partnership Project (Megan Plumlee, Jana Safarik, Christine Pham, Meeta Pannu)

V Pending Activities

None

VI Staff Addition Needed for FY 2024-25

- Hiring LTC Postdoctoral Research Associate to complete pilot-scale testing such as related to PFAS treatment.

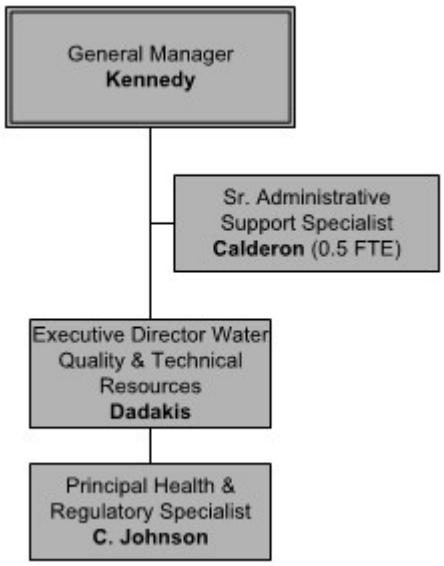
VII Future Issues

The purpose of this section is to list future issues, developments, and opportunities related to the District's objectives that may affect R&D or where R&D may contribute.

- Consideration of construction of a new building facility at FHQ that could house R&D Field Research Laboratory (FRL) laboratories and offices as well as Natural Resources Department staff offices to replace both department's outdated, temporary / modular facilities.

- Opportunities for future pilot testing, whether located at the Engineering Research Center or elsewhere on-site, to identify new technologies and operational strategies for the AWPF include:
    - Next-generation MF, UF, and RO membranes for the AWPF.
    - New chemical treatment techniques capable of enhancing MF and RO effectiveness and reducing operating costs.
    - Technologies for enhancing water recovery.
    - Membrane performance optimization through machine learning and Artificial intelligence (AI) analytics of process data.
    - New or improved AOP methodologies (e.g., chlorine AOP, catalytic AOPs).
    - Treatment of RO concentrate for the destruction of trace organics or improved performance of concentrate water recovery technologies.
- Evaluation of new methodologies capable of enhancing recharge efficiency, or studies of recharge impacts, such as:
    - Strategies for improved basin management.
    - Column studies or related experimentation, building on previous findings, to understand and minimize clogging in recharge systems that are fed AWPF FPW or other water supplies.
- Evaluation of new and novel methods of measuring water quality, including:
    - Sensing methodologies capable of real-time or near-real-time assessment of the RO and AOP barriers to chemical contaminants of public health concern.
    - Molecular biological methodologies for virus and bacterial pathogen detection and identification, such as Droplet Digital PCR for organisms of interest related to AWPF or of public health concern.
    - Bioassays to assess toxicity and other specific biological responses.
- Identification of novel treatment technologies or analytical methods for per- and polyfluoroalkyl substances (PFAS), including perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). This may include pilot testing new technologies applicable to groundwater.

REGULATORY AFFAIRS



Summary Information

Existing Staff – 2.5 FTEs

1 – Executive Director of Water Quality & Technical Resources

1 – Principal Health & Regulatory Specialist

0.5 – Senior Administrative Support Specialist (shared with Hydrogeology)

Mission

Assure reasonable regulation of District projects and programs through the interface with regulatory agencies, acquisition of necessary permits, and implementation of water quality monitoring and research programs to support district goals and compliance with current and anticipated future water quality regulations. In addition, manage and oversee the Water Quality, Laboratory, and Research & Development Departments.

Key issues for FY 2024-25

- Per- and polyfluoroalkyl substances (PFAS) - Assist Groundwater Producers with impacted wells/sources, monitoring orders, required governing bodies, public notifications, and the permitting of wellhead treatment systems. This will include ongoing facilitation of monthly Producer PFAS Workgroup meetings; review of state Public Health Goals (PHGs), Notification Levels (NLs), and Response Levels (RLs); assisting Water Quality with implementation of compliance monitoring for new federal PFAS Maximum Contaminant Levels (MCLs); working with Hydrogeology, Water Quality, and Laboratory departments to characterize the occurrence of PFAS in local groundwater; ongoing assessment of PFAS occurrence in the Upper

Watershed; interacting with state and federal regulators as needed; and supporting cost recovery litigation and settlement processing.

- Coordinate the preparation and submittal of the calendar year 2023 Groundwater Replenishment System (GWRS) Annual Report and the next Santa Ana River (SAR) Water Quality Report.
- Provide permitting support for potential future recharge facilities including Sunset Gap Seawater Intrusion Barrier.
- Support Laboratory and Water Quality Departments in negotiating appropriate California State Environmental Laboratory Accreditation Program fees.
- Lead preparations for the 2023 annual meetings of the GWRS NWRI Independent Advisory Panel.

Account Information	FY 2022-23 Actual	FY 2023-24 Budget	FY 2024-25 Proposed Budget
Salaries and Benefits	599,211	535,543	621,543
Services and Supplies	244,426	524,400	417,400
Total	**$843,637**	**$1,059,943**	**$1,038,943**

I FY 2024-25 Major New Initiatives/Programs

- Provide permitting support for potential future recharge facilities including Sunset Gap Seawater Intrusion Barrier.
- Review and implement new requirements resulting from state adoption of Cross Connection Control Policy Handbook as applicable to GAP and GWRS.
- Work with Groundwater Producers to implement required monitoring and reporting for new federal EPA National Primary Drinking Water Regulation for PFAS.
- Review and prepare for ramifications of EPA CERCLA designation for selecting PFAS as hazardous substances and other pending EPA actions.
- Monitor state development of state Public Health Goals, Notification/Response Levels, enforceable standards, and compliance monitoring approaches for PFAS and other pending emerging contaminants.
- Coordinate with the City of Anaheim on Riverwalk project design and prepare to apply for NPDES permit to allow use of GWRS water within project feature(s).
- Assist with WateReuse California-funded CALVAL guidance document for potable reuse treatment process regulatory validations.

II Core Activities

The Regulatory Affairs Department is primarily responsible for the District's permits with the State Water Resources Control Board (SWRCB), the Regional Water Quality Control Board (RWQCB), DDW, and the Orange County Health Care Agency (OCHCA) and assuring compliance with all monitoring and quality requirements.

Core activities include:

- Manage Water Quality and Technology Group, which includes the Laboratory, Water Quality, Regulatory Affairs, and Research and Development.
- Obtain permits and negotiate conditions for District projects and facilities from health and regulatory agencies such as the SWRCB, RWQCB, DDW, OCHCA, and SCAQMD.
- Assure compliance with permit conditions, including monitoring and reporting to regulatory agencies. Reporting includes monthly GWRS Pathogen LRV compliance, quarterly and annual GWRS and GAP reports, GWRS NPDES SAR Emergency Discharge Self-Monitoring, and Annual Recycled Water Production.
- Facilitate regular coordination between Water Quality and Technical Resources departments and OC San Division of Environmental Services, which includes OC San Laboratory, Ocean Monitoring, Environmental Compliance, and Resource Protection (i.e., Source Control) staff, with emphasis on identifying compounds of concern for control via the GWRS Source Control Program, including testing needs and concentration limits.
- Help manage and coordinate OCWD participation in external research projects with funding support, in-kind contributions, the provision of providing water quality samples and historical data, and the review of draft reports.
- Continue to support Planning and Engineering Departments with water quality and permitting needs for future GWRS recharge and injection facilities.
- Coordinate with the National Water Research Institute (NWRI) on the management of Independent Advisory Panel (IAP) appointed for GWRS.
- Evaluate recommendations from the NWRI GWRS IAP and prioritize implementation.
- Review sampling and analysis program results for the Santa Ana River and follow up on recommendations from the SARWQH Study and the SARMON NWRI IAP.
- Serve as the primary liaison with the SAWPA Emerging Constituents Workgroups.
- Participate in the optimization process for GWRS to improve treatment efficiency and product water quality.

- Assist Research and Development Department with oversight and direction of the District's post-doctoral fellow/associate researcher program.
- Coordinate with regulatory agencies and other water agencies regarding monitoring requirements for CECs.
- Provide consultation to other OCWD groups (e.g., Public Affairs), MWDOC, and the groundwater producers on water quality, health, and regulatory issues affecting District projects or programs.
- Assist in the review and development of legislation and regulation regarding water quality requirements and recycled water.
- Assist Public Affairs staff with the development and review of technical information to be included in District brochures and the enhanced hallway panels, kiosks, and displays.
- Assist Public Affairs staff with hosting and educating visitors from water agencies, regulatory agencies, and other governmental entities.

III Non-Core Activities

Non-core activities (secondary priority compared to core activities) conducted by the Regulatory Affairs include:

- Serve on WateReuse CA Board, OC Chapter of WateReuse CA leadership, WateReuse CA Potable Reuse Permitting and Compliance Committee, and as NWRI Treasurer.
- Participate in Expert Panels for NWRI regarding water recycling and reuse projects planned by other agencies.
- Serve on Project Advisory Committees (PACs) for Water Research Foundation (WRF) projects and coordinate the service of other staff on such PACs.
- Provide presentations to outside groups regarding water quality, health, and regulatory issues.
- Assist other water agencies in addressing water quality issues related to groundwater recharge with recycled water.

IV Group Goals for FY 2024-25

- PFAS – Continued support of PFAS Treatment System Program with Producers, including regulatory permitting support, compliance monitoring, expanded laboratory testing capacity, implementation of new federal EPA PFAS MCLs, and litigation support. Also, coordinate with UC Irvine research team leading federal Centers for Disease Control (CDC) funded PFAS retrospective epidemiological study being conducted in select Orange County communities.
- Permit Fees – Support Laboratory and Water Quality Departments in review and any necessary advocacy for potential new ELAP fee structure proposals.

- GWRS Annual Report – Manage the preparation of the annual report to regulatory agencies on the 2023 calendar year performance of GWRS and results from the testing required by the permit.
- Supplement to GWRS Annual Report - With the assistance of the Water Production and Water Quality Departments, prepare a report containing additional detailed analysis of GWRS performance as requested by the NWRI GWRS Independent Advisory Panel.
- Santa Ana River Monitoring – Manage the water quality sampling and analysis for the SAR in follow up to the SARWQH Study and the 2018 recommendations of NWRI's SARMON Panel and prepare the next SAR Water Quality Report.
- Enhanced GWRS Source Control – Continue to coordinate with OC San on the use of revised Response Plan to prevent contaminants from adversely affecting GWRS as a part of OC San's commitment to enhanced source control efforts, including updating Response Plan to explicitly incorporate Plant 2 sewer shed. Work with Water Production to assess impacts of higher salinity GWRS influent/source water on operations and coordinate with OC San to determine feasibility of mitigation options within Plant 2 sewer shed/collection system.
- North Basin Remedial Investigation/Feasibility Study – Provide technical support and guidance regarding regulatory alternatives for cleanup and reuse of contaminated groundwater.
- South Basin Remedial Investigation/Feasibility Study – Provide technical support and guidance regarding regulatory alternatives for cleanup and reuse of contaminated groundwater.
- Water Quality & Laboratory Groups – Since desired monitoring tends to exceed resources in Water Quality and Laboratory Groups, programs and projects must be continuously evaluated and prioritized.
- R&D for District Critical Needs – Coordinate the Research and Development Department efforts with the most critical research needs for the District, including PFAS treatment, recharge enhancement, MF/RO optimization, online RO monitoring systems for enhanced LRV credit, UV-AOP optimization, evaluation of project-site-specific underground retention characteristics that may support enhanced underground retention virus credit, and microbial characterization of SAR recharge waters.
- GWRS Regulatory Compliance – Coordinate Water Quality, Laboratory, and Operations group efforts to fulfill any changes to the Permit-required GWRS regulatory reporting format (i.e., transition from paper reporting to digital reporting via DDW CLIP database and State/Regional Board Geotracker database). Also, define the scope for and begin implementation of GWRS permit-required Climate Change Action Plan. CCAP must be submitted to the RWQCB by December 2025 and must consider all components of the GWRS AWPF as well as the GWRS injection wells, spreading basins, and compliance monitoring wells.

- Green Acres Project – In cooperation with the Engineering Department, implement Cross Connection Control Policy Handbook, along with relevant county-wide standardized procedures, for receiving required OCHCA and DDW approval of new end-users and/or for required regular site inspections for established use sites.

V Pending Activities

Major activities that are not being implemented include:

- Meeting of the SARMON IAP.
- Developing an annual water quality report card on the groundwater basin.
- Developing a more comprehensive water quality testing program to ensure adequate data for assessment of emerging contaminants, threats to producer wells, and seawater intrusion.

VI Staff Addition Needed for FY 2024-25

None

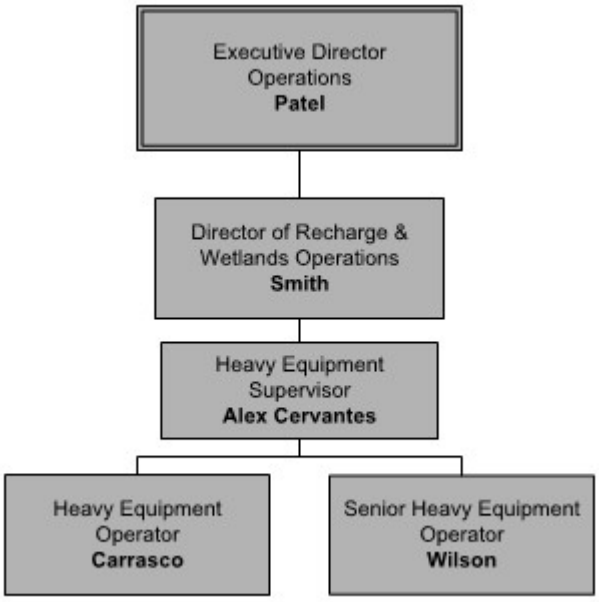
VII Future Issues

In the next one to three years, the District will need to consider the following:

- PFAS: continuous permitting of Producer treatment systems; occurrence within the Basin and SAR watershed; increased testing demand on laboratory. Compliance with new federal and state enforceable drinking water regulations.
- Assessment and permitting of additional locations for GWRS water recharge or injection for additional operational flexibility, including completion of tracer test protocols and plans for each new recharge location. This includes the proposed Anaheim Riverwalk project which will require an NPDES permit from the Santa Ana Regional Board. More stringent water quality regulations may apply to NPDES discharges including aquatic toxicity standards and narrower allowable pH standards.
- Evaluation of new technologies to enhance treatment in the GWRS and to improve energy efficiency and reduce chemical costs, specifically targeting enhanced recovery from the reverse osmosis process and/or concentrate treatment, accompanied by gaining regulatory acceptance.
- New and more stringent drinking water standards for contaminants such as PFAS, nitrosamines, 1,4-dioxane, perchlorate, manganese, arsenic, and disinfection by-products of new concern.
- Statewide requirement for testing and reporting of microplastics in drinking water.
- Enhanced monitoring and possible treatment requirements for the discharge of GWRS RO concentrate on the OC San outfall.

- Expanded source water assessment obligations that could include the entire SAR watershed and all potential contaminating activities in the watershed.
- Reassessing the feasibility, both technical and regulatory, of recycling segregated SARI Line/IEBL sewage flow from OC San Plant No.2; may be advisable should additional GWRS production be desired.

WETLANDS OPERATIONS



Summary Information

Existing Staff – 2 FTEs

1 – Senior Heavy Equipment Operator
1 – Heavy Equipment Operator

Mission

- Operate and maintain Prado Wetlands to provide natural water quality treatment of Santa Ana River flows behind Prado Dam.
- Provide operational oversight and maintenance of District property within the Prado Basin.
- Provide logistical and operational support for research activities.
- Provide operational support for the Natural Resources division.
- Coordinate operations with tenant recreational use.

Key Issues for FY 2024-25

- Implement an operational strategy to maintain optimal wetlands nitrate, and other constituents, removal.
- Provide logistical support for OCWD collaborative research projects.
- Develop a strategy to reduce mosquito populations in wetland ponds.
- Continue to implement improvements to ponds, conveyance channels, and SAR levee infrastructure.
- Continue to support mitigation sites and Natural Resource activities.

Account Information	FY 2022-23 Actual	FY 2023-24 Budget	FY 2024-25 Proposed Budget
Salaries and Benefits	296,112	336,604	310,401
Services and Supplies	211,992	228,950	229,000
Total	**$508,104**	**$565,554**	**$539,401**

I FY 2024-25 Major New Initiatives/Programs

- Adjust operational strategy by de-watering designated ponds to maintain optimal treatment retention time and vegetation.
- Provide logistical support for OCWD collaborative research projects.
- Modify de-watering/vegetation management operations to reduce habitat for mosquito harborage.
- Removal of sediment/sand at River Road at volumes requested by Natural Resources as required for ACOE Prado storage deviation agreement.

II Core Activities

The Wetland Operations group is primarily responsible for the management and operation of the wetland facilities that provide natural water quality treatment of SAR flows behind Prado Dam. The group also supports the Natural Resources group by providing operational oversight and maintenance of OCWD property within the Prado Basin.

Core activities include:

- Provide natural water treatment of SAR flows through constructed wetlands in the Prado Basin.
- Evaluation of water quality parameters to optimize wetland operations for maximum nitrate, and other constituents, removal.
- Maintenance of the levees, roads, and conveyance piping within the wetlands and Prado basin.
- Reconstruction of earthen structures and conveyances following storm events to ensure 50 percent of river flows through wetlands.
- Support of District approved research projects.
- Support of District mitigation sites and Natural Resources activities.

III Non-Core Activities

Non-core activities conducted by the Wetlands Operations group include:

- Oversight and operational support of wetlands research projects.
- Collection and analysis of pond water quality data.
- Support the District's education and outreach programs by providing tours of the wetland system.
- Support for volunteer functions, such as open houses and group tours.

IV Group Goals for FY 2024-25

Implement Operational Strategy for Optimal Water Treatment Retention Times:

- Adjust pond operations to de-water approximately 100 acres of ponds to reduce system volume, thus maintaining optimal treatment retention time due to reduced SAR baseflow.
- Adjust pond service to aid in vegetation management activities.

Modify Vegetation Management Techniques:

- Use OCWD equipment to mow dry vegetation in de-watered ponds.
- Remove harvested vegetation from operational ponds.

Provide Logistical Support for Collaborative Research Project:

- Operate and maintain pond infrastructure per design specifications in support of research projects.
- Provide operational support for the groundwater monitoring program.

Improvements to Wetlands Infrastructure:

- Grade and repair levees in and around the wetlands and habitat.
- Create new mitigation sites in compliance with District permits and Natural Resource direction.

Develop and Implement Operational Strategies to Reduce Mosquito Harborage:

- Manage vegetation removal and de-watering cycles to reduce mosquito breeding habitats.

V Pending Activities (Not Being Addressed Due to Insufficient Resources)

Major activities that are not being conducted include:

- Establish SAR streambed gauging station at River Road Bridge.

VI Staff Addition Needed for FY 2024-25

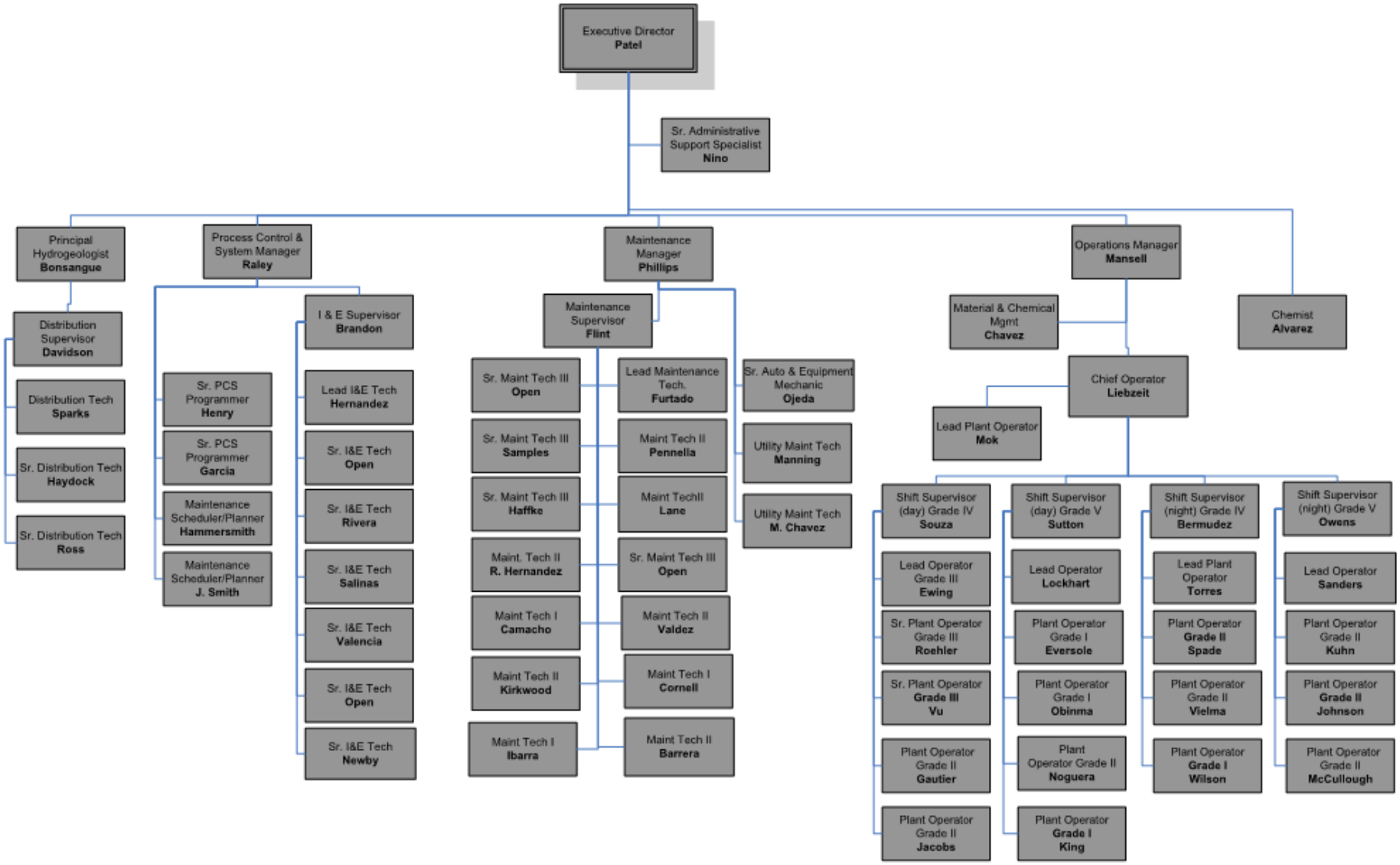
None

VII Future Issues

In the coming years, the District will need to consider the following:

- Continue to replace heavy equipment to maintain compliance with emissions regulations. The cost of equipment upgrades and replacements is substantial. R&R fund reserves have therefore been identified and set aside to accommodate this long-term compliance program. Replacement of diversion channel control structure.
- Participate as directed by the Natural Resource Department in mitigation activities for the former Prado shooting range areas.

WATER PRODUCTION/GROUNDWATER REPLENISHMENT SYSTEM



Summary Information

Existing Staff – 66 FTEs

1 – Executive Director of Operations
1 – Senior Administrative Support Specialist
6 – Supervisors (Operations Manager, Process Control & System Manager, Maintenance Manager, I&E Supervisor, Maintenance Supervisor, and Distribution Supervisor)
4 – Shift Supervisors
1 – Chief Operator
19 – Operators
14 – Maintenance Technicians
1 – Senior Auto & Equipment Mechanic
2 – Utility Maintenance Technicians
2 – Maintenance Schedulers/Planners
1 – Material and Chemical Management Technician
7 – Instrumentation & Electrical Technicians
2 – Senior Process Control System Programmers
1 – Chemist
2 – Senior Distribution Technicians
1 – Distribution Technician
1 – Principal Hydrogeologist

Mission

Operations and maintenance (O&M) of the GWRS Advanced Water Purification Facility (AWPF), Mid Basin Injection, Talbert Barrier, and Green Acres (GAP).

Key Issues for FY 2024-25

- Maximize operation of GWRS processes:
  - Continue to work with the Orange County Sanitation District to make as much water as possible for GWRS production. This includes maximizing water quantity and quality of flow from Plant No. 2.
  - Goal for 2024-25 production is 128,000-acre-feet of water.
  - Send all non-barrier production to Centennial Mid Basin Injection Wells, Canyon Power, Arctic, La Palma, Miraloma, and Kraemer/Miller basins.
  - Continue to control or reduce the water treatment unit cost by obtaining the best possible price on electricity and chemicals and spreading the system's fixed costs over the maximum possible production.

- Reduce GWRS processing costs:
  - Continue optimization of MF backwash and cleaning regimes. This includes optimizing maintenance wash processes for the new PVDF membranes installed as part of the GWRS Final Expansion.
  - Optimization of RO cleaning regimes by improving cleaning of chemical concentrations and cleaning intervals.
  - Optimization of RO pretreatment chemical program, which includes the use of acid and antiscalant to reduce cost and prevent mineral scaling of membranes in the 3rd stage of RO units. This includes optimizing dose of the existing or a new antiscalant formulation that is compatible with the new water quality expected by the GWRS Final Expansion (GWRSFE) with the use of OC San Plant No. 2 trickling filter/solids contact flows.
  - Optimize the use of the new RO energy recovery device upsized motors with new GWRSFE water quality in six RO units to reduce energy cost and/or balance flux performance.
  - Optimize the use of new inter-stage booster pumps on 15 Train A-E RO units as well as six new RO units in Trains H-I to maximize energy efficiency with the new GWRSFE water quality.
  - Continue to optimize usage of new antiscalant products to help control mineral scaling at pH 6.9 and achieve the lowest possible chemical cost. At the same time, continue to engage manufacturers to develop and evaluate antiscalant formulations that would be successful with future poorer water quality associated with the GWRS Final Expansion.
  - Work with purchasing to find and procure the best chemical pricing.
  - Reduce energy use and continue participation in demand response programs that offset the cost of electricity.
  - Lifespan extension of both MF and RO membranes including new PVDF MF membranes all being operated under a new level of water quality associated with the GWRSFE.
  - Continue efforts to maximize UV lamp life to 12,000 hours.
  - Revise regulatory reporting documentation and operational procedures required by conditions of the new GWRS operating permit issued as part of the completion of the GWRSFE.
- Manage GWRS assets by:
  - Continue to implement a robust preventative maintenance program using the Maximo computerized maintenance management system (CMMS).

- Staff continues to update GWRS work plans in the CMMS to reflect knowledge gained with over 15 years of experience operating the treatment plant. This includes the new assets installed as part of the GWRSFE.
- Continue to develop staff capabilities to make both minor and major mechanical and electrical repairs on equipment and facilities. These internal capabilities assure a fast response, quality repairs and lower cost.
- Conduct facility-wide electrical infrastructure preventative maintenance activities, including integration of new electrical equipment supplied as part of the GWRSFE.
- Continue yearly removal and rehabilitation of large horsepower vertical turbine pumps in the GWRS AWPF.
- Resume well re-development/rehabilitation of legacy injection wells including repairs to non-functional injection wells number 24 and 25.
- Protection of injection wells by delivery of low particle water.
- Continue to optimize performance, operation costs, and backwash frequency of four new Centennial Park MBI wells.

Account Information	FY 2022-23 Actual	FY 2023-24 Budget	FY 2024-25 Proposed Budget
Salaries and Benefits	10,884,172	11,437,642	12,226,725
Services and Supplies	39,070,501	44,220,485	47,079,120
Total	**$49,954,673**	**$55,658,127**	**$59,305,845**

I FY 2024-25 Major New Initiatives/Programs

- Continue to monitor changes in the MF membrane backwash and cleaning intervals to increase process efficiency and production, especially with new GWRSFE water quality.
- Optimize performance of PVDF membranes in new cells installed as part of the GWRSFE.
- Investigate new antiscalant products for use on new water quality resulting from the introduction of OC San Plant 2 flows.
- Develop key performance factors that help identify and predict MF and RO membrane end-of-life conditions under new GWRSFE water quality.
- Continue to optimize the operation of all five Mid-Basin injection wells.
- Assist Engineering with further GWRS pipeline corrosion assessments and possible further epoxy lining projects.
- Repair deteriorating or leaking one-inch blow-off piping at key locations along the GWRS pipeline.

- Rehabilitate and re-design down hole well valve technology for I-25 and I-26.

II Core Activities

- O&M of the 130 mgd GWRS AWPF.
- O&M of the 102 wells that make up the Talbert Injection Barrier well system.
- O&M of Mid Basin Injection Demonstration well.
- O&M of four new Centennial Park Mid Basin Injection wells.
- O&M of EW-1 well.
- O&M of the GAP treatment plant and distribution pipeline system.
- Work with Research and Development on engineering and research aimed at maintaining and optimizing treatment plant performance, production, and the Talbert Barrier.
- Administer the joint OCWD & OC San GWRS Steering Committee meetings.
- Continue to optimize I&E assets at FHQ maintained by Water Production.
- Facilitate monthly OCWD and OC San Joint Operation Committee meetings.

III Non-Core Activities

- Participate in technology transfer on advanced treatment with other water districts, consultants, public agencies, and industry organizations.
- Provide in-kind support as specified by OCWD for participating in the Water Reuse Research Foundation and Water Research Foundation research projects.
- Provide technical support on various wellhead treatment systems throughout Santa Ana Watershed.
- Provide technical support as needed to the Water Quality, Engineering, Hydrogeology, Public Relations, and Health & Regulatory Departments.
- Provide facility maintenance support for OCWD's Fountain Valley facilities.
- Provide support to set up meetings and events.
- Provide instrumentation and electrical support to OCWD's Recharge and Prado operations.
- Provide data collection and support for the Research and Development Department.
- Assist with GWRS tours for the Public Affairs Department as necessary.
- Provide any required GWRS technical and operational information for outside data requests.

- Provide support to the general manager as needed for technology improvement meetings with Bookey Oren Global Water Technologies.

IV Group Goals for FY 2024-25

GWRS:

- Produce up to 128,000-acre-feet of water for recharge and injection.
- Successfully operate new facilities constructed as part of the GWRSFE construction project.
- Continue efforts to control net production cost to less than $850 per acre-foot.
- Continue development of the CMMS for the GWRS and update maintenance requirements for existing and new equipment.
- Continue development of databases to help staff monitor the individual process performance of the MF, RO, and UV treatment systems.

OC San:

- Continue with joint operation meetings with OC San plant operations and source control and OCWD staff to ensure both agencies are knowledgeable of issues with each other's operations. This includes added coordination with the use of Plant No. 2 flows for GWRS.
- Support OC San staff as needed in ongoing investigation of seawater intrusion into Plant 2 sewer collection system resulting in higher total dissolved solids to the GWRS.

DDW and the RWQCB:

- Prepare an Annual Report on the GWRS operation with District staff and outside consultant.
- Continue to work with Health and Regulatory groups to develop new GWRS regulatory reporting formats to satisfy new conditions of the GWRS permit upon completion of the GWRSFE.

Talbert Barrier:

- In conjunction with the barrier, staff continues evaluating the corrosivity and injection well-fouling propensity of the GWRS finished product water.
- Support Engineering for Talbert Barrier hydraulic improvements project.
- Rehabilitate as many legacy wells as possible during the fiscal year using an outside contractor while also developing long-term plans for rehabilitation of the legacy injection well system to maximize barrier injection flows.
- Complete construction of repairs and rehabilitation to non-functional injection wells I-24 and I-25.

V Pending Activities

Continue to train staff to effectively operate and maintain the GWRS and determine preventative maintenance needs for the GWRS Final Expansion facilities. This includes new facilities now located off-site at the OC San Plant No. 2 facility in Huntington Beach, California.

VI Staff Addition Needed for FY 2024-25

Assess possible staffing increases required by the GWRSFE as well as for dealing with new cyber-security and programming requirements for both the GWRS and recharge system SCADA platforms.

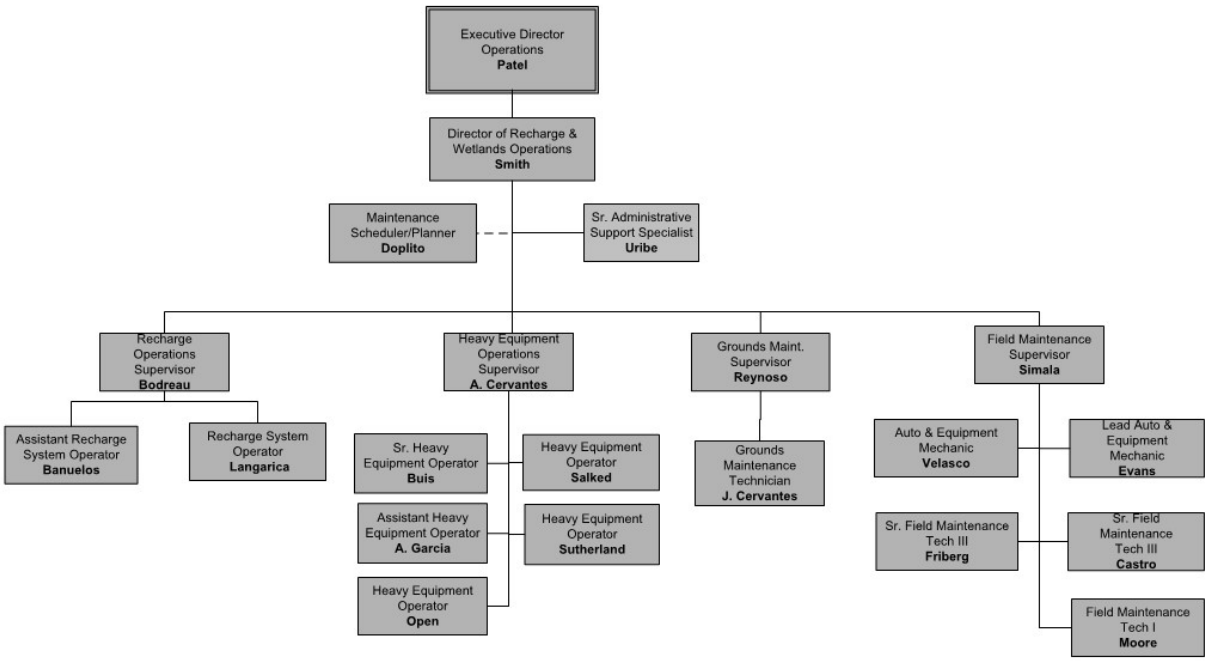
VII Future Issues

In the next two years, issues the District will need to consider include:

- Optimization of the GWRS AWPF treatment process to determine new operational costs associated with the change in water quality from the GWRSFE.
- Continue to optimize MF and RO membrane replacement strategies, including new metrics based upon expected poorer water quality associated with the GWRSFE.
- Process optimization and adjustment of preventative maintenance requirements as necessary.
- Continue forward-looking review of water treatment technologies and opportunities to optimize the current GWRS membrane and advanced oxidation treatment processes.
- Continue to monitor energy issues to ensure the lowest possible power expenditures for the GWRS.
- Support the operation and maintenance of the District's four new Centennial Park Mid-Basin Injection wells.
- Support construction of the Talbert Barrier hydraulic improvements.

  Support and plan for future Talbert Barrier pipeline corrosion assessment and correction project.
- Plan for future evaluation and possible structural upgrades to the GAP Santa Ana Reservoir facility.

RECHARGE OPERATIONS



Summary Information

Existing Staff – 20 FTEs

1 – Director of Recharge & Wetlands Operations
1 – Recharge Operations Supervisor
1 – Field Maintenance Supervisor
1 – Grounds Maintenance Supervisor
1 – Heavy Equipment Operations Supervisor
1 – Senior Administrative Support Specialist
1 – Maintenance Scheduler/Planner
1 – Assistant Recharge System Operator
1 – Recharge System Operator
1 – Assistant Heavy Equipment Operator
3 – Heavy Equipment Operators
1 – Senior Heavy Equipment Operator
1 – Grounds Maintenance Technician
1 – Lead Auto & Equipment Mechanic
1 – Auto & Equipment Mechanic
2 – Senior Field Maintenance Technicians III
1 – Field Maintenance Technician

Mission

Replenishment of the groundwater basin by operating and maintaining recharge basins and associated infrastructure, surface water conveyance system, storage, and recharge facilities, and managing the conservation pool behind Prado Dam.

