Expenditure Budgets by Division



Dissolved air floatation (DAF) clarifier, Soscol Water Recycling Facility

Board of Directors

Description

The Board of Directors is the policy making body that determines the overall direction of the District and services provided to the customers. The rules for connecting and discharging to the system, and the rates and charges for services, are set by the Board.

The Board of Directors comprises two directors who are members of the Napa City Council, one director who is a member of the Napa County Board of Supervisors, and two citizen appointees, one appointed by the city and one by the county. The Board of Directors hires the General Manager and contracts for the District Legal Counsel and the annual financial audit.

The Board adopts the annual Operating Budget, Ten-Year Capital Improvement Plan, Ten-Year Financial Plan and sets the priorities for the District.

Link to District Goals in Strategic Plan

The Board of Directors establishes the Strategic Plan's long-term goals, objectives and priorities.

Department Goals

Goal: The Board of Directors Department goal is to articulate the short and long-term policy direction for the District to ensure:

- infrastructure reliability
- financial stability
- operational capability
- employee development
- community outreach and communication
- resource recovery

Related Department Objectives

- Oversee the policy and strategic direction of the District and set levels of service for its customers.
- Provide policy direction regarding levels of service.
- Work with senior management and consultant to provide direction regarding rates and fees.
- Provide policy guidance regarding alternative methods for treatment of winery waste.
- Adopt, revise and monitor a long-term policy document for prioritizing the delivery of recycled water outside the current service areas.

• Provide direction to staff on efforts to increase non-rate revenues and decrease the District's reliance on non-green energy sources.

Changes from FY 2015/16 Service Levels

- The Board of Directors budget includes the District's expenses for legal services and audit services, as these functions report directly to the Board.
- The FY 16/17 budget includes an additional \$40,000 in Legal Services to accommodate anticipated support.
- The FY 16/17 budget includes an additional \$15,000 in Consulting Services in anticipation of updating the strategic plan in spring 2017.
- The FY 16/17 budget includes \$5,000 for scholarship support.



Stationary storage system stores energy created at night for use during the day.



Cogeneration engine meets 40% of NSD's electricity from biogas.

Percent of Operating Budget



Proposed Budget

	ı	Actual Y 13/14	ı	Actual Y 14/15	lj. Budget Y 15/16	stimated Y 15/16	Proposed FY 16/17	Percent Change
Salaries & Benefits	\$	29,753	\$	34,616	\$ 25,500	\$ 21,460	\$ 25,480	(0.1%)
Services & Supplies Other	\$	172,443 -	\$	144,646 -	\$ 288,850	\$ 212,530 -	\$ 350,200 -	21.2%
TOTAL EXPENDITURES	\$	202,195	\$	179,262	\$ 314,350	\$ 233,990	\$ 375,680	19.5%

Position Series	FY 13/14	FY 14/15	FY 15/16	FY 16/17
Director-Member of Napa City Council (CC)	2	2	2	2
Director-Member of Napa Board of Supervisors (BOS)	1	1	1	1
Director-Public Representative Appointed by BOS	1	1	1	1
Director-Public Representative Appointed by CC	1	1	1	1
Totals	5	5	5	5

General Manager's Office

Description

The General Manager is responsible to the Board of Directors for all aspects of the administration, operation and planning activities of the staff of the District. The General Manager is the hiring authority for all positions.

Link to District Goals in Strategic Plan

The General Manager's Office is responsible to ensure that all of the departments and respective management are performing toward the District's established goals. As part of the Quarterly Report to the Board of Directors, the General Manager reports on the status of each District goal, objective, and the specific projects outlined in the Strategic Plan.

The General Manager's Office is specifically responsible for conducting the study of plan check/inspection fees and capacity charge methodology (Goal Two: Financial Stability, Objective 2B), overseeing the next employee survey in Fall 2017 (Goal Four: Employee Development, Objective 4B), implementing the Employee Master Plan recommendations (Goal Four: Employee Development, Objective 4C), partnering with winery industry to develop alternative methods for treating winery waste (Goal Three: Operational Capability, Objective 3A), promoting the District as a progressive, professional organization as a great place to work (Goal Four: Employee Development, Objective 4A), working with partners on long-term water reuse opportunities (Goal Six: Resource Recovery, Objective 6B) and developing partnerships with stakeholders to achieve common goals (Goal Five: Community Outreach and Communications, Objective 5A).

Department Goals

Goal: Implement the policy direction of the Board of Directors.

Related Department Objectives

- Oversee the development of a Communications Plan for the District.
- Represent the District at the North Bay Water Reuse Authority, specifically working to bring federal money to the District for Recycled Water projects.
- Oversee the negotiation and implementation of a new NPDES permit.

• Work with the community to find better ways to serve residential, commercial and industrial wastewater treatment needs.

Goal: Provide leadership and management throughout the District.

Related Department Objectives

- Provide direction to all departments, aligning efforts to promote and be consistent with the District's goals and policy directives.
- Provide overall direction to the engineering staff regarding significant capital projects, including Browns Valley Road Sewer Interceptor, West Napa Pump Station Improvements, I&I projects, recycled water reservoir liner, and aeration basin diffuser replacement.
- Oversee the implementation of the Employee Master Plan.

Changes from FY 2015/16 Service Levels

- The budget includes a one-time expense of \$100,000 to contribute toward a winery waste treatment options study.
- The Budget removed a one-time expense of \$50,000 for assistance in negotiated a new NPDES permit.
- The budget removed a one-time expense of \$90,000 in the prior year related to Proposition 218 and the study of sewer service charge rates.



