

## **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 NapaSan 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 NapaSan.

### *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 NapaSan to ensure:

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

### *Related Department Objectives*

- Oversee the policy and strategic direction 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.
- Provide direction to staff on efforts to increase non-rate revenues and improve NapaSan's operational efficiency and effectiveness.

### *Changes in Service Levels*

- The Board of Directors budget includes NapaSan's expenses for legal services and audit services, as these functions report directly to the Board.
- The FY 18/19 budget includes \$100,000 in Consulting Services to support efforts to evaluate and recommend winery waste treatment options.
- The FY 18/19 budget includes \$20,000 for a Strategic Plan update in Spring 2019.
- The FY 18/19 budget continues support to evaluate the District's sewer service and capacity charge methodologies.

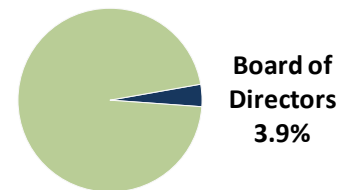


*Board of Directors honor 2017 Napa Engineering Society scholarship recipients.*



*Board of Directors honors Plant Operator Steven Chavis on being named Operator of the Year by the California Water Environment Association.*

### Percent of Operating Budget



### Department Operating Budget

	Actual FY 15/16	Actual FY 16/17	Adj. Budget FY 17/18	Estimated FY 17/18	Budget FY 18/19	Percent Change
Salaries & Benefits	\$ 33,572	\$ 31,796	\$ 33,500	\$ 26,250	\$ 33,500	-
Services & Supplies	\$ 153,392	\$ 228,346	\$ 594,500	\$ 425,430	\$ 594,500	-
Other	-	-	-	-	-	-
<b>TOTAL EXPENDITURES</b>	<b>\$ 186,964</b>	<b>\$ 260,142</b>	<b>\$ 628,000</b>	<b>\$ 451,680</b>	<b>\$ 628,000</b>	<b>-</b>

### Position Authorizations

Position Series	FY 15/16	FY 16/17	FY 17/18	FY 18/19
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
<b>Totals</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>

## 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 and Administrative Services are jointly responsible for conducting the study of sewer service charge and capacity charge methodologies (**Goal Two: Financial Stability, Objective 2A**). General Manager's Office is also overseeing the next employee survey in Fall 2017 (**Goal Four: Employee Development, Objective 4B**), working with the Board to pursue leases on District property (**Goal Two: Financial Stability, Objective 2C**), partnering with winery industry to develop alternative methods for treating winery waste (**Goal Three: Operational Capability, Objective 3A**), promoting NapaSan as a progressive, professional organization as a great place to work (**Goal Four: Employee Development, Objective 4A**), and working with partners to expand recycled water delivery and long-term water reuse opportunities (**Goal Six: Resource Recovery, Objectives 6A, 6B, 6C and 6F**).

### *Department Goals*

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

#### Related Department Objectives

- Oversee the engagement with wine industry representatives regarding the study of winery waste treatment options.
- Represent NapaSan at the North Bay Water Reuse Authority, specifically working to bring federal money to the region for Recycled Water projects.
- Under the direction of the Lands Committee and Board, work to develop options for lease revenue on District-owned property.

**Goal:** Provide leadership and management throughout NapaSan.

#### Related Department Objectives

- Provide direction to all departments, aligning efforts to promote and be consistent with NapaSan's goals and policy directives.
- Provide overall direction to the engineering staff regarding significant capital projects, including Browns Valley Road Trunk, West Napa Pump Station Improvements, I&I projects, and other priority projects.
- Oversee the changes derived from the Fall 2017 Employee Survey.



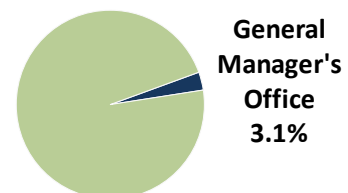
*NapaSan Booth at annual Earth Day event*

***Changes in Service Levels***

- There are no significant changes in the General Manager's Office budget.