Key Issues for FY 2024-25

- Continue to replace aging infrastructure and instrumentation.
- Continue heavy equipment replacement programs to maintain compliance with the CARB, SCAQMD, and other regulatory schedules.
- Manage vegetation in a manner that accommodates both the seasonal habitat needs of nesting birds and the use of the land for groundwater recharge.
- Continue to upgrade PLC/SCADA hardware, software, and cyber security.
- Continue repairs and upgrades to infrastructure, instrumentation, and equipment.

Account Information	FY 2022-23 Actual	FY 2023-24 Budget	FY 2024-25 Proposed Budget
Salaries and Benefits	2,916,015	3,073,036	3,270,183
Services and Supplies	2,773,764	1,880,250	2,093,700
Total	**$5,689,779**	**$4,953,286**	**$5,363,883**

I FY 2024-25 Major New Initiatives/Programs

- Adapt operations to allow for the recharge of an additional 36,000 AFY of GWRS produced water from the Final Expansion.
- Adapt operations to allow for the purchase and recharge of imported water to help offset the decline in SAR base flow.
- Improve data acquisition and retrieval at diversion points and other critical facility infrastructure to comply with provisions of SB 88.
- Develop District standards for installation and replacement of infrastructure.
- Collaborate with Field Research Staff to utilize data to optimize basin operation.
- Collaborate with the Hydrogeology Department to utilize WRMS data to inform recharge operations.
- Replace and maintain infrastructure such as pavements, heavy equipment, fuel storage facilities, and pumps.

II Core Activities

The Recharge Operations group is responsible for replenishing the groundwater basin by operating and maintaining the surface water conveyance system, storage, and recharge facilities, and managing the conservation pool behind Prado Dam.

III Non-Core Activities

- Support the District's education and outreach program by providing tours and presentations of the recharge system.
- Provide data and information to outside agencies and organizations.
- Support selected research and development efforts aimed at improving recharge efficiency and capacity.

IV Group Goals for FY 2024-25

- Develop strategies for the capture of local inflow with Prado storage levels at 505 ft and 508 ft.
- Continue to replace aging infrastructure and instrumentation.
- Continue to maintain compliance with the emission regulatory schedule through heavy equipment replacement programs.
- Coordinate with engineering staff to establish District standards for installation and replacement of infrastructure.
- Manage vegetation in a manner that accommodates both the seasonal habitat needs of nesting birds and the use of the land for groundwater recharge.

V Pending Activities

- Implementation of infrastructure repair and replacement projects.

VI Staff Addition Needed for FY 2024-25

- An Instrumentation and Electrical Technician dedicated to Recharge Operations would greatly enhance the capture and storage of water supplies. The Water Production I&E group supports Recharge Operations on a limited basis. The SCADA system used for the surface recharge system is a different platform than the Water Production system and thus requires a specialized skill set. Additionally, the types of instrumentation used for Recharge Operations are different and require a troubleshooter that is familiar with both the instrument and the SCADA system. When instrumentation requires troubleshooting, it is critical that staff can get it back into service rapidly because stormwater capture is at risk of being lost. There is enough on-going and deferred work in Recharge Operations to support the addition of a full-time I&E Technician.

VII Future Issues

- Continue to replace heavy equipment to maintain compliance with emissions regulations. The cost of equipment upgrades and replacements is substantial. R&R fund reserves have therefore been identified and set aside to accommodate this long-term compliance program.
- Re-locate direct buried valves to underground vaults. Existing buried valves and actuators are 20+ years old and are beginning to fail.
- Continue upgrades & repairs of flow and water level instrumentation, including staff to support the systems.
- Remove islands and peninsulas in Anaheim Lake to increase storage capacity. Add sand and re-grade basin bottom for improved recharge.
- Relocate the 48” magnetic flowmeter at Kraemer Basin. The current meter location does not allow accurate measurement of the flow or maintenance of the instrument.
- Install transfer pipe with valve between golf concession and Burris Basin to prevent golf lagoon de-watering at low water levels in Burris.
- Install lower elevation transfer pipes leading to Warner Basin to allow rapid fill and dewater operations in response to stormwater capture opportunities.
- Import sand into the SAR channel between the Imperial Headgates and Ball Road to reduce armoring and maintain percolation.
- Replace 48” valves at Anaheim Lake and house them inside a vault.

Section 4
Debt Service Fund

DEBT SERVICE

The District often uses debt to fund capital projects approved by the Board. The purpose of the Debt Service is to budget and set aside monies necessary to make principal and interest payments on the District's debt.

Total gross debt service payments and administration costs are budgeted at $46.5 million for FY 2024-25 as shown in Table 1. The District will utilize $46.5 million from RA/property tax revenues. This amount also reflects estimated revenues and payments related to the District's swap transactions. The components of the budgeted debt service payments are as follows:

- $16.5 million for fixed rate debt.
- $5.2 million for variable rate debt.
- $8.9 million for commercial paper debt.
- $15.0 million for low interest State Loans.
- $0.9 million for debt administration.

In November 2002, the Board approved a comprehensive long-term debt program with a number of goals including:

- To provide funding for the GWR System and other capital projects.
- To provide the lowest cost of funds.
- Take advantage of low interest rates and the District's variable rate debt capacity.
- Provide the lowest predictable RA.

In FY 2007-08 the Board adopted an updated Plan of Finance, which provided for the repayment of some of the District's highest cost fixed rate debt using low interest state loan reimbursement monies and for the execution of two interest rate swap transactions. The overall impact on the District's debt structure was to lower the District's overall cost of debt outstanding; reduce the District's variable rate exposure using an interest rate swap, and reduce the duration of the existing debt outstanding by approximately two years.

The District's policy of using long-term debt to fund capital projects was established in October 2000 and calls for the following:

- Preliminary project expenses related to direct research are to be paid from the General Fund and cannot be financed with long-term debt.
- Project expenses for items such as feasibility reports, pilot studies, engineer reports, compliance with CEQA, project design, and construction may be capitalized and funded with long-term debt.
- Project expenses that are capitalized and funded with long-term debt and do not lead to the construction of a project will require an adjustment by the Accounting Department to pay off the long-term debt incurred using cash reserves.

TABLE 1
DEBT SERVICE BUDGET
FY 2024-25

	Principal Payments	Interest Payments	Debt Administration Cost	Total	Outstanding Debt Balance as of June 30, 2025
Certificates of Participation/Refunding Revenue Bonds/Short-Term Notes					
2003A COP Variable Rate	$ -	$ 5,192,600.00 (1)	$ -	$ 5,192,600	$ 129,815,000
2017A Refunding Revenue Bond Fixed Rate	485,000	3,853,300	-	4,338,300	86,395,000
2017B Refunding Revenue Bond Fixed Rate	-	675,418	-	675,418	16,855,000
2019B Revenue COP Fixed Rate	160,000	288,100	-	448,100	5,775,000
2019C Refunding Revenue Bonds Fixed Rate	5,115,000	3,791,225	-	8,906,225	76,690,000
2019D Refunding Revenue Bonds Fixed Rate	735,000	1,453,873	-	2,188,873	55,860,000
2021A Refunding Revenue Bonds Fixed Rate	-	3,776,800	-	3,776,800	94,420,000
2021A Bonds Capitalized Interest Account	-	(3,776,800)	-	(3,776,800)	-
Subtotal	$ 6,495,000	$ 15,254,516	$ -	$ 21,749,516	$ 465,810,000
WIFIA Loan	$ -	$ -	$ -	$ -	$138,379,828
SWAPS - $82.55 Million					
OCWD Payments - fixed at 3.314%	$ -	$ 2,735,707	$ -	$ 2,735,707	
OCWD Revenues - .56 SOFR plus .23% - Estimates		(2,732,405) (2)	-	(2,732,405)	
State Loans					
GWR System C-06-4462-120	$ 197,882	$ 7,879	$ -	$ 205,761	$ 201,782
GWR System C-06-4462-130	174,951	6,762	-	181,713	178,300
GWR System C-06-4462-140	269,169	10,351	-	279,521	274,295
GWR System C-06-4462-150	6,368,226	471,847	-	6,840,074	19,801,912
GWR System C-06-4462-160	211,660	8,120	-	219,780	215,682
Fletcher Basin C-06-7867-110	140,152	35,515	-	175,667	1,729,042
La Palma Basin C-06-8101-110	168,051	43,217	-	211,268	4,153,599
Mid Basin C-06-8252-110	502,430	296,516	-	798,946	15,970,706
Alamitos Barrier Improvement C-06-7868-110	658,452	214,795	-	873,247	10,646,532
GWRSFE - SRF loans	3,407,524	1,763,704	-	5,171,228	122,560,949
Subtotal	$ 12,098,498	$ 2,858,706	$ -	$ 14,957,204	$ 175,732,800
Commercial Paper					
Tax-Exempt	$ 8,463,000 (4)	$ 483,750 (3)	$ -	$ 8,946,750	$ 4,437,000
Debt Administration	$ -	$ -	$ 869,110	$ 869,110	
TOTAL EXPENDITURES	$ 27,056,498	$ 18,600,274	$ 869,110	$ 46,525,883	$ 784,359,629

(1) Assumes 4.00% interest rate.
(2) Assumes SOFR equal to a rate of 5.5%.
(3) Assumes 3.75% for tax-exempt.
(4) Tax Exempt principal of $8.463 million will be paid using RA revenue.

Debt Administration Fees
FY 2024-25

	Fee		Annual Amount
1	Letter of Credit Commercial Paper Fee with Sumitomo Mitsui Banking Corp.	$76.3 M x 0.32%	$244,200
2	Quarterly 2003A Remarketing Fee - Morgan Stanley	$129.8 M x 0.035%	$45,500
3	2003A Bank of America Letter of Credit	$131.9 M x 0.29%	$382,600
4	Commercial Paper Remarketing JPM	$12.9 M x .0325%	$4,200
4	Annual Rating Agency Fees: Fitch, Moody's and Standard & Poor's		$78,500
5	Bond Counsel/Financial Advisor/Arbitrage Service		$50,000
6	US Bank Trust Commercial Paper Draw Fees and Quarterly Certificate Fees		$10,000
7	U.S. Bank COP Trust Fees		$24,110
8	WIFIA Fee (2 Loans)		$30,000
	Total		$869,110

Section 5
Other Post Employment Benefits

OTHER POST EMPLOYMENT BENEFITS

The Government Accounting Standards Board Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, and GASB 75 - *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, established accounting and financial reporting requirements for OPEB plan costs and obligations related to retiree healthcare benefits (Other Post Employment Benefits – OPEB). The statements generally require employers to account for and report the annual cost and outstanding obligations and commitments for these benefits. The GASB standards require that the long-term cost of retiree health care be determined and accrued on an actuarial basis. The results of the valuations are disclosed on the District's financial statements.

The GASB standards required a new actuarial study, and the District received it in June 2022, with a measurement date as of June 30, 2021. The actuarial study determined the District's net OPEB liability and the new actuarially determined contributions (ADC) to provide the retiree medical benefit. The Board has directed funding for this liability to our PARS trust per the actuarial study measured as of June 30, 2021.

Annual OPEB Cost for the budget year 2024-25	$640,000

The District's actual cost to pay medical premiums for retired employees will be paid out of the PARS trust. This annual cost is estimated at $836,000.

Section 6
Water Purchase

WATER PURCHASE

The proposed FY 2024-25 water budget is $6.0 million and calls for not purchasing any Metropolitan Water District (MWD) untreated full-service water for two primary reasons: (1) The groundwater basin is in good condition with high water storage levels that are expected to be even higher in the near future, and (2) Funding that would have been spent to purchase imported water can be diverted to assist in paying for necessary PFAS cost.

Staff expects groundwater pumping to continue to remain depressed due to the State Division of Drinking Water establishing a 10 ppt PFOA Response Level and the anticipated Environmental Protection Agencies 4 ppt Maximum Contaminant Level for PFOA.

This water budget will result in the accumulated overdraft, assuming an average hydrological year, to decline (resulting in increasing water storage levels) by approximately 20,000 acre-feet.

The groundwater basin accumulated overdraft is projected to be approximately 168,000 acre-feet on June 30, 2024. The overdraft is 7,000 acre-feet under the District's recommended target accumulated overdraft of 175,000 acre-feet (Average of 200,000 acre-feet to 150,000 acre-feet recommended range). The general maximum desired balance in the water reserve fund is to have sufficient funding available to purchase 50% of the water needed from MWD to refill the groundwater basin to the 175,000-acre-foot target. Given the anticipated June 30, 2024 overdraft, no reserve funds are needed.

Estimated June 30, 2024 Accumulated Overdraft		168,000 af
OCWD Target Accumulated Overdraft Range (150,000 to 200,000 af)		175,000 af
	Difference over/(under)	(7,000) af
	50% of Difference	0.0 af
2024-25 Average MWD untreated full-service rate including $80 per acre-feet for RTS and Capacity Charge ($935 + $80)		$1,015/af
Necessary water fund balance to purchase 0.0 af of water ($1,015/af x 0.0 af)		$0.00 million
Estimated June 30, 2024 Water Reserve Fund Balance		$1 Million

The accompanying table provides a detailed summary of the Water Purchase Budget for FY 2024-25. MWD's rates are assumed to increase on January 1, 2025, as shown. For budgeting purposes, the cost per acre-foot for MWD water is an average of the existing and expected calendar year 2024 rates. The specific water purchase items in the table include:

1. The District anticipates purchasing approximately 3,000 acre-feet of water from the City of Long Beach for injection into the Alamitos Barrier. The cost of this water is $5/acre-foot above the cost of MWD Tier I water plus the Readiness-To-Serve and Capacity Charge paid by the City of Long Beach to MWD. The total cost for this water is $1,439.96/af.
2. The District will not purchase any untreated full service non-interruptible MWD water for recharge at the District's field headquarters in the City of Anaheim.
3. MWDOC Groundwater Charge – MWDOC charges the District a fee to fund its staff time and other expenses incurred to support OCWD's programs and purchases of imported water. The fee is currently estimated at $400,000.
4. The District incurs a Capacity Charge fee on any purchase of MWD non-interruptible water supplies (i.e., OC-44 connection supplies or untreated non-interruptible water). The Capacity Charge is administered by MWDOC and is now billed monthly to the District as a flat fee. The Capacity Charge for FY 2024-25 will be approximately $10,000.
5. The District also incurs a Readiness-To-Serve charge on any purchase of MWD treated non-interruptible water supplies (i.e., OC-44 connection supplies or untreated non-interruptible water). The fee is expected to be approximately $1,300,000 in FY 2024-25.

The total Water Purchase budget expense for FY 2024-25 is $6.0 million.

Fiscal Year 2024-25 Budget for Water Purchase
(July 1, 2024 to June 30, 2025)

Item #		Volume (AF)	2024-25 Unit Cost $/af (1)	MWDOC Surcharge $/af	Total Cost Amount
1	Alamitos Barrier Injection water from Long Beach Water Department (2)	3,000	1,439.96	n/a	$4,319,880
2	Untreated Non-interruptible MWD Water (3)	0	934.50	n/a	$0
	Sub-total	**3,000**			**$4,319,880**
3	MWDOC Groundwater Charge				$400,000
4	MWD/MWDOC Capacity Charge (4)				$10,000
5	Readiness-to-serve charge is based upon an 4-year average of previous purchases (5)				$1,300,000
	Total	**3,000**			**$6,029,880**

NOTES

(1) Average of 2025 and 2024 rates
(2) Treated Non-interruptible rate assumed to increase from $1,256/af to $1,344/af: Average is $1,300/af
Unit cost includes $5/af City of Long Beach fee plus $123/af RTS and $12/af Capacity Charge paid by Long Beach to MWD
(3) Untreated non-interruptible rate assumed to increase from $903/af to $966/af: Average is $934.50/af
(4) MWD/MWDOC Capacity Charge is billed monthly by MWDOC as a flat fee
(5) Readiness-to-serve (RTS) charge is calculated and provided by MWDOC

Section 7
Basin Equity Assessment

BASIN EQUITY ASSESSMENT (BEA) BUDGET

The objective of the BEA program, as authorized by Section 31.5 of the Orange County Water District Act, is to make possible more effective management of the groundwater basin and to equalize water costs within the District.

BEA collections for FY 2024-25 are estimated at $2,750,000, which applies to pumping in excess of the basin production percentage (BPP). The District sets the BEA based on the price of the Metropolitan Water District's water.

BEA revenue is used to offset the cost of MWD water purchases. Predicting BEA revenue is difficult as it is determined by: (1) groundwater producers who decide to pump above the BPP; (2) groundwater producers participating in water quality projects that receive partial BEA exemptions for pumping above the BPP; and (3) smaller private party pumping.

BEA revenues expected for pumping above the BPP	$2,750,000

Section 8
Capital Improvement Program

Debt and PAYGO Funded Projects

CAPITAL IMPROVEMENT PROGRAM

The fiscal year (FY) 2024-25 Capital Improvement Program (CIP) is provided on the following pages. The CIP projects are funded by debt proceeds, grants, state loans, and $59.4 million from operating revenues. The assets created by the CIP projects typically have a useful life of between three to seventy years.

The total proposed CIP cost for the FY 2024-25 budget is $59.4 million, and it includes 27 projects. The life span of various CIP projects varies from project to project and it can be three years or longer. The District will fund $59.4 million CIP budget from the operating revenues, grants, and WIFIA loan. This District practice is very useful in keeping the debt service cost to the minimum and maintaining debt service coverage targets.

The CIP is primarily driven by the following objectives: (1) increasing the District's recharge capacity to allow for increased sustainable production out of the groundwater basin; (2) protecting water quality by removing contaminated groundwater from the basin and providing additional wetlands treatment for Santa Ana River flows; and (3) protecting the coastal portion of the groundwater basin.

Budgeting of project expenditures does not authorize staff to proceed with a project. Each budgeted project must be individually reviewed and formally approved by the Board via the preparation of an Engineer's Report. In addition, the Board would need to approve the design and the construction contracts if the project progresses forward.

The expenditures for each project are shown in the fiscal year they are anticipated to occur in. The District has many multi-year projects that require several years to process and construct. Table 8-1 provides a broad summary of the projects in the CIP. A brief description and status of each project are provided on the attached Capital Projects Information sheet.

TABLE 8-1
SUMMARY OF PROJECTS IN THE CAPITAL IMPROVEMENT PROGRAM

PROJECT TYPE	OBJECTIVE
WATER SUPPLY	**PROVIDE FOR INCREASED GROUNDWATER PRODUCTION AND CREATE SUPPLIES WHERE ECONOMICAL AS COMPARED WITH MWD RATES.**
	Construct facilities to increase recharge capacity and percolation rates to allow for increased groundwater pumping.
	Improve existing facilities to increase percolation rates.
	Create a new water supply.
WATER QUALITY	**PROTECT THE QUALITY OF THE GROUNDWATER BASIN SUPPLIES.**
	Protect groundwater in the North Basin by extracting and treating wells threatened by VOC contamination in Anaheim and Fullerton.

COASTAL IMPROVEMENTS	MITIGATE EXISTING AND PROJECTED FUTURE PROBLEMS ALONG THE COAST.
	Construct barrier facilities to prevent seawater intrusion.

The cost of information for multi-year debt and operating revenue funded projects is summarized in Table 8-2.

The OCWD staff works closely with the Board of Directors in processing capital projects. Formal Board approval is required at various stages of a project's life, as shown below:

1. Inclusion in OCWD annual budget.
2. Issuance of Request for Proposals for the hiring of consultants for fees greater than $20,000 to assist in processing project documents.
3. Awarding consultant contracts greater than $20,000.
4. Approval of Feasibility Study Report, if so directed by the General Manager.
5. Approval of necessary CEQA documents.
6. Approval of the project Engineer's Report.
7. Approval of any agreements (i.e. grant funding, interagency).
8. Approval of advertising construction contracts.
9. Award of construction contracts.
10. Approval of change orders greater than 5% of the construction budget.
11. Approval of Notice of Completion.

The District primarily uses long-term debt to fund capital projects. The District policy for using long-term debt was established in October 2000. The policy calls for the following:

- Preliminary project expenses related to direct research are to be paid from the General Fund.
- Project expenses for items such as feasibility reports, pilot studies, engineer reports, compliance with CEQA, and project design and construction may be capitalized and funded with long-term debt.
- Project expenses that are capitalized and funded with long-term debt and do not lead to the construction of a project will require an adjustment by the Accounting Department to pay off the long-term debt incurred using cash reserves.

TABLE 8-2
FISCAL YEAR 2024-25
CAPITAL IMPROVEMENT PROGRAM SUMMARY

				Fiscal Year	Salaries	Benefits	Salaries & Benefits	Pre-design	Design	Construction	Total		
			ACCOUNT NO: COST CODE					***02000***	***03000***	***40,010***			
			Grand Total	**2024-25**	**530,191**	**177,586**	**707,777**	**150,000**	**5,600,000**	**52,926,000**	**59,383,777**		
				2025-26	**0**	**0**	**0**	**0**	**3,150,000**	**67,950,000**	**71,100,000**		
				2026-27	**0**	**0**	**0**	**0**	**900,000**	**80,600,000**	**81,500,000**		
				2027-28	**0**	**0**	**0**	**0**	**-**	**36,700,000**	**36,700,000**		
				2028-29	**0**	**0**	**0**	**0**	**-**	**4,700,000**	**4,700,000**		
	JDE PROJECT ID NO.	**Project Name**	**Project Description**									**Project Details**	**Dept.**
1	C23001	**R&D ERC Pilot and Test Systems Upgrades**	This project will continue the R&D pilots modernization begun in FY23-24 including work on the RO satellite vessels (SVs) in the GWRS RO plant and on pilots at the Engineering Research Center.	2024-25			-			30,000	30,000	Staff will develop a plan for the SVs to integrate data loggers, pressure transducers and potentially include booster pump upgrades on SVs, and develop a Data Management and Reporting Platform (vendor or in-house TBD). KDC (contractor) work will include: complete work started in FY23-24, RO pilot #4: PLC and HMI upgrades. UF pilot #1 and UF pilot #2: PLC and HMI upgrades. RO pilot #3: PLC and HMI upgrades. Interstage booster pump installation and VFD configuration. R&D pilots data management system and online monitoring platform. RO building satellite vessels (SVs) upgrades: integrate data loggers, new sensors (pressure transducers) and potential include booster pump upgrades for up to 8 of 8 SVs. SVs' Data Management and Reporting Platform (vendor or in-house TBD). In-house staff (I/E staff) will finish the RO#3 pilot interstage boost pump (IBP) installation and VFD control configuration after KDC upgrade the PLC/HMI.	1040
				2025-26			-				-		
				2026-27			-				-		
				2027-28			-				-		
				2028-29			-				-		
		Estimated Total Capital Cost: $30k								5-Year Project Total	30,000		
2	C18001	**Prado Shooting Range Bullet Lead Iterim Remediation Actions**	Purpose is to consolidate and remediate for lead at two locations behind Prado in order to make one of the parcels of land available for purchase or redevelopment. A CAMU facility is to be constructed and lead contaminated soil will be transported and sealed within the CAMU structure.	2024-25			-		150,000	50,000	200,000	Consulting work revised to include preparation of Remedial Action Plan and CEQA documentation. Construction activities anticipated to begin July 2025	1044
				2025-26			-			450,000	450,000		
				2026-27			-				-		
				2027-28			-				-		
				2028-29			-				-		
		Estimated Total Capital Cost: $850,000								5-Year Project Total	650,000		
3	C19006	**Anaheim PFAS Treatment Systems**	PFAS Treatment Systems	2024-25			-			10,000,000	10,000,000	Design and construction of PFAS treatment vessel systems to remove the PFAS contaminant from the water prior to individual Producers serving to customers.	1070
				2025-26			-				-		
				2026-27			-				-		
				2027-28			-				-		
				2028-29			-				-		
		Estimated Total Capital Cost: $117M								5-Year Project Total	10,000,000		
4	C19007	**Fullerton PFAS Treatment Systems**	PFAS Treatment Systems	2024-25	19,999	7,078	27,076			1,700,000	1,727,076	Rehabilitate Well Kim 1A and Replace Well Pump and Pump Drive.	1070
				2025-26			-				-		
				2026-27			-				-		
				2027-28			-				-		
				2028-29			-				-		
		Estimated Total Capital Cost: $5.3M								5-Year Project Total	1,727,076		

TABLE 8-2
FISCAL YEAR 2024-25
CAPITAL IMPROVEMENT PROGRAM SUMMARY

				Fiscal Year	Salaries	Benefits	Salaries & Benefits	Pre-design	Design	Construction	Total		
		ACCOUNT NO: COST CODE						02000	03000	40,010			
5	C19011	**Tustin PFAS Treatment System** Estimated Total Capital Cost: $25.8M	PFAS Treatment Systems	2024-25	23,676	8,310	31,985			4,000,000	4,031,985	Design and construction of PFAS treatment vessel systems to remove the PFAS contaminant from the water prior to individual Producers serving to customers.	1070
				2025-26			-				-		
				2026-27			-				-		
				2027-28			-				-		
				2028-29			-				-		
										5-Year Project Total	4,031,985		
6	C19016	**Orange Well 20, 21, and 22 PFAS Treatment Systems** Estimated Total Capital Cost: $8M	PFAS Treatment Systems	2024-25	23,676	8,310	31,985			2,000,000	2,031,985	Design and construction of PFAS treatment vessel systems to remove the PFAS contaminant from the water prior to individual Producers serving to customers.	1070
				2025-26			-				-		
				2026-27			-				-		
				2027-28			-				-		
				2028-29			-				-		
										5-Year Project Total	2,031,985		
7	C19018	**Orange Well 29 PFAS Treatment System** Estimated Total Capital Cost: $5M	PFAS Treatment Systems	2024-25	15,784	5,540	21,324			2,500,000	2,521,324	Design and construction of PFAS treatment vessel systems to remove the PFAS contaminant from the water prior to individual Producers serving to customers.	1070
				2025-26			-			2,500,000	2,500,000		
				2026-27			-				-		
				2027-28			-				-		
				2028-29			-				-		
										5-Year Project Total	5,021,324		
8	C19019	**Orange Well 28 PFAS Treatment System** Estimated Total Capital Cost: $5M	PFAS Treatment Systems	2024-25	15,784	5,540	21,324			2,000,000	2,021,324	Design and construction of PFAS treatment vessel systems to remove the PFAS contaminant from the water prior to individual Producers serving to customers.	1070
				2025-26			-				-		
				2026-27			-				-		
				2027-28			-				-		
				2028-29			-				-		
										5-Year Project Total	2,021,324		
9	C19020	**Santa Ana Wells 27 and 28 PFAS Treatment Systems** Estimated Total Capital Cost: $12M	PFAS Treatment Systems	2024-25	30,935	9,734	40,669			6,000,000	6,040,669	Design and construction of PFAS treatment vessel systems to remove the PFAS contaminant from the water prior to individual Producers serving to customers.	1070
				2025-26			-			6,000,000	6,000,000		
				2026-27			-				-		
				2027-28			-				-		
				2028-29			-				-		
										5-Year Project Total	12,040,669		
10	C19021	**Santa Ana Well 31 PFAS Treatment System** Estimated Total Capital Cost: $6M	PFAS Treatment Systems	2024-25	30,935	9,734	40,669			3,000,000	3,040,669	Design and construction of PFAS treatment vessel systems to remove the PFAS contaminant from the water prior to individual Producers serving to customers.	1070
				2025-26			-				-		
				2026-27			-				-		
				2027-28			-				-		
				2028-29			-				-		
										5-Year Project Total	3,040,669		
11	C19022	**Santa Ana Well 38 PFAS Treatment System** Estimated Total Capital Cost: $5.4M	PFAS Treatment Systems	2024-25	12,374	3,893	16,267			1,140,000	1,156,267	Design and construction of PFAS treatment vessel systems to remove the PFAS contaminant from the water prior to individual Producers serving to customers.	1070
				2025-26			-				-		
				2026-27			-				-		
				2027-28			-				-		
				2028-29			-				-		
										5-Year Project Total	1,156,267		
12	C23002	**Garden Grove Well 19 PFAS Treatment System** Estimated Total Capital Cost: $6M	PFAS Treatment Systems	2024-25	39,998	14,155	54,153			5,000,000	5,054,153	Design and construction of PFAS treatment vessel systems to remove the PFAS contaminant from the water prior to individual Producers serving to customers.	1070
				2025-26			-				-		
				2026-27			-				-		
				2027-28			-				-		
				2028-29			-				-		
										5-Year Project Total	5,054,153		
13	C23005	**Fullerton Kim 2 PFAS Treatment System** Estimated Total Capital Cost: $6M	PFAS Treatment Systems	2024-25	39,998	14,155	54,153			5,000,000	5,054,153	Design and construction of PFAS treatment vessel systems to remove the PFAS contaminant from the water prior to individual Producers serving to customers.	1070
				2025-26			-				-		
				2026-27			-				-		
				2027-28			-				-		
				2028-29			-				-		
										5-Year Project Total	5,054,153		
14	C23006	**Golden State Water Company Sherrill Well PFAS Treatment System** Estimated Total Capital Cost: $2.5M	PFAS Treatment Systems	2024-25	31,304	9,087	40,391			2,000,000	2,040,391	Design and construction of PFAS treatment vessel systems to remove the PFAS contaminant from the water prior to individual Producers serving to customers.	1070
				2025-26			-				-		
				2026-27			-				-		
				2027-28			-				-		
				2028-29			-				-		
										5-Year Project Total	2,040,391		

TABLE 8-2
FISCAL YEAR 2024-25
CAPITAL IMPROVEMENT PROGRAM SUMMARY

	ACCOUNT NO: COST CODE			Fiscal Year	Salaries	Benefits	Salaries & Benefits	Pre-design 02000	Design 03000	Construction 40,010	Total		
15	C240XX	**Anaheim Wells 39, 47, 48, and 53 PFAS Treatment Systems**	PFAS Treatment Systems	2024-25	15,652	4,543	20,195		1,200,000		1,220,195	Design and construction of PFAS treatment vessel systems to remove the PFAS contaminant from the water prior to individual Producers serving to customers. These projects are part of the "Round 2" PFAS Program to be implemented once MCL is established.	1070
				2025-26			-			11,800,000	11,800,000		
				2026-27			-			11,000,000	11,000,000		
				2027-28			-				-		
				2028-29			-				-		
		Estimated Total Capital Cost: $24M								5-Year Project Total	24,020,195		
16	C240XX	**Fullerton Wells 10 and 15A PFAS Treatment Systems**	PFAS Treatment Systems	2024-25	25,651	8,082	33,734		600,000		633,734	Design and construction of PFAS treatment vessel systems to remove the PFAS contaminant from the water prior to individual Producers serving to customers. These projects are part of the "Round 2" PFAS Program to be implemented once MCL is established.	1070
				2025-26			-			8,400,000	8,400,000		
				2026-27			-			3,000,000	3,000,000		
				2027-28			-				-		
				2028-29			-				-		
		Estimated Total Capital Cost: $12M								5-Year Project Total	12,033,734		
17	C240XX	**Garden Grove Wells 22 and 27 PFAS Treatment Systems**	PFAS Treatment Systems	2024-25	9,999	3,539	13,538		600,000		613,538	Design and construction of PFAS treatment vessel systems to remove the PFAS contaminant from the water prior to individual Producers serving to customers. These projects are part of the "Round 2" PFAS Program to be implemented once MCL is established.	1070
				2025-26			-			8,400,000	8,400,000		
				2026-27			-			3,000,000	3,000,000		
				2027-28			-				-		
				2028-29			-				-		
		Estimated Total Capital Cost: $12M								5-Year Project Total	12,013,538		
18	C240XX	**Huntington Beach Well 3A PFAS Treatment System**	PFAS Treatment Systems	2024-25	15,652	4,543	20,195		300,000		320,195	Design and construction of PFAS treatment vessel systems to remove the PFAS contaminant from the water prior to individual Producers serving to customers. These projects are part of the "Round 2" PFAS Program to be implemented once MCL is established.	1070
				2025-26			-			4,000,000	4,000,000		
				2026-27			-			1,700,000	1,700,000		
				2027-28			-				-		
				2028-29			-				-		
		Estimated Total Capital Cost: $6M								5-Year Project Total	6,020,195		
19	C240XX	**Orange Wells 25 and 27 PFAS Treatment Systems**	PFAS Treatment Systems	2024-25	7,892	2,770	10,662		600,000		610,662	Design and construction of PFAS treatment vessel systems to remove the PFAS contaminant from the water prior to individual Producers serving to customers. These projects are part of the "Round 2" PFAS Program to be implemented once MCL is established.	1070
				2025-26			-			8,400,000	8,400,000		
				2026-27			-			3,000,000	3,000,000		
				2027-28			-				-		
				2028-29			-				-		
		Estimated Total Capital Cost: $12M								5-Year Project Total	12,010,662		
20	C240XX	**Golden State Water Company Wells SCL5 and PLJ2 PFAS Treatment Systems**	PFAS Treatment Systems	2024-25	15,652	4,543	20,195		400,000		420,195	Design and construction of PFAS treatment vessel systems to remove the PFAS contaminant from the water prior to individual Producers serving to customers. These projects are part of the "Round 2" PFAS Program to be implemented once MCL is established.	1070
				2025-26			-			7,000,000	7,000,000		
				2026-27			-			1,600,000	1,600,000		
				2027-28			-				-		
				2028-29			-				-		
		Estimated Total Capital Cost: $9M								5-Year Project Total	9,020,195		
21	C240XX	**Santa Ana Wells 16, 29, 41, and 33 PFAS Treatment System**	PFAS Treatment Systems	2024-25	6,187	1,947	8,134		750,000		758,134	Design and construction of PFAS treatment vessel systems to remove the PFAS contaminant from the water prior to individual Producers serving to customers. These projects are part of the "Round 2" PFAS Program to be implemented once MCL is established.	1070
				2025-26			-		250,000	3,000,000	3,250,000		
				2026-27			-			8,000,000	8,000,000		
				2027-28			-			8,000,000	8,000,000		
				2028-29			-				-		
		Estimated Total Capital Cost: $20M								5-Year Project Total	20,008,134		

TABLE 8-2
FISCAL YEAR 2024-25
CAPITAL IMPROVEMENT PROGRAM SUMMARY

				Fiscal Year	Salaries	Benefits	Salaries & Benefits	Pre-design	Design	Construction	Total		
		ACCOUNT NO: COST CODE						02000	03000	40,010			
22	C240XX	**Santa Ana Wells 18, 24, 32, 36, and 39 PFAS Treatment System**	PFAS Treatment Systems	2024-25	6,187	1,947	8,134		1,000,000	8,000,000	9,008,134	Design and construction of PFAS treatment vessel systems to remove the PFAS contaminant from the water prior to individual Producers serving to customers. These projects are part of the "Round 2" PFAS Program to be implemented once MCL is established.	1070
				2025-26			-			8,000,000	8,000,000		
				2026-27			-			8,000,000	8,000,000		
				2027-28			-				-		
				2028-29			-				-		
		Estimated Total Capital Cost: $25M								5-Year Project Total	25,008,134		
23	C250XX	**Anaheim Well 51 PFAS Treatment System**	PFAS Treatment Systems	2024-25			-				-	Design and construction of PFAS treatment vessel systems to remove the PFAS contaminant from the water prior to individual Producers serving to customers. These projects are part of the "Round 2" PFAS Program to be implemented once MCL is established.	1070
				2025-26			-		300,000		300,000		
				2026-27			-			4,000,000	4,000,000		
				2027-28			-			1,700,000	1,700,000		
				2028-29			-				-		
		Estimated Total Capital Cost: $6M								5-Year Project Total	6,000,000		
24	C250XX	**Buena Park Linden Well PFAS Treatment System**	PFAS Treatment Systems	2024-25			-				-	Design and construction of PFAS treatment vessel systems to remove the PFAS contaminant from the water prior to individual Producers serving to customers. These projects are part of the "Round 2" PFAS Program to be implemented once MCL is established.	1070
				2025-26			-		300,000		300,000		
				2026-27			-			4,000,000	4,000,000		
				2027-28			-			1,700,000	1,700,000		
				2028-29			-				-		
		Estimated Total Capital Cost: $6M								5-Year Project Total	6,000,000		
25	C250XX	**Fullerton Wells 5, 6, & 8 PFAS Treatment Systems**	PFAS Treatment Systems	2024-25			-				-	Design and construction of PFAS treatment vessel systems to remove the PFAS contaminant from the water prior to individual Producers serving to customers. These projects are part of the "Round 2" PFAS Program to be implemented once MCL is established.	1070
				2025-26			-		600,000	-	600,000		
				2026-27			-			8,400,000	8,400,000		
				2027-28			-			3,000,000	3,000,000		
				2028-29			-				-		
		Estimated Total Capital Cost: $12M								5-Year Project Total	12,000,000		
26	C250XX	**Garden Grove Wells 25 and 26 PFAS Treatment Systems**	PFAS Treatment Systems	2024-25			-				-	Design and construction of PFAS treatment vessel systems to remove the PFAS contaminant from the water prior to individual Producers serving to customers. These projects are part of the "Round 2" PFAS Program to be implemented once MCL is established.	1070
				2025-26			-		600,000		600,000		
				2026-27			-			9,400,000	9,400,000		
				2027-28			-			3,000,000	3,000,000		
				2028-29			-				-		
		Estimated Total Capital Cost: $13M								5-Year Project Total	13,000,000		
27	C250XX	**Huntington Beach Well 6 PFAS Treatment System**	PFAS Treatment Systems	2024-25			-				-	Design and construction of PFAS treatment vessel systems to remove the PFAS contaminant from the water prior to individual Producers serving to customers. These projects are part of the "Round 2" PFAS Program to be implemented once MCL is established.	1070
				2025-26			-		300,000		300,000		
				2026-27			-			4,000,000	4,000,000		
				2027-28			-			1,700,000	1,700,000		
				2028-29			-				-		
		Estimated Total Capital Cost: $6M								5-Year Project Total	6,000,000		
28	C250XX	**Golden State Water Company Wells SBCH and SDAL PFAS Treatment Systems**	PFAS Treatment Systems	2024-25			-				-	Design and construction of PFAS treatment vessel systems to remove the PFAS contaminant from the water prior to individual Producers serving to customers. These projects are part of the "Round 2" PFAS Program to be implemented once MCL is established.	1070
				2025-26			-		200,000		200,000		
				2026-27			-			3,500,000	3,500,000		
				2027-28			-			800,000	800,000		
				2028-29			-				-		
		Estimated Total Capital Cost: $4.5M								5-Year Project Total	4,500,000		