NSD Booth at annual Earth Day event



NSD booth at the annual Ag Expo in Napa

Percent of Operating Budget



Proposed Budget

	F	Actual Y 13/14	ı	Actual Y 14/15		Adjusted Y 15/16		stimated Y 15/16		Proposed FY 16/17	Percent Change
Salaries & Benefits	\$	366,714	\$	385,339	\$	395,770	\$	345,410	\$	403,570	2.0%
Services & Supplies	\$	72,377	\$	145,067	\$	289,900	\$	276,760	\$	164,650	(43.2%)
Other		-		-		-		-		-	-
TOTAL EXPENDITURES	Ś	439.091	Ś	530.406	Ś	685.670	Ś	622.170	Ś	568.220	(17.1%)

Position Series	FY 13/14	FY 14/15	FY 15/16	FY 16/17
General Manager	1	1	1	1
Assistant General Manager/District Engineer	1	1	1	0
Totals	2	2	2	1

Administrative Services

Description

Administrative Services provides administrative and financial support for all other departments of the District. The division includes accounting, payroll, budget and financial planning, human resources and risk management. The division also includes duties in support of the Board of Directors, responding to public inquiries, records management, and general administrative support.

Link to District Goals in Strategic Plan

The Administrative Services Department supports the District's "Goal Two: Financial Stability." This Department is responsible for developing nonrate, revenue-generating or expense minimizing ideas for the District (Objective 2A). This department will also be responsible for completing a study on plan check/inspection fees and capacity charge methodologies (Objective 2B) and conducting a Sewer Service Charge fee study prior to the next Proposition 218 hearing (Objective 2C). This department will also develop the financing plan for Browns Valley Road project (Objective 2D).

Department Goals

Goal: Provide financial information for managers and Board to maintain financial viability of the District.

Revenue-to-Expense Ratio

(positive number is goal)

11/12	12/13	13/14	14/15	15/16	16/17
0.00	0.79	-0.24	-0.35	-0.50	0.00

Debt Service Coverage Ratio

(greater than 125% is required)

11/12	12/13	13/14	14/15	15/16	16/17
325%	247%	276%	226%	220%	260%

Sewer Service Charge Bill Affordability

(goal is to remain under 1.0% per EPA guidance)

11/12	12/13	13/14	14/15	15/16	16/17
0.64%	0.66%	0.68%	0.66%	0.66%	0.70%

Related Department Objectives

- Review cash flow and emergency reserves for adequacy.
- Conduct a study of the District's Capacity Charges.
- Complete the seventh year's Performance Measurement Report.

- Work with private sector partners to implement partnerships for solar energy, energy storage and other technologies, lowering the District's electricity costs and providing non-rate revenues.
- Continue to provide financial support to managers, supervisors and staff, in support of District activities.
- Analyze assumptions in long-range plans for sensitivity to economic or regulatory change.

Goal: Provide time sensitive and necessary Human Resources support throughout the District.

Experience Turnover Rate

(Lower is better)

2012	2013	2014	2015	2016	2017
5.7%	0.0%	4.3%	0.0%	5.0%	5.0%

Employee Survey Results – These are the average score of employees who rated the following statement: (1=strongly disagree / 5=strongly agree)

"The forms and process used for annual employee performance evaluations are user friendly."

<u> 2012 </u>	2013	2014	2015	2016	2017
na	na	3.48	na	na	3.5

Related Department Objectives

- Implement the Employee Master Plan recommendations.
- Complete an update of the District's Employee Job Descriptions.
- Continue to provide human resource support to managers, supervisors and staff, in support of District activities.

Goal: Provide general administrative support to employees and serve the requests of the general public.

Related Department Objectives

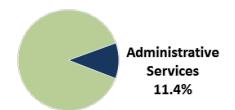
• Continue to provide general administrative support to managers, supervisors and staff, in support of District activities.

• No significant changes in the budget from prior year.



NSD Administrative Services staff

Percent of Operating Budget



Proposed Budget

	Actual FY 13/14	Actual FY 14/15	Adjusted FY 15/16	Estimated FY 15/16	Proposed FY 16/17	Percent Change
Salaries & Benefits	\$ 1,140,922	\$ 1,087,687	\$ 1,113,610	\$ 1,009,700	\$ 1,148,040	3.1%
Services & Supplies	\$ 475,039	\$ 527,329	\$ 591,200	\$ 569,700	\$ 565,910	(4.3%)
Other	\$ 36	\$ 18	\$ 50	\$ 30	\$ 50	-
TOTAL EXPENDITURES	\$ 1.615.996	\$ 1.615.034	\$ 1.704.860	\$ 1.579.430	\$ 1.714.000	0.5%

Position Series	FY 13/14	FY 14/15	FY 15/16	FY 16/17
Director of Admin Services/Chief Financial Officer	1	1	1	1
Clerk to the Board/Human Resources Officer	1	1	1	1
Senior Accountant	1	1	1	1
Accountant	1	1	1	1
Management Analyst and Outreach Coordinator	1	1	0	0
Administrative Assistant I/II	2	2	2	2
Totals	7	7	6	6

Safety, Training and Fleet Maintenance

Description

Many of the District's activities are inherently dangerous, as they involve work in heavy traffic, repairs and installations of pipe in deep trenches susceptible to collapse, and entrance into confined spaces that potentially contain toxic gases or other hazardous conditions. This program oversees workplace safety and provides safety training for all staff to ensure safe working practices and compliance with safety regulations. This includes reviews of contractor safety programs to ensure that the District's contractors also work and operate safely.

This program also includes maintenance and management of the District's fleet vehicles, communications management and general safety and security protocols.

Link to District Goals in Strategic Plan

This Department supports the District's value of safety, along with all of the goals of other departments by ensuring that the workplace is safe and employees are adequately trained.