*NapaSan booth at the annual Ag Expo in Napa*

**Percent of Operating Budget****Proposed Budget**

	Actual FY 15/16	Actual FY 16/17	Adjusted FY 17/18	Estimated FY 17/18	Budget FY 18/19	Percent Change
Salaries & Benefits	\$ 300,277	\$ 387,026	\$ 397,800	\$ 404,350	\$ 320,200	(19.5%)
Services & Supplies	\$ 135,169	\$ 71,478	\$ 179,750	\$ 117,835	\$ 179,600	(0.1%)
Other	-	-	-	-	-	-
<b>TOTAL EXPENDITURES</b>	<b>\$ 435,446</b>	<b>\$ 458,503</b>	<b>\$ 577,550</b>	<b>\$ 522,185</b>	<b>\$ 499,800</b>	<b>(13.5%)</b>

**Position Authorizations**

Position Series	FY 15/16	FY 16/17	FY 17/18	FY 18/19
General Manager	1	1	1	1
Assistant General Manager/District Engineer	1	-	-	-
<b>Totals</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>



## Administrative Services

### Description

Administrative Services provides administrative and financial support for all other NapaSan departments. The division includes accounting, payroll, budget and financial planning, Information Technology, 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 NapaSan's "**Goal Two: Financial Stability.**" This Department is jointly responsible with the General Manager's Office to study sewer service charge and capacity charge methodology options (**Objective 2A**). This department will also be responsible for evaluating and presenting options to the Board regarding long term liabilities (**Objective 2B**), evaluating opportunities for shared services (**Goal 3: Operational Optimization, Objective 3B**) and supporting the Board in its total compensation study (**Goal 4: Employee Development, Objective 4C**). The Department will take a leadership role in promoting further succession planning through training and mentorship (**Goal 4: Employee Development, Objective 4E**).

### Department Goals

**Goal:** Provide financial information for managers and Board to maintain NapaSan's financial viability and stability.

#### Related Department Objectives

- Review cash flow and emergency reserves for adequacy.
- Continue a study of NapaSan's sewer service charge and capacity charge methodologies.
- Complete the ninth year's Performance Measurement Report.
- Continue to provide financial support to managers, supervisors and staff, in support of NapaSan activities.

**Goal:** Provide time sensitive and necessary Human Resources support throughout NapaSan.

#### Related Department Objectives

- Provide support to departments through recruitments and internship programs.
- Assist the General Manager in implementing changes derived from the Fall 2017 Employee Survey.
- Continue efforts in succession planning, including training and mentorship programs.
- Continue to provide human resource support to managers, supervisors and staff, in support of NapaSan activities.

#### Operating Ratio

(above 1.0 is goal)

13/14	14/15	15/16	16/17	17/18	18/19
0.88	0.90	1.02	1.07	1.10	1.10

#### Debt Service Coverage Ratio

(greater than 125% is required)

13/14	14/15	15/16	16/17	17/18	18/19
277%	227%	284%	344%	417%	421%

#### Sewer Service Charge Bill Affordability

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

13/14	14/15	15/16	16/17	17/18	18/19
0.68%	0.66%	0.68%	0.74%	0.76%	0.76%

#### Experience Turnover Rate

(Lower is better)

2014	2015	2016	2017	2018	2019
4.3%	0.0%	3.7%	3.9%	4.0%	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."**

2014	2015	2016	2017	2018	2019
3.48	na	na	3.49	na	na

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

#### Related Department Objectives

- Evaluate opportunities to increase efficiencies in the delivery of support services.
- Continue to provide general administrative support to managers, supervisors and staff, in support of NapaSan activities.

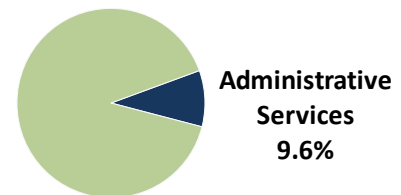
#### Changes in Service Levels

- FY 18/19 budget decreased \$34,900 to account for one-time projects in the prior fiscal year
- FY 18/19 includes budget for the set-up and licensing of HR recruitment and selection software.
- FY 18/19 budget includes a new contract to provide fiduciary support services for the 457 Deferred Compensation program.
- Budget for accounting services, Information Technology services and Human Resource services through Napa County increased \$2,413 from prior year, for same level of service.