TABLE 8-2
FISCAL YEAR 2024-25
CAPITAL IMPROVEMENT PROGRAM SUMMARY

				Fiscal Year	Salaries	Benefits	Salaries & Benefits	Pre-design	Design	Construction	Total		
		ACCOUNT NO: COST CODE						02000	03000	40,010			
29	C250XX	**Santa Ana Wells 26 PFAS Treatment System** Estimated Total Capital Cost: $6M	PFAS Treatment Systems	2024-25			-				-	Design and construction of PFAS treatment vessel systems to remove the PFAS contaminant from the water prior to individual Producers serving to customers. These projects are part of the "Round 2" PFAS Program to be implemented once MCL is established.	1070
				2025-26			-		300,000		300,000		
				2026-27			-			4,000,000	4,000,000		
				2027-28			-			1,700,000	1,700,000		
				2028-29			-				-		
										5-Year Project Total	6,000,000		
30	C250XX	**Westminster Well 3 PFAS Treatment System** Estimated Total Capital Cost: $6M	PFAS Treatment Systems	2024-25			-				-	Design and construction of PFAS treatment vessel systems to remove the PFAS contaminant from the water prior to individual Producers serving to customers. These projects are part of the "Round 2" PFAS Program to be implemented once MCL is established.	1070
				2025-26			-		300,000		300,000		
				2026-27			-			4,000,000	4,000,000		
				2027-28			-			1,700,000	1,700,000		
				2028-29			-				-		
										5-Year Project Total	6,000,000		
31	C260XX	**Newport Beach Combined PFAS Treatment System** Estimated Total Capital Cost: $13M	PFAS Treatment Systems	2024-25			-				-	Design and construction of PFAS treatment vessel systems to remove the PFAS contaminant from the water prior to individual Producers serving to customers. These projects are part of the "Round 2" PFAS Program to be implemented once MCL is established.	1070
				2025-26			-				-		
				2026-27			-		600,000		600,000		
				2027-28			-			9,400,000	9,400,000		
				2028-29			-			3,000,000	3,000,000		
										5-Year Project Total	13,000,000		
32	C260XX	**Golden State Water Company Wells SLON, SORG, and SSYC PFAS Treatment Systems** Estimated Total Capital Cost: $6M	PFAS Treatment Systems	2024-25			-				-	Design and construction of PFAS treatment vessel systems to remove the PFAS contaminant from the water prior to individual Producers serving to customers. These projects are part of the "Round 2" PFAS Program to be implemented once MCL is established.	1070
				2025-26			-				-		
				2026-27			-		300,000		300,000		
				2027-28			-			4,000,000	4,000,000		
				2028-29			-			1,700,000	1,700,000		
										5-Year Project Total	6,000,000		
33	C08007	**South Basin Groundwater Protection Project** Estimated Total Capital Cost: $15M	Continuation of a contract begun in FY23-24 to perform environmental evaluation (CEQA) and prepare documentation, including program EIR for a groundwater contamination remediation project.	2024-25	122,282	41,635	163,917	150,000			313,917	Subject to Board approval, a proposed remedial action project would address groundwater contamination in the South Basin area (Santa Ana and Irvine) and may entail the construction and operation of a series of groundwater extraction wells and treatment systems.	1075
				2025-26			-				-		
				2026-27			-				-		
				2027-28			-				-		
				2028-29			-				-		
										5-Year Project Total	313,917		
34	C23004	**Bolsa Gap Seawater Intrusion Monitoring Well** Estimated Total Capital Cost: $500K	Complete construction begun in FY23-24 of monitoring well BS29 in Bolsa Gap (Huntington Beach)	2024-25			-			200,000	200,000	Construct a 4-well cluster of monitoring wells to a maximum depth of approx. 400 feet to investigate seawater intrusion in the Bolsa Gap.	1075
				2025-26			-				-		
				2026-27			-				-		
				2027-28			-				-		
				2028-29			-				-		
										5-Year Project Total	200,000		
35	C24XXX	**Shallow Aquifer Monitoring Wells for Basin Storage Calculation Wells FM-41 and OM-12** Estimated Total Capital Cost: $115K	Construct two shallow monitoring wells for water level measurements used for annual basin storage change calculation	2024-25	20,575	8,503	29,077			85,000	114,077	Construct two shallow monitoring wells (Fullerton and Orange) where no wells exist to improve the accuracy of the annual groundwater level contour map and basin storage calculation.	1075
				2025-26			-				-		
				2026-27			-				-		
				2027-28			-				-		
				2028-29			-				-		
										5-Year Project Total	114,077		

TABLE 8-2
FISCAL YEAR 2024-25
CAPITAL IMPROVEMENT PROGRAM SUMMARY

				Fiscal Year	Salaries	Benefits	Salaries & Benefits	Pre-design	Design	Construction	Total		
	ACCOUNT NO:	COST CODE						02000	03000	40,010			
36	C24XXX	**Talbert Gap Seawater Intrusion Monitoring Well**	Construct monitoring well M29A in Talbert Gap to determine trends in seawater intrusion and Talbert Barrier performance where no other wells exist.	2024-25			-			171,000	171,000	The proposed well will provide data to help staff understand an area where seawater intrusion has been stubbornly difficult to push back toward the ocean by observing groundwater level and chloride trends in relation to barrier injection.	1075
				2025-26			-				-		
				2026-27			-				-		
				2027-28			-				-		
				2028-29			-				-		
		Estimated Total Capital Cost: $171K								5-Year Project Total	171,000		
37	C23003	**Shallow Aquifer Monitoring Wells for Basin Storage Calculation (carry-over of expenses for work begun in FY23-24) Wells AM-62, IDM-5 and IDM-6**	Complete construction of three shallow monitoring wells for water level measurements used for annual basin storage change calculation	2024-25			-			50,000	50,000	Construct shallow monitoring wells (Yorba Linda, North Tustin, Irvine) where no wells exist to improve the accuracy of the annual groundwater level contour map and basin storage calculation.	1075
				2025-26			-				-		
				2026-27			-				-		
				2027-28			-				-		
				2028-29			-				-		
		Estimated Total Capital Cost: $150K								5-Year Project Total	50,000		

Section 9
New Equipment
(Fixed Assets) Summary

New Equipment Budget Funded by Operating Revenues

NEW EQUIPMENT (FIXED ASSETS) SUMMARY

This section describes the equipment items proposed for FY 2024-25. The total budget for 14 equipment items listed in Table 9-1 is $893,000. These items will be funded using operating revenues.

TABLE 9-1
FY 2024-25 PROPOSED EQUIPMENT BUDGET
FUNDED BY OPERATING REVENUES

	Item Name	Item Description	Department	Budget Amount
	Information Services (1016)			
1	Audiovisual Equipment	Replacement of audiovisual equipment in the Boardroom, C2 and C3 Conference Rooms.	Information Services (1016)	400,000
2	Network Switches	Replacement of end-of-life Cisco network switches.	Information Services (1016)	75,000
3	SAR River Flow Camera for Operations	Remote camera with solar power, cellular communications, license and installation for FHQ adjacent to Angels stadium for monitoring SAR flow.	Information Services (1016)	32,000
4	Network Backup System	Backup / Disaster Recovery system for District systems.	Information Services (1016)	30,000
5	Cisco Gateway	Replacement of end-of-life Cisco gateway used for telephone services at Prado.	Information Services (1016)	13,000
	E24.17110.1016	**Total**	**Information Services (1016)**	**550,000**
	Laboratory (1038)			
6	Promochrom SPE-03 (2)	PFAS automated 8-port solid-phase sample extraction systems.	Laboratory (1038)	90,000
7	Ion Chromatograph	Ion chromatograph used for anion analysis.	Laboratory (1038)	70,000
8	Turbo Vap Concentrator (2)	PFAS sample extract evaporators using nitrogen gas.	Laboratory (1038)	30,000
9	Scientific Refrigerator	Replacing 1 out of 19 storage units for samples, standards, and reagents (20 years old).	Laboratory (1038)	15,000
	E24.17110.1038	**Total**	**Laboratory (1038)**	**205,000**
	Water Production (1050)			
10	I&E Electric Cart	New electric cart for the I&E shop.	Water Production (1050)	28,000
11	Replace 3 Copiers/Scanners Located in: A540 Building, Maintenance Shop, MF East	Replace existing 10 year old Minolta copiers/scanners located in three separate builidngs used by Water Production staff: RO Elect Building, MF East (Ops), Maintenance Shop/Annex.	Water Production (1050)	25,000
12	Trend Net Fiber OTDR	Optical Time Domain Reflectometer for certifying and troubleshooting MM and SM fiber networks.	Water Production (1050)	10,000
	E24.17110.1050	**Total**	**Water Production (1050)**	**63,000**
	Wetland Operations (1062)			
13	Excavator Mulching Head Attachment	To assist in the management of trees and vegetation at the District's land behind Prado Dam and in the Wetlands, a mulching head attachment for an excavator is needed. The device will allow an operator to easily mulch timber and vegetation with the excavator instead of by contractor or with less efficient equipment.	Wetland Operations (1062)	65,000
	E24.17110.1062	**Total**	**Wetland Operations (1062)**	**65,000**
	Hydrogeology (1075)			
14	Replace 32 year-old Pipe Trailer	New trailer will be 18-20 feet long to haul 20-foot lengths of well development pipe and will have electric brakes for heavy loads.	Hydrogeology (1075)	10,000
	E24.17110.1075	**Total**	**Hydrogeology (1075)**	**10,000**
	Grand Total for Equipment Funded by Operating Revenues			**893,000**

Section 10
Replacement and Refurbishment Fund

REPLACEMENT AND REFURBISHMENT BUDGET

The District has over $1.5 billion in assets, excluding construction in progress, that will need to be replaced or refurbished at some point in the future. To prevent additional pressure on the Replenishment Assessment, a replacement and refurbishment model was developed in 1998, which included all District assets and used engineer's estimates for the useful life of each asset. This model is capable of forecasting future costs and required revenue streams and is updated annually.

The Replacement and Refurbishment (R&R) fund was originally funded in FY 1998-99 with $15 million from the District Replacement Reserves and $20 million from the Orange County bankruptcy proceeds.

In 2004 the R&R program was downsized to only include infrastructure type assets. The amount of money annually transferred into the R&R program was reduced from $4.5 million annually to $2.8 million. The annual transfer amount for the budget year 2024-25 has grown by $1.8 million to provide sufficient funds to meet future expected R&R expenses. The fiscal year 2024-25 contribution is $27.0 million.

An update to the R&R Model was made in 2007 and the changes included:

1. All infrastructure replacement costs have been updated.
2. The R&R Fund balance was set at the current amount of $61.8 million with an expected interest earnings rate of 5% over the next 30 years.
3. The inflation rate was increased from 3% to 3.5% to reflect recent increases in construction materials.
4. The cost of repairing and refurbishing the Talbert barrier injection wells has been moved out of the R&R program and into the District's general fund.
5. The cost of major lab equipment costing greater than $100,000 has been moved into the R&R program.

Another update to the Model was conducted in 2011 and the changes included the following:

1. Eliminated the replacement of the Green Acres Project's conventional filtration technology as it will be replaced by an expansion of the microfiltration treatment of GWRS.
2. The Basin Cleaning Vehicles (BCV) was removed from the R&R Model as the BCV Program was discontinued.
3. Pump stations electrical and pumps were separated from buildings as they were previously treated as a single unit in the R&R Model.
4. Transferred $10 million in reserves from the R&R Fund to the Operating Fund.

Actual expenditures from the fund vary significantly each year depending on which District assets have reached the end of their useful life and need to be replaced or which assets

can have their lives extended by refurbishing them. The proposed FY 2024-25 R&R budget expenditure is $23.6 million and includes 47 projects. The top five are listed below:

- Replacement of 5,472 MF PP Membranes in MF Train C ($5,700,000).
- Santiago Floating Pump & Motor ($3,500,000).
- Orange Storm Drain at Bond Basin ($3,000,000).
- Replacement of Butterfly valves and actuators at Anaheim Lake ($2,500,000).
- Replacement of RO CIP PVC piping system with SS in area A520 ($1,500,000).

FISCAL YEAR 2024-25
PROPOSED REPLACEMENT & REFURBISHMENT FUND REQUESTS

#	Project ID	Item	Description	Department	Salaries & Benefits	Project Cost	Total Project Cost	Asset Class	Refurbishment or Replacement	Asset Age
		Water Quality (1036)								
1	R24****	Westbay Water Quality Monitoring Vehicle	The Westbay water quality monitoring vehicle is a specialized, one-of-a-kind vehicle designed to safely and effectively perform water quality monitoring of the multi-port monitoring wells located throughout the Orange County groundwater basin. OCWD has 56 separate multi-port monitoring wells with over 550 separate monitoring ports that provide important groundwater quality data. The current vehicle to be replaced was purchased in 1999 and has served the Water Quality Department for 25 years.	Water Quality (1036)		380,000	380,000	Vehicles > $50,000	Replacement	25 yrs
			Total	**Water Quality (1036)**	**$ -**	**$ 380,000**	**$ 380,000**			
		Laboratory (1038)								
2	R24*****	Lab washroom remodel	Remove corroded stainless steel cabinetry used in lab washroom and replace with chemically resistant plastic, install new fume hoods and safety showers (14+ years old)	Laboratory (1038)		980,000	980,000	Buildings	Replacement	14 yrs
3	R24*****	Ion Chromatograph Tandem Mass Spectrometer	Ion chromatograph coupled with tandem mass spectrometer replacing 9-year old instrument no longer supported by manufacturer	Laboratory (1038)		350,000	350,000	Lab Equipment > $100,000	Replacement	9 yrs
4	R24****	Replace obsolete lab Andover continuum controllers, server and front end graphics package with new Shnieder EcoStructure	Replace server, work station, net controllers, switches, software and graphics for the Lab BMS system.	Laboratory (1038)		75,000	75,000	Other	Replacement	14yrs
			Total	**Laboratory (1038)**	**$ -**	**$ 1,405,000**	**$ 1,405,000**			
		Research & Development (1040)								
5	R24****	Office carpeting and Lab flooring	Replace the 20-year old carpet with a non-carpet option (R&D offices, landing) and replace lab flooring (30+ years old) with suitable lab flooring in the R&D Department (second floor Annex Building). Vendor also needs to move and return the office furniture. Consider continuing into first floor NWRI that has same carpet.	Research & Development (1040)		40,000	40,000	Buildings	Replacement	20 - 30+yrs
			Total	**Research & Development (1040)**	**$ -**	**$ 40,000**	**$ 40,000**			
		Water Production (1050)								
6	R24****	Replace 5,472 MF PP Membranes in MF Train C (8 cells)	Replace 684 MF Polypropylene membranes in each cell of Train C (cells C01-C08) for a total of 5,472 MF PP membranes.	Water Production (1050)		5,700,000	5,700,000	RO, MF units	Replacement	5 yrs
7	R22011	Replacement of RO CIP PVC Piping System with Stainless Steel in A520	Replace key sections or entire RO CIP existing PVC schedule 80 piping system that have deteriorated over time.	Water Production (1050)		1,500,000	1,500,000	Pipe/Pipeline	Replacement	15 yrs
8	R24****	Refurbish or Replace Mechanical and Electrical Equipment or Structural Items	These funds are to refurbish or replace GWRS, GAP, and Fountain Valley campus building, mechanical, electrical, and structural items that unexpectedly fail.	Water Production (1050)		700,000	700,000	RO, MF units	Replacement or Refurbishment	16 yrs
9	R23009	GAP Process Building Stairs - Install and Purchase of replacement staircase	Actual stairs installation costs obtained from design engineer. Existing stairs are deteriorating and unsafe to use.	Water Production (1050)		400,000	400,000	Buildings	Replacement	20 yrs
10	R22006	Gap HPEP VFD replacement. Rollover from 22/23	Drive is being custom built to fit the existing space and there have been many supply chain issues. Projected ship date is now 5/2024.	Water Production (1050)		310,550	310,550	Pumps	Replacement	33 yrs
11	R24****	Fire protection system at FV campus	Retrofit existing fire panels from obsolete EST3 to new and in support EST4 system. Re-structure existing fiber network to support star topology and get away from token ring.	Water Production (1050)		300,000	300,000	Buildings	Replacement	17yrs
12	R24****	Green Acres and GWRS Distribution Emergency Pipeline Repairs	These funds allow for refurbishment or replacement of Green Acres or GWRS distribution pipeline assets that unexpectedly fail or damaged.	Water Production (1050)		300,000	300,000	Pipe/Pipeline	Replacement or Refurbishment	30 yrs
13	R24****	GWRS Pipeline leak prevention project	Repair 16 locations that are experiencing significant corrosion at blow off/Air Vac locations.	Water Production (1050)		300,000	300,000	Pipe/Pipeline	Refurbishment	17 yrs
14	R23010	I-24 and I-25 Well Pump and Down Hole Valve Replacement	Replace pumps and down hole control valves that have failed and re-design well controls to restore full functionality.	Water Production (1050)		200,000	200,000	Wells (all types)	Refurbishment	23 yrs
15	R24****	Annex Building Roof Replacement	The Annex building roofing system suffers from numerous leaks and has been patched several times. A replacement of the existing roofing is required. The exact type of roofing system to be installed will be determined.	Water Production (1050)		170,000	170,000	Buildings	Replacement	30 yrs
16	R23012	Replace the GWRS pipeline Phenix subnet controllers with native Delta V Charms controllers, rollover from 23/24	The existing Phoenix subnet controllers are now obsolete. These operate on a Fiber ring network that is not native to Delta V and require a virtual interface module card on the DV backplane that adds complexity to networking and programming . Eliminates several offsite 3rd party Cybersecurity threat elements to the GWRS control networks.	Water Production (1050)		153,000	153,000	Pipe/Pipeline	Replacement	17 yrs
17	R24****	Finished Water Pump and Motor Refurbishment	The five product water pumps are over 15 years old and have never been removed for inspection and refurbishment of key components.	Water Production (1050)		150,000	150,000	Pumps	Replacement	17 yrs
18	R24****	Switchgear Building Roof Replacement	The Switchgear building houses sensitive electrical equipment and the existing roofing system has experienced several leaks. A replacement of the existing membrane based roofing system is required.	Water Production (1050)		150,000	150,000	Buildings	Replacement	20 yrs
19	R24****	RO Electrical Building Roof Replacement	The RO Electrical Building membrane roofing system has signs of leaks during rain events and has been patched. A replacement of the existing membrane based roofing system is required.	Water Production (1050)		150,000	150,000	Buildings	Replacement	17 yrs
20	R21010	RO Transfer Pump and Motor Refurbishment	Inspect, remove (using external crane service) and machine a 1,250hp RO Transfer Pump Station pump as well as replace seals and bearings. Also, clean, dip and bake motor.	Water Production (1050)		120,000	120,000	Pumps	Refurbishment	13 yrs
21	R24****	RO Feed Pump and Motor Refurbishment	The RO High Pressure pumps are over 15 years old and have never been removed for inspection and refurbishment of key components.	Water Production (1050)		100,000	100,000	Pumps	Replacement	17 yrs
22	R21011	Replace Access Ladders on Chemical Process Tanks	Replace ladders on chemical tanks either with FRP or SS depending upon chemical area and tank condition. Also, reglaze ladder mounts on FRP tanks as needed.	Water Production (1050)		100,000	100,000	Buildings	Replacement	13 yrs
23	R21012	RO Feed Pump and Motor Refurbishment	Inspect, remove and machine a 1,050hp RO feed pump as well as replace seals and bearings. Also, clean, dip and bake motor.	Water Production (1050)		95,000	95,000	Pumps	Refurbishment	13 yrs
24	R24****	Pickup Truck F-350	Replace T-113, a 2022 F-350 Pick Up Truck.	Water Production (1050)		78,500	78,500	Heavy Equipment > $50,000	Replacement	22 yrs
25	R24****	Replace Medium voltage VFD 825P motor protection relays (3) with Swietzer SEL 710 MPR's	Replace 3 more 825P motor protection relays in the RO. The 825 series is obsolete and we can no longer purchase replacements.	Water Production (1050)		35,000	35,000	RO, MF units	Replacement	17yrs

FISCAL YEAR 2024-25
PROPOSED REPLACEMENT & REFURBISHMENT FUND REQUESTS

#	Project ID	Item	Description	Department	Salaries & Benefits	Project Cost	Total Project Cost	Asset Class	Refurbishment or Replacement	Asset Age
26	R24****	LED Lighting Retrofit (MF Canopy, RO HID lighting)	Existing fixtures have reached end of life and retrofit to LED will reduce energy and extend life of fixtures.	Water Production (1050)		30,000	30,000	Buildings	Replacement	15 yrs
			Total	**Water Production (1050)**	**$ -**	**$ 11,042,050**	**$ 11,042,050**			
		Recharge Operations (1060)								
27	R24****	John Deere 450 Bulldozer	Replace existing TL-20, a 1983 Tier 0 track loader.	Recharge Operations (1060)		230,000	230,000	Heavy Equipment > $50,000	Replacement	41 yrs
28	R24****	Kraemer Basin Check Valves	Replace the three failed check valves at the Kraemer Basin pump station.	Recharge Operations (1060)		200,000	200,000	Pipe/Pipeline	Replacement	35 yrs
29	R24****	Richfield Fencing	Consistent dumping, trespassing, and code enforcement issues are occurring along Richfield. The fence needs to be aligned with the District's property limits.	Recharge Operations (1060)		100,000	100,000	Fences/Walls	Replacement	25 yrs
30	R24****	SCADA Hardware Replacements	Many of the SCADA hardware components throughout the recharge facilities are unsupported and potential cyber security risks.	Recharge Operations (1060)		100,000	100,000	SCADA	Replacement	Varies
31	R24****	Pavement Maintenance	There is approximtaly 18 acres of paved surfaces in the forebay and Prado areas. Refurbishment will elongate their lifespans.	Recharge Operations (1060)		100,000	100,000	Parking Lots/Roads	Refurbishment	Varies
32	R24****	Infrastructure & Equipment Repair	Funds to replace or refurbish infrastructure or equipment that unexpectedly fail.	Recharge Operations (1060)		100,000	100,000	Recharge Basins	Refurbishment or Replacement	Varies
33	R24****	Heavy Equipment Repair	Funds to repair heavy equipment that unexpectedly fails.	Recharge Operations (1060)		100,000	100,000	Heavy Equipment > $50,000	Refurbishment or Replacement	Varies
34	R24****	Pick-Up Truck F-150	Replace existing T-128, a 2004 F-150 Pick-Up Truck.	Recharge Operations (1060)		56,000	56,000	Vehicles > $50,000	Replacement	20 yrs
35	R24****	Scraper Tire Replacement	The tires on the two scrapers and water truck (RT-14, RT-46, T-124) require replacement due to wear and tear.	Recharge Operations (1060)		50,000	50,000	Heavy Equipment > $50,000	Replacement	36 yrs
36	R24****	Mobile Dewatering Pump (8-inch)	One of the existing mobile dewatering pumps used for basin management has failed and requires replacement.	Recharge Operations (1060)		40,000	40,000	Pumps	Replacement	13 yrs
37	R24****	Paddle Scraper Elevator Overhaul	RT-46 requires an overhaul of its elevator system in order to prevent failure. The equipment is used to clean basin floors.	Recharge Operations (1060)		25,000	25,000	Recharge Basins	Refurbishment	18 yrs
38	R24****	SCADA Screens Update & On-Call Support	Several of the SCADA screens require updates to reflect current infrastructure and remove abandoned features.	Recharge Operations (1060)		60,000	60,000	SCADA	Refurbishment	Varies
			Total	**Recharge Operations (1060)**	**$ -**	**$ 1,161,000**	**$ 1,161,000**			
		Wetland Operations (1062)								
39	R24****	Scraper Tire Replacement	The tires on the scraper, tractors, and water truck (RT-16, RT-31, RT-56, T-135) require replacement due to wear and tear.	Wetland Operations (1062)		50,000	50,000	Heavy Equipment > $50,000	Replacement	35 yrs
			Total	**Wetlands Operations (1062)**	**$ -**	**$ 50,000**	**$ 50,000**			
		Engineering (1070)								
40	R22014	Santiago Floating Pump Station Refurbishment	Repair cables and conduits to floating pump station and modify discharge to allow pumping above water elevation 240'.	Engineering (1070)	40,615	3,459,385	3,500,000	Pumps	Refurbishment	14 yrs
41	R22028	Orange Storm Drain at Bond	Emergency slope and City of Orange storm drain repairs at Bond Basin.	Engineering (1070)	25,000	2,975,000	3,000,000	Recharge Basins	Refurbishment	40 yrs
42	R24****	Anaheim Valve Vault	Replace two butterfly valves and five valve actuators at Anaheim Lake and install valve vault.	Engineering (1070)	25,000	2,475,000	2,500,000	Pipe/Pipeline	Refurbishment	40 yrs
43	R23029	I-8 Vault Lid	Refurbish Barrier Injection Well I-8 vault with a heavy duty traffic rated vault lid.	Engineering (1070)		125,000	125,000	Pipe/Pipeline	Refurbishment	50 yrs
44	R24****	Gap Reservoir Assessment	Drain and perform assessment of the GAP reservoir in Santa Ana for current condition and any necessary defects/repairs.	Engineering (1070)	5,000	95,000	100,000	Pipe/Pipeline	Refurbishment	40 yrs
			Total	**Engineering (1070)**	**$ 95,615**	**$ 9,129,385**	**$ 9,225,000**			
		Hydrogeology (1075)								
45	R24****	Monitoring Well SC-4 Refurbishment	Replace failed packers in Westbay-type multi-point monitoring well SC-4.	Hydrogeology (1075)	20,808	290,000	310,808	Wells (all types)	Refurbishment	33 yrs
46	R23031	Monitoring Well Decommissioning (carry-over expenses for work begun in FY23-24)	Properly destroy and seal obsolete monitoring wells MCAS-10 (Irvine) and AM-29A (Anaheim).	Hydrogeology (1075)		15,000	15,000	Wells (all types)	Replacement	unknown
47	R24****	Monitoring Well OCWD-M41 Liner	Install PVC liner and inflatable packer to seal off leaky well casing.	Hydrogeology (1075)		9,000	9,000	Wells (all types)	Refurbishment	22 yrs
			Total	**Hydrogeology (1075)**	**$ 20,808**	**$ 314,000**	**$ 334,808**			
				R&R Grand Total	**$ 116,423**	**$ 23,521,435**	**$ 23,637,858**			

Section 11
OCWD Share of PFAS Treatment Cost

OCWD FY 24-25 50% Share of PFAS Treatment Operating Cost

The PFAS Treatment Facilities and Program Agreement that OCWD has executed with eleven Groundwater Producers calls for the District to pay 50% of the PFAS treatment facilities operating cost up to the current fiscal year maximum adjusted cost. This rate is automatically adjusted annually on July 1st per the agreement by the percentage differential based on the last two annual indices set forth in the Bureau of Labor Statistics Consumer Price Index for All Urban Consumers - Los Angeles-Long Beach-Anaheim. The rate is currently $86.83 and can be expected to increase by approximately 3.5% on July 1, 2024, to $89.86/acre-foot.

OCWD currently expects all eleven Producers to have the majority of the new PFAS treatment systems operational during FY 24-25. Reimbursement assumptions have been made based on expected resin media changeouts. The systems forecasted for resin changeouts were conservatively calculated with the maximum reimbursement amount and those not expecting changeouts were calculated with half the cost based on previous year reimbursement requests. The estimated amount of PFAS treated groundwater is 98,000 acre-feet with a treatment operating cost share estimate of $5.4 million.

Section 12
Cost Center Details

Detail Cost Center General Fund Budget
Acronyms and Abbreviations

GENERAL FUND BUDGET
COST CENTER DETAIL

GENERAL FUND OPERATING BUDGET FY 24-25
GENERAL MANAGER'S OFFICE (1010)

JDE Account Number	Description	General	Total
	ACTIVITY CODE	9900	
	SALARIES & BENEFITS		
1010.50104	REGULAR SALARIES	464,816	464,816
1010.50210	PAYROLL TAXES	10,322	10,322
1010.50202	RETIREMENT	77,392	77,392
1010.50203	457 RETIREMENT MATCH	6,500	6,500
1010.50204	HEALTH INSURANCE	65,549	65,549
1010.50206	WORKERS' COMPENSATION	2,231	2,231
	SALARIES & BENEFITS TOTAL	**626,810**	**626,810**
1010.51102	DISTRICT MEMBERSHIPS		
	AMERICAN MEMBRANE TECHNOLOGY ASSOCIATION	600	600
	AMERICAN WATER WORKS ASSOCIATION (AWWA)	2,100	2,100
	ASSOCIATION OF CALIFORNIA CITIES - ORANGE COUNTY (ACC-OC)	5,300	5,300
	ASSOCIATION OF CALIFORNIA WATER AGENCIES (ACWA)	35,000	35,000
	ASSOCIATION OF CALIFORNIA WATER AGENCIES FOUNDATION	10,000	10,000
	ASSOCIATION OF METROPOLITAN WATER AGENCIES (AMWA)	23,500	23,500
	CAL DESAL	5,000	5,000
	CAL STATE FULLERTON DEMOGRAPHICS	57,500	57,500
	CALIFORNIA DATA COLLABORATIVE	16,500	16,500
	CALIFORNIA GROUNDWATER COALITION	10,500	10,500
	CALIFORNIA MUNICIPAL UTILITIES ASSOCIATION (CMUA)	13,500	13,500
	CALIFORNIA SPECIAL DISTRICTS ASSOCIATION (CSDA)	9,500	9,500
	CALIFORNIA WATER EFFICIENCY PARTNERSHIP (SRF LOAN)	6,200	6,200
	CHAMBERS OF COMMERCE	5,000	5,000
	CLEAN WATER SOCAL	2,800	2,800
	COMMUNITY WATER SYSTEMS ALLIANCE	10,000	10,000
	GROUNDWATER RESOURCES FOUNDATION (GRA)	1,500	1,500
	INDEPENDENT SPECIAL DISTRICTS ASSOCIATION (ISDOC)	100	100
	ORANGE COUNTY WATER ASSOCIATION	250	250
	PROFESSIONAL MEMBERSHIPS (ASCE & WEF)	500	500
	SANTA ANA RIVER FLOOD PROTECTION AGENCY (SARFPA)	1,300	1,300
	SCRIPPS WATER AFFILIATES GROUP	25,000	25,000
	SOUTHERN CALIFORNIA SALINITY COALITION (NWRI)	10,000	10,000
	SOUTHERN CALIFORNIA WATER COALITION	5,000	5,000
	SOUTHWEST MEMBRANE OPERATORS ASSOCIATION	500	500
	URBAN WATER INSTITUTE	1,350	1,350
	WATER EDUCATION FOUNDATION	8,000	8,000
	WATER RESEARCH FOUNDATION	178,500	178,500
	WATEREUSE ASSOCIATION	20,000	20,000
	SUSTAIN SOCAL	1,500	1,500
	DISTRICT MEMBERSHIPS TOTAL	**466,500**	**466,500**

GENERAL FUND OPERATING BUDGET FY 24-25
GENERAL MANAGER'S OFFICE (1010)

JDE Account Number	Description	General	Total
	ACTIVITY CODE	9900	
1010.51104	SUBSCRIPTIONS		
	ADMINISTRATIVE PROFESSIONAL, NEWSPAPERS	800	800
	SUBSCRIPTIONS TOTAL	**800**	**800**
1010.51112	SPECIAL DISTRICT EXPENSES (SPONSORSHIPS)		
	ACWA CONFERENCES (2)	6,500	6,500
	CALIFORNIA WATEREUSE CONFERENCE	5,500	5,500
	MISC. SPONSORSHIPS	15,000	15,000
	ORANGE COUNTY SCIENCE FAIR	3,000	3,000
	SOUTHERN CALIFORNIA WATER CONFERENCE	2,500	2,500
	TET FESTIVAL	5,000	5,000
	WATER EDUCATION FOR LATINO LEADERS CONFERENCE	7,500	7,500
	SPECIAL DISTRICT EXPENSES (SPONSORSHIPS) TOTAL	**45,000**	**45,000**
1010.51192	TECHNICAL TRAINING		
	STAFF TRAINING	250	250
	TECHNICAL TRAINING TOTAL	**250**	**250**
1010.51301	TRAVEL/CONFERENCE/MILEAGE		
	ACWA SPRING CONFERENCE, MONTEREY, CA	1,800	1,800
	ACWA FALL CONFERENCE, INDIAN WELLS	1,500	1,500
	SACRAMENTO LEGISLATIVE TRIPS (4)	2,000	2,000
	WASHINGTON DC LEGISLATIVE TRIPS (2)	5,000	5,000
	40TH ANNUAL WATEREUSE SYMPOSIUM, TAMPA, FL	2,500	2,500
	WATEREUSE CALIFORNIA ANNUAL, GARDEN GROVE, CA	1,500	1,500
	TRAVEL/CONFERENCE/MILEAGE TOTAL	**14,300**	**14,300**
1010.51501	OFFICE EXPENSE - GENERAL		
	BULK OFFICE AND CONSUMABLE SUPPLIES	4,500	4,500
	OFFICE EXPENSE - GENERAL TOTAL	**4,500**	**4,500**
1010.51531	SHIRTS - LOGO		
	SHIRTS - LOGO	300	300
	SHIRTS - LOGO TOTAL	**300**	**300**

GENERAL FUND OPERATING BUDGET FY 24-25
GENERAL MANAGER'S OFFICE (1010)

JDE Account Number	Description	General	Total
	ACTIVITY CODE	9900	
1010.53001	PROFESSIONAL SERVICES - GENERAL		
	DISTRICT ISSUES CONSULTING	20,000	20,000
	OPERATIONAL EFFICIENCY CONSULTING	50,000	50,000
	MANAGEMENT CONSULTING	39,500	39,500
	PROFESSIONAL SERVICES - GENERAL TOTAL	**109,500**	**109,500**
1010.53005	PROFESSIONAL SERVICES - LEGAL		
	RUTAN & TUCKER, LLP	350,000	350,000
	PROFESSIONAL SERVICES - LEGAL TOTAL	**350,000**	**350,000**
1010.56012	INTERAGENCY AGREEMENTS		
	ACOE WATER CONSERVATION MAINTENANCE FEE	150,000	150,000
	LOCAL AGENCY FORMATION COMMISSION (LAFCO)	38,000	38,000
	NATIONAL WATER RESOURCE INSTITUTE (NWRI)	50,000	50,000
	OCFCD WATER CONSERVATION MAINTENANCE FEE	37,000	37,000
	SAWPA	461,655	461,655
	WATER EMERGENCY RESPONSE ORGANIZATION OF ORANGE COUNTY (WEROC)	149,000	149,000
	INTERAGENCY AGREEMENTS TOTAL	**885,655**	**885,655**
1010.57004	MAINTENANCE EQUIPMENT - GENERAL		
	EQUIPMENT REPAIRS	100	100
	MAINTENANCE EQUIPMENT - GENERAL TOTAL	**100**	**100**
	GENERAL MANAGER'S OFFICE GRAND TOTAL	**2,503,715**	**2,503,715**