Department Goals

Goal: Implement programs that result in improved safety and lower accidents and incidents rates

District's Experience Modification (XMOD) Rate (lower is better; NSD is compared to the CSRMA risk pool member average)

	11/12	12/13	13/14	14/15	15/16	16/17
NSD	63	66	66	84	89	85
Avg	80	85	94	94	X	X

Total Recordable Incidence Rate

(Injuries and illnesses per 200,000 hours worked; NSD is compared to the wastewater industry average)

	2012	2013	2014	2015	2016	2017
NSD	4.27	10.69	0	2.10	0	0
Avg	4.2	3.4	5.3	na	na	na

Number of Insurance Claims

(number of claims per 200,000 hours of work)

11/12	12/13	13/14	14/15	15/16	16/17
8.55	14.95	8.60	18.85	5.00	5.00

Severity of Insurance Claims

(cost of claims per 200,000 hours of work)

11/12	12/13	13/14	14/15	15/16	16/17
\$16k	\$33k	\$6k	\$104k	\$15k	\$15k

Online Safety Training Hours Completed by Staff

2012	2013	2014	2015	2016	2017
91.6%	99.1%	99.2%	100%	99%	99%

Related Department Objectives

- Develop and implement periodic review plan for District safety policies and programs.
- Complete and coordinate the safety review requested by CSRMA, the District's workers compensation insurance carrier.
- Continue on five-year plan to fully implement the lockout-tagout Standard Operating Procedures (SOP) development and revision project, in conjunction with plant maintenance staff.

Goal: Facilitate proper management of fleet vehicles to ensure they are safe and reach their intended useful lifespan

- Maintain and adjust ten-year plan for fleet sustainment, acquisition, rehabilitation and attrition.
- Determine right combination of mission essential vehicle types to ensure District operational effectiveness, while increasing efficiency and reducing overall cost.
- Oversee the District's Fleet Committee to determine proper general purpose fleet sizing to meet the goal of a "common fleet" approach; cross utilization of assets, increasing economy and efficiency while reducing cost.

- The FY 16/17 budget includes training for several district-wide classes that are required once every three years (\$3,950).
- The budget includes \$11,000 to implement a radio communication system.
- The budget includes \$2,500 to replace the SCBA bottles (required every 15 years).
- The budget removes \$5,500 for one-time training for the new employee that was completed last fiscal year.



District staff training on fire extinguisher use

Percent of Operating Budget



Proposed Budget

		Actual Y 13/14	ı	Actual Y 14/15		Adjusted Y 15/16		stimated Y 15/16		Proposed FY 16/17	Percent Change
Salaries & Benefits	\$	155,983	\$	129,953	\$	144,360	\$	141,240	\$	161,560	11.9%
Services & Supplies	\$	74,630	\$	73,332	\$	84,950	\$	69,670	\$	102,550	20.7%
Other TOTAL EXPENDITURES	ė	230 614	ċ	203 285	ċ	229 310	ć	210 910	ċ	264 110	15.2%

Position Series	FY 13/14	FY 14/15	FY 15/16	FY 16/17
Safety, Training & Fleet Maintenance Officer	1	1	1	1
Totals	1	1	1	1

Treatment Plant Operations

Description

The Treatment Plant Operations Department receives, treats and distributes wastewater and solids conveyed to the treatment plant in an environmentally sound and cost effective manner. This is done with a strong ethical foundation of protecting public health and the environment, while meeting our responsibilities to the rate payers.

The department operates the plant, performs some basic preventive maintenance of plant equipment and structures, recommends improvements in plant process, assists with engineering and special studies, and prepares all regulatory reports applicable to the treatment plant.

Link to District Goals in Strategic Plan

The Treatment Plant Operations Department supports the District's "Goal One: Infrastructure Reliability" by providing support to the Engineering Department's work on implementing the Treatment Plant Master Plan critical projects (Objective 1A) and development an Asset Management program (Objective 1D).

The Department will directly support the District's efforts to negotiate and obtain a new NPDES permit (Goal Three: Operational Capability, Objective 3B).

To support "Goal Six: Resource Recovery," this Department will provide technical analysis when setting the targets for the percentage of electricity that is self-generated and will take the lead on determining strategies for the beneficial reuse of algae (Objective 6C).

Department Goals

Goal: Adhere to all federal, state and local guidelines, permits and regulations in the operation of the treatment plant.

Treatment for BOD and TSS Removal

(Must be higher than 85% - winter monthly average)

<u>2012</u>	2013	2014	<u> 2015</u>	2016	2017
BOD 97.3%	97.9%	97.7%	98.1%	97%	97%
TSS 97.2%	97.2%	96.7%	96.2%	97%	97%

Total Allowable BOD and TSS

(Must be lower than 30 mg/L - winter monthly average)

	2012	2013	2014	<u>2015</u>	2016	2017
BOD	5.6	5.3	4.9	4.6	5.0	5.0
TSS	6.2	7.6	7.4	9.8	9.0	9.0

Related Department Objectives

• Continue producing an effluent that meets the NPDES permit requirements.

Goal: Effectively and efficiently operate the treatment plant.

Polymer per MG processed - Winter and Summer

	2012	2013	2014	2015	2016	2017
Wnt	35.1	52.7	33.4	28.8	35	35
Smr	68.5	79.0	50.6	103.1	85	85

Hypochlorite per MG processed

	2012	2013	2014	2015	2016	2017
Wnt	71.9	113.3	102.9	124.3	110	110
Smr	155.0	206.6	203.7	211.9	200	200

Percent Electricity Produced by Cogen Engine

2012	2013	2014	2015	2016	2017
23.3%	33.7%	32.6%	35%	38%	38%

Electricity Consumed per Million Gallons Treated (Megawatt-hours per MG processed)

	2012	2013	2014	2015	2016	2017
Wnt	1.3	2.0	1.7	2.2	1.7	1.7
Smr	4.9	5.7	5.9	7.2	6.0	6.0

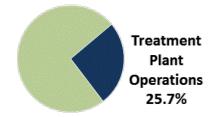
- Continuous process optimization of the plant control systems to achieve a reduction in chemical and energy costs, to match or exceed the targets noted in performance measures above.
- Continue installation of additional online instrumentation.
- Continue to receive fats, oil and grease (FOG) collected from siphon to the FOG receiving station.
- Continue to optimize production of biogas in digester resulting from FOG receiving program.
- Assist Engineering in the construction and design of new Aeration diffusors and automation of air control.