*NapaSan Open House*

#### Percent of Operating Budget



#### Department Operating Budget

	Actual FY 15/16	Actual FY 16/17	Adjusted FY 17/18	Estimated FY 17/18	Budget FY 18/19	Percent Change
Salaries & Benefits	\$ 863,395	\$ 1,124,480	\$ 1,161,300	\$ 1,186,200	\$ 997,450	(14.1%)
Services & Supplies	\$ 561,768	\$ 544,375	\$ 544,950	\$ 538,917	\$ 538,100	(1.3%)
Other	\$ 24	\$ 24	\$ 50	-	-	(100.0%)
<b>TOTAL EXPENDITURES</b>	<b>\$ 1,425,187</b>	<b>\$ 1,668,880</b>	<b>\$ 1,706,300</b>	<b>\$ 1,725,117</b>	<b>\$ 1,535,550</b>	<b>(10.0%)</b>

#### Position Authorizations

Position Series	FY 15/16	FY 16/17	FY 17/18	FY 18/19
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
Administrative Assistant I/II	2	2	2	2
<b>Totals</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>

## Safety, Training and Fleet Maintenance

### Description

Many of NapaSan'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 NapaSan's contractors also work and operate safely.

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

### Link to District Goals in Strategic Plan

This Department supports NapaSan'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

#### Related Department Objectives

- Develop and implement periodic review plan for NapaSan safety policies and programs.
- Develop a Business Continuity Plan for operations during disasters, and integrate NapaSan in the city and county's emergency response systems.
- 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

#### Related Department Objectives

- Maintain and adjust ten-year plan for fleet sustainment, acquisition, rehabilitation and attrition.
- Determine right combination of mission essential vehicle types to ensure NapaSan operational effectiveness, while increasing efficiency and reducing overall cost.
- Oversee NapaSan'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.

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

	13/14	14/15	15/16	16/17	17/18	18/19
NSD	66	84	89	104	68	68
Avg	94	94	93	93	na	na

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

	2014	2015	2016	2017	2018	2019
NSD	0	2.10	8.36	8.23	0	0
Avg	5.5	7.1	8.2	na	na	na

#### Number of Insurance Claims (number of claims per 200,000 hours of work)

13/14	14/15	15/16	16/17	17/18	18/19
8.60	18.85	6.27	14.41	0	0

#### Severity of Insurance Claims (cost of claims per 200,000 hours of work)

13/14	14/15	15/16	16/17	17/18	18/19
\$6k	\$104k	\$92	\$33k	\$0	\$0



***Changes in Service Levels***

- The training budget fluctuates annually to facilitate the different trainings required, on a two or three-year rotational basis.
- There are no significant changes in service levels in this program.

*District staff training on fire extinguisher use***Percent of Operating Budget****Department Operating Budget**

	Actual FY 15/16	Actual FY 16/17	Adjusted FY 17/18	Estimated FY 17/18	Budget FY 18/19	Percent Change
Salaries & Benefits	\$ 120,351	\$ 152,151	\$ 165,300	\$ 183,900	\$ 143,950	(12.9%)
Services & Supplies	\$ 72,091	\$ 91,557	\$ 93,350	\$ 60,146	\$ 90,350	(3.2%)
Other	-	-	-	-	-	-
<b>TOTAL EXPENDITURES</b>	<b>\$ 192,443</b>	<b>\$ 243,708</b>	<b>\$ 258,650</b>	<b>\$ 244,046</b>	<b>\$ 234,300</b>	<b>(9.4%)</b>

**Position Authorizations**

Position Series	FY 15/16	FY 16/17	FY 17/18	FY 18/19
Safety, Training & Fleet Maintenance Officer	1	1	1	1
<b>Totals</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>

## 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 NapaSan'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 NapaSan'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 sewer rehabilitation projects (**Objective 1A**) and in decisions made as part of the Asset Management program (**Objective 1B**). The Department will be significantly involved in the Collection System Master Plan update (**Objective 1D**).

### 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.

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

#### 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.

#### Category 1 Sewer Overflows per 100 miles of main (NSD compared to California and SF Regional averages)

	2014	2015	2016	2017	2018	2019
NSD	4.8	0.0	1.1	13.6	0	0
CA	5.1	3.9	4.9	5.7	na	na
Reg	6.7	6.1	7.0	6.2	na	na

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

	2014	2015	2016	2017	2018	2019
NSD	1.4	1.4	2.0	0	0	0
CA	53.1	2.4	3.7	2	na	na
Reg	4.6	1.4	4.3	0	na	na