GENERAL FUND OPERATING BUDGET FY 24-25
PUBLIC AFFAIRS (1012)

JDE Account Number	Description	General	Youth Education	Water Summit	Water 101	Tours	Total
	ACTIVITY CODE	9900	1206	9959	9962	9963	
	SALARIES & BENEFITS						
1012.50104	REGULAR SALARIES	855,174	52,547	27,049	41,098	103,972	1,079,840
1012.50210	PAYROLL TAXES	13,770	762	392	596	1,508	17,028
1012.50202	RETIREMENT	138,707	8,749	4,504	6,843	17,311	176,114
1012.50203	457 RETIREMENT MATCH	19,825	1,625	650	1,138	2,763	26,001
1012.50204	HEALTH INSURANCE	127,551	7,638	4,041	9,218	18,181	166,629
1012.50206	WORKERS' COMPENSATION	4,105	252	130	197	499	5,183
	SALARIES & BENEFITS TOTAL	**1,159,132**	**71,573**	**36,766**	**59,090**	**144,234**	**1,470,795**
1012.51301	TRAVEL/CONFERENCE/MILEAGE						
	WASHINGTON D.C. - 2 TRIPS (OCWD/ACWA)	5,000					5,000
	ACWA CONF (SPRING AND FALL; 2 STAFF)	6,000					6,000
	LOCAL ONE-DAY CONFERENCES (ACWA REGION EVENTS, WEBINARS)	5,000					5,000
	SACRAMENTO (ACWA/WRA LEG COMMITTEE & COMMUNICATIONS COMMITTEE)	15,000					15,000
	MISCELLANEOUS TRAVEL EXPENSES (MILEAGE)	1,000					1,000
	WATEREUSE CA CONFERENCES (1-2 STAFF)	2,000					2,000
	CAPIO CONFERENCE (2 STAFF)	3,500					3,500
	TRAVEL/CONFERENCE/MILEAGE TOTAL	**37,500**	**-**	**-**	**-**	**-**	**37,500**
1012.51305	PUBLIC INFORMATION TOURS						
	GROUNDWATER ADVENTURE TOUR					15,000	15,000
	NEXT GENERATION WATER LEADERS AND PRADO FIELD TRIPS (INSIDE THE OUTDOORS & SUBSIDIZED BUS FUNDING)		20,000				20,000
	SPEAKERS BUREAU	2,000					2,000
	PUBLIC INFORMATION TOURS TOTAL	**2,000**	**20,000**	**-**	**-**	**15,000**	**37,000**
1012.51204	MISCELLANEOUS EXPENSE						
	LEGISLATIVE & PRODUCER ACTIVITIES	2,000					2,000
	MISCELLANEOUS EXPENSE TOTAL	**2,000**	**-**	**-**	**-**	**-**	**2,000**
1012.53001	PROFESSIONAL SERVICES - GENERAL						
	ENS RESOURCES (FEDERAL ADVOCACY)	98,000					98,000
	EDELSTEIN, GILBERT, SMITH & ROBSON (STATE ADVOCACY)	92,000					92,000
	GONSALVES & SON (STATE ADVOCACY)	92,000					92,000
	LIBRIS ONLINE PHOTO AND VIDEO LIBRARY LICENSE	5,800					5,800
	LICENSING, TECH SUPPORT AND MAINTENANCE/UPDATES FOR H2O LEARNING CENTER HALLWAY					10,000	10,000
	PROFESSIONAL SERVICES - GENERAL TOTAL	**287,800**	**-**	**-**	**-**	**10,000**	**297,800**
1012.51501	OFFICE EXPENSE - GENERAL						
	AWARDS (SUBMITTALS)	1,500					1,500
	PHOTOGRAPHY SERVICES & EQUIPMENT	1,000					1,000
	MEDIA ACTIVITIES (CISION; WEEKLY WATER LINES FEED)	22,000					22,000
	LICENSING TO POST/REPRINT ARTICLES	1,000					1,000
	OFFICE EXPENSES SUPPLIES, EQUIPMENT, AND PRINTING ETC.	12,000					12,000
	FLYER DISTRIBUTION & MAILINGS (WALKING MAN/POSTAGE) - CONSTRUCTION COMM. - NOT ALWAYS COVERED IN PROJECT BUDGETS	2,500					2,500
	OFFICE EXPENSE - GENERAL TOTAL	**40,000**	**-**	**-**	**-**	**-**	**40,000**

GENERAL FUND OPERATING BUDGET FY 24-25
PUBLIC AFFAIRS (1012)

JDE Account Number	Description	General	Youth Education	Water Summit	Water 101	Tours	Total
	ACTIVITY CODE	9900	1206	9959	9962	9963	
1012.51102	MEMBERSHIP						
	PROFESSIONAL MEMBERSHIPS (CAPIO)	1,650					1,650
	MEMBERSHIP TOTAL	**1,650**	**-**	**-**	**-**	**-**	**1,650**
1012.56012	GWRS						
	GWRS VIP GROUP TOURS	4,500					4,500
	MARKETING/OUTREACH GWRS (TABLING, VIDEOS, ADVERTISING, TOUR ROUTE ENHANCEMENTS & EQUIPMENT)	10,000					10,000
	GWRS COLLATERAL (PROMOTIONAL ITEMS, TECH BROCHURE, BAGS, OTHER HANDOUTS)				10,000	20,000	30,000
	GWRS TOTAL	**14,500**	**-**	**-**	**10,000**	**20,000**	**44,500**
1012.51112	SPECIAL DEPARTMENT EXPENSE						
	OCWD BROCHURES, FOLDERS & FACT SHEETS	11,500					11,500
	EMPLOYEE EVENTS	15,000					15,000
	OCWD'S INDUSTRY AND COMMUNITY IMPACT (VIDEO, ADVERTISING, SOCIAL MEDIA, HISTORY BOOK)	5,000					5,000
	EVENTS AND VIDEOS	15,000					15,000
	BOARD ROOM PHOTOS & UPDATE FRAMED DISTRICT MAPS AND PHOTOS FOR CONFERENCE ROOMS AS NEEDED	1,500					1,500
	SPECIAL DEPARTMENT EXPENSE TOTAL	**48,000**	**-**	**-**	**-**	**-**	**48,000**
1012.51119	SPECIAL DEPARTMENT EXPENSE - OC WATER SUMMIT						
	OC WATER SUMMIT - OPERATING COSTS			50,000			50,000
	WATER ADVISORY COMMITTEE OF ORANGE COUNTY	6,000					6,000
	SPECIAL DEPARTMENT EXPENSE - OC WATER SUMMIT TOTAL	**6,000**	**-**	**50,000**	**-**	**-**	**56,000**
	MISCELLANEOUS REIMBURSEMENT - OC WATER SUMMIT						
1012.51119.170	MWDOC REIMBURSEMENT (SUMMIT AND WACO)	(3,000)		(3,000)			(6,000)
1012.51119.250	OC WATER SUMMIT - SPONSOR REIMBURSEMENT & REGISTRATION			(87,000)			(87,000)
	MISCELLANEOUS REIMBURSEMENT - OC WATER SUMMIT TOTAL	**(3,000)**	**-**	**(90,000)**	**-**	**-**	**(93,000)**
1012.51116	SPECIAL DEPARTMENT EXPENSE - CWEF						
	CHILDREN'S FESTIVAL		265,000				265,000
	SPECIAL DEPARTMENT EXPENSE - CWEF TOTAL	**-**	**265,000**	**-**	**-**	**-**	**265,000**
1012.51116.250	MISCELLANEOUS REIMBURSEMENT - CWEF						
	CHILDREN'S FESTIVAL (SPONSORS)		(70,000)				(70,000)
	MISCELLANEOUS REIMBURSEMENT - CWEF TOTAL	**-**	**(70,000)**	**-**	**-**	**-**	**(70,000)**
	PUBLIC AFFAIRS GRAND TOTAL	**1,595,582**	**286,573**	**(3,234)**	**69,090**	**189,234**	**2,137,245**

GENERAL FUND OPERATING BUDGET FY 24-25
INFORMATION SERVICES (1016)

JDE Account Number	Description ACTIVITY CODE	General 9900	GWRS 9922	Total
	SALARIES & BENEFITS			
1016.50104	REGULAR SALARIES	1,064,427	524,270	1,588,697
1016.50210	PAYROLL TAXES	15,434	7,602	23,036
1016.50202	RETIREMENT	177,227	87,291	264,518
1016.50203	457 RETIREMENT MATCH	21,775	10,725	32,500
1016.50204	HEALTH INSURANCE	149,624	73,695	223,319
1016.50206	WORKERS' COMPENSATION	5,109	2,516	7,625
	SALARIES & BENEFITS TOTAL	**1,433,596**	**706,099**	**2,139,695**
1016.52501	COMMUNICATION			
	PHONE SERVICE (PHYSICAL CIRCUITS, DID LINES, LONG DISTANCE, ETC.)	125,000		125,000
	DATA COMMUNICATIONS - FVALLEY X 2, ANAHEIM, SANTIAGO, PRADO, WELL SITE	75,000		75,000
	CELLULAR TELEPHONE & WIRELESS SERVICES	47,000		47,000
	ZOOM VIDEO CONFERENCING	15,000		15,000
	REPLACEMENT/ADDITIONAL PHONES/COMMUNICATION EQUIP	13,000		13,000
	COMMUNICATION TOTAL	**275,000**	**-**	**275,000**
1016.51301	TRAVEL/CONFERENCE/MILEAGE			
	CONFERENCE/TRAINING TRAVEL (MISAC/TECHNICAL CONFERENCES)	2,500		2,500
	TRAVEL/CONFERENCE/MILEAGE TOTAL	**2,500**	**-**	**2,500**
1016.51501	OFFICE EXPENSE - GENERAL			
	GENERAL OFFICE EXPENSE (SHIPPING, FEDEX)	2,000		2,000
	OFFICE EXPENSE - GENERAL TOTAL	**2,000**	**-**	**2,000**
1016.51510	HARDWARE/SOFTWARE			
	HARDWARE & SOFTWARE PURCHASES FOR DEPTS, PROGRAMMER TOOLS FOR IS	55,000		55,000
	COMPUTER REPLACEMENTS (DESKTOPS) - QTY 50 (PHASE 3 WIN 10 REFRESH)	75,000		75,000
	COMPUTER REPLACEMENTS (LAPTOPS) - QTY 17 (VARIOUS DEPARTMENTS / WIN REFRESH)	46,000		46,000
	MICROSOFT 365 LICENSING (285 LICENSES)	80,000		80,000
	NETWORK SECURITY SERVICES/MONITORING	80,000		80,000
	ONLINE & OTHER DATA SERVICES (DATA BACKUP)	25,000		25,000
	ADDITIONAL VIDEO MONITORING SOFTWARE LICENSING	20,000		20,000
	ANTIMALWARE SUBSCRIPTION	17,000		17,000
	ONLINE SERVICES (WEBSITES, VIRTUAL SERVERS & RELATED SERVICES)	15,000		15,000
	IT MANAGEMENT SYSTEM AND SERVICE	15,000		15,000
	ADVANCED SECURITY SERVICES FOR MICROSOFT 365 EMAIL	14,000		14,000
	REPLACEMENT BATTERIES FOR DATA CENTER POWER SUPPLY (UPS)	6,000		6,000
	NETWORK WIFI AND SWITCH UPDATE SUBSCRIPTION	5,000		5,000
	COMPUTER UPGRADE HARDWARE (DRIVES AND MEMORY)	2,000		2,000
	DATA CENTER EQUIPMENT/RACKS, RAILS, POWER SUPPLIES	2,000		2,000
	PRINTERS (REPLACEMENT AND NETWORK PRINTERS)	3,000		3,000
	PERMIT AND MONITORING MANAGEMENT SOFTWARE SUBSCRIPTION	150,000		150,000
	HARDWARE/SOFTWARE TOTAL	**610,000**	**-**	**610,000**

GENERAL FUND OPERATING BUDGET FY 24-25
INFORMATION SERVICES (1016)

JDE Account Number	Description ACTIVITY CODE	General 9900	GWRS 9922	Total
1016.57004	MAINTENANCE EQUIPMENT - GENERAL			
	MAINTENANCE AGREEMENTS FOR EXISTING HW & SW	385,000		385,000
	SUPPORT FOR BOARDROOM/CONF ROOM AUDIOVISUAL EQUIP	10,000		10,000
	ON-CALL SERVICE AGREEMENT FOR HALLWAY LEARNING CENTER EQUIPMENT	8,000		8,000
	REPAIR EXISTING CABLING (NETWORK, TELEPHONE, COPPER, ETC.)	3,000		3,000
	REPAIR EXISTING EQUIPMENT (WORKSTATIONS, PRINTERS, ETC.)	7,000		7,000
	MAINTENANCE EQUIPMENT - GENERAL TOTAL	**413,000**	**-**	**413,000**
1016.53001	PROFESSIONAL SERVICE - GENERAL			
	ON-CALL CONSULTING (JD EDWARDS, MAXIMO, WRMS, SECURITY, NETWORK, DOCUMENTATION)	25,000		25,000
	PROFESSIONAL SERVICE - GENERAL TOTAL	**25,000**	**-**	**25,000**
1016.51102	MEMBERSHIP			
	USER GROUP MEMBERSHIP	500		500
	MEMBERSHIP TOTAL	**500**	**-**	**500**
1016.51192	TECHNICAL TRAINING			
	ONGOING TECHNICAL TRAINING FOR IS DEPARTMENT	5,000		5,000
	ORACLE JD EDWARDS TRAINING/IBM MAXIMO TRAINING	6,000		6,000
	TECHNICAL TRAINING TOTAL	**11,000**	**-**	**11,000**
	INFORMATION SERVICES GRAND TOTAL	**2,772,596**	**706,099**	**3,478,695**

GENERAL FUND OPERATING BUDGET FY 24-25

BOARD ADMINISTRATION (1018)

JDE Account Number	Description	General	Total
	ACTIVITY CODE	9900	
	SALARIES & BENEFITS		
1018.50104	REGULAR SALARIES	591,646	591,646
1018.50118	DIRECTORS' FEES	377,055	377,055
1018.50210	PAYROLL TAXES	14,046	14,046
1018.50202	RETIREMENT	161,289	161,289
1018.50203	457 RETIREMENT MATCH	52,000	52,000
1018.50204	HEALTH INSURANCE	312,994	312,994
1018.50206	WORKERS' COMPENSATION	4,650	4,650
	SALARIES & BENEFITS TOTAL	**1,513,680**	**1,513,680**
1018.51301	BOARD TRAVEL/CONFERENCE/MILEAGE		
	ACWA, AWWA, ADA, NWRA, ASCE, CRWUA, OCCOG, WATEREUSE, AND MISC. CONFERENCES	50,000	50,000
	BOARD TRAVEL/CONFERENCE/MILEAGE TOTAL	**50,000**	**50,000**
1018.51012	LEGAL ADVERTISING		
	LEGALLY REQUIRED NOTICES AND REPORTS, I.E. PUBLIC HEARINGS, ETC.	10,000	10,000
	LEGAL ADVERTISING TOTAL	**10,000**	**10,000**
1018.51501	OFFICE EXPENSE - GENERAL		
	BOARDROOM SUPPLIES, REFRESHMENTS FOR BOARD AND COMMITTEES	50,000	50,000
	FEDEX	100	100
	MINUTE MAN	100	100
	MAIL DISPATCH	4,500	4,500
	POSTAGE	20,000	20,000
	FILING FEES	100	100
	NOTARY SUPPLIES	100	100
	OFFICE SUPPLIES	100	100
	OFFICE EXPENSE - GENERAL TOTAL	**75,000**	**75,000**

GENERAL FUND OPERATING BUDGET FY 24-25

BOARD ADMINISTRATION (1018)

JDE Account Number	Description	General	Total
	ACTIVITY CODE	9900	
1018.51565	RENT EQUIPMENT - GENERAL		
	XEROX E-1105 & E-5540CT COPY MACHINE LEASES (MAIN COPY ROOM)	15,000	15,000
	COPY CENTER C35 (MAIN COPY ROOM)	500	500
	COPY CENTER C35 (SM COPY ROOM)	500	500
	DC420AC COPIER (FHQ)	500	500
	DC420AC COPIER (LAB/MAINT)	500	500
	DC420AC COPIER (OPERATIONS)	500	500
	DC535H COPIER (LARGE COPY ROOM)	500	500
	DC535H COPIER (ANNEX)	500	500
	DC535H COPIER (WATER PRODUCTION)	500	500
	SCANNER	2,500	2,500
	DC535H COPIER (LAB)	500	500
	NEOPOST POSTAGE MACHINE	8,000	8,000
	RENT EQUIPMENT - GENERAL TOTAL	**30,000**	**30,000**
1018.51192	EDUCATIONAL TRAINING		
	ARMA TRAINING AND SEMINARS	500	500
	EDUCATIONAL TRAINING TOTAL	**500**	**500**
1018.51102	MEMBERSHIP		
	ASSOCIATION OF RECORDS MANAGERS & ADMINISTRATORS (1 STAFF)	215	215
	NATIONAL NOTARY ASSOCIATION (2 STAFF)	225	225
	MEMBERSHIP TOTAL	**440**	**440**
1018.51112	SPECIAL DEPARTMENT EXPENSE		
	DOCUMENT ARCHIVAL AND SCANNING	5,000	5,000
	OFFSITE STORAGE	55,000	55,000
	SPECIAL DEPARTMENT EXPENSE TOTAL	**60,000**	**60,000**
1018.51042	ELECTION COSTS		
	ACCRUED ELECTION COSTS	285,207	285,207
	ELECTION COSTS TOTAL	**285,207**	**285,207**
	BOARD ADMINISTRATION GRAND TOTAL	**2,024,827**	**2,024,827**

GENERAL FUND OPERATING BUDGET FY 24-25
PURCHASING (1022)

JDE Account Number	Description	General	GWRS	Total
	ACTIVITY CODE	9900	9922	
	SALARIES & BENEFITS			
1022.50104	REGULAR SALARIES	498,735	124,684	623,419
1022.50210	PAYROLL TAXES	7,232	1,808	9,040
1022.50202	RETIREMENT	83,039	20,760	103,799
1022.50203	457 RETIREMENT MATCH	15,600	3,900	19,500
1022.50204	HEALTH INSURANCE	71,612	17,903	89,515
1022.50206	WORKERS' COMPENSATION	4,652	1,163	5,815
	SALARIES & BENEFITS TOTAL	**680,870**	**170,218**	**851,088**
1022.51501	OFFICE EXPENSE - GENERAL			
	SAFETY SIGNS/HARDWARE FOR WAREHOUSE	250		250
	MISCELLANEOUS SUPPLIES (TONERS, DRUMS, FILING SUPPLIES)	4,500		4,500
	SHIPPING SUPPLIES (SHRINK WRAP/TAPE, BINDING, ETC.)	1,000		1,000
	PAPER RECYCLING - SET FEE AT $300 PER MONTH	3,600		3,600
	UPS SHIPPING FEES	2,500		2,500
	TRUCK WASH FOR DISTRICT VEHICLES - PRADO, FHQ AND FV	2,000		2,000
	OFFICE EXPENSE - GENERAL TOTAL	**13,850**	**-**	**13,850**
1022.51520	GAS & DIESEL			
	VEHICLE FUEL	400		400
	GAS & DIESEL TOTAL	**400**	**-**	**400**
1022.51531	SHIRTS - LOGO			
	SHIRTS - LOGO/SHIRTS/JACKETS	350		350
	SHIRTS - LOGO TOTAL	**350**	**-**	**350**
1022.51545	SMALL TOOLS			
	MISCELLANEOUS HAND TOOLS	1,000		1,000
	SMALL TOOLS TOTAL	**1,000**	**-**	**1,000**
1022.51102	MEMBERSHIP			
	PURCHASING (CALIFORNIA ASSOCIATION OF PUBLIC PURCHASING OFFICERS, INC. AND NATIONAL ASSOCIATION)	130		130
	MEMBERSHIP TOTAL	**130**	**-**	**130**
1022.51192	TECHNICAL TRAINING			
	PURCHASING SEMINARS (INSURANCE, BIDDING AND NEGOTIATION)	250		250
	TECHNICAL TRAINING TOTAL	**250**	**-**	**250**

GENERAL FUND OPERATING BUDGET FY 24-25
PURCHASING (1022)

JDE Account Number	Description	General	GWRS	Total
	ACTIVITY CODE	9900	9922	
1022.51630	INVENTORY FREIGHT			
	DELIVERY FEES AND FREIGHT CHARGES	30,000		30,000
	INVENTORY FREIGHT TOTAL	**30,000**	**-**	**30,000**
1022.57016	MAINTENANCE STRUCTURE AND IMPROVEMENT - GENERAL			
	WAREHOUSE MAINTENANCE - ADDITIONAL SHELVING/RACKING & FLOOR REFURB.	2,000		2,000
	MAINTENANCE STRUCTURE AND IMPROVEMENT - GENERAL TOTAL	**2,000**	**-**	**2,000**
	PURCHASING GRAND TOTAL	**728,850**	**170,218**	**899,068**

GENERAL FUND OPERATING BUDGET FY 24-25
FINANCE (1024)

JDE Account Number	Description	General	GWRS	GAP	Total
	ACTIVITY CODE	9900	9922	9911	
	SALARIES & BENEFITS				
1024.50104	REGULAR SALARIES	1,385,511	348,788	9,639	1,743,938
1024.50210	PAYROLL TAXES	22,282	5,606	140	28,028
1024.50202	RETIREMENT	224,800	56,601	1,605	283,006
1024.50203	457 RETIREMENT MATCH	33,313	8,450	488	42,251
1024.50204	HEALTH INSURANCE	168,231	42,465	1,627	212,323
1024.50206	WORKERS' COMPENSATION	6,696	1,688	57	8,441
	SALARIES & BENEFITS TOTAL	**1,840,833**	**463,598**	**13,556**	**2,317,987**
1024.53001	PROFESSIONAL SERVICES - GENERAL				
	EXTERNAL AUDIT (SINGLE AUDIT/MPP INCLUDED)	55,000			55,000
	PAYROLL OUTSOURCING	65,000			65,000
	AP SOFTWARE MAINTENANCE	12,000			12,000
	DEBTBOOK SOFTWARE MAINTENANCE	14,000			14,000
	INVESTMENT SOFTWARE MAINTENANCE	7,800			7,800
	SPECIALIZED ACCOUNTING/FINANCIAL SERVICES	20,000			20,000
	PROFESSIONAL SERVICES - GENERAL TOTAL	**173,800**	**-**	**-**	**173,800**
1024.51501	OFFICE EXPENSE - GENERAL				
	CHECK STOCK FOR A/P - SAFECHECKS	1,000			1,000
	COLOR COPY ALLOCATION	1,000			1,000
	COLOR PRINTING CHARGE FOR ACFR AND BUDGET BOOK	2,000			2,000
	FEDEX	1,000			1,000
	MICR TONER - A/P, P/R	1,000			1,000
	ANNUAL COMPREHENSIVE FINANCIAL REPORT APPLICATION	1,000			1,000
	MISCELLANEOUS SUPPLIES (COMPUTER PAPER, TONER, OFFICE SUPPLIES)	10,000			10,000
	OFFICE EXPENSE - GENERAL TOTAL	**17,000**	**-**	**-**	**17,000**
1024.51104	SUBSCRIPTIONS				
	GASB/GAAP-ACCOUNTING JOURNAL	500			500
	SUBSCRIPTIONS TOTAL	**500**	**-**	**-**	**500**
1024.51520	GAS & DIESEL FUEL				
	SC FUEL AT $542 PER MONTH IN AVERAGE	6,500			6,500
	GAS & DIESEL FUEL TOTAL	**6,500**	**-**	**-**	**6,500**
1024.51530	UNIFORMS & SAFETY				
	WORK POLOS	500			500
	OVERALL - UNIFORMS	200			200
	UNIFORMS & SAFETY TOTAL	**700**	**-**	**-**	**700**

GENERAL FUND OPERATING BUDGET FY 24-25
FINANCE (1024)

JDE Account Number	Description	General	GWRS	GAP	Total
	ACTIVITY CODE	9900	9922	9911	
1024.51102	MEMBERSHIP				
	AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS	1,000			1,000
	INSTITUTE OF MANAGEMENT ACCOUNTANTS	300			300
	CALIFORNIA MUNICIPAL TREASURERS ASSOCIATION	300			300
	CPA LICENSE, CAL CPA MEMBERSHIP(DS, MO)	1,200			1,200
	CALIFORNIA SOCIETY OF MUNICIPAL FINANCE OFFICERS	300			300
	GOVERNMENT FINANCE OFFICERS ASSOCIATION	300			300
	MEMBERSHIP TOTAL	**3,400**	**-**	**-**	**3,400**
1024.51192	TECHNICAL TRAINING				
	TAX LAW CHANGES SEMINAR (2 STAFF)	1,000			1,000
	JDE AND OTHER TECHNICAL TRAINING	4,000			4,000
	GFOA CONFERENCE (RF, DS AND MO)	2,500			2,500
	CSMFO CONFERENCE (DS, MO)	3,500			3,500
	CAL CPA CPE TECHNICAL TRAINING (DS, MO)	3,000			3,000
	TECHNICAL TRAINING TOTAL	**14,000**	**-**	**-**	**14,000**
1024.56023	PURCHASE DISCOUNTS				
	PURCHASE DISCOUNTS	(100,000)			(100,000)
	PURCHASE DISCOUNTS TOTAL	**(100,000)**	**-**	**-**	**(100,000)**
1024.56024	REBATES - PURCHASING CARD				
	REBATES - PURCHASING CARD	(20,000)			(20,000)
	REBATES - PURCHASING CARD TOTAL	**(20,000)**	**-**	**-**	**(20,000)**
1024.56028	BANK CHARGES				
	BANK CHARGES ($1,500 AVERAGE/MO)	18,000			18,000
	BANK CHARGES TOTAL	**18,000**	**-**	**-**	**18,000**
	FINANCE GRAND TOTAL	**1,954,733**	**463,598**	**13,556**	**2,431,887**

GENERAL FUND OPERATING BUDGET FY 24-25
HUMAN RESOURCES (1030)

JDE Account Number	Description ACTIVITY CODE	General 9900	GWRS 9922	Total
	SALARIES & BENEFITS			
1030.50104	REGULAR SALARIES	529,297	117,108	646,405
1030.50210	PAYROLL TAXES	7,675	1,698	9,373
1030.50202	RETIREMENT	88,128	19,499	107,627
1030.50203	457 RETIREMENT MATCH	13,650	2,600	16,250
1030.50204	HEALTH INSURANCE	92,887	20,261	113,148
1030.50205	HEALTH INSURANCE - RETIREE PREMIUMS	5,500		5,500
1030.50206	WORKERS' COMPENSATION	2,541	562	3,103
	SALARIES & BENEFITS TOTAL	**739,678**	**161,728**	**901,406**
1030.51301	TRAVEL/CONFERENCE/MILEAGE			
	ACWA/JPIA COMMITTEE/ACWA/JPIA PERSONNEL COMMITTEE MEETINGS (4 TRIPS)	500		500
	CALPELRA CONFERENCE (MONTEREY, CA) & SEMINARS	2,800		2,800
	MILEAGE	300		300
	TRAVEL/CONFERENCE/MILEAGE TOTAL	**3,600**	**-**	**3,600**
1030.51102	MEMBERSHIPS			
	CALPELRA MEMBERSHIP FEE	380		380
	SOCIETY OF HUMAN RESOURCES PROFESSIONALS	300		300
	MEMBERHSIPS TOTAL	**680**	**-**	**680**
1030.53001	PROFESSIONAL SERVICES - GENERAL			
	COMPSYCH EMPLOYEE ASSISTANCE PROGRAM	6,100		6,100
	HEALTH AND WELLNESS (FAIR AND ACTIVITIES)	3,000		3,000
	UNIVERSAL BACKGROUND INVESTIGATION	9,000		9,000
	ALLIANT BROKER SERVICES FEE	25,000		25,000
	PERSONNEL ISSUES - LEGAL FEES	10,000		10,000
	RETIREE MEDICAL ACTUARIAL FEES	20,000		20,000
	RETIREMENT PLAN FEES (PARTICIPANT INITIATED TRANSACTIONS)	1,000		1,000
	RETIREMENT PLAN LEGAL CONSULTING AND PLAN FILINGS	1,000		1,000
	PRE-EMPLOYMENT PHYSICALS	10,000		10,000
	SHEAKLEY FEES	150		150
	PROFESSIONAL SERVICES - GENERAL TOTAL	**85,250**	**-**	**85,250**
1030.53015	TEMPORARY LABOR - GENERAL			
	TEMPORARY LABOR - MISC. DEPARTMENTS	50,000		50,000
	TEMPORARY LABOR - GENERAL TOTAL	**50,000**	**-**	**50,000**

GENERAL FUND OPERATING BUDGET FY 24-25
HUMAN RESOURCES (1030)

JDE Account Number	Description ACTIVITY CODE	General 9900	GWRS 9922	Total
1030.51501	OFFICE EXPENSE - GENERAL			
	EMPLOYMENT ADVERTISING	20,000		20,000
	NEOGOV	8,500		8,500
	FEDERAL EXPRESS	200		200
	EMPLOYEE OF THE MONTH/YEAR AWARD EXPENSES	200		200
	ERP AWARD CERTIFICATES	2,000		2,000
	LENGTH OF SERVICE AWARDS	17,000		17,000
	OFFICE SUPPLIES	9,000		9,000
	OFFICE EXPENSE - GENERAL TOTAL	**56,900**	**-**	**56,900**
1030.51104	SUBSCRIPTIONS			
	LEGAL BULLETINS AND FMLA ONLINE (3 YEARS - 2021)	750		750
	SUBSCRIPTIONS TOTAL	**750**	**-**	**750**
1030.51192	TECHNICAL TRAINING			
	EMPLOYEE TRAINING	6,000		6,000
	TECHNICAL TRAINING TOTAL	**6,000**	**-**	**6,000**
1030.50208	EDUCATION TUITION REIMBURSEMENT			
	EDUCATION TUITION REIMBURSEMENT	35,000		35,000
	EDUCATION TUITION REIMBURSEMENT TOTAL	**35,000**	**-**	**35,000**
1030.51112	SPECIAL DEPARTMENT EXPENSE			
	DOT DRUG & ALCOHOL PROGRAM	5,200		5,200
	EMPLOYEE FITNESS FACILITIES	2,500		2,500
	UNEMPLOYMENT INSURANCE	15,000		15,000
	SPECIAL DEPARTMENT EXPENSE TOTAL	**22,700**	**-**	**22,700**
	HUMAN RESOURCES GRAND TOTAL	**1,000,558**	**161,728**	**1,162,286**

GENERAL FUND OPERATING BUDGET FY 24-25
SAFETY & RISK MANAGEMENT (1034)

JDE Account Number	Description	Administration	GWRS	Total
	ACTIVITY CODE	9900	9922	
	SALARIES & BENEFITS			
1034.50104	REGULAR SALARIES	112,609	255,235	367,844
1034.50210	PAYROLL TAXES	1,633	3,701	5,334
1034.50202	RETIREMENT	18,749	42,497	61,246
1034.50203	457 RETIREMENT MATCH	2,925	6,825	9,750
1034.50204	HEALTH INSURANCE	20,052	40,873	60,925
1034.50206	WORKERS' COMPENSATION	652	1,457	2,109
	SALARIES & BENEFITS TOTAL	**156,620**	**350,587**	**507,207**
1034.52001	INSURANCE			
	CRIME/EXCESS	4,500		4,500
	POLLUTION LIABILITY EXCESS FOR LA PALMA BASIN 10 YEARS PREPAID	30,000		30,000
	FIDUCIARY	8,000		8,000
	GENERAL LIABILITY	450,000		450,000
	PROPERTY	630,000		630,000
	TOUR GROUP AND BUSINESS TRAVEL	6,000		6,000
	UST INSURANCE	2,600		2,600
	INSURANCE TOTAL	**1,131,100**	**-**	**1,131,100**
1034.52005	CLAIMS & TESTING			
	SMALL NON-TRIAL CLAIMS, WORKERS' COMPENSATION FIRST AID	5,000		5,000
	CLAIMS & TESTING TOTAL	**5,000**	**-**	**5,000**
1034.51301	TRAVEL/CONFERENCE/MILEAGE			
	AMERICAN SOCIETY OF SAFETY PROFESSIONALS CONFERENCE	2,400		2,400
	PASMA CONFERENCE/BUSINESS MEETINGS	450		450
	INDUSTRIAL ENVIRONMENTAL COALITION OF OC MEETINGS	300		300
	MILEAGE	500		500
	TRAVEL/CONFERENCE/MILEAGE TOTAL	**3,650**	**-**	**3,650**
1034.53001	PROFESSIONAL SERVICE - GENERAL			
	SAFETY PROGRAM ASSESSMENT	10,000		10,000
	UPDATE HAZARD MITIGATION PLAN	10,000		10,000
	HEPATITIS A AND B SHOTS	2,000		2,000
	RESPIRATOR FIT TESTS	3,800		3,800
	INDUSTRIAL HYGIENE MONITORING	7,000		7,000
	PROFESSIONAL SERVICE - GENERAL TOTAL	**32,800**	**-**	**32,800**

GENERAL FUND OPERATING BUDGET FY 24-25
SAFETY & RISK MANAGEMENT (1034)

JDE Account Number	Description	Administration	GWRS	Total
	ACTIVITY CODE	9900	9922	
1034.51501	OFFICE EXPENSE - GENERAL			
	FEDERAL EXPRESS/COURIER	200		200
	OFFICE SUPPLIES	1,900		1,900
	TRAINING MATERIALS AND MEETING EXPENSES	3,000		3,000
	OFFICE EXPENSE - GENERAL TOTAL	**5,100**	**-**	**5,100**
1034.51104	SUBSCRIPTIONS			
	CAL OSHA REPORTER	500		500
	BUSINESS AND LEGAL REPORT (BLR)	1,300		1,300
	MSDS ONLINE ANNUAL FEE (3 YEAR AGREEMENT 9/1/2022 - 8/31/2025)	4,200		4,200
	TRAINING TRACKING SERVICE	12,000		12,000
	SUBSCRIPTIONS TOTAL	**18,000**	**-**	**18,000**
1034.51530	UNIFORMS & SAFETY			
	ERGONOMIC EQUIPMENT	8,000		8,000
	PERSONAL PROTECTIVE EQUIPMENT - NON OPERATIONS DEPARTMENTS	1,000		1,000
	SAFETY GLASSES - RX	4,000		4,000
	SHOES	20,000		20,000
	UNIFORMS & SAFETY TOTAL	**33,000**	**-**	**33,000**
1034.57004	MAINTENANCE EQUIPMENT - GENERAL			
	MEDICAL EQUIPMENT/AED UNITS & SUPPLIES	1,500		1,500
	MAINTENANCE EQUIPMENT - GENERAL TOTAL	**1,500**	**-**	**1,500**
1034.51550	SAFETY SUPPLIES			
	CONFINED SPACE EQUIPMENT	1,000		1,000
	COVID SUPPLIES	1,000		1,000
	DISASTER/HAZMAT EQUIPMENT/SUPPLIES	2,000		2,000
	SAFETY INCENTIVES/SUPPLIES	1,200		1,200
	FIRST AID SUPPLIES	1,000		1,000
	HEAT ILLNESS PREVENTION SUPPLIES, SIGNS, TRAFFIC CONES, MISC. SAFETY SUPPLIES	5,000		5,000
	SAFETY SUPPLIES TOTAL	**11,200**	**-**	**11,200**
1034.51102	MEMBERSHIP			
	AMERICAN SOCIETY OF SAFETY PROFESSIONALS	350		350
	INDUSTRIAL ENVIRONMENTAL COALITION OF ORANGE COUNTY	75		75
	PUBLIC SAFETY MANAGEMENT ASSOCIATION	150		150
	MEMBERSHIP TOTAL	**575**	**-**	**575**

GENERAL FUND OPERATING BUDGET FY 24-25
SAFETY & RISK MANAGEMENT (1034)