- FY 16/17 budget moves \$65,100 from Plant Operations to Plant Maintenance for SCADA equipment and software.
- FY 16/17 budget adds \$173,900 in chemicals, predominantly for polymer related to DAF operations.
- FY 16/17 budget includes an additional \$15,000 for anticipated increases in NPDES and Regional Monitoring Program fees.
- FY 16/17 budget removes \$25,000 for a one-time document scanning project.



Overseeing plant operations via SCADA interface

Percent of Operating Budget



Proposed Budget

	Actual	Actual	Adjusted	Estimated	Proposed	Percent
	FY 13/14	FY 14/15	FY 15/16	FY 15/16	FY 16/17	Change
Salaries & Benefits	\$ 1,386,706	\$ 1,514,444	\$ 1,625,510	\$ 1,425,370	\$ 1,644,360	1.2%
Services & Supplies	\$ 2,332,858	\$ 2,076,021	\$ 2,142,700	\$ 2,408,630	\$ 2,211,700	3.2%
Other	\$ 190	\$ 196	\$ 200	\$ 200	\$ 200	-
TOTAL EXPENDITURES	\$ 3,719,753	\$ 3,590,660	\$ 3,768,410	\$ 3,834,200	\$ 3,856,260	2.3%

Position Series	FY 13/14	FY 14/15	FY 15/16	FY 16/17
Plant Manager	1	1	1	1
Operations Supervisor	1	1	1	1
Operator OIT/I/II/III	7	7	7	7
Totals	9	9	9	9

Treatment Plant Maintenance

Description

The Treatment Plant Maintenance Department provides corrective and preventive maintenance and equipment installation at the wastewater treatment plant and recycled water facilities, lift stations and other assigned areas.

Priorities are set through consultation with Treatment Plant Operations staff to ensure plant reliability and permit compliance.

Link to District Goals in Strategic Plan

The Treatment Plant Maintenance Department supports the District's "Goal One: Infrastructure Reliability" by providing technical assistance on major plant infrastructure projects (Objective 1A) and Asset Management implementation (Objective 1D).

Department Goals

Goal: Provide corrective and preventive maintenance safely, cost effectively and efficiently.

Planned Maintenance Ratio of Hours Worked

(Planned maintenance as a percentage of total maintenance measures the proactive nature of activity in the department and is more efficient than corrective or emergency maintenance. A higher percentage is better.)

2012	2013	2014	2015	2016	2017
63.7%	58.0%	65.8%	65.8%	68%	68%

Number of work orders completed

<u> 2012 </u>	2013	2014	2015	2016	2017
1,191	1,372	1,351	1,314	1,400	1,400

Related Department Objectives:

- Continue to implement an effective life cycle equipment replacement schedule for better budgetary expense projections.
- Expand equipment data base and associated task of Maintenance Program.
- Complete phase II, replacement of Stationary Gas Monitors At Treatment Plant and Lift Stations
- Implement Infrared Imaging PM program for all electrical switchgear and motor control centers
- Rebuild cogeneration engine bottom end and refurbish generator

Goal: Maintain critical operational systems so that there is reliability and operational resiliency.

Uptime for Cogeneration Engine

(The Cogeneration Engine is critical for effective management of biogas through the generation of heat and electricity needed by the wastewater treatment plant to operate.)

2012	2013	2014	2015	2016	2017
84%	96%	96%	98%	85%	95%

- Implement PM program for Telemetry System testing for reliablity
- Continue enhancement and organization of the inventory system to reduce down time.

- FY 16/17 budget includes SCADA software and maintenance that was moved from Plan Operations (\$65,200), plus \$5,000 for one-time switch monitoring equipment.
- FY 16/17 budget removes he one-time budget for digester painting (\$49,200).
- FY 16/17 includes \$20,000 in landscape services, budgets that were moved from Reclamation and Operations departments, plus an additional level of effort for new areas around plant.
- FY 16/17 incudes \$20,000 to install an air/fuel controller upgrade to the cogeneration engine, to increase reliability.
- FY 16/17 includes an additional \$10,000 for instrumentation parts to be replaced.
- FY 16/17 budget removes \$20,000 for one-time VFD installations in the prior year budget.



NSD's cogeneration engine burns biogas from the digester to create heat and electricity

Percent of Operating Budget



Proposed Budget

	Actual FY 13/14	Actual FY 14/15	Adjusted FY 15/16	Estimated FY 15/16	Proposed FY 16/17	Percent Change
Salaries & Benefits	\$ 773,44	6 \$ 804,775	\$ 1,017,050	\$ 845,770	\$ 1,045,500	2.8%
Services & Supplies Other	\$ 691,50 -	8 \$ 625,060 -	\$ 784,500 -	\$ 712,230 -	\$ 829,050 -	5.7% -
TOTAL EXPENDITURES	\$ 1,464.95	4 \$ 1.429.835	\$ 1.801.550	\$ 1.558.000	\$ 1.874.550	4.1%

Position Series	FY 13/14	FY 14/15	FY 15/16	FY 16/17
Plant Maintenance Supervisor	1	1	1	1
Equipment Maintenance Specialist I/II	3	3	4	4
Plant Attendant	1	1	1	1
Totals	5	5	6	6

Collection System

Description

The purpose of the Collection System Department is to clean and maintain, inspect, repair, replace or rehabilitate sanitary sewer lines, manholes and other related facilities to assure the structural integrity of the District's sewer system in a manner that results in the most economical operation while maintaining regulatory compliance.

Link to District Goals in Strategic Plan

The Collection System Department supports the District's "Goal One: Infrastructure Reliability" by taking both preventive and corrective actions to maintain the infrastructure of the sewer system, and by assisting the Engineering staff in the design of capital projects. Specifically, the Department provides maintenance data and analysis in support of the wet weather inflow/infiltration analysis (Objective 1B), development of an Asset Management program (Objective 1D), design of the Browns Valley Road Interceptor (Objective 1E), and the amendment to the Collection System Master Plan (Objective 1F).