#### Sewer Main Condition Assessment (% of sewer mains video inspected) (Goal is 10% per year)

2014	2015	2016	2017	2018	2019
10.3%	8.5%	9.2%	9.4%	10%	10%

#### Percent of Main Lines Cleaned (Goal is 40%)

2014	2015	2016	2017	2018	2019
47.6%	42.3%	34.2%	42.5%	40%	40%

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

2014	2015	2016	2017	2018	2019
87.5%	86.7%	87.1%	88.5%	88%	88%

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

2014	2015	2016	2017	2018	2019
52	72	36	53	60	60

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

#### 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.

#### Average Number of Minutes to Respond

2014	2015	2016	2017	2018	2019
29	32	30	26	30	30

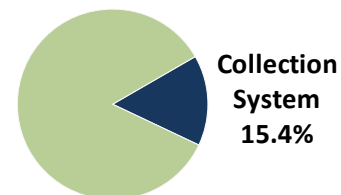
#### Changes in Service Levels

- FY 18/19 budget adds \$7,600 for “in training” temporary worker program.
- FY 18/19 budget adds \$15,000 in fuel, based on historical usage.
- FY 18/19 budget adds \$1,000 in additional drain rock in anticipation of additional construction and repair workload.



*Collection system workers excavate a sewer lateral to make repairs*

#### Percent of Operating Budget



#### Department Operating Budget

	Actual FY 15/16	Actual FY 16/17	Adjusted FY 17/18	Estimated FY 17/18	Budget FY 18/19	Percent Change
Salaries & Benefits	\$ 1,603,747	\$ 2,081,791	\$ 2,444,950	\$ 2,340,800	\$ 2,021,050	(17.3%)
Services & Supplies	\$ 374,369	\$ 337,725	\$ 411,700	\$ 365,854	\$ 439,100	6.7%
Other	-	-	-	-	-	-
<b>TOTAL EXPENDITURES</b>	<b>\$ 1,978,116</b>	<b>\$ 2,419,517</b>	<b>\$ 2,856,650</b>	<b>\$ 2,706,654</b>	<b>\$ 2,460,150</b>	<b>(13.9%)</b>

#### Position Authorizations

Position Series	FY 15/16	FY 16/17	FY 17/18	FY 18/19
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	2	2	2	2
Collection System Worker IT/I/II	8	8	10	10
<b>Totals</b>	<b>13</b>	<b>13</b>	<b>15</b>	<b>15</b>

## 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 developing the Treatment Plant Master Plan (Objective 1D) and development of an Asset Management program (Objective 1B).

The Department will be responsible to evaluate ways to reduce energy and chemistry (Goal Three: Operational Optimization, Objective 3D).

To support "Goal Six: Resource Recovery," this Department will provide technical analysis to evaluate energy self-generation projects (Objective 6D) and toward efforts to improve recycled water quality (Objective 6E).

### Department Goals

**Goal:** Effectively and efficiently operate the treatment plant.

#### Related Department Objectives

- 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.



Overseeing plant operations via SCADA interface

#### Polymer per MG processed – Winter and Summer

	2014	2015	2016	2017	2018	2019
Wnt	33.4	28.8	20.3	10.2	15	15
Smr	50.6	103.5	109.6	39.3	50	50

#### Hypochlorite per MG processed

	2014	2015	2016	2017	2018	2019
Wnt	102.9	124.3	85.4	55.2	60	60
Smr	203.7	211.9	211.3	198.6	200	200

#### Percent of Self-Generated Electricity

	2014	2015	2016	2017	2018	2019
	33%	35%	27%	41%	50%	60%

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

	2014	2015	2016	2017	2018	2019
Wnt	1.7	2.1	1.6	1.5	1.5	1.5
Smr	5.9	6.3	6.0	6.6	6.0	6.0

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

#### Related Department Objectives

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

#### Changes in Service Levels

- FY 18/19 budget adds \$120,000 for an Alternative Chemicals study.
- FY 18/19 budget subtracts \$83,400 for electricity, due to increased solar production and change in PG&E rates.
- FY 18/19 budget includes \$20,000 for repairs to the pond transfer structures.