JDE Account Number	Description	Administration	GWRS	Total
	ACTIVITY CODE	9900	9922	
1034.51192	STAFF TRAINING			
	CONFINED SPACE - TRAINING AND ANNUAL REQUIRED DRILLS	4,000		4,000
	RESPIRATOR TRAINING	2,000		2,000
	CPR/FIRST AID/AED	10,000		10,000
	ERGONOMIC TRAINING	2,000		2,000
	HAZMAT 24/40 HOUR	10,000		10,000
	HAZMAT ANNUAL	6,000		6,000
	ACTIVE SHOOTER TRAINING - NEW HIRES	2,000		2,000
	OVERHEAD GANTRY TRAINING	3,000		3,000
	SAFETY STAFF REQUIRED PROFESSIONAL TRAINING	2,000		2,000
	STAFF TRAINING TOTAL	**41,000**	**-**	**41,000**
1034.51202	SECURITY PROGRAM			
	ALARM SYSTEM MONITORING - BAY ALARM (FHQ AND PRADO)	15,000		15,000
	BAY ALARM FV PANIC ALARMS	1,000		1,000
	SECURITY GUARD SERVICES	490,000		490,000
	SECURITY PROGRAM TOTAL	**506,000**	**-**	**506,000**
1034.51112	SPECIAL DEPARTMENT EXPENSE			
	CITY/COUNTY ALARM PERMITS	1,800		1,800
	COUNTY HAZMAT WASTE PROGRAM - CUPA FEES	2,200		2,200
	DTSC AND EPA FEES	1,000		1,000
	SPECIAL DEPARTMENT EXPENSE TOTAL	**5,000**	**-**	**5,000**
	SAFETY AND RISK MANAGEMENT GRAND TOTAL	**1,950,545**	**350,587**	**2,301,132**

GENERAL FUND OPERATING BUDGET FY 24-25
WATER QUALITY (1036)

JDE Account Number	Description	General	GWP Assistance	GWR System O&M	SAR Monitoring	NBGPP NCP	SBGPP NCP	PFAS	PFAS O&M Anaheim	PFAS O&M EOCWD	PFAS O&M Fullerton	PFAS O&M Garden Grove	PFAS O&M GSWC	PFAS O&M IRWD	PFAS O&M Orange	PFAS O&M Santa Ana	PFAS O&M Serrano	PFAS O&M Tustin	PFAS O&M YLWD	Total
	ACTIVITY CODE	9900	4406	9922	4602	9985	9986	1914	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
	SALARIES & BENEFITS																			
1036.50104	REGULAR SALARIES	465,647	332,626	175,230	90,063	124,157	39,041	204,808	26,137	12,964	19,180	20,909	12,964	12,964	20,481	16,463	12,964	14,782	22,211	1,623,591
1036.50106	OVERTIME	5,320	3,413	1,899	1,439	2,251	714	2,907	377	171	220	259	171	171	250	250	171	171	288	20,442
1036.50210	PAYROLL TAXES	8,844	4,873	2,568	1,327	1,833	576	3,012	384	190	281	307	190	190	301	242	190	217	326	25,851
1036.50202	RETIREMENT	73,005	55,951	29,492	15,235	21,047	6,619	34,584	4,415	2,187	3,230	3,525	2,187	2,187	3,452	2,783	2,187	2,490	3,746	268,322
1036.50203	457 RETIREMENT MATCH	11,830	7,898	4,843	2,665	3,868	1,170	5,265	650	325	455	504	325	325	488	423	325	358	536	42,253
1036.50204	HEALTH INSURANCE	77,521	44,056	29,619	16,748	24,207	7,087	37,018	4,589	2,300	3,137	3,557	2,300	2,300	3,497	2,898	2,300	2,529	3,917	269,580
1036.50206	WORKERS' COMPENSATION	7,370	4,898	2,676	1,792	2,712	860	3,739	483	224	302	347	224	224	336	315	224	235	381	27,342
	SALARIES & BENEFITS TOTAL	**649,537**	**453,715**	**246,327**	**129,269**	**180,075**	**56,067**	**291,333**	**37,035**	**18,361**	**26,805**	**29,408**	**18,361**	**18,361**	**28,805**	**23,374**	**18,361**	**20,782**	**31,405**	**2,277,381**
1036.51301	TRAVEL/CONFERENCES																			
	ACWA CONFERENCES & WQ COMMITTEE (SPRING, FALL, REGULATORY)	1,600																		1,600
	TRAVEL/CONFERENCES TOTAL	**1,600**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**1,600**
1036.51501	OFFICE EXPENSE - GENERAL																			
	OFFICE/WQ SAMPLING CONSUMABLE PRODUCTS (SAMPLE LABELS, PAPER, PRINTER CARTRIDGES, TAPE, ETC.); COMPUTER-RELATED EQUIPMENT	2,800	2,800	2,800	2,000	2,000	500	2,800	200	100	100	100	100	100	100	100	100	100	200	17,000
	FEDEX SHIPPING: WQ SAMPLE SHIPPING (CONTRACT LABS, RESEARCHERS, ETC.)	2,000	2,000	2,000																6,000
	OFFICE EXPENSE - GENERAL TOTAL	**4,800**	**4,800**	**4,800**	**2,000**	**2,000**	**500**	**2,800**	**200**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**200**	**23,000**
1036.53001	PROFESSIONAL SERVICE - GENERAL																			
	TRAFFIC CONTROL ENGINEER SERVICES - TRAFFIC CONTROL PLANS	2,500																		2,500
	TRAFFIC CONTROL CONTRACTOR SERVICES	7,200																		7,200
	PROFESSIONAL SERVICE - GENERAL TOTAL	**9,700**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**9,700**
1036.51520	GAS & DIESEL FUEL																			
	GASOLINE/DIESEL FUEL	4,000	5,000	4,000	3,000	4,000	2,000	2,600	400	200	200	200	200	200	200	200	200	200	200	27,000
	GAS & DIESEL FUEL TOTAL	**4,000**	**5,000**	**4,000**	**3,000**	**4,000**	**2,000**	**2,600**	**400**	**200**	**200**	**200**	**200**	**200**	**200**	**200**	**200**	**200**	**200**	**27,000**
1036.51530	UNIFORMS & SAFETY																			
	OCWD UNIFORMS, RAIN BOOTS, RAIN JACKET/OVERALLS, SUN PROTECTION	3,000																		3,000
	UNIFORMS & SAFETY TOTAL	**3,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**3,000**
1036.57004	MAINTENANCE & EQUIPMENT - GENERAL																			
	ROUTINE MAINT & PARTS FOR FIELD MONITORING EQUIPMENT, PUMPS, GENERATORS, CONSTRUCTING ANCILLARY SYSTEMS, TREATMENT ISSUES, ETC.; REPLACEMENT EQUIPMENT, FIELD METERS, INSTRUMENTATION, PIPES, WIRE, CONNECTORS, FITTINGS, PARTS FOR MECHANICAL AND SUBMERSIBLE PUMPS; SAFETY ITEMS, TRAFFIC CONTROL DEVICES; REPLACEMENT VEHICLE/OTHER SPECIALTY PARTS	1,500	1,000	1,000	1,000	1,500	500	1,000												7,500
	REPLACEMENT OF FAILED SUBMERSIBLE PUMPS - MP1 & SQE PUMPS AT EXISTING SITES OR PUMPS ON TRUCKS	7,000		5,000		8,000	1,500													21,500
	BOOM HYDRAULIC SYSTEM MAINTENANCE (T-98)	800		800																1,600
	MANUFACTURER FIELD EQUIPMENT REPAIRS	4,000	400	2,000	1,000	500	300	1,200												9,400
	MAINTENANCE & EQUIPMENT - GENERAL TOTAL	**13,300**	**1,400**	**8,800**	**2,000**	**10,000**	**2,300**	**2,200**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**40,000**
1036.51545	SMALL TOOLS/FIELD SUPPLIES																			
	FIELD SUPPLIES & MATERIALS FOR SAMPLE COLLECTION TASKS; BATTERIES, BUCKETS, ICE CHESTS, MAN-HOLE PULLERS, CARBON TREATMENT VESSELS AND ANCILLARY PARTS, LOCKS, 250-GAL DECON WATER TANK(S) OR OTHER SAFETY EQUIPMENT (LIGHT BAR, CONES, SIGNS), CARBON SUPPLIES, SPECIALIZED FITTINGS FOR CARBON TREATMENT SYSTEM, DRUMS FOR SPENT CARBON; SPECIALTY ITEMS/EQUIPMENT	2,000	450	1,500	1,500	1,500	450	1,500	100	100	100	100	100	100	100	100	100	100	100	10,000

GENERAL FUND OPERATING BUDGET FY 24-25
WATER QUALITY (1036)

JDE Account Number	Description	General	GWP Assistance	GWR System O&M	SAR Monitoring	NBGPP NCP	SBGPP NCP	PFAS	PFAS O&M Anaheim	PFAS O&M EOCWD	PFAS O&M Fullerton	PFAS O&M Garden Grove	PFAS O&M GSWC	PFAS O&M IRWD	PFAS O&M Orange	PFAS O&M Santa Ana	PFAS O&M Serrano	PFAS O&M Tustin	PFAS O&M YLWD	Total
	ACTIVITY CODE	9900	4406	9922	4602	9985	9986	1914	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
1036.51545	SMALL TOOLS/FIELD SUPPLIES (CONTINUED)																			
	WQ CONSUMABLE ITEMS (TUBING, HOSES, FITTINGS, SMALL TOOLS, BLUE ICE, SHIPPING SUPPLIES & PACKING MATERIALS REPLACEMENT OF AGED, FAILED FIELD METERS, PROBES, WATER LEVEL TAPES, CONTROLLERS, ETC.)	3,500	800	1,500	1,500	1,000	700	1,000												10,000
	CARBON - MOBILE CARBON TREATMENT UNITS (WELL DISCHARGES)	10,000		5,000		10,000														25,000
	SMALL TOOLS/FIELD SUPPLIES TOTAL	**15,500**	**1,250**	**8,000**	**3,000**	**12,500**	**1,150**	**2,500**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**45,000**
1036.51555	LAB SUPPLIES/EQUIPMENT																			
	CALIBRATION SOLUTIONS AND FIELD PRESERVATIVES GLASSWARE, STORAGE CONTAINERS, CARBOYS, GLOVES, DISPENSERS, SAFETY GLASSES, SPILL CONTROL MATERIALS, MISC. LAB SUPPLIES AND UTENSILS, RADIOACTIVITY BOTTLES AND OTHER SPECIALTY SAMPLE CONTAINERS OR SUPPLIES (ORP SOLUTION, ETC.)	2,000	2,000	1,000	1,000	1,000	500	900	100	100	100	100	100	100	100	100	100	100	100	9,500
	LAB SUPPLIES/EQUIPMENT TOTAL	**2,000**	**2,000**	**1,000**	**1,000**	**1,000**	**500**	**900**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**9,500**
1036.51560	LAB SAMPLES ANALYSIS																			
	GWRS PERMIT: FPW, TALBERT BARRIER, FOREBAY, MID-BASIN MW RADIOLOGICAL, PRIORITY POLLUTANTS, ASBESTOS, DIOXIN; MICROBIAL, BIOANALYTICAL, AND MONTHLY ROP COLIPHAGE MONITORING.			45,000																45,000
	GWRS NPDES TOXICITY TESTING			10,000																10,000
	GWRS SPECIAL STUDIES (OCWD/OCSD PATHOGEN LRV STUDY, CEC'S, ETC.)			20,000																20,000
	GROUNDWATER PRODUCER DRINKING WATER WELL TESTING: NEW WELLS, RADIOLOGICAL TESTING, CONFIRMATION TESTING, ETC.		25,000																	25,000
	GREEN ACRES MONITORING	1,000																		1,000
	SARMON WATER QUALITY: MICROBIAL (E.G., PHAGE, BACTERIAL, ETC.) TOTAL ORGANIC HALIDES (TOX) AND RADIOLOGICAL TESTING				36,000															36,000
	SARMON SPECIAL STUIDES (EMERGING CONTAMINANTS / PFOA & PFOS)				5,000			5,000												10,000
	RIVER DESILTING STUDIES (RIVERBED FILTRATION)	3,000																		3,000
	IRVINE DESALTER/MCAS TCE PLUME: NAVY AGREEMENT, AND IRWD/DPH MONITORING PROGRAM - SENTINEL WELLS	8,000																		8,000
	MISC. CONTRACT LAB TESTING (SPILLS, EMERGENCIES, SPLITS, CONFIRMATION TESTING, SPECIFIC ANALYTES, ETC.)	12,000																		12,000
	NPDES TPH MONITORING DE MINIMUS PERMIT, AS NEEDED	2,000																		2,000
	LAB SAMPLES ANALYSIS TOTAL	**26,000**	**25,000**	**75,000**	**41,000**	**-**	**-**	**5,000**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**172,000**
1036.51192	TECHNICAL TRAINING																			
	STAFF SAFETY / WQ SAMPLING / TECHNICAL TRAINING (I.E., STORMWATER NEW PERMIT & QISP TRAINING, REGULATORY, MONITORING TECHNIQUES, ETC.)	3,000																		3,000
	TECHNICAL TRAINING TOTAL	**3,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**3,000**
1036.51112	SPECIAL DEPT EXPENSE																			
	NPDES INDUSTRIAL STORMWATER PERMIT - GWRS FACILITY			3,000																3,000
	NPDES GENERAL DEWATERING PERMIT - BASINWIDE (EXCLUDES DISCHARGES TO NEWPORT BAY)	4,200																		4,200
	SPENT CARBON DISPOSAL COSTS (CARBON TREATMENT OF PURGED GW AT MONITORING WELL SITES TO MEET NPDES DISCHARGE PERMIT LIMITS)	2,800																		2,800
	SPECIAL DEPT EXPENSE TOTAL	**7,000**	**-**	**3,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**10,000**
	WATER QUALITY GRAND TOTAL	**739,437**	**493,165**	**350,927**	**181,269**	**209,575**	**62,517**	**307,333**	**37,835**	**18,861**	**27,305**	**29,908**	**18,861**	**18,861**	**29,305**	**23,874**	**18,861**	**21,282**	**32,005**	**2,621,181**

GENERAL FUND OPERATING BUDGET FY 24-25

LABORATORY (1038)

JDE Account Number	Description	General	GWR System O&M	Talbert Barrier O&M	GAP O&M	Groundwater Producers' Assistance	MTBE Litigation	Forebay VOC N. Basin	SAR Monitoring	PFAS	Prado O&M	Total
	ACTIVITY CODE	9900	9922	9908	9911	4406	9954	9936	4602	1914	9924	
	SALARIES & BENEFITS											
1038.50104	REGULAR SALARIES	500,845	1,231,034	366,070	109,981	1,177,542	4,398	4,398	239,219	392,723	82,168	4,108,378
1038.50106	OVERTIME	6,724	30,134	9,162	2,591	29,394			5,458	9,973	1,907	95,343
1038.50210	PAYROLL TAXES	7,360	21,027	5,783	2,317	19,898	64	64	3,959	5,976	1,356	67,804
1038.50202	RETIREMENT	84,510	202,625	61,556	16,903	194,516	732	732	39,635	66,681	13,630	681,520
1038.50203	457 RETIREMENT MATCH	11,278	32,663	9,913	2,795	31,525	65	65	6,208	10,595	2,145	107,252
1038.50204	HEALTH INSURANCE	84,413	212,819	65,361	17,762	204,459	739	739	41,951	72,395	14,299	714,937
1038.50206	WORKERS' COMPENSATION	4,750	11,761	3,498	1,050	11,253	41	41	2,283	3,754	784	39,215
	SALARIES & BENEFITS TOTAL	**699,880**	**1,742,063**	**521,343**	**153,399**	**1,668,587**	**6,039**	**6,039**	**338,713**	**562,097**	**116,289**	**5,814,449**
1038.51301	TRAVEL/CONFERENCE/MILEAGE											
	ENVIRONMENTAL MEASUREMENT SYMPOSIUM (AUGUST 2024, GARDEN GROVE, CA, MULTIPLE STAFF)	10,000										10,000
	TNI FORUM ON ENVIRONMENTAL ACCREDITATION (JANUARY 2025, LOCATION TBD, 1 STAFF)	3,000										3,000
	LAB MANAGER LEADERSHIP SUMMIT (APRIL 2025, LOCATION TBD, 1 STAFF)	3,000										3,000
	AMERICAN SOCIETY OF MASS SPECTROMETRY CONFERENCE (JUNE 2025, BALTIMORE, MD, 1 STAFF)	3,000										3,000
	TRAVEL/CONFERENCE/MILEAGE TOTAL	**19,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**19,000**
1038.51501	OFFICE EXPENSE - GENERAL											
	OFFICE SUPPORT MATERIALS	20,000										20,000
	PAPERS, PARTS, DATA CABLES, INSTRUMENT DATA LINKS, ETC.	10,000										10,000
	OFFICE EXPENSE - GENERAL TOTAL	**30,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**30,000**
1038.51104	SUBSCRIPTIONS											
	GENERAL TNI STANDARD (8 USERS)	500				500						1,000
	JOURNAL: AWWA, ACS, ANALYTICAL CHROMATOGRAPHY	200										200
	STANDARD METHODS SMALL LAB ELECTRONIC LICENSE (9 USERS)	250	250			250			250			1,000
	IDEAGEN QUALITY MANAGEMENT SOFTWARE LICENSE (UP TO 50 USERS)	6,000	6,000	1,000	1,000	2,000		1,000	1,000	2,000		20,000
	SUBSCRIPTIONS TOTAL	**6,950**	**6,250**	**1,000**	**1,000**	**2,750**	**-**	**1,000**	**1,250**	**2,000**	**-**	**22,200**
1038.51530	UNIFORMS & SAFETY											
	LAB COATS AND SAFETY EQUIPMENT	8,000										8,000
	UNIFORMS & SAFETY TOTAL	**8,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**8,000**
1038.57004	MAINTENANCE EQUIPMENT - GENERAL											
	THERMO SERVICE AGREEMENT - IC (2), IC/MS, AUTOTRACE (8)		35,000	10,000	5,000	25,000			15,000	5,000	5,000	100,000
	PERKIN ELMER - ICP/OES AND ICP/MS		25,000	3,000	2,000	15,000			5,000	6,000	4,000	60,000
	SEAL DISCRETE ANALYZER		4,000			3,500						7,500
	AGILENT UV/VIS		3,500			3,500						7,000
	METTLER TOLEDO AUTOTITRATOR		500	500	500	500			500	250	250	3,000
	ANNUAL LABORATORY EQUIPMENT CERTIFICATION (TNI REQUIREMENT)		2,000	2,000	1,000	2,000			2,000	2,000	2,000	13,000
	LABORATORY SCIENTIFIC REFRIGERATORS (19)		2,500	1,000	500	2,500			500	500	500	8,000
	INSTRUMENTS SOFTWARE AND COMPUTERS UPGRADE		3,000	1,000	1,000	2,000			1,000	1,000	1,000	10,000
	TOC ANALYZERS (2)		5,000	2,000	2,000	5,000			2,000	2,000	2,000	20,000
	AGILENT GC/MS AND HPLC ANALYTICAL SYSTEMS (ORGANIC)		50,000	12,500	1,000	50,000			12,500	10,000	4,000	140,000

GENERAL FUND OPERATING BUDGET FY 24-25

LABORATORY (1038)

JDE Account Number	Description	General	GWR System O&M	Talbert Barrier O&M	GAP O&M	Groundwater Producers' Assistance	MTBE Litigation	Forebay VOC N. Basin	SAR Monitoring	PFAS	Prado O&M	Total
	ACTIVITY CODE	9900	9922	9908	9911	4406	9954	9936	4602	1914	9924	
1038.57004	MAINTENANCE EQUIPMENT - GENERAL (CONTINUED)											
	PEAK NITROGEN GENERATOR FOR IC/MS		3,000			2,500						5,500
	NITROGEN GENERATORS FOR LC-MS/MS SYSTEMS (3)		3,000	1,000		5,000			3,000	5,000		17,000
	AB SCIEX LC-MS/MS SYSTEMS (3)		20,000	5,000		25,000			10,000	65,000		125,000
	HYDROGEN GENERATOR FOR GC/ECD		1,000	1,000		1,000				500		3,500
	DI SYSTEM - SUPPORT & MAINTENANCE		3,000	2,000	1,000	2,000			1,000	3,000	1,000	13,000
	STERIS - STERILIZERS, DRYING OVENS & AUTOMATED WASHERS		3,000	1,500	1,500	1,000			2,000	1,000	2,000	12,000
	CULLIGAN RO SYSTEM		500	500	400	400			400	400	400	3,000
	EST ANALYTICAL		5,000	4,000	1,000	5,000			1,000	2,000		18,000
	ACID DILUTION TANK PM'S		1,000			1,000			500	500		3,000
	VACUUM TRUCK HAUL OFF		2,000			2,000			500	500		5,000
	CHEM PRO - CORROSION INHIBITOR		700			700						1,400
	PROMOCHROM SPE-03 (4)		500			6,000			500	6,000		13,000
	MAINTENANCE EQUIPMENT - GENERAL TOTAL	**-**	**173,200**	**47,000**	**16,900**	**160,600**	**-**	**-**	**57,400**	**110,650**	**22,150**	**587,900**
1038.51545	SMALL TOOLS & EQUIPMENT											
	TOOLS AND EQUIPMENT TO SERVICE ANALYTICAL SYSTEM	1,000	500	500	500			500				3,000
	SMALL TOOLS & EQUIPMENT TOTAL	**1,000**	**500**	**500**	**500**	**-**	**-**	**500**	**-**	**-**	**-**	**3,000**
1038.51555	LAB SUPPLIES											
	STANDARDS, PROFICIENCY TEST & QA/QC SAMPLES	10,000	65,000		15,000	75,000			10,000	80,000		255,000
	REAGENTS, SOLVENTS & CHEMICALS	15,000	175,000		15,000	175,000			30,000	60,000		470,000
	GC-LC-MS COLUMNS, DETECTORS & ANALYTICAL PARTS	10,000	120,000		10,000	80,000			20,000	40,000		280,000
	EXTRACTION CARTRIDGES & DISKS	5,000	25,000		3,000	15,000			10,000	35,000		93,000
	GAS (HELIUM, NITROGEN, CARBON DIOXIDE, ARGON) SUPPLY		30,000			30,000			10,000	30,000		100,000
	MISCELLANEOUS SUPPLY		800			500			500	200		2,000
	LAB SUPPLIES TOTAL	**40,000**	**415,800**	**-**	**43,000**	**375,500**	**-**	**-**	**80,500**	**245,200**	**-**	**1,200,000**
1038.51560	LAB SAMPLES ANALYSIS											
	CONFIRMATION DATA FROM A SECOND LAB		400	200	200	400			400	400		2,000
	LAB SAMPLES ANALYSIS TOTAL	**-**	**400**	**200**	**200**	**400**	**-**	**-**	**400**	**400**	**-**	**2,000**
1038.51192	EDUCATIONAL TRAINING											
	ANNUAL LAB TRAINING ON TNI QUALITY SYSTEM/ETHICS	1,000	1,000			1,000			1,000	1,000		5,000
	LOCAL WATER EDUCATION SEMINAR (AUGUST 2024, ORANGE, CA), 5 STAFF	500										500
	EDUCATIONAL TRAINING TOTAL	**1,500**	**1,000**	**-**	**-**	**1,000**	**-**	**-**	**1,000**	**1,000**	**-**	**5,500**
1038.51112	SPECIAL DEPARTMENT EXPENSE											
	ANNUAL CERTIFICATION FEES - STATE ELAP & 3RD PARTY TNI AUDIT	35,000										35,000
	HAZARDOUS WASTE DISPOSAL SERVICE	50,000										50,000
	SPECIAL DEPARTMENT EXPENSE TOTAL	**85,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**85,000**
1038.51102	MEMBERSHIP											
	AMERICAN CHEMICAL SOCIETY MEMBERSHIP (1 STAFF)	160										160
	CSEA MEMBERSHIP (1 STAFF)	30										30
	CALIFORNIA WATER ENVIRONMENT ASSOCIATION MEMBERSHIP/CERTIFICATION (4 STAFF)	1,100										1,100
	AMERICAN SOCIETY OF MASS SPECTROMETRY (3 STAFF)	300										300
	MEMBERSHIP TOTAL	**1,590**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**1,590**
	LABORATORY GRAND TOTAL	**892,920**	**2,339,213**	**570,043**	**214,999**	**2,208,837**	**6,039**	**7,539**	**479,263**	**921,347**	**138,439**	**7,778,639**

GENERAL FUND OPERATING BUDGET FY 24-25
RESEARCH & DEVELOPMENT (1040)

JDE Account Number	Description	General	GWR Process Opt.	GWR System O&M	Forebay O&M	Grants/ Proposals	Particip-ating Utility	Next Gen. Seq.	USBR UCR AOP	PFAS	USBR PAA	RBFS PFAS	WRF PIGE	WRF RO LRV	FR-RO	PRADO	WRF-RIC	USBR P2P	NAWI CAR.	USBR KJ UF	USBR NOL	NAWI TA&M	NAWI UCI	WRF VOC	NAWI RICE	NAWI NALA RO	NAWI UCLA	USBR HAZEN	USBR ROC PFAS	EAP PIGE	Total
	ACTIVITY CODE	9900	9952	9922	9920	9996	9997	9992	1809	1914	1916	2005	2006	1917	2007	9983	2019	2020	2021	2022	2023	2024	2025	2027	2028	2029	2030	2031	2032	2033	
	SALARIES & BENEFITS																														
1040.50104	REGULAR SALARIES	368,372	236,288	97,312	19,697	52,115	43,350	29,922	2,094	65,906	11,686	73,094	7,612	1,140	5,304	1,157	10,284	11,476	27,396	19,943	11,591	3,277	21,700	10,515	14,219	12,139	15,718	33,084	52,524	19,520	1,278,435
1040.50210	PAYROLL TAXES	6,317	6,940	2,455	584	756	629	434	30	1,254	186	1,656	110	17	77	17	149	183	475	351	200	48	363	182	236	224	228	590	1,003	420	26,114
1040.50202	RETIREMENT	58,715	29,905	13,399	2,479	8,677	7,218	4,982	349	10,173	1,902	10,568	1,267	190	883	193	1,712	1,868	4,352	3,154	1,843	546	3,483	1,671	2,287	1,891	2,617	5,212	8,096	2,882	192,514
1040.50203	457 RETIREMENT MATCH	9,718	5,525	2,340	325	1,463	1,235	910	33	2,178	228	2,113	195	33	130	33	228	228	618	423	260	65	585	195	325	260	390	813	1,235	423	32,507
1040.50204	HEALTH INSURANCE	49,779	23,032	9,575	1,568	7,351	6,013	3,345	277	11,399	1,145	9,137	1,334	218	824	125	1,944	1,039	3,145	1,972	1,626	260	2,988	1,056	1,776	1,432	2,114	4,169	9,246	3,446	161,335
1040.50206	WORKERS' COMPENSATION	3,314	3,417	726	142	435	386	281	20	464	110	466	55	11	50	6	69	108	356	206	109	31	304	98	152	114	208	509	366	120	12,633
	SALARIES & BENEFITS TOTAL	**496,215**	**305,107**	**125,807**	**24,795**	**70,797**	**58,831**	**39,874**	**2,803**	**91,374**	**15,257**	**97,034**	**10,573**	**1,609**	**7,268**	**1,531**	**14,386**	**14,902**	**36,342**	**26,049**	**15,629**	**4,227**	**29,423**	**13,717**	**18,995**	**16,060**	**21,275**	**44,377**	**72,470**	**26,811**	**1,703,538**
1040.51301	TRAVEL/CONFERENCE/MILEAGE																														
	WATEREUSE CALIFORNIA ANNUAL CONFERENCE (3 STAFF, ORANGE COUNTY 9/2024)	2,900																													2,900
	7th ANNUAL GRA WESTERN GROUNDWATER CONGRESS (2 STAFF, TBD LOCATION [CA], 10/2024)	2,700																													2,700
	USBR WIN WORKSHOP (1 STAFF, ALAMAGORDO NM, 10/2024)	1,300																													1,300
	97th ANNUAL WEFTEC (1 STAFF, NEW ORLEANS, 10/2024)	2,700																													2,700
	NGWA 2024 GROUNDWATER WEEK CONFERENCE (2 STAFF, LAS VEGAS, 12/2024)	2,900																													2,900
	AWWA MEMBRANE TECHNOLOGY CONFERENCE (2 STAFF, LONG BEACH, 3/2025)	2,100																													2,100
	40th ANNUAL WATEREUSE SYMPOSIUM (2 STAFF, TAMPA, 3/2025)	4,200																													4,200
	ACE25 (ANNUAL CONFERENCE & EXPOSITION) (1 STAFF, TBD LOCATION, 4/2025)	2,200																													2,200
	AMERICAN SOCIETY OF MICROBIOLOGY (ASM) MICROBE CONFERENCE (1 STAFF, LOS ANGELES, 6/2025)	1,800																													1,800
	TRAVEL/CONFERENCE/MILEAGE TOTAL	**22,800**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**						**-**	**-**	**22,800**
1040.53001	PROFESSIONAL SERVICES - GENERAL																														
	PFAS PILOT SUPPORT									10,000																					10,000
	FRRO 1 UNIT RETROFIT PRELIMINARY CONSTRUCTION COST ESTIMATE														75,000																75,000
	GWRS RO CONCENTRATE PFAS STUDY - KENNEDY JENKS SUPPORT (GRANT REIMBURSED)																												20,000		20,000
	GWRS RO CONCENTRATE PFAS STUDY - OVIVO PILOT AND SUPPORT (GRANT REIMBURSED)																												100,000		100,000
	ISLE WORK GROUP (ANNUAL FEE)	12,000																													12,000
	PFAS SUPERCRITICAL WATER OXIDATION (SCWO) STUDY									25,000																					25,000
	RESEARCH COLLABORATION SUPPORT PROJECTS	50,000																													50,000
	PROFESSIONAL SERVICES - GENERAL TOTAL	**62,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**35,000**	**-**	**-**	**-**	**-**	**75,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**						**120,000**	**-**	**292,000**
1040.51501	OFFICE EXPENSE - GENERAL																														
	MISC. OFFICE EXPENSES (OFFICE SUPPLIES, SOFTWARE)	1,000																													1,000
	SHIPPING SAMPLES (FEDEX/COURIER)	5,000																													5,000
	OFFICE FURNITURE	500																													500
	OFFICE EXPENSE - GENERAL TOTAL	**6,500**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**						**-**	**-**	**6,500**
1040.51520	GAS & DIESEL FUEL																														
	FUEL FOR DEPARTMENT VEHICLE (SC FUELS BPO)	400			600																										1,000
	GAS & DIESEL FUEL TOTAL	**400**	**-**	**-**	**600**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**						**-**	**-**	**1,000**
1040.57004	MAINTENANCE EQUIPMENT - GENERAL																														
	BALANCES (9), INCUBATORS (7), MICROSCOPES, FRIDGES, CENTRIFUGES, AUTOCLAVE, MISC. LAB.	800																													800
	ABI STEP ONE PLUS (qPCR) REPAIR	800																													800
	ALL HOOD SAFETY INSPECTION/CALIBRATION (5)	200																													200
	HACH 6000 SPECTROPHOTOMETER SERVICE (ERC HACH OR LAB HACH, ROTATE EVERY OTHER YEAR)	1,200																													1,200
	VERTI FAST THERMOCYCLER (PCR) REPAIR	800																													800
	COULTER MULTISIZER 4 (PARTICLE COUNTER) SERVICE CONTRACT	3,500																													3,500
	PFAS ADSORBENT PILOT AT FHQ	500																													500
	ERC PILOTS MAINTENANCE (PUMPS, SENSORS, TANKS, ETC.)	15,000																													15,000
	MAINTENANCE EQUIPMENT - GENERAL TOTAL	**22,800**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**						**-**	**-**	**22,800**
1040.57016	MAINT STRUCTURE & IMPROVEMENT - GENERAL																														
	GENERAL DEPARTMENTAL REPAIR WORK	3,000																													3,000
	MAINT STRUCTURE & IMPROVEMENT - GENERAL TOTAL	**3,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**						**-**	**-**	**3,000**
1040.51555	LAB SUPPLIES & SMALL EQUIPMENT																														
	LAB CONSUMABLES / EQUIP. - GENERAL		20,000	11,000	9,000																										40,000
	LAB CONSUMABLES / EQUIP. - MOLEC. BIO. SUPPLIES							7,000																							7,000
	PILOTS / ERC - GENERAL		16,300																												16,300
	PILOTS / ERC - MEMBRANES (MF/RO)		6,000																												6,000
	FRL COLUMN SYSTEM FOR AQUIFER RECHARGE USBR PFAS PROJECT (GRANT REIMBURSED)											3,500																			3,500
	GWRS RO CONCENTRATE PFAS STUDY (GRANT REIMBURSED)																												3,600		3,600
	GRAINGER (BPO)				2,000																										2,000
	HOME DEPOT (BPO)		1,500		1,500																										3,000
	MCFADDEN DALE (BPO)				1,600																										1,600
	AMAZON WEB SERVICES (BPO)		800																												800
	LAB SUPPLIES & SMALL EQUIPMENT TOTAL	**-**	**44,600**	**11,000**	**14,100**	**-**	**-**	**7,000**	**-**	**-**	**-**	**3,500**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**						**3,600**	**-**	**83,800**

GENERAL FUND OPERATING BUDGET FY 24-25
RESEARCH & DEVELOPMENT (1040)

JDE Account Number	Description	General	GWR Process Opt.	GWR System O&M	Forebay O&M	Grants/ Proposals	Particip-ating Utility	Next Gen. Seq.	USBR UCR AOP	PFAS	USBR PAA	RBFS PFAS	WRF PIGE	WRF RO LRV	FR-RO	PRADO	WRF-RIC	USBR P2P	NAWI CAR.	USBR KJ UF	USBR NOL.	NAWI TA&M	NAWI UCI	WRF VOC	NAWI RICE	NAWI NALA RO	NAWI UCLA	USBR HAZEN	USBR ROC PFAS	EAP PIGE	Total
	ACTIVITY CODE	9900	9952	9922	9920	9996	9997	9992	1809	1914	1916	2005	2006	1917	2007	9983	2019	2020	2021	2022	2023	2024	2025	2027	2028	2029	2030	2031	2032	2033	
1040.51560	LAB SAMPLES ANALYSIS																														
	UCI LAB SERVICES (SEM ANALYSIS, MICROBIO)	6,000																													6,000
	WATER QUALITY ANALYSIS (DNA SEQUENCING, CHEMICALS, MICROBIO., ETC.)	12,000																													12,000
	PFAS SAMPLE ANALYSIS (FULL OR PARTIAL GRANT REIMBURSED)									12,000																					12,000
	LAB SAMPLES ANALYSIS TOTAL	**18,000**	-	-	-	-	-	-	-	**12,000**	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	**30,000**
1040.51565	EQUIPMENT RENTAL - GENERAL																														
	BOTTLED WATER SERVICE (SPARKLETTS BPO ANNEX)	1,000																													1,000
	DI CARTRIDGES (EVOQUA BPO)	3,000																													3,000
	GAS CYLINDERS/LIQUID N2 (WESTAIR BPO)	400																													400
	EQUIPMENT RENTAL - GENERAL TOTAL	**4,400**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	**4,400**
1040.51102	MEMBERSHIP																														
	PROFESSIONAL ENGINEER LICENSE RENEWAL FEE	115																													115
	WATER ENVIRONMENT FEDERATION (WEF) FEE x 2 STAFF	280																													280
	CALIFORNIA WATER ENVIRONMENT ASSOCIATION FEE x 2 STAFF	460																													460
	AMERICAN CHEMICAL SOCIETY (ACS) FEE	160																													160
	WATER UCI INDUSTRY-UNIVERSITY RESEARCH CENTER MEMBERSHIP	50,000																													50,000
	SOIL SCIENCE SOCIETY OF AMERICA (SSSA) FEE	150																													150
	NATIONAL GROUNDWATER ASSOCIATION FEE	150																													150
	AWWA (ADMINISTRATIVE STAFF FEE)	110																													110
	AMERICAN MEMBRANE TECHNOLOGY ASSOCIATION FEE	225																													225
	AMERICAN SOCIETY FOR MICROBIOLOGY FEE X 2 STAFF	430																													430
	MEMBERSHIP TOTAL	**52,080**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	**52,080**
1040.51112	SPECIAL DEPARTMENT EXPENSE																														
	JOURNAL PUBLISHING AND OPEN ACCESS FEES	6,000																													6,000
	REFERENCE MATERIAL (BOOKS, MANUALS, JOURNAL ARTICLES, WEBINARS)	500																													500
	SPECIAL DEPARTMENT EXPENSE TOTAL	**6,500**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	**6,500**
1040.51192	TECH TRAINING																														
	TECHNICAL TRAINING (WEBINARS, COURSES)	1,500																													1,500
	TECH TRAINING EXPENSE TOTAL	**1,500**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	**1,500**
	RESEARCH & DEVELOPMENT GRAND TOTAL	**696,195**	**349,707**	**136,807**	**39,495**	**70,797**	**58,831**	**46,874**	**2,803**	**138,374**	**15,257**	**100,534**	**10,573**	**1,609**	**82,268**	**1,531**	**14,386**	**14,902**	**36,342**	**26,049**	**15,629**	**4,227**	**29,423**	**13,717**	**18,995**	**16,060**	**21,275**	**44,377**	**196,070**	**26,811**	**2,229,918**