Department Goals

Goal: To prevent sanitary sewer overflows (SSO's). Especially important is to prevent Category 1 overflows that are defined as an SSO that reached a drainage channel and/or surface water or; an SSO that reached a storm drain pipe that was not fully recovered and returned to the sanitary sewer system.

Category 1 Sewer Overflows per 100 miles of mains (NSD compared to California average)

	2012	2013	2014	2015	2016	2017
NSD	0.37	0.0	4.81	0.0	0.0	0.0
CA	3.94	3.79	5.09	3.94	na	na

Category 1 Sewer Overflows per 100 miles of laterals (NSD compared to California average)

	2012	2013	2014	2015	2016	2017
NSD	0.0	0.0	1.4	1.4	0.0	0.0
CA	15.9	5.2	53.1	2.4	na	na

Category 1 Gallons of Spilled Sewage from Mains per 1,000 capita

(NSD compared to California average)

	<u>2012</u>	2013	2014	2015	2016	2017
NSD	9	0	1,095	0	0	0
CA	1,258	1,301	1,294	1,574	na	na

Category 1 Gallons of Spilled Sewage from Laterals per 1,000 capita

(NSD compared to California average)

	2012	2013	2014	2015	2016	2017
NSD	0	0	3.6	6.7	0	0
CA	104.2	12.5	5.9	3.5	na	na

Goal: To provide quality customer service by responding to customer requests for service and being on site within 30 minutes of receiving the call.

Average Number of Minutes to Respond

2012	2013	2014	2015	2016	2017
27	31	29	32	30	30

Service Calls for District Plugged Laterals

2012	2013	2014	2015	2016	2017
221	247	302	230	225	225

Related Department Objectives

• Continue to respond to the needs of the community in a timely and professional manner within 30 minutes, while trying to reduce the number of emergency service calls.

Goal: To insure infrastructure stability by performing preventive maintenance on the Collection System. This includes inspection and cleaning of the sewer system.

Sewer Main Condition Assessment

(% of sewer mains video inspected) (Goal is 10% per year)

2012	2013	2014	2015	2016	2017
9.9%	7.4%	10.3%	8.5%	10%	10%

Percent of Main Lines Cleaned

(Goal is 40%)

2012	2013	2014	2015	2016	2017
45.8%	47.6%	47.6%	42.3%	40%	40%

Planned Maintenance as Ratio of Total Maintenance (*Goal is 90%*)

2012	2013	2014	2015	2016	2017
90.4%	87.6%	87.5%	86.7%	88%	88%

Number of Public Laterals Replaced or Rehabilitated (Goal is 60 per year)

<u>2012</u>	2013	2014	2015	2016	2017
44	51	52	72	60	60

Related Department Objectives

• Maintain the sewer lateral preventive maintenance program at current service levels.

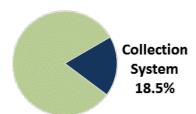
- Video inspect 10% of the sewer mains in the District's system
- Clean at least 40% of District sewer mains per year.
- Root foam 4 miles of sewer main, including related laterals and manholes, to reduce the root intrusion into these facilities.
- Work to eliminate higher maintenance sewer mains by replacing or repairing them.
- Replace or rehabilitate 60 public laterals.
- Move forward in gathering, storing and disseminating asset and work information in an economical way with completeness and accuracy, including sharing with other departments in the District and others as needed.



Collection system workers excavate a sewer lateral to make repairs

- FY 16/17 budget includes two new Collection System Worker positions, and associated materials, uniforms, equipment and training for these new positions.
- FY 16/17 budget removes \$16,600 in maintenance supplies that were already captured in the CIP budget.
- FY 16/17 budget removes \$8,000 in waste hauling, with savings coming from self-hauling to the transfer station.
- FY 16/17 removes \$2,650 for one-time software update in prior fiscal year.

Percent of Operating Budget



Proposed Budget

	Actual FY 13/14	Actual FY 14/15	Adjusted FY 15/16	Estimated FY 15/16	Proposed FY 16/17	Percent Change
Salaries & Benefits	\$ 1,849,318	\$ 2,011,189	\$ 2,106,520	\$ 1,909,820	\$ 2,369,250	12.5%
Services & Supplies	\$ 337,669	\$ 361,343	\$ 416,200	\$ 401,660	\$ 406,150	(2.4%)
Other	-	-	-	-	-	-
TOTAL EXPENDITURES	\$ 2 186 987	\$ 2 372 532	\$ 2 522 720	\$ 2 311 480	\$ 2 775 400	10.0%

Position Series	FY 13/14	FY 14/15	FY 15/16	FY 16/17
Collection System Manager	1	1	1	1
Collection System Supervisor	1	1	1	1
Collection System Technician	1	1	1	1
Collection System Worker III	1	1	2	2
Collection System Worker IT/I/II	9	9	8	10
Totals	13	13	13	15

Water & Biosolids Reclamation

Description

This department is responsible for the effective and efficient distribution of recycled water and management of biosolids in a manner that respects the environment, maintains public health and conforms to local, state and federal regulations.

After the treatment of wastewater, the District generates recycled water known as "Title 22 Unrestricted Use" which is permitted under State of California Regulations for almost any use except potable (drinking water) reuse. The District delivers this water to vineyards, golf courses, cemeteries, parks and athletic fields, and for landscape irrigation purposes.

Biosolids are managed by this department through land application. This method avoids expensive offsite hauling and disposal of biosolids, with significant savings to the ratepayers.

Link to District Goals in Strategic Plan

The Water & Biosolids Reclamation Department supports the District's "Goal Six: Resource Recovery" through its support of local partners and the Engineering Department's projects to construct distribution systems for recycled water (Objective 6A) and providing technical assistance regarding expanding water reuse (Objective 6B).

Department Goals

Goal: Dispose of recycled water during the summer months through sales to customers and on District-owned property.

Recycled Water Service Availability

(% of time RW is available to customers – May to Oct.)