#### Treatment for BOD and TSS Removal

(Must be higher than 85% - monthly average)

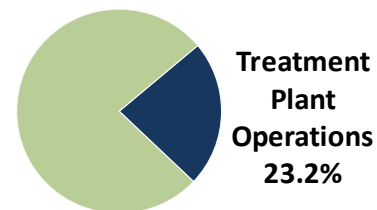
	2014	2015	2016	2017	2018	2019
BOD	97.7%	98.2%	96.7%	97.0%	95%	95%
TSS	96.7%	96.3%	94.6%	95.6%	95%	95%

#### Total Allowable BOD and TSS

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

	2014	2015	2016	2017	2018	2019
BOD	4.9	4.6	5.3	4.8	5.0	5.0
TSS	7.4	9.8	10.0	7.7	10.0	10.0

#### Percent of Operating Budget



#### Department Operating Budget

	Actual FY 15/16	Actual FY 16/17	Adjusted FY 17/18	Estimated FY 17/18	Budget FY 18/19	Percent Change
Salaries & Benefits	\$ 1,211,350	\$ 1,662,278	\$ 1,697,900	\$ 1,667,150	\$ 1,406,400	(17.2%)
Services & Supplies	\$ 2,305,604	\$ 2,301,007	\$ 2,249,650	\$ 2,236,917	\$ 2,305,000	2.5%
Other	\$ 190	\$ 190	\$ 200	-	-	(100.0%)
<b>TOTAL EXPENDITURES</b>	<b>\$ 3,517,143</b>	<b>\$ 3,963,475</b>	<b>\$ 3,947,750</b>	<b>\$ 3,904,067</b>	<b>\$ 3,711,400</b>	<b>(6.0%)</b>

#### Position Authorizations

Position Series	FY 15/16	FY 16/17	FY 17/18	FY 18/19
Director of Operations Services	-	1	1	1
Plant Manager	1	-	-	-
Operations Supervisor	1	1	1	1
Operator OI/I/II/III	7	7	7	7
<b>Totals</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>



## 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 and information to support the master planning efforts (**Objective 1D**) and Asset Management implementation (**Objective 1B**).

### Department Goals

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

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.
- Implement Infrared Imaging PM program for all electrical switchgear and motor control centers

#### 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.)*

<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
65.8%	45.2%	40.5%	61.3%	68%	68%

#### Number of work orders completed

<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
1,351	1,314	1,482	1,334	1,400	1,400

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

Related Department Objectives:

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

#### 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.)*

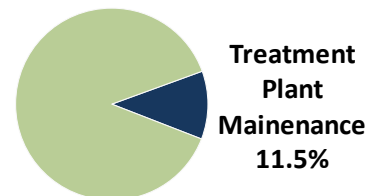
<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
96%	98%	79%	81%	95%	95%

***Changes in Service Levels***

- FY 18/19 removes \$28,500 for weed abatement requiring special equipment and contracted services in prior year.
- FY 18/19 adds \$25,000 to repair the access gate to the recycled water pump station.
- FY 18/19 budget removes the rental of siloxane filter unit, as one was purchased in prior year.
- Various categories were increased and decreased from prior year, based on specific work plan in this department.



*Maintenance technicians installing a valve to the “3-Water” filter.*

**Percent of Operating Budget****Department Operating Budget**

	Actual FY 15/16	Actual FY 16/17	Adjusted FY 17/18	Estimated FY 17/18	Budget FY 18/19	Percent Change
Salaries & Benefits	\$ 709,444	\$ 994,246	\$ 1,053,600	\$ 1,074,800	\$ 922,750	(12.4%)
Services & Supplies	\$ 677,391	\$ 698,316	\$ 926,050	\$ 823,818	\$ 909,800	(1.8%)
Other	-	-	-	-	-	-
<b>TOTAL EXPENDITURES</b>	<b>\$ 1,386,835</b>	<b>\$ 1,692,562</b>	<b>\$ 1,979,650</b>	<b>\$ 1,898,618</b>	<b>\$ 1,832,550</b>	<b>(7.4%)</b>

**Position Authorizations**

Position Series	FY 15/16	FY 16/17	FY 17/18	FY 18/19
Plant Maintenance Supervisor	1	1	1	1
Equipment Maintenance Specialist I/II	4	4	4	4
Plant Attendant	1	1	1	1
<b>Totals</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>

## 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, NapaSan generates recycled water to “Title 22 Unrestricted Use” quality, which is permitted under State of California Regulations for almost any use except potable (drinking) water. NapaSan 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 off-site hauling and disposal of biosolids, with significant savings to the ratepayers.

### Link to District Goals in Strategic Plan

The Water & Biosolids Reclamation Department supports NapaSan’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 recycled water allocation policy (**Objective 6C**).