GENERAL FUND OPERATING BUDGET FY 24-25
PLANNING & WATERSHED MANAGEMENT (1044)

JDE Account Number	Description	General	Prado FS	Total
	ACTIVITY CODE	9900	9978	
	SALARIES & BENEFITS			
1044.50104	REGULAR SALARIES	768,213		768,213
1044.50210	PAYROLL TAXES	12,751		12,751
1044.50202	RETIREMENT	123,578		123,578
1044.50203	457 RETIREMENT MATCH	13,000		13,000
1044.50204	HEALTH INSURANCE	93,685		93,685
1044.50206	WORKERS' COMPENSATION	3,687		3,687
	SALARIES & BENEFITS TOTAL	**1,014,914**	**-**	**1,014,914**
1044.51192	TRAINING			
	TECHNICAL WRITING CLASS, LEADERSHIP, PUBLIC SPEAKING, PROJECT MANAGEMENT	2,000		2,000
	TRAINING TOTAL	**2,000**	**-**	**2,000**
1044.51301	TRAVEL/CONFERENCE/MILEAGE			
	ACWA CONFERENCES (FALL AND SPRING)	5,000		5,000
	MULTI-STATE SALINITY CONFERENCE	3,500		3,500
	RESOLVE WOMEN IN WATER	1,500		1,500
	NATIONAL WATER SURPLY	1,050		1,050
	GRA WESTERN GROUNDWATER CONGRESS	1,750		1,750
	CASQA	1,750		1,750
	GRA SGMA IMPLEMENTATION SUMMIT	700		700
	FLOOD MAR NETWORK FORUM	1,000		1,000
	FIRO FORUM WORKSHOPS	5,000		5,000
	TRAVEL/CONFERENCE/MILEAGE TOTAL	**21,250**	**-**	**21,250**
1044.53001	PROFESSIONAL SERVICE - GENERAL			
	PRADO BASIN ECOSYSTEM RESTORATION PROJECT (JOINT WITH ARMY CORPS)		60,000	60,000
	PRADO WATER CONSERVATION TECHNICAL STUDIES	200,000		200,000
	PRADO FORECAST INFORMED RESERVOIR OPERATIONS IMPLEMENTATION	420,000		420,000
	SUPPORT FOR CEQA COMPLIANCE (AIR & NOISE ANALYSES) PFAS	70,000		70,000
	RECHARGE FACILITIES MODEL SIMULATIONS	10,000		10,000
	PRADO INTEGRATED MODELING PROJECT - APEX ENV.	100,000		100,000
	HCP PERMIT UMBRELLA	25,000		25,000
	SEDIMENT REMOVAL ANALYSIS (PRADO)	50,000		50,000
	PROFESSIONAL SERVICE - GENERAL TOTAL	**875,000**	**60,000**	**935,000**

GENERAL FUND OPERATING BUDGET FY 24-25
PLANNING & WATERSHED MANAGEMENT (1044)

JDE Account Number	Description	General	Prado FS	Total
	ACTIVITY CODE	9900	9978	
1044.51501	OFFICE EXPENSE - GENERAL			
	OFFICE SUPPLIES	300		300
	MEETING EXPENSES (REWG AND PLANNING BLUEPRINT)	2,000		2,000
	OFFICE EXPENSE - GENERAL TOTAL	**2,300**	**-**	**2,300**
1044.51112	SPECIAL DEPARTMENT EXPENSE			
	WATER RIGHTS FEE (STATE WATER RESOURCES CONTROL BOARD)	65,000		65,000
	REGIONAL GENERAL MAINTENANCE PERMIT (CA DEPT OF FISH & WILDLIFE ANNUAL FEE)	15,000		15,000
	O.C. CONSERVATION CORP - ADOPTED CHANNEL	35,000		35,000
	REWG STUDIES (CLOGGING STUDIES, SUBSURFACE RECHARGE)	10,000		10,000
	PAYMENT TO SAWPA FOR BASIN MONITORING PROGRAM TASK FORCE EXPENSES	28,500		28,500
	PAYMENT TO SAWPA FOR WEATHER MODIFICATION PROGRAM	45,000		45,000
	WATER DEMAND STUDY WITH MWDOC	25,000		25,000
	PAYMENT TO SAWPA FOR SANTA ANA SUCKER MONITORING PROGRAM	15,000		15,000
	PERMIT FEES FOR PROJECTS (CDFG, ARMY CORPS, REG BOARD, CEQA FILINGS)	7,000		7,000
	SPECIAL DEPARTMENT EXPENSE TOTAL	**245,500**	**-**	**245,500**
1044.51530	UNIFORMS & SAFETY			
	DISTRICT SHIRTS	300		300
	UNIFORMS & SAFETY TOTAL	**300**	**-**	**300**
1044.51102	MEMBERSHIP			
	PROFESSIONAL CERTIFICATIONS & MEMBERSHIPS	500		500
	MEMBERSHIP TOTAL	**500**	**-**	**500**
	PLANNING & WATERSHED MANAGEMENT GRAND TOTAl	**2,161,764**	**60,000**	**2,221,764**

GENERAL FUND OPERATING BUDGET FY 24-25
LOCAL RESOURCES (1045)

JDE Account Number	Description	General	Total
	ACTIVITY CODE	9900	
	SALARIES & BENEFITS		
1045.50104	REGULAR SALARIES	285,513	285,513
1045.50210	PAYROLL TAXES	4,140	4,140
1045.50202	RETIREMENT	47,538	47,538
1045.50203	457 RETIREMENT MATCH	3,250	3,250
1045.50204	HEALTH INSURANCE	15,394	15,394
1045.50206	WORKERS' COMPENSATION	1,370	1,370
	SALARIES & BENEFITS TOTAL	**357,205**	**357,205**
1045.51102	MEMBERSHIPS		
	MEMBERSHIPS (OCWA, AWWA, CRWA)	200	200
	MEMBERSHIPS TOTAL	**200**	**200**
1045.51301	TRAVEL/CONFERENCE/MILEAGE		
	ACWA MEETING	1,200	1,200
	CAL DESAL	1,000	1,000
	LOCAL MEETINGS	100	100
	TRAVEL/CONFERENCE/MILEAGE TOTAL	**2,300**	**2,300**
1045.51501	OFFICE EXPENSE - GENERAL		
	OFFICE/MEETING SUPPLIES	400	400
	COLOR COPIES	300	300
	FEDERAL EXPRESS TO GRANT & LOAN FUNDING AGENCIES	400	400
	OFFICE EXPENSE - GENERAL TOTAL	**1,100**	**1,100**
	LOCAL RESOURCES GRAND TOTAL	**360,805**	**360,805**

GENERAL FUND OPERATING BUDGET FY 24-25
REGULATORY AFFAIRS (1046)

JDE Account Number	Description	General	GWR System O&M	GAP O&M	PFAS	SAWPA PFAS Regional Study	GWR O&M	SAR Monitoring	Total
	ACTIVITY CODE	9900	9922	9911	1914	2026	2003	4602	
	SALARIES & BENEFITS								
1046.50104	REGULAR SALARIES	203,455	107,906	13,224	55,011	20,541	27,858	27,153	455,148
1046.50210	PAYROLL TAXES	2,950	1,565	192	798	298	404	394	6,601
1046.50202	RETIREMENT	33,875	17,966	2,202	9,159	3,420	4,638	4,521	75,781
1046.50203	457 RETIREMENT MATCH	5,363	2,113	325	813	325	325	488	9,752
1046.50204	HEALTH INSURANCE	31,583	19,346	2,938	7,594	3,021	3,104	4,490	72,076
1046.50206	WORKERS' COMPENSATION	977	518	63	264	99	134	130	2,185
	SALARIES & BENEFITS TOTAL	**278,203**	**149,414**	**18,944**	**73,639**	**27,704**	**36,463**	**37,176**	**621,543**
1046.51301	TRAVEL/CONFERENCE/MILEAGE								
	WATER QUALITY POLICY/LEGISLATION TRIPS (SACRAMENTO, CA) (3 STAFF)	1,500							1,500
	40TH WATEREUSE SYMPOSIUM (MARCH 2025; TAMPA) (2 STAFF)	3,500							3,500
	2023 WATEREUSE CALIFORNIA ANNUAL CONFERENCE (SEPT 2024: ORANGE COUNTY) (2 STAFF)	1,500							1,500
	WEFTEC 2024 (OCT 2024: NEW ORLEANS, LA) (1 STAFF)	2,000							2,000
	PFAS CONFERENCE (TBD) (1 STAFF)	1,500							1,500
	TRAVEL/CONFERENCE/MILEAGE TOTAL	**10,000**	**-**	**-**	**-**	**-**	**-**	**-**	**10,000**
1046.53001	PROFESSIONAL SERVICE - GENERAL								
	CONSULTING SERVICES FOR 2024 GWRS ANNUAL REPORT		67,500						67,500
	NWRI GWRS INDEPENDENT ADVISORY PANEL		60,000						60,000
	NWRI SARMON INDEPENDENT ADVISORY PANEL							55,000	55,000
	GWRS CLIMATE CHANGE ACTION PLAN (PERMIT REQUIREMENT)		120,000						120,000
	PROFESSIONAL SERVICE - GENERAL TOTAL	**-**	**247,500**	**-**	**-**	**-**	**-**	**55,000**	**302,500**
1046.51501	OFFICE EXPENSE - GENERAL								
	SHIPPING COST/FEDEX/ONTRAC		500						500
	OFFICE SUPPLIES (TONER, ETC.)		1,000						1,000
	COLOR COPIES FOR GWRS ANNUAL REPORT & GWRS NWRI IAP MEETING		1,500						1,500
	OFFICE EXPENSE - GENERAL TOTAL	**-**	**3,000**	**-**	**-**	**-**	**-**	**-**	**3,000**
1046.51104	SUBSCRIPTION								
	NGWA GROUNDWATER JOURNAL	200							200
	ENVIRONMENTAL SCIENCE & TECHNOLOGY JOURNAL	200							200
	SUBSCRIPTION TOTAL	**400**	**-**	**-**	**-**	**-**	**-**	**-**	**400**
1046.51102	MEMBERSHIPS AND REGISTRATIONS								
	MEMBERSHIPS AND PROFESSIONAL REGISTRATIONS (P.E., P.G., IAAP LICENSES)	1,000							1,000
	MEMBERSHIPS AND REGISTRATIONS TOTAL	**1,000**	**-**	**-**	**-**	**-**	**-**	**-**	**1,000**
1046.51112	SPECIAL DEPARTMENT EXPENSE								
	RWQCB PERMIT FEE FOR GWRS EMERGENCY SAR DISCHARGE NPDES PERMIT		5,500						5,500
	RWQCB FEE FOR GWRS FINAL EXPANSION PERMIT		55,000						55,000
	SWRCB DDW FEES FOR REVIEWING PERMITS, PROJECTS, PANEL MEETINGS		40,000						40,000
	SPECIAL DEPARTMENT EXPENSE TOTAL	**-**	**100,500**	**-**	**-**	**-**	**-**	**-**	**100,500**
	REGULATORY AFFAIRS GRAND TOTAL	**289,603**	**500,414**	**18,944**	**73,639**	**27,704**	**36,463**	**92,176**	**1,038,943**

GENERAL FUND OPERATING BUDGET FY 24-25
WATER PRODUCTION (1050)

JDE Account Number	Description	General	GWR System O&M	Process Optimization	Talbert Barrier O&M	FV Facility O&M	GAP O&M	Lab Maintenance	Alamitos Barrier O&M	Forebay O&M	MWDOC	EW1	MBI	Total
	ACTIVITY CODE	9900	9922	9952	9908	9901	9911	9974	9932	9920	9970	1711	9990	
	SALARIES & BENEFITS													
1050.50104	REGULAR SALARIES	1,030,311	4,842,261	221,536	474,442	224,286	621,090	143,908	14,067	226,760	105,853	63,532	119,590	8,087,636
1050.50106	OVERTIME SALARIES	60,564	418,196	8,310	18,993	10,316	50,165	7,036	584	14,587	5,285	2,865	4,751	601,652
1050.50210	PAYROLL TAXES	18,316	76,277	3,333	7,155	3,402	9,733	2,189	212	3,500	1,612	963	1,803	128,495
1050.50202	RETIREMENT	174,921	875,866	38,269	82,157	39,061	111,764	25,132	2,439	40,184	18,505	11,055	20,703	1,440,056
1050.50203	457 RETIREMENT MATCH	25,610	129,870	6,240	11,928	7,475	16,998	4,063	390	4,518	2,925	1,560	2,925	214,502
1050.50204	HEALTH INSURANCE	194,214	944,942	38,849	75,527	58,707	118,036	31,639	3,058	40,114	22,973	10,924	19,513	1,558,496
1050.50206	WORKERS' COMPENSATION	23,195	118,837	4,774	12,127	5,725	15,907	3,650	369	4,080	2,751	1,537	2,936	195,888
	SALARIES & BENEFITS TOTAL	**1,527,131**	**7,406,249**	**321,311**	**682,329**	**348,972**	**943,693**	**217,617**	**21,119**	**333,743**	**159,904**	**92,436**	**172,221**	**12,226,725**
1050.51301	TRAVEL/CONFERENCE/MILEAGE													
	PATEL MARCH 2025 AWWA/AMTA JOINT MEMBRANE TECHNOLOGY CONF (CONF ORGANIZER, AMTA BOARD MEETING) LONG BEACH, CA		900											900
	PATEL JUL 24-25, 2024 AMTA WORKSHOP, SACRAMENTO, CA. ATTEND BOARD MEETING.		400											400
	PATEL OCT 1-3, 2024 AMTA WORKSHOP, DECATUR, AL. ATTEND BOARD MEETING.		1,000											1,000
	PATEL SEPT 15-17, 2024, WATEREUSE CA ANNUAL CONF, GARDEN GROVE, CA		250											250
	PATEL MAY 2025 AMTA WORKSHOP, WILMINGTON, NC. ATTEND BOARD MEETING.		750											750
	PATEL MARCH 16-19, 2025, WATEREUSE ANNUAL CONFERENCE, TAMPA, FL		1,500											1,500
	PATEL OCT 2024 WEFTEC, NEW ORLEANS, LA, PARTICIPATE ON REUSE/IPR OPERATIONS PANEL WORKSHOP		2,000											2,000
	BONSANGUE AIPG ANNUAL CONFERENCE DURANGO, CO (PRESENTING) - AUGUST 10-13, 2024		2,000											2,000
	CWEA TRI-STATE SEMINAR, AUG. 7-10, LAS VEGAS, NV		1,500											1,500
	EMERSON USER CONFERENCE PHOENIX, 2 STAFF		7,000											7,000
	TRAVEL/CONFERENCE/MILEAGE TOTAL	**-**	**17,300**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**17,300**
1050.53001	PROFESSIONAL SERVICES-GENERAL													
	CONSULTING SERVICES GWRS PROCESS OPTIMIZATION (SPI)		125,000											125,000
	HAZEN AND SAWYER RO DASHBOARD FOR USBR STUDY (PARTIAL GRANT REIMBURSED)		60,000											60,000
	PROFESSIONAL SERVICES - GENERAL TOTAL	**-**	**185,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**185,000**
1050.51501	OFFICE EXPENSE - GENERAL													
	BLUE PRINT AND COPIES		2,000											2,000
	OFFICE FURNITURE		2,000				2,500							4,500
	OFFICE SUPPLIES		8,400	400										8,800
	CHAIR/FLOOR MATS FOR AWPF CONTROL ROOM REPLACEMENTS		1,200											1,200
	REPLACEMENT CHAIRS SHOP OFFICES (17)		8,500											8,500
	ADOBE PROFESSIONAL		2,000											2,000
	OFFICE EXPENSE - GENERAL TOTAL	**-**	**24,100**	**400**	**-**	**-**	**2,500**	**-**	**-**	**-**	**-**	**-**	**-**	**27,000**
1050.51510	HARDWARE/SOFTWARE													
	REPLACE 4 OPERATOR BUSINESS SYSTEM WORKSTATIONS		8,000											8,000
	PCS SYSTEM SOFTWARE SUPPORT (EMERSON GUARDIAN)		80,100											80,100
	LAB BUILDING BMS SYSTEM HARDWARE/SOFTWARE UPGRADE							7,000						7,000
	ADOBE PROFESSIONAL				500									500
	HARDWARE/SOFTWARE TOTAL	**-**	**88,100**	**-**	**500**	**-**	**-**	**7,000**	**-**	**-**	**-**	**-**	**-**	**95,600**
1050.51520	GAS & DIESEL FUEL													
	FUEL		12,000		11,000	3,000								26,000
	GAS & DIESEL FUEL TOTAL	**-**	**12,000**	**-**	**11,000**	**3,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**26,000**
1050.51530	UNIFORMS & SAFETY													
	BOTTLED WATER AS REQUIRED IN TREATMENT AREA		3,000											3,000
	JACKETS, POLO SHIRTS, RAINGEAR		4,500											4,500
	DISTRICT SUPPLIED UNIFORMS (UNIFIRST CONTRACT PRICE INCREASE)		50,000											50,000
	UNIFORMS & SAFETY TOTAL	**-**	**57,500**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**57,500**

GENERAL FUND OPERATING BUDGET FY 24-25
WATER PRODUCTION (1050)

JDE Account Number	Description	General	GWR System O&M	Process Optimization	Talbert Barrier O&M	FV Facility O&M	GAP O&M	Lab Maintenance	Alamitos Barrier O&M	Forebay O&M	MWDOC	EW1	MBI	Total
	ACTIVITY CODE	9900	9922	9952	9908	9901	9911	9974	9932	9920	9970	1711	9990	
1050.57001	MAINTENANCE - SUPPLIES & MATERIAL - ELECTRICAL/INSTRUMENTATION													
	MISC MOTOR, PUMP WAREHOUSE SUPPLIES		6,000		1,000	750	1,250							9,000
	PLANT UPS SYSTEM REPAIRS		7,500		1,000		500							9,000
	ELECTRICAL WAREHOUSE SUPPLIES		5,000	1,000			500							6,500
	INSTRUMENTATION PARTS AND SUPPLIES		11,000	3,000			1,000							15,000
	LIGHTING & EMERGENCY, LIGHT SUPPLIES		3,500			1,000	200	500						5,200
	OFFICE ELECTRICAL & LIGHTING REPAIRS		5,000			1,000		500						6,500
	MAINTENANCE - SUPPLIES & MATERIAL - ELECTRICAL/INSTRUMENTATION TOTAL	**-**	**38,000**	**4,000**	**2,000**	**2,750**	**3,450**	**1,000**	**-**	**-**	**-**	**-**	**-**	**51,200**
1050.57004	MAINTENANCE - SUPPLIES & MATERIAL													
	BARRIER FIELD EQUIPMENT REPAIR SUPPLIES				2,000									2,000
	BOTTLED GAS NITROGEN ECT FOR BARRIER, OPTIONS & MAINTENANCE		500		3,200		750							4,450
	EQUIPMENT AND STRUCTURE REPAIRS SUPPLIES		5,500			3,000	2,500	2,500						13,500
	EQUIPMENT LUBRICATION SUPPLIES		14,000	2,000		2,000	3,000							21,000
	FENCING AND SECURITY GATE REPAIRS		3,000		1,500	2,000								6,500
	GASKETS, BEARINGS, AND GEARS WAREHOUSE SUPPLIES		8,500		500	1,000	2,000							12,000
	HARDWARE SUPPLIES FOR BUILDINGS AND PROCESSES		9,000	1,000	1,000	3,000	1,500							15,500
	IRRIGATION SUPPLIES		2,000		1,000	5,000	2,000							10,000
	JANITORIAL SUPPLIES					9,500								9,500
	ADMINISTRATION, LABORATORY & ANNEX REPAIRS					6,000		5,000						11,000
	LANDSCAPE SUPPLIES					3,000								3,000
	LUMBER, PAINT, HARDWARE SUPPLIES		3,500				2,500							6,000
	PIPE AND SUPPLIES		9,000	10,000		4,000	3,000							26,000
	PVC PIPE REPAIRS AND SUPPLIES		7,500	6,000		1,000	3,000							17,500
	SIGNAGE SUPPLIES		5,500			5,500	2,000				1,000			14,000
	SITE FACILITY PAINTING/SUPPLIES		7,000			4,500	2,000							13,500
	STRUCTURE BLDG REPAIRS MISC		8,000		1,000	6,000	3,000	3,000						21,000
	WELDING MATERIAL (SHEET METAL, STAINLESS, ANGLE IRON)		10,000	6,000	3,000	3,000	4,000	2,500						28,500
	SUMP PUMP REPLACEMENT ELECTRICAL MANHOLES		5,000		1,000	1,000	1,500							8,500
	WELDING SUPPLIES		6,000		500	1,000	2,000							9,500
	US FLAGS					3,000								3,000
	ENGINEERING RESEARCH CENTER PARTS			6,000										6,000
	MAINTENANCE - SUPPLIES & MATERIAL TOTAL	**-**	**104,000**	**31,000**	**14,700**	**63,500**	**34,750**	**13,000**	**-**	**-**	**1,000**	**-**	**-**	**261,950**
1050.57006	MAINTENANCE EQUIPMENT - COMMUNICATION													
	REPAIR AND REPLACEMENT OF HANDHELD AND CAR RADIOS		500		800		700							2,000
	MAINTENANCE EQUIPMENT - COMMUNICATION TOTAL	**-**	**500**	**-**	**800**	**-**	**700**	**-**	**-**	**-**	**-**	**-**	**-**	**2,000**
1050.57008	MAINTENANCE EQUIPMENT - CARTS													
	REPAIR OF CARTS	3,500	12,000											15,500
	MAINTENANCE EQUIPMENT - CARTS TOTAL	**3,500**	**12,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**15,500**
1050.57010	MAINTENANCE EQUIPMENT - VEHICLES													
	MAINTENANCE OF ALL VEHICLES IN OCWD FV POOL	40,000												40,000
	PAINT AND BODY REPAIR OF POOL VEHICLES	5,000												5,000
	SOFTWARE UPGRADE VEHICLE SCANNER	2,000												2,000
	MAINTENANCE EQUIPMENT - VEHICLES TOTAL	**47,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**47,000**
1050.57012	MAINTENANCE EQUIPMENT - HEAVY EQUIPMENT													
	MAINTENANCE OF HEAVY EQUIPMENT FOR WATER PRODUCTION		2,000											2,000
	MAINTENANCE OF LARGE AIR COMPRESSOR FOR INJECTION WELLS				2,000									2,000
	MAINTENANCE EQUIPMENT - HEAVY EQUIPMENT TOTAL	**-**	**2,000**	**-**	**2,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**4,000**

GENERAL FUND OPERATING BUDGET FY 24-25
WATER PRODUCTION (1050)

JDE Account Number	Description	General	GWR System O&M	Process Optimization	Talbert Barrier O&M	FV Facility O&M	GAP O&M	Lab Maintenance	Alamitos Barrier O&M	Forebay O&M	MWDOC	EW1	MBI	Total
	ACTIVITY CODE	9900	9922	9952	9908	9901	9911	9974	9932	9920	9970	1711	9990	
1050.57016	MAINTENANCE STRUCTURE AND IMPROVEMENT - OUTSIDE SERVICES													
	FV SITE BUILDING REPAIRS		4,000			3,500		2,500						10,000
	ROOF REPAIRS		1,300			2,500	200	1,000						5,000
	GRAFFITI REMOVAL SERVICE				5,000					10,000				15,000
	ANNUAL INSPECTION/REPAIR OF RPPD		5,000			2,500	3,000							10,500
	PLANT WIDE CRANE SERVICE AND INSPECTION		14,500			2,500	1,500							18,500
	CONCRETE REPAIRS & CORE DRILLING		2,000		500	500								3,000
	ELEVATOR YEARLY INSPECTION AND CERTIFICATION (MF, RO, ANNEX & LAB)		4,000			8,000		3,000						15,000
	FIRE SPRINKLER SERVICE WET AND DRY QUARTERLY AND ANNUAL TEST		12,000			5,000		2,000						19,000
	FIRE EXTINGUISHER SERVICE PM		6,000											6,000
	LABORATORY FIRE ALARM SERVICE							6,000						6,000
	FV SITE FIRE ALARM SERVICE/REPAIR		9,000			4,000								13,000
	HVAC & AIR HANDLING PREVENTIVE MAINT GWRS & FV OFFICES		34,000			35,000	2,000	20,000						91,000
	HVAC & AIR HANDLING REPAIRS GWRS AND FV SITE OFFICES		20,000			10,000	2,000							32,000
	HVAC LAB PM/REPAIR INCLUDES PHOENIX AND ANDOVER CONTROLS AND BOILERS							35,000						35,000
	COVID-19 EXTRA CLEANING BY JANITORIAL SERVICE					27,000								27,000
	JANITORIAL SERVICE GWRS, FV, LAB BLDS & WINDOWS (PLANT WIDE) INCLUDES SHARED MWDOC (PRICE INCREASE PER BOARD ACTION 8/13/20 AFC)					157,000								157,000
	GWRS EXTERIOR PANEL MAINTENANCE (QUOTE FOR METAL PANELS AND WINDOWS)					48,000								48,000
	EMERGENCY JANITORIAL SERVICES & CARPET CLEANING					4,000								4,000
	LANDSCAPE SERVICES INCLUDING SHARED MWDOC					52,000								52,000
	TREE TRIMMING SERVICE					12,000								12,000
	INDOOR PLANT SERVICES					3,800								3,800
	EXTERMINATOR PEST CONTROL SERVICES		3,000			6,000								9,000
	RAINBOW DISPOSAL TRASH PICKUP INCLUDES SHARED MWDOC		6,000			51,000								57,000
	SITE STREET SWEEPING					5,000								5,000
	MEDIUM VOLTAGE VFD ANNUAL PM (VFD COUNT INCREASED DUE TO GWRSFE AND ROCKWELL COSTS HAVE INCREASED)		120,000											120,000
	MOTOR CONTROL CENTER PM		2,000			1,000	1,000							4,000
	MEDIUM VOLTAGE DISTRIBUTOR & SWITCHGEAR PM & OIL TESTING		51,000											51,000
	MEDIUM VOLTAGE DISTRIBUTOR & SWITCHGEAR PM REPAIRS 20% OF PM		10,200											10,200
	NFPA SAFETY EQUIPMENT CERTIFICATION/TESTING		5,000											5,000
	NIST CERTIFICATION CALIBRATION ELECTRICAL SHOP EQUIPMENT		2,500											2,500
	GWRS EMERGENCY GENERATORS QUARTERLY INSPECTION & LOAD TEST		5,500											5,500
	MOTOR OIL ANALYSIS		5,000				3,000							8,000
	MOTOR VIBRATION ANALYSIS		3,000				1,000							4,000
	PLUMBING SERVICE BUILDINGS		1,500			3,000	1,500	1,000			1,000			8,000
	PUMP MISC INSPECTION AND MODIFICATION		2,000			1,500								3,500
	REPAIR STAINLESS STEEL VALVE, FITTINGS AND MISC PIPES		2,000		500		1,000							3,500
	REPAIR/INSPECTION OF AIR VAC AND PRESS RELIEF & BF VALVES		2,000		800		1,500							4,300
	USA OUTSOURCE UNDERGROUND SERVICE ALERTS		22,000		16,000		37,000							75,000
	USA NOTIFICATION REQUEST FEE		6,000				4,000							10,000
	STOCKING MAINTENANCE PARTS CAGE		3,500	1,500	1,000	1,500	1,500							9,000
	WINDOW AND DOOR REPAIRS AND SUPPLIES		3,000		500	1,500	500							5,500
	VIBRALIGN CALIBRATION & SERVICE		2,000											2,000
	ANNUAL GARAGE DOOR MAINTENANCE		2,500			1,000								3,500
	FUME HOOD CERTIFICATION		500					9,800						10,300
	UE SYSTEMS ULTRASONIC CALIBRATION SERVICE		1,000											1,000
	VACTOR TRUCK SERVICE FOR SCREENINGS SUMP, STORM DRAINS ON SITE		3,000				1,000							4,000
	CHEMICAL TREATMENT FOR HOT WATER LOOPS FOR ADMIN AND LAB					2,000								2,000
	BC WIRE ROPE FALL PROTECTION EQUIPMENT INSPECTION CERTIFICATION		3,000		1,000		500							4,500
	SUNBELT CONTROLS - 1 YEAR SERVICE CONTRACT FOR NEW ADMIN HVAC SOFTWARE CONTROL SYSTEM					7,000								7,000
	FUMIGATION FOR TERMITES OCWD ADMIN AND MWDOC ADMIN BUILDINGS					50,000								50,000
	ROCKWELL TECH CONNECT SUPPORT FOR BOTH MEDIUM AND LOW VOLTAGE DRIVES (NEW ITEM NEEDED FOR ONGOING TECH SUPPORT)		20,000											20,000
	MAINTENANCE STRUCTURE AND IMPROVEMENT - OUTSIDE SERVICES TOTAL	**-**	**399,000**	**1,500**	**25,300**	**507,800**	**62,200**	**80,300**	**-**	**10,000**	**1,000**	**-**	**-**	**1,087,100**
1050.57044	MAINTENANCE STRUCTURE AND IMPROVEMENT - GWRS SCREENINGS													
	SCREENINGS PM		15,000											15,000
	R3 TOC ANALYZER PM VEOLIA (2 NEW TOC ANALYZERS ADDED AT A140 AND A144)		9,800											9,800
	R3 TOC ANALYZER REAGENTS (2 NEW TOC ANALYZERS ADDED AT A140 AND A144)		4,000											4,000
	MAINTENANCE STRUCTURE AND IMPROVEMENT - GWRS SCREENINGS TOTAL	**-**	**28,800**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**28,800**

GENERAL FUND OPERATING BUDGET FY 24-25
WATER PRODUCTION (1050)

JDE Account Number	Description	General	GWR System O&M	Process Optimization	Talbert Barrier O&M	FV Facility O&M	GAP O&M	Lab Maintenance	Alamitos Barrier O&M	Forebay O&M	MWDOC	EW1	MBI	Total
	ACTIVITY CODE	9900	9922	9952	9908	9901	9911	9974	9932	9920	9970	1711	9990	
1050.57031	MAINTENANCE STRUCTURE AND IMPROVEMENT - GWRS MICROFILTRATION													
	MF BACKWASH PUMP PM		5,500											5,500
	MF FILTRATE PUMP PM		12,000	2,000										14,000
	MF PUMP VFD PM/REPAIRS		14,000	1,000										15,000
	MF PCS EQUIPMENT		6,000	500										6,500
	MF CHEMICAL PUMPS		9,500	2,000										11,500
	MF INSTRUMENTATION PM		12,000	1,000										13,000
	MF CHLORINE ANALYZER PM		2,000											2,000
	MF PIPE REPAIRS		21,000	500										21,500
	MF COMPRESSOR PM		12,000											12,000
	MF BLOWER PM		13,000											13,000
	MF CHEMICAL SUMP PUMP REPAIRS		5,000											5,000
	MF HORIBA AMMONIA ANALYZER REPAIRS AND CALIBRATION (NOW 2 ANALYZERS DUE TO ONE ADDED AT A144 FOR GWRSFE)		15,400											15,400
	MF VALVE/ACTUATOR PM		65,000	4,000										69,000
	TRANSFER PUMP, BACKWASH PUMP AND VALVE PM		15,500											15,500
	MISC MF ELEMENT REPLACEMENT NON WARRANTY/TESTING OF NEW (MANUFACTURERS) ELEMENT APPROX. 18 ELEMENTS AT $277 EACH			5,000										5,000
	MAINTENANCE STRUCTURE AND IMPROVEMENT - GWRS MICROFILTRATION TOTAL	**-**	**207,900**	**16,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**223,900**
1050.57032	MAINTENANCE STRUCTURE/IMPROVEMENT - GWRS REVERSE OSMOSIS													
	RO FEED PUMP PM		25,000	4,000										29,000
	REPLACE 4 MECHANICAL SEALS RO FEED PUMPS		15,000											15,000
	RO ACID PUMP PM		6,000	1,000										7,000
	RO VFD PM		10,000											10,000
	RO PCS EQUIPMENT		8,000											8,000
	RO INSTRUMENTATION PM		8,000	5,000										13,000
	ANNUAL AMMONIA ANALYZER SENSOR REPLACEMENT (NOW 2 ANALYZERS DUE TO ONE ADDED AT A144 FOR GWRSFE)		6,000											6,000
	RO PRESSURE VESSEL END CAP ORING REPLACEMENT		12,000											12,000
	RO PIPE REPAIRS		25,000	5,000										30,000
	REPLACING RO CLEANING PVC PIPE		25,000											25,000
	TOC ANALYZER CHEMICALS/MISC.		12,000											12,000
	TOC ANALYZER PM (INCREASE NUMBER OF ANALYZERS IN PLANT FROM 4 TO 6 FROM GWRSFE)		71,000											71,000
	RO VALVE ACTUATOR PM		10,000											10,000
	MISC RO MEMBRANES (FULL-SCALE EVALUATIONS)		8,000	5,000										13,000
	MAINTENANCE STRUCTURE/IMPROVEMENT - GWRS REVERSE OSMOSIS TOTAL	**-**	**241,000**	**20,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**261,000**
1050.57038	MAINTENANCE STRUCTURE/IMPROVEMENT - GWRS UV SYSTEM													
	UV CHEMICAL PUMP PM		6,000											6,000
	UV PCS EQUIPMENT		5,000											5,000
	UV INSTRUMENT PM		5,000											5,000
	UV LAMP ASSEMBLY PM ORINGS END ADAPTERS		6,000											6,000
	UV BALLASTS		15,000											15,000
	UV LAMP REPLACEMENT AND SPARES (PRICE INCREASE TO $228/LAMP AND NOT INCREASED SINCE 2017, 3460 LAMPS ESTIMATED)		750,000											750,000
	UV LAMP RECYCLING FEE		11,000											11,000
	UV QUARTZ SLEEVES		10,000											10,000
	UV TRANSMITTANCE METER PM		4,000											4,000
	UV VALVE ACTUATOR PM		5,000											5,000
	MAINTENANCE STRUCTURE/IMPROVEMENT - GWRS UV SYSTEM TOTAL	**-**	**817,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**817,000**
1050.57046	MAINTENANCE STRUCTURE/IMPROVEMENT - GWRS LIME SYSTEM													
	LIME MIXING EQUIPMENT PM		8,500											8,500
	POLYMER EQUIPMENT		10,000											10,000
	LIME INSTRUMENTATION		5,000											5,000
	LIME LOOP PUMP PM / SLAKER PM		9,000											9,000
	LIME SLURRY LOOP OPTIMIZATION			2,500										2,500
	LIME 4 INCH SLUDGE LINE PLUMBING PM		10,000											10,000
	LIME SOLIDS HAULING		2,000											2,000
	LIME VALVE PM		4,500											4,500
	MAINTENANCE STRUCTURE/IMPROVEMENT - GWRS LIME SYSTEM TOTAL	**-**	**49,000**	**2,500**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**51,500**

GENERAL FUND OPERATING BUDGET FY 24-25
WATER PRODUCTION (1050)