2012	2013	2014	2015	2016	2017
100%	100%	100%	100%	100%	100%

Recycled Water Reuse by Customers

(% of recycled water sold to customers – May to Oct.)

2012	2013	2014	2015	2016	2017
62.3%	71.5%	75.2%	78.3%	85%	90%

Related Department Objectives

 Maintain Recycled Water availability at 100% during the non-discharge period.

- Distribute up to 650 million gallons (2,000 acre feet) recycled water, with 85% sold to customers.
- Complete annual recycled water user site inspections, issuing no Notices of Noncompliance.
- Gateway Business Park facilities using recycled water for irrigation achieved 100 % conversion.
- Napa Airport Centre initiated conversion to recycled water for irrigation of two facilities. Additional conversions in progress during FY 15/16 and anticipated 100% conversion in FY 16/17.
- Facilitate conversion activities of MST and Los Carneros Water District customers.
- Complete activities necessary to achieve "Fish Friendly Certification" at Fegundes Ranch, with certification anticipated in FY 16/17.

Goal: Dispose of 100% of biosolids through land application on District-owned property.

Biosolids Put to Beneficial Reuse

(% of biosolids applied to seeded & harvested acres)

2012	2013	2014	2015	2016	2017
100%	100%	100%	100%	100%	100%

- Apply approximately 1,200 dry tons of dewatered biosolids on District land.
- Put 100% of the biosolids applied to District land to beneficial reuse, through active agricultural practices on the land (growing crops, grazing sheep, etc.).

- FY 16/17 budget adds \$12,000 for water truck rental for summer 2016, prior to purchase which is planned in CIP.
- FY 16/17 budget includes an additional \$7,000 for cathodic protection testing for new recycled water lines in LCWD and MST areas.
- FY 16/17 budget moves \$3,000 from this budget to the Plant Maintenance budget for marsh weed maintenance.
- FY 16/17 budget removes \$4,000 from electricity to match actual spending, associated with recycled water application at Jameson Ranch property.

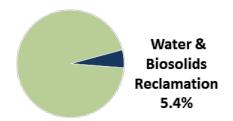


Irrigating Somky Ranch with recycled water



Loading the biosolids spreader at Jameson Ranch

Percent of Operating Budget



Proposed Budget

	ı	Actual FY 13/14	ı	Actual FY 14/15	Adjusted Y 15/16	stimated Y 15/16	roposed Y 16/17	Percent Change
Salaries & Benefits	\$	497,409	\$	485,005	\$ 507,880	\$ 437,510	\$ 470,720	(7.3%)
Services & Supplies	\$	188,281	\$	205,908	\$ 307,700	\$ 187,060	\$ 309,250	0.5%
Other	\$	23,796	\$	24,946	\$ 28,000	\$ 24,780	\$ 28,000	-
TOTAL EXPENDITURES	\$	709,486	\$	715,859	\$ 843,580	\$ 649,350	\$ 807,970	(4.2%)

Position Series	FY 13/14	FY 14/15	FY 15/16	FY 16/17
Reclamation Systems Director	1	1	1	1
Reclamation Maintenance Worker I/II	3	3	2	2
Plant Attendant	-	-	-	-
Totals	4	4	3	3

Engineering

Description

Engineering provides technical assistance to the operational departments within the District. The group is responsible for managing most of the District's capital projects and prepares project charters for projects that are included in the District's Ten-Year Capital Improvement Plan.

Engineering is responsible for reviewing development plans for conformance with District standards and inspection of sanitary sewer facilities. In some cases, the group prepares the design plans and specifications and provides construction management and inspection for collection system projects.

Link to District Goals in Strategic Plan

The Engineering Department supports the District's "Goal One: Infrastructure Reliability" and "Goal Six: Resource Recovery" by providing project management and leadership on all of the infrastructure projects identified:

- Treatment Plant Master Plan projects, such as pond aeration, recycled water equalization and filters, and influent pump station (**Objective 1A**)
- Conduct wet weather inflow/infiltration cost/benefit analysis (**Objective 1B**)
- Determine target for renewal and replacement of sewer assets (Objective 1C)
- Develop and Asset Management Plan (Objective 1D)
- Design and construct Browns Valley Road Interceptor (Objective 1E)
- Update the Collection System Master Plan (**Objective 1F**)
- Study whether to implement a private lateral program (**Objective 1G**)
- Working with local partners in the distribution of recycled water (Objective 6A)
- Study and develop pathway to become energy independent (Objective 6C)

Department Goals

Goal: Plan and implement the Ten-Year Capital Improvement Plan.

Percent of Annual Capital Plan Expended

11/12	12/13	13/14	14/15	15/16	16/17
67.5%	63.8%	62.8%	83.2%	85%	85%

Capital Expenses as Percent of Operating Expenses

11/12	12/13	13/14	14/15	15/16	16/17
71%	106%	168%	322%	180%	75%

Related Department Objectives

- Initiate capital projects that are scheduled to begin within the fiscal year and finalize those projects that are scheduled to be completed within the fiscal year.
- Develop and utilize capital program management system to monitor and report progress of active capital projects.
- Continue design of the Browns Valley Road Interceptor Project.

Goal: Plan projects to ensure that the renewal or replacement of existing assets is completed according to condition assessments and estimated useful lives of assets.

Renewal & Replacement of Assets

(as a % of asset net worth – 2% minimum, 4% goal)

11/12	12/13	13/14	14/15	15/16	16/17
3.0%	2.6%	8.8%	10.2%	3%	3%

Related Department Objectives

- Plan for and complete renewal & replacement capital projects that impact at least 2% and up to 4% of the District's total assets annually.
- Initiate in-house design of the Summer 2017 I/I project to reduce peak wet-weather flow.
- Complete construction management of the Basin L Rehabilitation Project 5.
- Construction of the Aeration Basin diffuser replacement project.
- Begin implementation of a formal asset management plan
- Design, construct, and evaluate effectiveness of I/I pilot projects.

Goal: Complete the first review of development plans submitted for District approval within 30 calendar days.

Development Review Response Time

(% of applications where 30-day goal is met)

2012	2013	2014	2015	2016	2017
97.5%	96.1%	97.5%	94.4%	95%	95%

Number of development plans reviewed

2012	2013	2014	2015	2016	2017
135	191	190	289	275	275

Number of construction inspections

2012	2013	2014	2015	2016	2017
520	1,043	352	594	650	650

Related Department Objectives

- Review and return development plans within 30 days of submittal to District.
- Respond to requests for information from the general public and other local agencies within three working days of request.
- Responded to an estimated 800 phone requests and 225 counter requests for development related information.
- Conduct an estimated 650 activities related to construction inspection of NSD collection system facilities, include locating sewers, permit processing, preconstruction meetings, inspections, and updating record drawings.

Changes from FY 2015/16 Service Levels

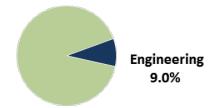
• FY 16/17 budget includes \$10,000 for summer college intern.



District engineers review development plans for conformance to standard specifications

- FY 2016/17 budget removes \$250,000 for one-time asset management implementation expenses that were in prior year budget (unspent money from FY 15/16 will be requested carried forward to FY 16/17 to continue implementation).
- FY 2015/16 budget subtracts \$4,900 for the onetime purchase of storage container for retention of documents.

Percent of Operating Budget



Proposed Budget

_		Actual / 13/14	ı	Actual FY 14/15	Adjusted Y 15/16	stimated FY 15/16	Proposed FY 16/17	Percent Change
Salaries & Benefits	\$	955,789	\$	990,043	\$ 1,273,690	\$ 993,460	\$ 1,253,920	(1.6%)
Services & Supplies	\$	91,842	\$	69,604	\$ 331,200	\$ 67,630	\$ 98,200	(70.4%)
Other		-		-	-	-	-	-
TOTAL EXPENDITURES	\$ 1	,047,632	\$	1,059,646	\$ 1,604,890	\$ 1,061,090	\$ 1,352,120	(15.7%)

Position Series	FY 13/14	FY 14/15	FY 15/16	FY 16/17
Technical Services Director	0	0	0	1
Senior Civil Engineer	1	1	1	1
Junior/Assistant/Associate Engineer	3	3	3	3
Senior Engineering Technician	-	-	-	-
District Inspector I/II	2	2	2	2
Senior Construction Inspector	0	0	0	0
Construction Inspector	0	0	0	0
Totals	6	6	6	7

Treatment Plant Laboratory

Description

The Treatment Plant Laboratory provides support to Plant Operations with consistently high quality analytical laboratory services.

Laboratory analyses fall into one of three categories:

- 1) Required for regulatory compliance within District's operating permits;
- 2) Needed for operational control of the complex treatment processes; or
- 3) Requested by staff or contracted consultants in support of special studies.

Link to District Goals in Strategic Plan

The Treatment Plant Laboratory Department supports the District's goals in the Strategic Plan through its support of the Plant Operations, Plant Maintenance, and Engineering Departments, and the Pollution Prevention Program. There are no specific objectives in the Strategic Plan that this department is responsible for completing.

Department Goals

Goal: Provide laboratory services efficiently and reliably, while abiding by the protocols and policies of the Quality Assurance Manual, Standard Operating Procedures and laboratory safety program.

Number of regulatory analyses processed

2012	2013	2014	2015	2016	2017
4,498	4,644	5.030	4,670	5,000	5,000

Number of Process Control analyses processed

2012	2013	2014	2015	2016	2017
11,522	14,155	15,259	12,827	13,000	13,000

Number of special request analyses processed

2012	2013	2014	2015	2016	2017
1,280	94	196	1,885	2,500	2,500

Number of Quality Control/Assurance analyses processed

2012	2013	2014	2015	2016	2017
1 422	4 355	5 380	2.434	2.500	2.500

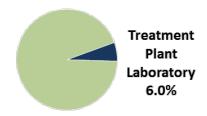
- Implement new Environmental Laboratory Accreditation Program (ELAP) certification requirements.
- NPDES Permit Renewal and Implementation of updated NPDES limits, monitoring and reporting requirements.
- Pretreatment Program Assessment and Implementation
- Successful development and implementation of a Method Detection Limit program.
- Begin an updated assessment of the Napa Sanitation's collection system raw waste stream.
- Conduct a Local Limit's Assessment for NPDES permit reporting compliance.
- Continue to develop and implement an analyst educational outreach training program.
- Continue to review and update operational data sampling and analysis management for an efficient process control operational strategy.

- FY 16/17 budget includes expenses related to new ELAP certification requirements, including \$2,100 for additional certification fees, \$1,200 for additional training requirements, \$650 for certification material subscriptions, and \$4,000 in chemicals to increase certification inspections from once to twice annually.
- FY 16/17 budget includes \$6,500 for an additional LIMS user interface.
- FY16/17 budget includes \$3,750 additional in consumables for additional chlorides monitoring and additional sampling anticipated with new NDPES permit.



NSD Lab Technicians run thousands of regulatory and process control analyses annually

Percent of Operating Budget



Proposed Budget

	F	Actual Y 13/14	ı	Actual FY 14/15		Adjusted Y 15/16		stimated Y 15/16		roposed Y 16/17	Percent Change
Salaries & Benefits	\$	635,666	\$	661,638	\$	699,800	\$	637,180	\$	724,050	3.5%
Services & Supplies Other	\$	181,422 -	\$	144,462 -	\$	155,250 -	\$	174,050 -	\$	177,750 -	14.5% -
TOTAL EXPENDITURES	Ś	817.088	Ś	806.100	Ś	855.050	Ś	811.230	Ś	901.800	5.5%

Position Series	FY 13/14	FY 14/15	FY 15/16	FY 16/17
Regulatory Compliance Manager	0	0	0	1
Lab Supervisor	1	1	1	0
Lab Technician I/II	3	3	3	3
Totals	4	4	4	4

Pollution Prevention

Description

The Pollution Prevention Program is a cross-departmental program designed to ensure that discharges to the collection system and treatment plant are in compliance with the District's Sewer Use Ordinance and will not pose a hazard to the public, District employees or District facilities and treatment processes.