JDE Account Number	Description	General	GWR System O&M	Process Optimization	Talbert Barrier O&M	FV Facility O&M	GAP O&M	Lab Maintenance	Alamitos Barrier O&M	Forebay O&M	MWDOC	EW1	MBI	Total
	ACTIVITY CODE	9900	9922	9952	9908	9901	9911	9974	9932	9920	9970	1711	9990	
1050.57048	MAINT STRUCTURE/IMPROVEMENT - GWRS PRODUCT WTR PUMP STATION													
	VFD PM		3,500											3,500
	MOTOR PM		3,000											3,000
	SPLIT SEAL REPLACEMENT (2 SEALS)		8,000											8,000
	PUMP PM		10,000											10,000
	VALVE PM		6,000											6,000
	INSTRUMENTATION PM		3,000											3,000
	MAINT STRUCTURE/IMPROVEMENT - GWRS PRODUCT WATER PUMP STATION TOTAL	**-**	**33,500**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**33,500**
1050.57034	MAINTENANCE STRUCTURE/IMPROVEMENT - GREEN ACRES PROJECT													
	GAP EFFLUENT PUMP VFD PM						3,500							3,500
	GAP EFFLUENT MOTOR PM						4,000							4,000
	GAP EFFLUENT PUMP PM						3,000							3,000
	GAP BACKWASH PUMP PM						1,000							1,000
	GAP CHEMICAL PUMP PM						1,500							1,500
	GAP FLOCCULATOR PM						4,000							4,000
	GAP PCS REPAIRS						2,500							2,500
	GAP CL2 ANALYZER PM						2,500							2,500
	GAP INSTRUMENT PM						4,000							4,000
	GAP PIPING REPAIRS						1,500							1,500
	GAP VALVE PM						3,000							3,000
	GAP AIR VAC AND PIPELINE EMERGENCY REPAIRS						4,000							4,000
	GAP CHLORINE MIXER REPAIRS						2,000							2,000
	GAP GRAVITY FILTER SURVEILLANCE INSPECTION						10,000							10,000
	VACUUM TRUCK TO CLEAN BW SUMP						13,000							13,000
	MAINTENANCE STRUCTURE/IMPROVEMENT - GREEN ACRES PROJECT TOTAL	**-**	**-**	**-**	**-**	**-**	**59,500**	**-**	**-**	**-**	**-**	**-**	**-**	**59,500**
1050.57036	MAINTENANCE STRUCTURE/IMPROVEMENT - INJECTION WELLS													
	INJECTION WELL INSTRUMENT PM				4,000									4,000
	REHABILITATE UP TO 23 INJECTION WELLS				150,000									150,000
	INJECTION WELL PCS PM				3,000								1,000	4,000
	REPAIR & RECALIBRATION OF FLOW METERS/INSTRUMENTS/9 MAG METERS				2,500								1,000	3,500
	REPAIR ACCESS HATCHES AND VAULTS				25,000									25,000
	REPAIR OF DOWN-HOLE VALVES AND BF PUMPS				20,000									20,000
	REPAIR/INSPECTION OF SEB 10 INCH BACK FLOW PREVENTION				2,000									2,000
	REPLACEMENT PARTS AND SUPPLIES FOR BARRIER				30,000									30,000
	REPAIR STAINLESS STEEL VALVE, FITTINGS AND MISC PIPES				5,000									5,000
	REPAIR/INSPECTION OF AIR VAC AND PRESS RELIEF & BF VALVES				4,000									4,000
	INJECTION WELL SUMP PUMP PM				3,500									3,500
	BARRIER FIELD EQUIPMENT SUPPLIES REPAIRS				2,000									2,000
	MAINTENANCE FEES TO MAINTAIN M-26 DATA LOGGER				420									420
	MAINTENANCE FOR 3 LASER TURBIDITY METERS				1,500									1,500
	PARTICLE COUNTER MAINTENANCE				1,200									1,200
	MAINTENANCE STRUCTURE/IMPROVEMENT - INJECTION WELLS TOTAL	**-**	**-**	**-**	**254,120**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**2,000**	**256,120**
1050.51540	CARTRIDGE FILTERS - REVERSE OSMOSIS													
	REPLACEMENT OF RO PRETREATMENT FILTERS 3 REPLACEMENTS OF 14 HOUSING WITH 283 FILTERS EACH (NOW 16 HOUSING WITH GWRSFE, MATERIAL COST INCREASE)		62,000											62,000
	CARTRIDGE FILTERS - REVERSE OSMOSIS TOTAL	**-**	**62,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**62,000**
1050.51545	SMALL TOOLS													
	TOOLS - OPERATIONS		1,500	300	1,000									2,800
	POWER HAND TOOLS AND INFRARED THERMOMETER		8,000											8,000
	TOOLS - MAINTENANCE		2,500	1,000	1,000	1,500								6,000
	TOOLS - I&E		5,000											5,000
	INSTRUMENT SHOP CALIBRATION EQUIPMENT		3,200		1,500									4,700
	SPECIALIZED TOOLS FOR TREATMENT PROCESS AREAS		4,500											4,500
	SMALL TOOLS TOTAL	**-**	**24,700**	**1,300**	**3,500**	**1,500**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**31,000**

GENERAL FUND OPERATING BUDGET FY 24-25
WATER PRODUCTION (1050)

JDE Account Number	Description	General	GWR System O&M	Process Optimization	Talbert Barrier O&M	FV Facility O&M	GAP O&M	Lab Maintenance	Alamitos Barrier O&M	Forebay O&M	MWDOC	EW1	MBI	Total
	ACTIVITY CODE	9900	9922	9952	9908	9901	9911	9974	9932	9920	9970	1711	9990	
1050.51550	SAFETY SUPPLIES													
	TRAFFIC SAFETY SUPPLIES		1,000		1,000									2,000
	CONFINED SPACE GAS DETECTORS		2,500		1,500									4,000
	CONFINED SPACE BLOWERS		1,500		500									2,000
	CONFINED SPACE RESCUE EQUIPMENT		7,000		500		500							8,000
	PPE FOR EMPLOYEES		3,000	200										3,200
	FULL FACE RESPIRATORS (REPLACE SOME EXISTING THAT ARE SEVERAL YEARS OLD, ADD MORE FOR NEW EMPLOYEES)		5,000											5,000
	RESPIRATOR FILTERS		1,500											1,500
	SCBA TESTING REPAIR		2,000											2,000
	SAFETY EQUIPMENT FOR 12 KV ELECTRICAL SYSTEM PM AND EMERGENCY TESTING		2,500											2,500
	SPILL CONTAINMENT SUPPLIES		4,000	500										4,500
	SAFETY AND OPERATION SIGNS		1,000	200	500									1,700
	SAFETY SUPPLIES TOTAL	**-**	**31,000**	**900**	**4,000**	**-**	**500**	**-**	**-**	**-**	**-**	**-**	**-**	**36,400**
1050.57040	MAINT STRUCTURE/IMPROV - GREEN ACRES INFLUENT PUMP STATION													
	INSTRUMENTATION PM						750							750
	VFD PM						750							750
	MOTOR PM						750							750
	PUMP PM						750							750
	VALVE ACTUATOR PM						500							500
	VALVE PM						500							500
	MAINT STRUCTURE/IMPROVEMENT - GREEN ACRES INFLUENT PUMP STATION TOTAL	**-**	**-**	**-**	**-**	**-**	**4,000**	**-**	**-**	**-**	**-**	**-**	**-**	**4,000**
1050.57042	MAINTENANCE - SANTA ANA RESERVOIR													
	CHEMICAL PUMP PM						500							500
	INSTRUMENTATION PM						750							750
	MOTOR PM						750							750
	PUMP PM						750							750
	VALVE MOTOR ACTUATOR PM						1,500							1,500
	VALVE PM						750							750
	MAINTENANCE - SANTA ANA RESERVOIR TOTAL	**-**	**-**	**-**	**-**	**-**	**5,000**	**-**	**-**	**-**	**-**	**-**	**-**	**5,000**
1050.54001	CHEMICALS - CHLORINE (NO TAX)													
	GWRS SODIUM HYPOCHLORITE (20% UNIT PRICE DECREASE DEC. 2023, GWRSFE POORER WATER QUALITY, HIGHER PRODUCTION, MORE USAGE WITH PVDF)		6,900,000	2,000										6,902,000
	GAP INFLUENT AND CL CONTACT SODIUM HYPOCHLORITE (1275 TONS) - 20% PRICE DECREASE						270,000							270,000
	CHEMICALS - CHLORINE (NO TAX) TOTAL	**-**	**6,900,000**	**2,000**	**-**	**-**	**270,000**	**-**	**-**	**-**	**-**	**-**	**-**	**7,172,000**
1050.54060	CHEMICALS - ANHYDROUS AMMONIA (TAX)													
	GAP CL CONTACT AMMONIA						2,500							2,500
	CHEMICALS - ANHYDROUS AMMONIA TOTAL	**-**	**-**	**-**	**-**	**-**	**2,500**	**-**	**-**	**-**	**-**	**-**	**-**	**2,500**
1050.54045	CHEMICALS - POST TREATMENT HYDRATED LIME (NO TAX)													
	HYDRATED LIME (UNIT PRICE INCREASE EXPECTED WHEN CONTRACT EXPIRES IN APRIL 2024, HIGHER PRODUCTION GWRSFE)		1,800,000											1,800,000
	CHEMICALS - POST TREATMENT HYDRATED LIME (NO TAX) TOTAL	**-**	**1,800,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**1,800,000**
1050.54050	CHEMICALS - HYDROGEN PEROXIDE UV (NO TAX)													
	HYDROGEN PEROXIDE UV 8% PRICE DECREASE DEC. 2023; INCREASE DOSE VIA DDW TO 4 MG/L		600,000											600,000
	CHEMICALS - HYDROGEN PEROXIDE UV (NO TAX) TOTAL	**-**	**600,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**600,000**
1050.54055	CHEMICALS - SODIUM BISULFITE (TAX)													
	SODIUM BISULFITE RO FLUSH AND SAR DISCHARGE (25 TONS)		7,000											7,000
	CHEMICALS - SODIUM BISULFITE (TAX) TOTAL	**-**	**7,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**7,000**
1050.54015	CHEMICALS - POLYMER (TAX)													
	ANIONIC POLYMER LIME SATURATOR (17 TONS) - (UNIT PRICE INCREASE BASED ON BULK VS. TOTAL DELIVERY PRICE)		90,000											90,000
	CHEMICALS - POLYMER (TAX) TOTAL	**-**	**90,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**90,000**
1050.54020	CHEMICALS - GWRS REVERSE OSMOSIS SULFURIC ACID (NO TAX)													
	SULFURIC ACID OPERATING WITH SEASONAL ADJUSTMENTS BETWEEN PH (2,900 TONS) 6.9 PH (9% UNIT PRICE DECREASE AND INCREASE FOR OC SAN WATER QUALITY)		500,000	1,500										501,500
	CHEMICALS - GWRS REVERSE OSMOSIS SULFURIC ACID (NO TAX) TOTAL	**-**	**500,000**	**1,500**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**501,500**

GENERAL FUND OPERATING BUDGET FY 24-25
WATER PRODUCTION (1050)

JDE Account Number	Description	General	GWR System O&M	Process Optimization	Talbert Barrier O&M	FV Facility O&M	GAP O&M	Lab Maintenance	Alamitos Barrier O&M	Forebay O&M	MWDOC	EW1	MBI	Total
	ACTIVITY CODE	9900	9922	9952	9908	9901	9911	9974	9932	9920	9970	1711	9990	
1050.54025	CHEMICALS - GWRS REVERSE OSMOSIS ANTISCALANT (NO TAX)													
	RO ANTISCALANT (510 TONS) - (DOSAGE 3.0 PPM, INCREASED PRODUCTION, PRICE INCREASE EXPECTED JUNE 2024)		1,700,000											1,700,000
	CHEMICALS - GWRS REVERSE OSMOSIS ANTISCALANT (NO TAX) TOTAL	-	**1,700,000**	-	-	-	-	-	-	-	-	-	-	**1,700,000**
1050.54030	CHEMICALS - GWRS MF CLEANING CHEMICALS (TAX)													
	MF MEMBRANE CLEANING CHEMICALS CAUSTIC - (22% UNIT PRICE DECREASE IN DEC. 2023)		480,000											480,000
	MF MEMBRANE CLEANING CHEMICALS CITRIC (700 TONS) - (565% PRICE DECREASE, POORER OC SAN QUALITY, MORE PVDF CELLS)		1,700,000											1,700,000
	MF PROPRIETARY CLEANING CHEMICAL STUDY			1,000										1,000
	MF MEMCLEAN		43,000											43,000
	CHEMICALS - GWRS MF CLEANING CHEMICALS (TAX) TOTAL	-	**2,223,000**	**1,000**	-	-	-	-	-	-	-	-	-	**2,224,000**
1050.54033	CHEMICALS - GWRS RO CLEANING CHEMICALS (TAX)													
	RO MEMBRANE CITRIC (50 TONS) 56% UNIT PRICE DECREASE IN DEC. 2023		80,000											80,000
	RO MEMBRANE CAUSTIC (25 TONS) UNIT PRICE DECREASE 22% IN DEC. 2023		12,000											12,000
	RO CLEANING CHEMICAL STUDY			500										500
	RO MEMBRANE PROPRIETARY CLEANING CHEMICALS 21 FULL UNIT CLEANINGS (ADDED 30% MORE RO UNITS TO CLEAN FROM 21 TO 27)		500,000	500										500,500
	CHEMICALS - GWRS RO CLEANING CHEMICALS (TAX) TOTAL	-	**592,000**	**1,000**	-	-	-	-	-	-	-	-	-	**593,000**
1050.54040	CHEMICALS GAP ALUM													
	PRETREATMENT COAGULANT (21 TONS), PRICE INCREASE EXPECTED						15,000							15,000
	CHEMICALS GAP ALUM TOTAL	-	-	-	-	-	**15,000**	-	-	-	-	-	-	**15,000**
1050.51555	LAB SUPPLIES													
	CALIBRATION STANDARDS FOR BARRIER FIELD EQUIPMENT		20,000		600									20,600
	CHEMICALS AND SUPPLIES		2,500											2,500
	LABORATORY DI WATER SYSTEM		1,400											1,400
	PEROXIDE AND CHLORINE TEST STRIPS		2,500											2,500
	NEW HANDHELD EC PH METERS (2)		2,000											2,000
	LAB SUPPLIES TOTAL	-	**28,400**	-	**600**	-	-	-	-	-	-	-	-	**29,000**
1050.51560	LAB SAMPLES ANALYSIS													
	GENERAL LAB ANALYSIS BY OUTSIDE LAB		3,000	2,000										5,000
	LAB SAMPLES ANALYSIS TOTAL	-	**3,000**	**2,000**	-	-	-	-	-	-	-	-	-	**5,000**
1050.51565	RENT EQUIPMENT- GENERAL													
	RENTAL OF EQUIPMENT FOR PM PROJECTS		5,000											5,000
	RENT EQUIPMENT - GENERAL TOTAL	-	**5,000**	-	-	-	-	-	-	-	-	-	-	**5,000**
1050.54501	UTILITIES - ELECTRICITY (OFFSITE & MISC ELECTRICAL METERS)													
	GAP CATHODIC PROTECTION						5,000							5,000
	GAP DEEP WELL WATER ELECTRICITY (DEPENDS ON IRWD SWITCHOVER PERIOD)						20,000							20,000
	GAP INFLUENT PUMPING ELECTRICITY (DEPENDS ON IRWD SWITCHOVER PERIOD)						40,000							40,000
	GAP SANTA ANA RESERVOIR PUMP STATION POWER (CNE/SCE) (DEPENDS ON IRWD SWITCHOVER PERIOD)						170,000							170,000
	EW-1 WELL POWER											50,000		50,000
	MID BASIN INJECTION WELLS (5 WELLS)												140,000	140,000
	TALBERT BARRIER INJECTION WELLS				12,000									12,000
	UTILITIES - ELECTRICITY (OFFSITE & MISC ELECTRICAL METERS) TOTAL	-	-	-	**12,000**	-	**235,000**	-	-	-	-	**50,000**	**140,000**	**437,000**
1050.54505	UTILITIES - ELECTRICITY (66KV FV SITE SCE)													
	ADMIN BLDG ELECTRICITY (NEW DA CONTRACT PRICE INCREASES FOR 2021 TO 2022)					52,000								52,000
	MWDOC BLDG ELECTRICITY (NEW DA CONTRACT PRICE INCREASES 2021 TO 2022)					50,000								50,000
	WAREHOUSE, ANNEX & MAINTENANCE SHOPS		184,000											184,000
	LABORATORY							350,000						350,000
	SCREENINGS		15,000											15,000
	MICROFILTRATION (GWRSFE GOES FROM 36 TO 48 CELLS OR 33% MORE MF, PLUS UNIT PRICE OF POWER INCREASE)		6,500,000											6,500,000
	REVERSE OSMOSIS (30% MORE RO CAPACITY PLUS WATER QUALITY DECREASE		11,000,000											11,000,000
	UV SYSTEM ELECTRICITY (PRICE INCREASE PLUS MORE CAPACITY)		1,900,000											1,900,000
	DECARB		175,000											175,000
	CHEMICAL FEED/LIME SYSTEM		23,000											23,000
	PRODUCT WATER PUMP STATION (30% MORE PUMPING WITH GWRSFE)		6,500,000											6,500,000
	BARRIER PUMP STATION		675,000											675,000
	UTILITIES - ELECTRICITY (66KV FV SITE SCE) TOTAL	-	**26,972,000**	-	-	**102,000**	-	**350,000**	-	-	-	-	-	**27,424,000**

GENERAL FUND OPERATING BUDGET FY 24-25
WATER PRODUCTION (1050)

JDE Account Number	Description	General	GWR System O&M	Process Optimization	Talbert Barrier O&M	FV Facility O&M	GAP O&M	Lab Maintenance	Alamitos Barrier O&M	Forebay O&M	MWDOC	EW1	MBI	Total
	ACTIVITY CODE	9900	9922	9952	9908	9901	9911	9974	9932	9920	9970	1711	9990	
1050.54505.250	UTILITIES ELECTRICAL CURTAILMENT POWER CREDITS													
	ESTIMATED PAYMENTS ENEL X $900,000		(1,000,000)											(1,000,000)
	UTILITIES ELECTRICAL CURTAILMENT POWER CREDITS TOTAL	**-**	**(1,000,000)**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**(1,000,000)**
1050.54510	UTILITIES - GAS													
	NATURAL GAS FOR HVAC OFFICES & ANNEX BUILDING					18,000								18,000
	NATURAL GAS FOR LABORATORY							85,000						85,000
	UTILITIES - GAS TOTAL	**-**	**-**	**-**	**-**	**18,000**	**-**	**85,000**	**-**	**-**	**-**	**-**	**-**	**103,000**
1050.54515	UTILITIES - WATER													
	POTABLE WATER AND INDUSTRIAL WATER		195,000											195,000
	UTILITIES - WATER TOTAL	**-**	**195,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**195,000**
1050.51102	MEMBERSHIPS/CERTIFICATION FEES													
	MEHUL - WEF, AWWA, ASCE MEMBERSHIP FEES		800	200										1,000
	JANICE - IAAP MEMBERSHIP (CAP CERT RENEWAL)		150											150
	JOHN - NGWA				250									250
	ISA MEMBERSHIP (4) FOR SCADA ICS CYBERSECURITY									600				600
	OPERATOR & MAINTENANCE CERTIFICATION FEES ($1900 MORE FOR OPS)		11,400											11,400
	MEMBERSHIPS/CERTIFICATION FEES TOTAL	**-**	**12,350**	**200**	**250**	**-**	**-**	**-**	**-**	**600**	**-**	**-**	**-**	**13,400**
1050.51192	TECHNICAL TRAINING													
	DELTA V PROCESS CONTROL TRAINING (2 NEW SENIOR TECHS)		10,000											10,000
	I&E MEDIUM VOLTAGE SAFETY TRAINING CLASSES		2,000											2,000
	MANAGEMENT TRAINING		1,500											1,500
	MAINTENANCE TRAINING		4,000											4,000
	ADMINISTRATIVE CERTIFICATION		250											250
	WPG TRAINING LIBRARY			400										400
	OPERATOR CERTIFICATION CLASSES		5,000											5,000
	ON SITE O&M TECHNICAL TRAINING		1,500											1,500
	CRANE TRAINING/RIGGING AND SIGNALING		2,000											2,000
	ULTRASONIC MONITOR TRAINING & CERTIFICATION		2,500											2,500
	CSRT TRAINING		5,000											5,000
	WATER DISTRIBUTION TRAINING BARRIER STAFF				500									500
	TECHNICAL TRAINING TOTAL	**-**	**33,750**	**400**	**500**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**34,650**
1050.51112	SPECIAL DEPARTMENT EXPENSE													
	CONSULTING SERVICE PERMITS		2,000											2,000
	SCAQMD AND CITY PERMIT FEES		14,000											14,000
	CITY OF FOUNTAIN VALLEY ENCROACHMENT PERMITS				4,200									4,200
	UNITED PARCEL SERVICE		1,000											1,000
	ORANGE COUNTY PUBLIC FACILITIES PERMIT				10,000									10,000
	SPECIAL DEPARTMENT EXPENSE TOTAL	**-**	**17,000**	**-**	**14,200**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**31,200**
1050.56026	LADPW CURRENT EXPENSE													
	LADPW BARRIER (NUMBER COMES FROM ROY HERNDON)								1,350,000					1,350,000
	LADPW CURRENT EXPENSE TOTAL	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**1,350,000**	**-**	**-**	**-**	**-**	**1,350,000**
	WATER PRODUCTION GRAND TOTAL	**1,577,631**	**50,519,149**	**407,011**	**1,027,799**	**1,047,522**	**1,638,793**	**753,917**	**1,371,119**	**344,343**	**161,904**	**142,436**	**314,221**	**59,305,845**

GENERAL FUND OPERATING BUDGET FY 24-25
RECHARGE OPERATIONS (1060)

JDE ACCOUNT NUMBER	DESCRIPTION	General	GWRS	Forebay O&M	Prado O&M	Total
	ACTIVITY CODE	9900	9922	9920	9924	
	SALARIES AND BENEFITS					
1060.50104	REGULAR SALARIES	135,486	333,842	1,331,806	337,724	2,138,858
1060.50106	OVERTIME	4,884	14,653	59,165	18,982	97,684
1060.50210	PAYROLL TAX	2,104	5,259	20,923	5,515	33,801
1060.50202	RETIREMENT	23,188	57,472	229,573	58,472	368,705
1060.50203	457 RETIREMENT MATCH	4,388	10,075	40,463	10,075	65,001
1060.50204	HEALTH INSURANCE	35,053	79,311	319,033	80,457	513,854
1060.50206	WORKERS' COMPENSATION	2,751	8,174	32,973	8,382	52,280
	SALARIES AND BENEFITS TOTAL	**207,854**	**508,786**	**2,033,936**	**519,607**	**3,270,183**
1060.51102	MEMBERSHIPS					
	STATE OF CALIFORNIA PESTICIDE LICENSE (1 STAFF)	150				150
	CWEA MEMBERSHIP FOR CERTIFICATION (4 STAFF)	500				500
	ANNUAL BACKFLOW CERTIFICATION AND MEMBERSHIP (1 STAFF)	400				400
	PROFESSIONAL ORGANIZATION MEMBERSHIPS AND MEETINGS	250				250
	WATER DISTRIBUTION CERTIFICATIONS (4 STAFF)	200				200
	PROFESSIONAL ENGINEER LICENSURE (1 STAFF)	200				200
	MEMBERSHIPS TOTAL	**1,700**	**-**	**-**	**-**	**1,700**
1060.51112	SPECIAL DEPARTMENT EXPENSE					
	TRANSPORTATION FEES			500		500
	SOUTH COAST AQMD PERMIT & FEES			2,000		2,000
	CITY FIRE INSPECTION			200		200
	PERP			1,900		1,900
	CITY OF ANAHEIM CUPA (UST)			2,900		2,900
	STATE CRANE CERTIFICATION			1,000		1,000
	DMV REQ FOR CLASS A HOLDERS			500		500
	SPECIAL DEPARTMENT EXPENSE TOTAL	**-**	**-**	**9,000**	**-**	**9,000**
1060.51192	EDUCATIONAL TRAINING					
	BACKFLOW TRAINING (1 STAFF)	400				400
	DISTRIBUTION LISCENCE EXAM AND PREP	500				500
	PESTICIDE APPLICATORS PROFESSIONAL ASSOCIATION WORKSHOPS	300				300
	PRYOR MEMBERSHIP (5 STAFF)	1,500				1,500
	TRAINING FOR SOFTWARE AND PERMITS	700				700
	MISCELLANEOUS TRAINING (21 STAFF)	1,000				1,000
	MAINTENANCE CERTIFICATION TRAININGS (3 STAFF)	600				600
	SCADA, WONDERWARE TRAINING	1,000				1,000
	EDUCATIONAL TRAINING TOTAL	**6,000**	**-**	**-**	**-**	**6,000**
1060.51501	OFFICE EXPENSE - GENERAL					
	BASIC OFFICE SUPPLIES (PAPER, INK, CALENDARS, BATTERIES, MAILING), KITCHEN SUPPLIES	3,500				3,500
	COPIER EXPENSES	1,000				1,000
	CATERING MEETINGS (CORPS., TRAINING)	5,000				5,000
	OFFICE FURNITURE, MAPS	1,000				1,000
	OFFICE EXPENSE - GENERAL TOTAL	**10,500**	**-**	**-**	**-**	**10,500**

GENERAL FUND OPERATING BUDGET FY 24-25
RECHARGE OPERATIONS (1060)

JDE ACCOUNT NUMBER	DESCRIPTION	General	GWRS	Forebay O&M	Prado O&M	Total
	ACTIVITY CODE	9900	9922	9920	9924	
1060.51510	HARDWARE/SOFTWARE					
	SCADA HARDWARE AND SOFTWARE			7,000		7,000
	HARDWARE/SOFTWARE TOTAL	**-**	**-**	**7,000**	**-**	**7,000**
1060.51520	GAS AND DIESEL					
	GASOLINE AND DIESEL			40,000		40,000
	GAS AND DIESEL TOTAL	**-**	**-**	**40,000**	**-**	**40,000**
1060.51521	FUEL - OFF ROAD					
	DIESEL FUEL (OFF-ROAD)			80,000		80,000
	FUEL - OFF ROAD TOTAL	**-**	**-**	**80,000**	**-**	**80,000**
1060.51530	UNIFORMS					
	UNIFORM SERVICES, SHIRTS/JACKETS			12,500		12,500
	UNIFORMS TOTAL	**-**	**-**	**12,500**	**-**	**12,500**
1060.51545	SMALL TOOLS					
	MAINTENANCE AND HYDROGRAPHY OPERATIONS			600		600
	MAINTENANCE OPERATIONS			1,700		1,700
	SMALL TOOLS FOR H.E. MECHANIC & MAINTENANCE			1,700		1,700
	SMALL TOOLS TOTAL	**-**	**-**	**4,000**	**-**	**4,000**
1060.51550	SAFETY SUPPLIES					
	SAFETY EQUIPMENT, I.E., SAFETY GOGGLES, GLOVES, RESPIRATORS, EAR PROTECTORS, AIR MONITORING, TRAFFIC, AND CONFINED SPACE EQUIPMENT			3,000		3,000
	FIRE EXTINGUISHER MAINTENANCE			1,200		1,200
	ANNUAL FALL PROTECTION			1,200		1,200
	CONFINED SPACE SAFETY EQUIPMENT			1,600		1,600
	SAFETY SUPPLIES TOTAL	**-**	**-**	**7,000**	**-**	**7,000**
1060.51565	RENT EQUIPMENT - GENERAL					
	TRENCHERS, TAMPERS, DEWATERING EQUIPMENT, ETC.			1,500		1,500
	RENT EQUIPMENT - GENERAL TOTAL	**-**	**-**	**1,500**	**-**	**1,500**
1060.51570	RENT EQUIPMENT - HEAVY EQUIPMENT					
	RENTAL CRANE, MAN LIFT, SCRAPERS, ETC.			15,000		15,000
	RENT EQUIPMENT - HEAVY EQUIPMENT TOTAL	**-**	**-**	**15,000**	**-**	**15,000**
1060.53001	PROFESSIONAL SERVICES					
	SCADA MAINTENANCE AND TECHNOLOGY			20,000		20,000
	SCADA WONDERWARE AND TOPWORKS SUPPORT			15,000		15,000
	SCADA THREAT DETECTION SUPPORT			10,000		10,000
	SITEWIDE ELECTRICAL MAINTENANCE			15,000		15,000
	CATHODIC PROTECTION SYSTEM SUPPORT			10,000		10,000
	EMISSIONS REGULATORY CONSULTANT			20,000		20,000
	PROFESSIONAL SERVICES TOTAL	**-**	**-**	**90,000**	**-**	**90,000**

GENERAL FUND OPERATING BUDGET FY 24-25
RECHARGE OPERATIONS (1060)

JDE ACCOUNT NUMBER	DESCRIPTION	General	GWRS	Forebay O&M	Prado O&M	Total
	ACTIVITY CODE	9900	9922	9920	9924	
1060.53015	TEMPORARY LABOR					
	ON CALL LANDSCAPE MAINTENANCE SERVICES			10,000		10,000
	TEMPORARY LABOR TOTAL	**-**	**-**	**10,000**	**-**	**10,000**
1060.54010	HERBICIDE/CHEMICALS					
	HERBICIDE (WEED KILLER)			3,500		3,500
	HERBICIDE/CHEMICALS TOTAL	**-**	**-**	**3,500**	**-**	**3,500**
1060.54501	UTILITIES - ELECTRICITY					
	ANAHEIM LAKE DEWATER/TRANSFER			60,000		60,000
	BURRIS BASIN PUMP STATION			900,000		900,000
	KRAEMER/MILLER PUMPS			50,000		50,000
	SANTIAGO BASIN PUMP STATION			10,000		10,000
	WARNER PUMPS			10,000		10,000
	ALL OTHER (RUBBER DAMS, FHQ, VALVES, METERS, ETC.)			50,000		50,000
	UTILITIES - ELECTRICITY TOTAL	**-**	**-**	**1,080,000**	**-**	**1,080,000**
1060.54515	UTILITIES - WATER					
	GENERAL (FHQ, SANTIAGO BASIN, BURRIS PS, WARNER, KRAEMER, ETC.)			40,000		40,000
	UTILITIES - WATER TOTAL	**-**	**-**	**40,000**	**-**	**40,000**
1060.57001	MAINTENANCE-SUPPLIES & MATERIAL- ELECT					
	MOTOR, PUMP WAREHOUSE SUPPLIES			4,000		4,000
	UPS SYSTEM REPAIRS			2,000		2,000
	ELECTRICAL WAREHOUSE SUPPLIES			3,000		3,000
	INSTRUMENTATION PARTS AND SUPPLIES			5,000		5,000
	LIGHTING & EMERGENCY, LIGHT SUPPLIES			2,000		2,000
	OFFICE ELECTRICAL & LIGHTING REPAIRS			2,000		2,000
	MAINT.-SUPPLIES & MATERIAL-ELECT TOTAL	**-**	**-**	**18,000**	**-**	**18,000**
1060.57006	MAINTENANCE EQUIPMENT COMMUNICATION					
	REPAIR AND REPLACEMENT OF MOBILE RADIOS			2,000		2,000
	MONITOR REPLACEMENTS			1,000		1,000
	MAINTENANCE EQUIPMENT COMMUNICATION TOTAL	**-**	**-**	**3,000**	**-**	**3,000**
1060.57010	MAINTENANCE EQUIPMENT VEHICLES					
	TRUCK SCHEDULED AND UNSCHEDULED REPAIRS, TIRES, BELTS, ETC.			33,000		33,000
	ANNUAL SMOG AND PSIP			5,000		5,000
	ANNUAL DIAGNOSTIC SOFTWARE UPDATE			2,000		2,000
	MAINTENANCE EQUIPMENT VEHICLES TOTAL	**-**	**-**	**40,000**	**-**	**40,000**

GENERAL FUND OPERATING BUDGET FY 24-25
RECHARGE OPERATIONS (1060)

JDE ACCOUNT NUMBER	DESCRIPTION	General	GWRS	Forebay O&M	Prado O&M	Total
	ACTIVITY CODE	9900	9922	9920	9924	
1060.57011	MAINTENANCE EQ - GROUNDS					
	FENCE REPAIR			30,000		30,000
	LANDSCAPE MAINTENANCE/TREE TRIMMING			60,000		60,000
	LANDSCAPE MAINTENANCE/WARNER BASIN			60,000		60,000
	LANDSCAPE MAINTENANCE/SANTIAGO BIKE TRAIL			45,000		45,000
	LANDSCAPE MAINTENANCE/MULCH			25,000		25,000
	ANNUAL SMITH BASIN SLOPE CLEARING			15,000		15,000
	RICHFIELD PROPERTY LINE SURVEY			50,000		50,000
	DUMPING AND DEBRIS CLEARING			5,000		5,000
	INSECT/RODENT CONTROL			15,000		15,000
	MAINTENANCE EQ - GROUND TOTAL	**-**	**-**	**305,000**	**-**	**305,000**
1060.57012	MAINTENANCE EQUIPMENT - HEAVY EQUIPMENT					
	GENERAL HEAVY EQUIPMENT PM AND REPAIRS			34,000		34,000
	ANNUAL ET DIAGNOSITIC SOFTWARE FOR CAT			1,500		1,500
	ANNUAL ET DIAGNOSTIC SOFTWARE FOR JOHN DEER			3,000		3,000
	PARTS UNDERCARRIAGE REPAIRS			20,000		20,000
	PARTS FOR HEAVY EQUIPMENT GROUND ENGAGING TOOLS			20,000		20,000
	OIL AND LUBRICANT			20,000		20,000
	OIL ANALYSIS			4,000		4,000
	OFF ROAD TIRES			7,500		7,500
	MAINTENANCE EQUIPMENT - HEAVY EQUIPMENT TOTAL	**-**	**-**	**110,000**	**-**	**110,000**
1060.57016	MAINTENANCE STRUCTURE AND IMPROVEMENTS - GENERAL					
	GENERAL MAINTENANCE PARTS & REPAIRS			16,000		16,000
	FISH DISPOSAL (2 CLEANINGS)			10,000		10,000
	FLOWMETER AND INSTRUMENTATION MAINTENANCE			13,000		13,000
	MOTOR ACTUATOR/LIMITORQUE SERVICE			25,000		25,000
	MOTOR VIBRATION ANALYSIS			3,000		3,000
	FHQ AND FRL BUILDINGS HVAC PM AND REPAIRS	5,000		4,000		9,000
	FHQ 9 AIR COMPRESSORS PM AND CERTIFICATION			2,000		2,000
	FHQ CRANE INSPECTION			5,000		5,000
	UST SERVICE			10,000		10,000
	GASES (WESTAIR)			6,000		6,000
	PAINTING STRUCTURES			5,000		5,000
	JANITORIAL			30,000		30,000
	PLANT SERVICE			2,000		2,000
	FHQ FITNESS CENTER			2,000		2,000
	PORTABLE RESTROOM RENTALS			2,000		2,000
	MAINTENANCE STRUCTURE AND IMPROVEMENTS - GENERAL TOTAL	**5,000**	**-**	**135,000**	**-**	**140,000**

GENERAL FUND OPERATING BUDGET FY 24-25
RECHARGE OPERATIONS (1060)

JDE ACCOUNT NUMBER	DESCRIPTION	General	GWRS	Forebay O&M	Prado O&M	Total
	ACTIVITY CODE	9900	9922	9920	9924	
1060.57017	MAINTENANCE					
	TRASH RACK IMPERIAL			1,500		1,500
	RUBBER DAM IMPERIAL			1,500		1,500
	TRASH RACK 5 COVES			1,500		1,500
	RUBBER DAM 5 COVES			1,500		1,500
	LA JOLLA TRASH RACK			500		500
	INSTRUMENTATION PM			8,000		8,000
	VALVE AND ACTUATOR PM			8,000		8,000
	PUMP AND MOTOR PM			8,000		8,000
	VFD AND SOFT START PM			20,000		20,000
	AIR VAC PM			1,500		1,500
	FLOW METER PM			2,000		2,000
	SURGE TANK PM			1,500		1,500
	15' FLUME CALIBRATION - REQUIRED BY STATE WATER BOARD			2,000		2,000
	HVAC PM AND BUILDING FILTER CHANGE			2,000		2,000
	SOFT START PM			500		500
	MAINTENANCE TOTAL	**-**	**-**	**60,000**	**-**	**60,000**
	RECHARGE OPERATIONS GRAND TOTAL	**231,054**	**508,786**	**4,104,436**	**519,607**	**5,363,883**

GENERAL FUND OPERATING BUDGET FY 24-25
WETLAND OPERATIONS (1062)

JDE Account Number	Description	General	GWRS	Prado O&M	FHQ O&M	Total
	ACTIVITY CODE	9900	9922	9924	9920	
	SALARIES & BENEFITS					
1062.50104	REGULAR SALARIES	18,644	24,036	155,002	32,487	230,169
1062.50106	OVERTIME	113	227	1,588	340	2,268
1062.50210	PAYROLL TAXES	272	352	2,271	476	3,371
1062.50202	RETIREMENT	3,123	4,040	26,072	5,466	38,701
1062.50203	457 RETIREMENT MATCH	325	650	4,550	975	6,500
1062.50204	HEALTH INSURANCE	1,276	2,402	16,665	3,563	23,906
1062.50206	WORKERS' COMPENSATION	309	553	3,811	813	5,486
	SALARIES & BENEFITS TOTAL	**24,062**	**32,260**	**209,959**	**44,120**	**310,401**
1062.51204	MISCELLANEOUS EXPENSES					
	MISCELLANEOUS EXPENSES			1,000		1,000
	MISCELLANEOUS EXPENSES TOTAL	**-**	**-**	**1,000**	**-**	**1,000**
1062.51501	OFFICE EXPENSE - GENERAL					
	OFFICE AND KITCHEN SUPPLIES, FED-EX			500		500
	PRINTER AND COMPUTER EQUIPMENT			500		500
	OFFICE EXPENSE - GENERAL TOTAL	**-**	**-**	**1,000**	**-**	**1,000**
1062.51520	GAS & DIESEL FUEL					
	GASOLINE AND DIESEL FUEL FOR ON-ROAD VEHICLES			6,500		6,500
	GAS & DIESEL FUEL TOTAL	**-**	**-**	**6,500**	**-**	**6,500**
1062.51521	FUEL - OFF ROAD					
	FUEL - OFF ROAD			60,000		60,000
	FUEL - OFF ROAD TOTAL	**-**	**-**	**60,000**	**-**	**60,000**
1062.51530	UNIFORMS & SAFETY					
	UNIFORMS AND BOTTLED WATER			5,000		5,000
	UNIFORMS & SAFETY TOTAL	**-**	**-**	**5,000**	**-**	**5,000**

GENERAL FUND OPERATING BUDGET FY 24-25
WETLAND OPERATIONS (1062)

JDE Account Number	Description	General	GWRS	Prado O&M	FHQ O&M	Total
	ACTIVITY CODE	9900	9922	9924	9920	
1062.51545	SMALL TOOLS					
	MISCELLANEOUS HAND TOOLS (DRILLS, HAMMERS, WRENCHES, SOCKETS, AND SAWS)			1,000		1,000
	SMALL TOOLS TOTAL	**-**	**-**	**1,000**	**-**	**1,000**
1062.51550	SAFETY SUPPLIES					
	SAFETY SUPPLIES			500		500
	SAFETY SUPPLIES TOTAL	**-**	**-**	**500**	**-**	**500**
1062.51565	EQUIPMENT RENTAL - GENERAL					
	RENT SMALL CONSTRUCTION EQUIPMENT			500		500
	EQUIPMENT RENTAL - GENERAL TOTAL	**-**	**-**	**500**	**-**	**500**
1062.51570	EQUIPMENT RENTAL - HEAVY EQUIPMENT					
	VEGETATION CONTROL			25,000		25,000
	RENT EXCAVATOR, AND OTHER EQUIPMENT (DOZERS, WATER TRUCKS AND MOWERS)			25,000		25,000
	EQUIPMENT RENTAL - HEAVY EQUIPMENT TOTAL	**-**	**-**	**50,000**	**-**	**50,000**
1062.53015	TEMPORARY LABOR					
	TEMPORARY LABOR FOR PRADO			2,500		2,500
	TEMPORARY LABOR TOTAL	**-**	**-**	**2,500**	**-**	**2,500**
1062.54035	CHEMICALS					
	HERBICIDES FOR ARUNDO CONTROL			500		500
	CHEMICALS TOTAL	**-**	**-**	**500**	**-**	**500**
1062.54501	UTILITIES - ELECTRICITY					
	ELECTRICAL UTILITIES			9,000		9,000
	UTILITIES - ELECTRICITY TOTAL	**-**	**-**	**9,000**	**-**	**9,000**

GENERAL FUND OPERATING BUDGET FY 24-25
WETLAND OPERATIONS (1062)

JDE Account Number	Description	General	GWRS	Prado O&M	FHQ O&M	Total
	ACTIVITY CODE	9900	9922	9924	9920	
1062.57004	MAINTENANCE EQUIPMENT - GENERAL					
	REPAIR OF SMALL TOOLS, WQ EQUIPMENT, FLOW METERS, SENSORS, ETC.			1,000		1,000
	MAINTENANCE EQUIPMENT - GENERAL TOTAL	**-**	**-**	**1,000**	**-**	**1,000**
1062.57010	MAINTENANCE EQUIPMENT - VEHICLES					
	TRUCK MAINTENANCE AND ROUTINE REPAIRS			5,000		5,000
	MAINTENANCE EQUIPMENT - VEHICLES TOTAL	**-**	**-**	**5,000**	**-**	**5,000**
1062.57012	MAINTENANCE EQUIPMENT - HEAVY EQUIPMENT					
	REPAIRS (GREASE, OIL, AIR FILTERS, HYDRAULICS, BELT)			30,000		30,000
	MAINTENANCE EQUIPMENT - HEAVY EQUIPMENT TOTAL	**-**	**-**	**30,000**	**-**	**30,000**
1062.57016	MAINT STRUCTURE & IMPROVEMENT - GENERAL					
	A/C MAINTENANCE, SUPPLIES & REPAIRS			4,000		4,000
	ROCK FOR ROAD & LEVEE STABILIZATION			2,000		2,000
	GEO-CLOTH & GABIONS			1,000		1,000
	ELECTRICAL REPAIRS			1,000		1,000
	MISCELLANEOUS, RADIO AND EMERGENCY REPAIRS			5,000		5,000
	MOSQUITO AND VECTOR CONTROL			30,000		30,000
	SECURITY MAINTENANCE, FENCES, GATES, CAMERAS, REMOTE SENSING			1,000		1,000
	TRAILER MAINTENANCE & REPAIRS			3,000		3,000
	FENCING MODIFICATIONS			500		500
	JANITORIAL AND SUPPLIES SERVICE			8,000		8,000
	MAINT STRUCTURE & IMPROVEMENT - GENERAL TOTAL	**-**	**-**	**55,500**	**-**	**55,500**
	WETLAND OPERATIONS GRAND TOTAL	**24,062**	**32,260**	**438,959**	**44,120**	**539,401**

GENERAL FUND OPERATING BUDGET FY 24-25
PROPERTY MANAGEMENT (1069)

JDE Account Number	Description	General	Total
	ACTIVITY CODE	9900	
	SALARIES & BENEFITS		
1069.50104	REGULAR SALARIES	129,755	129,755
1069.50210	PAYROLL TAXES	1,881	1,881
1069.50202	RETIREMENT	21,604	21,604
1069.50203	457 RETIREMENT MATCH	3,250	3,250
1069.50204	HEALTH INSURANCE	15,237	15,237
1069.50206	WORKERS' COMPENSATION	623	623
	SALARIES & BENEFITS TOTAL	**172,350**	**172,350**
1069.53001	PROFESSIONAL SERVICES		
	REAL ESTATE SERVICES (APPRAISAL, SURVEYING, TITLE, ETC.)	10,000	10,000
	PROFESSIONAL SERVICES TOTAL	**10,000**	**10,000**
1069.51501	OFFICE EXPENSES - GENERAL		
	OFFICE SUPPLIES INCLUDING SMALL DESK SUPPLIES, REPROGRAPHICS, FILE CABINETS	500	500
	OFFICES EXPENSES - GENERAL TOTAL	**500**	**500**
1069.51520	GAS & DIESEL FUEL		
	FUEL FOR DISTRICT VEHICLES	250	250
	GAS & DIESEL FUEL TOTAL	**250**	**250**
1069.56022	TAXES & ASSESSMENTS		
	ORANGE COUNTY SEWER & MWD FEES AND ASSESSMENTS	37,231	37,231
	RIVERSIDE PROPERTY TAX & ASSESSMENTS	36,766	36,766
	SAN BERNARDINO PROPERTY TAX & ASSESSMENTS	545	545
	TAXES & ASSESSMENTS TOTAL	**74,542**	**74,542**
1069.57016	MAINTENANCE STRUCTURE AND IMPROVEMENTS - GENERAL		
	PROPERTY FENCES, GATES, LOCKS, MISCELLANEOUS REPAIRS, DISPOSAL SERVICES	500	500
	MAINTENANCE STRUCTURE AND IMPROVEMENTS - GENERAL TOTAL	**500**	**500**

GENERAL FUND OPERATING BUDGET FY 24-25
PROPERTY MANAGEMENT (1069)

JDE Account Number	Description	General	Total
	ACTIVITY CODE	9900	
1069.51112	SPECIAL DEPARTMENT EXPENSE		
	UNITED PARCEL SERVICE	200	200
	SPECIAL DEPARTMENT EXPENSE TOTAL	**200**	**200**
1069.51206	LICENSES AND PERMITS		
	EDISON PIPELINE LICENSE ACCOUNT 2097 OLD SEAWATER LINE (RESO 72-1-5 / NO RENT INCREASE)	1,165	1,165
	GAP EDISON PIPELINE LICENSE ACCOUNT 9.4068 (FORMALLY #2110) (ADAMS, SAR, GARFIELD, HB)	24,384	24,384
	GAP EDISON PIPELINE LICENSE ACCOUNT 9.4172 (FORMALLY #3272) (GARFIELD, WARD)	14,277	14,277
	LICENSE WITH MWD FOR SANTIAGO CREEK RECHARGE ENHANCEMENT PROJECT (DOCUMENT # R.L. 2832)	1,606	1,606
	LEASE AGREEMENT WITH OC FLOOD CONTROL DISTRICT MID-BASIN INJECTION (CPI ADJUSTMENT)	29,914	29,914
	EDISON PIPELINE LICENSE ACCOUNT 9.4176 (FORMALLY # 3085) (GARFIELD/ELLIS) INJECTION WELLS I-27 & I-28	17,130	17,130
	LEASE AGREEMENT WITH CALTRANS FOR THE BURRIS BASIN / BALL ROAD PROPERTY	9,720	9,720
	LICENSES AND PERMITS TOTAL	**98,196**	**98,196**
	PROPERTY MANAGEMENT GRAND TOTAL	**356,538**	**356,538**

GENERAL FUND OPERATING BUDGET FY 24-25
ENGINEERING (1070)

JDE Account Number	Description	General	GWRS OM	Talbert Barrier Eng. Support	GAP O&M	Forebay Recharge O&M	PFAS	Total
	ACTIVITY CODE	9900	9922	9908	9911	9920	1914	
	SALARIES & BENEFITS							
1070.50104	REGULAR SALARIES	833,160	12,374	15,784	23,676	49,361	274,566	1,208,921
	CAPITALIZED SALARIES	(417,333)						(417,333)
1070.50210	PAYROLL TAXES	13,451	179	229	343	716	3,981	18,899
1070.50202	RETIREMENT	135,041	2,060	2,628	3,942	8,219	45,715	197,605
1070.50203	457 RETIREMENT MATCH	16,575	325	325	488	650	4,388	22,751
1070.50204	HEALTH INSURANCE	101,796	1,256	2,265	3,397	6,136	36,572	151,422
1070.50206	WORKERS' COMPENSATION	4,779	73	93	140	291	1,620	6,996
	CAPITALIZED BENEFITS	(138,065)						(138,065)
	SALARIES & BENEFITS TOTAL	**549,404**	**16,267**	**21,324**	**31,986**	**65,373**	**366,842**	**1,051,196**
1070.51102	MEMBERSHIP							
	ORGANIZATIONAL MEMBERSHIPS	1,000						1,000
	MEMBERSHIP TOTAL	**1,000**	**-**		**-**	**-**	**-**	**1,000**
1070.51301	TRAVEL/CONFERENCE/MILEAGE							
	ENGINEERS' CONFERENCE/SEMINARS	5,000						5,000
	TRAVEL/CONFERENCE/MILEAGE TOTAL	**5,000**	**-**		**-**	**-**	**-**	**5,000**
1070.51192	TECHNICAL TRAINING							
	LOCAL CLASSES AND TRAINING (4 CLASSES)	1,000						1,000
	TECHNICAL TRAINING TOTAL	**1,000**	**-**		**-**	**-**	**-**	**1,000**
1070.53010	PROFESSIONAL SERVICES - ENGINEERING							
	CONSULTING SERVICES	40,000						40,000
	PROFESSIONAL SERVICES - ENGINEERING TOTAL	**40,000**	**-**		**-**	**-**	**-**	**40,000**
1070.51501	OFFICE EXPENSE - GENERAL							
	ANNUAL ENGINEER'S REPORT PREPARATION	1,000						1,000
	OUTSIDE COPYING SERVICES	500						500
	PRINTER CARTRIDGES	1,500						1,500
	CONSTRUCTION MANUALS	200						200
	DESIGN BOOKS	500						500
	FEDERAL EXPRESS	500						500
	MISCELLANEOUS OFFICE SUPPLIES	500						500
	SUPPLEMENTS TO MANUALS AND BOOKS	200						200
	OUTSIDE SERVICES	1,000						1,000
	PUBLIC WORKS INSPECTION MANUALS	1,000						1,000
	OFFICE EXPENSE - GENERAL TOTAL	**6,900**	**-**		**-**	**-**	**-**	**6,900**

GENERAL FUND OPERATING BUDGET FY 24-25
ENGINEERING (1070)

JDE Account Number	Description	General	GWRS OM	Talbert Barrier Eng. Support	GAP O&M	Forebay Recharge O&M	PFAS	Total
	ACTIVITY CODE	9900	9922	9908	9911	9920	1914	
1070.51104	SUBSCRIPTIONS							
	SMARTNET VRS FOR GPS	2,400						2,400
	AUTOCAD 3D	2,000						2,000
	AWWA STANDARDS	500						500
	ENR MAGAZINE	100						100
	SUBSCRIPTIONS TOTAL	**5,000**	**-**		**-**	**-**	**-**	**5,000**
1070.51520	GAS & DIESEL							
	FUEL FOR VEHICLE	3,500						3,500
	GAS & DIESEL TOTAL	**3,500**	**-**		**-**	**-**	**-**	**3,500**
1070.51531	SHIRTS - LOGO							
	SHIRTS - LOGO	700						700
	SHIRTS - LOGO TOTAL	**700**	**-**		**-**	**-**	**-**	**700**
	ENGINEERING GRAND TOTAL	**612,504**	**16,267**	**21,324**	**31,986**	**65,373**	**366,842**	**1,114,296**

GENERAL FUND OPERATING BUDGET FY 24-25
HYDROGEOLOGY (1075)

JDE Account Number	Description	General	So. Basin Litigation	Well EW-1	Talbert Barrier O&M	Alamitos Barrier O&M	North Basin NCP	South Basin NCP & CEQA	PFAS Litigation	PFAS	Total
	ACTIVITY CODE	9900	9976	1711	9908	9932	9985	9986	2003	1914	
	SALARIES & BENEFITS										
1075.50104	REGULAR SALARIES	1,899,992	12,340	7,445	9,999	77,674	58,016	42,911	37,021	12,340	2,157,738
1075.50106	OVERTIME	17,358									17,358
	CAPITALIZED SALARIES	(157,747)									(157,747)
1075.50210	PAYROLL TAXES	32,162	179	108	145	1,126	841	622	537	179	35,899
1075.50202	RETIREMENT	307,646	2,055	1,240	1,665	12,933	9,660	7,145	6,164	2,055	350,563
1075.50203	457 RETIREMENT MATCH	38,025	163	163	163	1,463	975	650	488	163	42,253
1075.50204	HEALTH INSURANCE	254,319	1,183	1,405	671	9,669	4,583	5,047	3,549	1,183	281,609
1075.50206	WORKERS' COMPENSATION	18,463	59	44	59	624	1,224	583	178	59	21,293
	CAPITALIZED BENEFITS	(55,484)									(55,484)
	SALARIES & BENEFITS TOTAL	**2,354,734**	**15,979**	**10,405**	**12,702**	**103,489**	**75,299**	**56,958**	**47,937**	**15,979**	**2,693,482**
1075.51301	TRAVEL/CONFERENCE/MILEAGE										
	REGULATORY & AGENCY MEETINGS FOR WQ PROJECTS, SEAWATER BARRIERS; TECHNICAL CONFERENCE ATTENDANCE (GIS, SGMA, MODELING) (CALIFORNIA)	6,000									6,000
	TRAVEL/CONFERENCE/MILEAGE TOTAL	**6,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**6,000**
1075.53005	PROFESSIONAL SERVICES - LEGAL										
	TUCKER ELLIS (FORMERLY CONNOR FLETCHER & HEDENKAMP)		20,000					40,000	40,000		100,000
	MILLER & AXLINE		200,000								200,000
	LARSON O'BRIEN - INCLUDES S. SOMMER & K. TAKATA						15,000	25,000			40,000
	PROFESSIONAL SERVICES - LEGAL TOTAL	**-**	**220,000**	**-**	**-**	**-**	**15,000**	**65,000**	**40,000**	**-**	**340,000**
1075.53010	PROFESSIONAL SERVICES - ENGINEER										
	ENGINEERING ANALYTICS (SOUTH BASIN NCP & CEQA SERVICES)							75,000			75,000
	AECOM (NORTH BASIN RI/FS SERVICES)						12,000				12,000
	INTERA (NORTH BASIN MODELING)						8,000				8,000
	TRAFFIC CONTROL, WASTE HAULING FOR WELL SAMPLING						3,000	23,000			26,000
	SUNSET GAP SEAWATER INTRUSION MODELING TO SUPPORT FEASIBILITY STUDY							120,000			120,000
	SUNSET GAP SEAWATER INTRUSION CONTROL FEASIBILITY STUDY	200,000									200,000
	WRMS PROGRAMMING SERVICES FOR CROSS-SECTION APPLICATION UPDATE	40,000									40,000
	PROFESSIONAL SERVICES - ENGINEER TOTAL	**240,000**	**-**	**-**	**-**	**-**	**23,000**	**218,000**	**-**	**-**	**481,000**
1075.51501	OFFICE EXPENSE - GENERAL										
	FEDERAL EXPRESS/COURIER	500									500
	OFFICE SUPPLIES INCLUDING SMALL DESK SUPPLIES, SCANNING SERVICES	3,000									3,000
	PLOTTER PAPER & INK CARTRIDGES	3,000									3,000
	SUPPLIES FROM WAREHOUSE, PETTY CASH	2,000									2,000
	OFFICE EXPENSE - GENERAL TOTAL	**8,500**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**8,500**
1075.51520	GAS & DIESEL FUEL										
	FUEL FOR DISTRICT FIELD VEHICLES (WELL MONITORING & MAINTENANCE)	9,000									9,000
	GAS & DIESEL FUEL TOTAL	**9,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**9,000**
1075.51530	UNIFORMS & SAFETY										
	BOOTS, RAIN GEAR, UNIFORMS FOR FIELD PERSONNEL	200									200
	UNIFORMS & SAFETY TOTAL	**200**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**200**
1075.51531	SHIRTS - LOGO										
	SHIRTS - LOGO	100									100
	SHIRTS - LOGO TOTAL	**100**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**100**

GENERAL FUND OPERATING BUDGET FY 24-25
HYDROGEOLOGY (1075)

JDE Account Number	Description	General	So. Basin Litigation	Well EW-1	Talbert Barrier O&M	Alamitos Barrier O&M	North Basin NCP	South Basin NCP & CEQA	PFAS Litigation	PFAS	Total
	ACTIVITY CODE	9900	9976	1711	9908	9932	9985	9986	2003	1914	
1075.57004	MAINTENANCE EQUIPMENT - GENERAL										
	FIELD EQUIPMENT REPAIR (VIDEO TRAILER, GENERATORS, PUMPS, WELDER)	1,500									1,500
	2 PRINTERS AND PLOTTER MAINTENANCE	1,000									1,000
	WATER LEVEL SENSOR REPAIR & CALIBRATION	1,500									1,500
	WESTBAY EQUIP. (REELS, SAMPLER, PROBES) SERVICE AGREEMENT	15,000									15,000
	MAINTENANCE EQUIPMENT - GENERAL TOTAL	**19,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**19,000**
1075.57016	MAINT STRUCTURES AND IMPROVEMENTS										
	BASIN-WIDE MONITORING WELL REPAIRS	8,000									8,000
	MAINT STRUCTURES AND IMPROVEMENTS TOTAL	**8,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**8,000**
1075.51545	SMALL TOOLS										
	DATALOGGERS, VEHICLE EQUIPMENT, WATER LEVEL PROBES, CABLES, EC & PH METERS	7,000									7,000
	SMALL TOOLS TOTAL	**7,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**7,000**
1075.51555	LAB SUPPLIES										
	CALIBRATION STANDARDS FOR FIELD EQUIPMENT	300									300
	LAB SUPPLIES TOTAL	**300**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**300**
1075.51102	MEMBERSHIP										
	DISTRICT MEMBERSHIPS FOR GRA, NGWA, URISA AND PROFESSIONAL CERTIFICATIONS	1,500									1,500
	MEMBERSHIP TOTAL	**1,500**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**1,500**
1075.51192	TECHNICAL TRAINING										
	WEBINARS, GIS/WRMS PROGRAMMING TRAINING (ARC/GIS, ORACLE), GROUNDWATER MODELING TRAINING, GIS CONFERENCE PROCEEDINGS	6,000									6,000
	TECHNICAL TRAINING TOTAL	**6,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**6,000**
1075.51112	SPECIAL DEPARTMENT EXPENSE										
	WELL SITE & DISCHARGE LICENSE/PERMIT RENEWALS	18,000									18,000
	RWQCB & DTSC REVIEW OF SOUTH BASIN RI/FS DOCUMENTS COST REIMBURSEMENT							50,000			50,000
	SANTA ANA RIVER WATERMASTER EXPENSES	42,000									42,000
	USGS STREAMGAGING (WATERMASTER/PRADO GAUGE AND SANTIAGO CREEK GAUGE)	50,000									50,000
	AERIAL IMAGERY ANNUAL SUBSCRIPTION	4,000									4,000
	SPECIAL DEPARTMENT EXPENSE TOTAL	**114,000**	**-**	**-**	**-**	**-**	**-**	**50,000**	**-**	**-**	**164,000**
	HYDROGEOLOGY GRAND TOTAL	**2,774,334**	**235,979**	**10,405**	**12,702**	**103,489**	**113,299**	**389,958**	**87,937**	**15,979**	**3,744,082**

GENERAL FUND OPERATING BUDGET FY 24-25
NATURAL RESOURCES (1080)

JDE Account Number	Description	General	Wildlife Management	Habitat Restoration	Total
	ACTIVITY CODE	9900	8010	8008	
	SALARIES AND BENEFITS				
1080.50104	REGULAR SALARIES	225,582	205,205	215,721	646,508
1080.50210	PAYROLL TAXES	3,755	4,426	4,418	12,599
1080.50202	RETIREMENT	36,261	30,270	32,454	98,985
1080.50203	457 RETIREMENT MATCH	5,200	5,850	5,200	16,250
1080.50204	HEALTH INSURANCE	32,148	31,666	34,556	98,370
1080.50206	WORKERS' COMPENSATION	5,599	4,774	5,093	15,466
	SALARIES AND BENEFITS TOTAL	**308,545**	**282,191**	**297,442**	**888,178**
1080.51301	TRAVEL/CONFERENCE/MILEAGE				
	WESTERN WILDLIFE SOCIETY (CA) VIRTUAL	1,000			1,000
	CAL-IPC (CA) VIRTUAL	1,000			1,000
	FISHERIES - SANTA ANA SUCKER FISH	1,000			1,000
	WILDLIFE SYMPOSIUMS	1,000			1,000
	SUPERVISORY TRAINING - LEADERSHIP	1,000			1,000
	TRAVEL/CONFERENCE/MILEAGE TOTAL	**5,000**	**-**	**-**	**5,000**
1080.53001	PROFESSIONAL SERVICES - GENERAL				
	VIREO MONITORING - JIM PIKE CONTRACT	71,000			71,000
	BIOLOGIST CONTRACTOR SAWA SPLIT	50,000			50,000
	COWBIRD REGULATORY REQUIREMENT (PRADO BIOLOGICAL OPINION)	55,000			55,000
	SUNNYSLOPE CREEK/SA SUCKER TRANSLOCATION (SAWA FUNDS AVAILABLE $236,739.12)	37,000			37,000
	PROFESSIONAL SERVICES - GENERAL TOTAL	**213,000**	**-**	**-**	**213,000**
1080.53001.170	EXPENSE - CONTRA				
	SAWA REIMBURSEMENT - PAYROLL	(53,000)			(53,000)
	EXPENSE - CONTRA TOTAL	**(53,000)**	**-**	**-**	**(53,000)**
1080.53015	FIELD CREW LABOR (TEMP LABOR)				
	MISC VEGETATION MAINTENANCE AT OC FACILITIES	80,000			80,000
	FIELD CREW LABOR (TEMP LABOR) TOTAL	**80,000**	**-**	**-**	**80,000**

GENERAL FUND OPERATING BUDGET FY 24-25
NATURAL RESOURCES (1080)

JDE Account Number	Description	General	Wildlife Management	Habitat Restoration	Total
	ACTIVITY CODE	9900	8010	8008	
1080.51104	SUBSCRIPTIONS				
	SUBSCRIPTIONS/PUBLICATIONS	750			750
	MEMBERSHIPS	500			500
	SUBSCRIPTIONS TOTAL	**1,250**	**-**	**-**	**1,250**
1080.51501	OFFICE EXPENSE - GENERAL				
	MISCELLANEOUS OFFICE SUPPLIES	5,000			5,000
	OFFICE EXPENSE - GENERAL TOTAL	**5,000**	**-**	**-**	**5,000**
1080.51520	GAS & DIESEL FUEL				
	GAS & DIESEL FUEL	12,000			12,000
	GAS & DIESEL FUEL TOTAL	**12,000**	**-**	**-**	**12,000**
1080.51531	SHIRTS - LOGO				
	SHIRTS - LOGO	500			500
	SHIRTS - LOGO TOTAL	**500**	**-**	**-**	**500**
1080.51530	UNIFORMS				
	CLOTHING, UNIFORMS, AND BOOTS	600			600
	UNIFORMS TOTAL	**600**	**-**	**-**	**600**
1080.57010	MAINTENANCE EQUIPMENT - VEHICLES				
	SMALL TRUCK SCHEDULED AND UNSCHEDULED REPAIRS, TIRES, BELTS, ETC.	14,000			14,000
	MAINTENANCE EQUIPMENT - VEHICLES TOTAL	**14,000**	**-**	**-**	**14,000**
1080.57016	MAINT STRUCTURE AND IMPROVEMENTS - GENERAL				
	PRADO HABITAT RESTORATION/WETLAND IMPROVEMENTS (CDFW 1600-2011-0148-R6)	100,000			100,000
	RGP RECHARGE AREA HABITAT MAINTENANCE (CDFW 1600-2012-0013-R5)	90,000			90,000
	OCWD PROJECT AREA HABITAT RESTORATION (CDFW 1600-2011-0148-R6)	90,000			90,000
	ARUNDO MAINTENANCE OCWD FACILITIES (WATER CONSERVATION OBLIGATION)	100,000			100,000
	MAINT STRUCTURE AND IMPROVEMENTS - GENERAL TOTAL	**380,000**	**-**	**-**	**380,000**
1080.51545	TOOLS AND EQUIPMENT				
	EQUIPMENT	16,000			16,000
	TOOLS AND EQUIPMENT TOTAL	**16,000**	**-**	**-**	**16,000**

GENERAL FUND OPERATING BUDGET FY 24-25
NATURAL RESOURCES (1080)

JDE Account Number	Description	General	Wildlife Management	Habitat Restoration	Total
	ACTIVITY CODE	9900	8010	8008	
1080.51550	SAFETY SUPPLIES				
	SAFETY EQUIPMENT (SAFETY GOGGLES, GLOVES, FIELD SAFETY)	1,000			1,000
	SAFETY SUPPLIES TOTAL	**1,000**	**-**	**-**	**1,000**
1080.51112	SPECIAL DEPARTMENT EXPENSE				
	PUBLIC RELATIONS / INTERPRETIVE	5,000			5,000
	SPECIAL DEPARTMENT EXPENSE TOTAL	**5,000**	**-**	**-**	**5,000**
1080.56012	INTER AGENCY				
	SANTA ANA SUCKER CONSERVATION (SAWPA)	15,000			15,000
	INTER AGENCY TOTAL	**15,000**	**-**	**-**	**15,000**
	NATURAL RESOURCES GRAND TOTAL	**1,003,895**	**282,191**	**297,442**	**1,583,528**

ACC-OC	Association of California Cities - Orange County
ACFR	Annual Comprehensive Financial Report
ACOE or Corps	Army Corps of Engineers
ACWA	Association of California Water Agencies
ADC	Actuarially Determined Contributions
af	Acre-feet
AFFF	Aqueous Film-Forming Foam
AFY	Acre-feet per Year
AGWA	Association of Ground Water Agencies
AI	Artificial Intelligence
AMWA	Association of Metropolitan Water Agencies
AMX	Water Billing System
AOP	Advanced Oxidation Process
AP	Accounts Payable
ASSP	American Society of Safety Professionals
AWPF	Advanced Water Purification Facilities
AWWA	American Water Works Association
AWWARF	American Water Works Association Research Foundation
BCV	Basin Cleaning Vehicle
BEA	Basin Equity Assessment
BPP	Basin Production Percentage
CALVAL	Calibration and Validation
CAMU	Corrective Action Management Unit
CEC	Contaminants of Emerging Concern
CEQA	California Environmental Quality Act
CERCLA	The Comprehensive Environmental Response, Compensation, and Liability Act
CERS	California Environmental Reporting System
CIP	Capital Improvement Program
CLIP	California Laboratory Intake Portal
CMMS	Computerized Maintenance Management System
CMUA	California Municipal Utilities Association
COP	Certificate of Participation
CSDA	California Special Districts Association
DBPs	Disinfection By-Products
DDTC	Directorate of Defense Trade Controls
DDW	Division of Drinking Water
DPH	California Department of Public Health
EDC	Endocrine Disrupting Compounds
EEA	Eurofins Eaton Analytical
EO	Electrochemical Oxidation
EOC	Emergency Operations Center
ELAP	Environmental Laboratory Accreditation Program
EPA	Environmental Protection Agency
ERC	Engineering Research Center
ERP	Emergency Response Plan
ERT	Emergency Response Team
FHQ	Field Headquarters
FIRO	Forecast Informed Reservoir Operations
FIS	Financial Information System
FRL	Field Research Laboratory

FTE	Full-Time Equivalent
FWS	Fish and Wildlife Service
FY	Fiscal Year
GAC	Granular Activated Carbon
GAP	Green Acres Project
GASB	Governmental Accounting Standards Board
GC-ECD	Gas Chromatography-Micro Electron Capture Detector
GC-MS/MS	Gas Chromatography/Mass Spectrometer
GFOA	Government Finance Officers Association
GIS	Geographic Information System
GL	General Liability Insurance
GRA	Groundwater Resources Foundation
GWP	Groundwater Producers
GWRS	Groundwater Replenishment System
GWRSFE	Groundwater Replenishment System Final Expansion
GWRSIE	Groundwater Replenishment System Initial Expansion
HCP	Habitat Conservation Plan
HRIS	Human Resources Information System
I&E	Instrumentation and Electrical
IAP	Independent Advisory Panel
IC/MS	Ion Chromatography/Mass Spectrometry
IEBL	Inland Empire Brine Line
IEC/OC	Industrial Environmental Coalition of Orange County
IEUA	Inland Empire Utilities Agency
IIS	Integrated Information Systems
IRWM	Integrated Regional Water Management
IRWD	Irvine Ranch Water District
IS	Information Services
ISDOC	Independent Special Districts Association
IX	Ion Exchange
JDE	JD Edwards
JPIA	Joint Powers Insurance Authority
KPIs	Key Performance Indicators
LAFCO	Local Agency Formation Commission
LC/MS/MS	Liquid Chromatograph/Double Mass Spectrometer
LC-OCD	Liquid Chromatography-Organic Carbon Detection
LID	Low Impact Development
LIMS	Lab Information System
LRV	Log Removal Value
LOA	Leave of Absence
LTFP	Long-Term Facilities Plan
MAR	Managed Aquifer Recharge
MCAS	Marine Corps Air Station
MCLs	Maximum Contaminant Levels
MDL	Method Detection Limit
MET	Manual Entry Tool
MF	Microfiltration
MGD	Million Gallons per Day
ML	Machine Learning
MSDS	Material Safety Data Sheet
MSL	Mean Sea Level

MWD	Metropolitan Water District of Southern California
MWDOC	Municipal Water District of Orange County
NAWI	National Alliance for Water Innovation
NBGPP	North Basin Groundwater Protection Project
NDMA	N-nitrosodimethylamine
NEMC	National Environment Management Council
NIMS	National Incident Management System
NPDES	National Pollutant Discharge Elimination System
NWRI	National Water Research Institute
O&M	Operations and Maintenance
OCBC	Orange County Business Council
OCCOG	Orange County Council of Government
OCEA	Orange County Employee Association
OCHCA	Orange County Health Care Agency
OCSD	Orange County Sanitation District
OCWD	Orange County Water District
OMMP	Operations, Maintenance, and Monitoring Plan
OPEB	Other Post-Employment Benefits
ORNL	Oak Ridge National Laboratory
OSHA	Occupational Safety and Health Administration
PAC	Project Advisory Committee
PARS	Public Agency Retirement Services
PASMA	Public Agency Safety Management Association
PAYGO	Pay As You Go
PBDE	Poly-Brominated Diphenyl Ethers
PCS	Process Control System
PDAs	Personal Digital Assistants
PED	Preconstruction Engineering and Design
PFAS	Per-and Polyfluoroalkyl Substances
PFOA	Perfluorooctanoic Acid
PHG	Public Health Goals
PO	Purchase Orders
ppt	Parts per Trillion
Producers	Orange County Groundwater Producers
PVDF	Polyvinylidene Difluoride
QA/QC	Quality Assurance/Quality Control
R&D	Research and Development
R&R	Replacement and Refurbishment
RA	Replenishment Assessment
RDL	Reporting Detection Limit
REWG	Recharge Enhancement Working Group
RFP	Requests for Proposals
RFQ	Request for Quotes
RGP	Regional General Permit
RMP	Risk Management Plan
RMS	Records Management System
RO	Reverse Osmosis
RTS	Readiness-to-serve
RWQCB	Regional Water Quality Control Board
SAR	Santa Ana River
SARCCUP	Santa Ana River Conservation and Conjunctive Use Project

SARFPA	Santa Ana River Flood Protection Agency
SARI	Santa Ana Regional Interceptor
SARMON	Santa Ana River Monitoring Program
SARWQH	Santa Ana River Water Quality Health
SAWA	Santa Ana Watershed Association
SAWPA	Santa Ana Watershed Project Authority
SB	Senate Bill
SBGPP	South Basin Groundwater Protection Project
SCADA	Supervisory Control and Data Acquisition
SCAQMD	South Coast Air Quality Management District
SCWO	Supercritical Water Oxidation
SEO	Search Engine Optimization
SGMA	Sustainable Groundwater Management Act
SOFR	Secured Overnight Financing Rate
SOPs	Standard Operating Procedures
SRF	State Revolving Fund
SWPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TDS	Total Dissolved Solids
TMDL	Total Maximum Daily Load
TNI	The NELAC Institute
TOC	Total Organic Carbon
UCI	University of California Irvine
UCMR	Unregulated Contaminant Monitoring Rule
UF	Ultrafiltration
USACE	United States Army Corps of Engineers
USBR	United States Bureau of Reclamation
USFWS	United States Fish and Wildlife Service
UV	Ultraviolet Light
VOC	Volatile Organic Compounds
VFD	Variable Frequency Device
W/C	Workers' Compensation
WACO	Water Advisory Committee of Orange County
WD	Water District
WEROC	Water Emergency Response of Orange County
WL	Water Level
WQ	Water Quality
WQTC	Water Quality Technology Conference
WQTS	Water Quality and Treatment Solutions
WIFIA	Water Infrastructure Finance and Innovation Act
WRD	Water Resources Department
WRDA	Water Resources Development Act
WRF	WateReuse Research Foundation
WRMS	Water Resource Management System
WRR	Water Resources Report
WUSMA	Water Utilities Safety Managers' Association
YLWD	Yorba Linda Water District