The District's Pretreatment Program controls the amount of pollutants that are discharged to the sanitary sewer system through active regulation of numerous industrial and commercial businesses in Napa. Program activities include periodic on-site inspections, permit writing and administration, sampling of various discharges, and enforcement when necessary. The Program supports increased water recycling and reuse, as well as wastewater treatment prior to discharge to the sanitary sewer to reduce pollutant loadings to the treatment facility.

The Pollution Prevention Program also supports education and outreach through school programs, community events and treatment plant tours.

Link to District Goals in Strategic Plan

This program supports the Strategic Plan, specifically "Goal Three: Operational Capability" in the outreach to develop alternative methods for treating winery waste (Objective 3A) and "Goal Five: Community Outreach and

Communication" in the development of a communications plan to address NSD outreach and public information needs (**Objective 5B**).

Program Goals

Goal: Decrease Fats, Oil and Grease (FOG) deposited in the Collection System, thus reducing maintenance expenses and reducing the risk of Sanitary Sewer Overflows (SSOs).

Restaurant Inspections (Fats, Oil & Grease)

(goal is every food service establishment annually is inspected)

2012	2013	2014	2015	2016	2017
43%	100%	100%	100%	100%	100%

Lateral Overflows or Backups Due to FOG (goal is zero)

2012	2013	2014	2015	2016	2017
7	6	2	1	0	0

Main Line Sanitary Sewer Overflows Due to FOG (goal is zero)

2012	2013	2014	2015	2016	2017
4	1	3	1	0	0

Related Department Objectives

- With the City of Napa, promote the Recycle More Program which provides curbside collection of used cooking oil.
- Continue the inspection program for Fats, Oil and Grease (FOG).
- Continue public outreach on proper disposal of FOG.

Goal: Prevent pollutants from being discharged into the sewer system through active regulation, promotion of Best Management Practices, and outreach to the public.

Plant Tours Conducted and Presentations Made

2012	2013	2014	2015	2016	2017
14	17	31	14	25	25

Pounds of Unwanted Pharmaceuticals Diverted

2012	2013	2014	2015	2016	2017
2,577	3,464	2,910	3,126	3,200	3,200

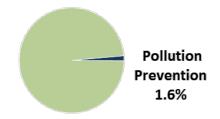
- Work with General Manager's Office to develop a Communications Plan.
- Partner with local agencies for collection of unwanted medications from drop-off sites.
- Conduct plant tours and make public presentations.
- Develop and disseminate to stakeholders pollution prevention BMPs as necessary
- Promote classroom presentations targeting elementary school students.
- Develop Spanish language outreach for pollution prevention messages.
- Develop a wastewater treatment plant video for use online, in classrooms, and for community organizations.
- Develop performance goals for increased and improved inspection of non-categorical dischargers.
- Continue monitoring, sampling, reporting, and billing for all categorical dischargers.

- FY 16/17 budget includes \$6,000 to partner with local agencies to pay for the pickup and disposal of unwanted medications from drop-off locations.
- FY 16/17 budget includes \$4,400 more than prior year in the Toilet Retrofit program, based on significantly increased demand in the prior year.



School tour of the Treatment Plant Headworks

Percent of Operating Budget



Proposed Budget

		Actual Y 13/14	F	Actual Y 14/15		Adjusted Y 15/16		stimated Y 15/16		Proposed TY 16/17	Percent Change
Salaries & Benefits	\$	17,058	\$	17,611	\$	144,510	\$	100,440	\$	135,920	(5.9%)
Services & Supplies	\$	68,346	\$	63,877	\$	84,850	\$	89,890	\$	96,300	13.5%
Other		-		-		-		-		-	-
TOTAL EXPENDITURES	Ś	85.404	Ś	81.488	Ś	229,360	Ś	190.330	Ś	232,220	1.2%

Position Series	FY 13/14	FY 14/15	FY 15/16	FY 16/17
Pollution Prevention and Outreach Specialist	=	=	1	1
Totals	0	0	1	1

Non-Departmental Expenses

Description

These expenses are not directly attributable to a specific department or program. They include expenses that are allocated at the District level, such as District memberships in organizations and associations, liability insurance, refunds of sewer service charges, debt service payments, and interfund transfers.

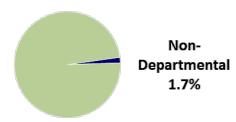
Changes from FY 2015/16 Service Levels

- There is an increase in the FY 2016/17 budget of \$5,000 for liability insurance related to new facilities (IPS, PW pump station, etc.).
- There is an increase in the FY 2016/17 budget for memberships related to increased BACWA fees (\$4,850).
- There is an increase in the FY 2016/17 budget for debt service related to the issuance of new debt for the Browns Valley Road Sewer Interceptor project.



Treatment plant biogas holder (left) and digester (right)

Percent of Operating Budget



Proposed Budget

	Actual FY 13/14	Actual FY 14/15	Adjusted FY 15/16	Estimated FY 15/16	Proposed FY 16/17	Percent Change
Salaries & Benefits	-	-	-	-	-	-
Services & Supplies	\$ 269,757	\$ 239,785	\$ 246,750	\$ 249,070	\$ 256,600	4.0%
Total Operating Expenditures	\$ 269,757	\$ 239,785	\$ 246,750	\$ 249,070	\$ 256,600	4.0%
Debt Service, Transfers and Taxes	\$ 6,426,367	\$ 11,437,960	\$ 12,679,200	\$ 12,679,200	\$ 13,673,050	7.8%
TOTAL EXPENDITURES	\$ 6,696,124	\$ 11,677,745	\$ 12,925,950	\$ 12,928,270	\$ 13,929,650	7.8%