### Department Goals

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

#### Related Department Objectives

- Maintain recycled water availability at 100% during the non-discharge period.
- Distribute 814 million gallons (2,500 acre feet) recycled water, with 85% sold to customers.
- Complete annual recycled water user site inspections, issuing no Notices of Non-compliance.
- Complete conversion of properties to recycled water in Napa Airport Centre.
- Facilitate additional conversion activities of MST and Los Carneros Water District customers.

#### Recycled Water Service Availability

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

<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
100%	100%	100%	100%	100%	100%

#### Recycled Water Reuse by Customers

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

<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
75.2%	78.3%	80.6%	83.1%	85%	85%

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

#### Related Department Objectives

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

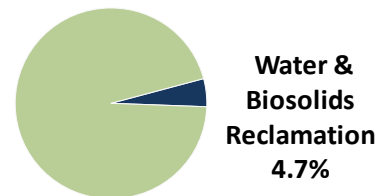
#### Biosolids Put to Beneficial Reuse

(% of biosolids applied to seeded & harvested acres)

<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
100%	100%	100%	100%	100%	100%

***Changes in Service Levels***

- FY 18/19 budget includes \$13,500 in new software maintenance contracts for water management software and recycled water meter reading software.

*Sheep Grazing at Somky Ranch**Irrigating Jameson Ranch with recycled water***Percent of Operating Budget****Department Operating Budget**

	Actual FY 15/16	Actual FY 16/17	Adjusted FY 17/18	Estimated FY 17/18	Budget FY 18/19	Percent Change
Salaries & Benefits	\$ 343,304	\$ 478,906	\$ 485,250	\$ 494,700	\$ 455,350	(6.2%)
Services & Supplies	\$ 182,723	\$ 234,298	\$ 267,050	\$ 230,689	\$ 272,750	2.1%
Other	\$ 24,781	\$ 26,331	\$ 28,400	\$ 28,714	\$ 29,150	2.6%
<b>TOTAL EXPENDITURES</b>	<b>\$ 550,808</b>	<b>\$ 739,534</b>	<b>\$ 780,700</b>	<b>\$ 754,103</b>	<b>\$ 757,250</b>	<b>(3.0%)</b>

**Position Authorizations**

Position Series	FY 15/16	FY 16/17	FY 17/18	FY 18/19
Reclamation Systems Director	1	1	1	1
Reclamation Maintenance Worker I/II	2	2	2	2
<b>Totals</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>

## Engineering

### Description

Engineering provides technical assistance to the operational departments within NapaSan. The group is responsible for managing most of NapaSan's capital projects and prepares project charters for projects that are included in the 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 NapaSan's "Goal One: Infrastructure Reliability" and "Goal Six: Resource Recovery" by providing project management and leadership on all of the infrastructure projects identified:

- Collection System Master Plan and Treatment Plant Master Plan updates (**Objective 1D**)
- Replace 2% of sewers annually (**Objective 1A**)
- Develop and Asset Management Plan (**Objective 1B**)
- Design and construct Browns Valley Road Trunk (**Objective 1C**)
- Study whether to implement a Private Lateral Program (**Objective 1E**)
- Working with local partners to expand the distribution of recycled water (**Objective 6A**)
- Work with local partners to achieve long-term recycled water goals (**Objective 6B**), evaluate the current recycled water allocation policy (**Objective 6C**) and renew the recycled water agreement with the City of Napa (**Objective 6F**)
- Evaluate energy self-generation to reduce overall energy costs (**Objective 6D**)

### Department Goals

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

#### 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 Trunk and West Napa Pump Station projects.
- Complete construction of the Recycled Water Fill Station in the MST area.

#### Percent of Annual Capital Plan Expended

<u>13/14</u>	<u>14/15</u>	<u>15/16</u>	<u>16/17</u>	<u>17/18</u>	<u>18/19</u>
62.8%	83.2%	72.1%	52.7%	85%	85%

#### Capital Expenses as Percent of Operating Expenses

<u>13/14</u>	<u>14/15</u>	<u>15/16</u>	<u>16/17</u>	<u>17/18</u>	<u>18/19</u>
168%	322%	239%	78%	115%	125%

**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.

#### Related Department Objectives

- Continue implementation of a formal asset management plan.
- Rehabilitate or replace at least 1.3% of the Collection System mains.
- Plan for and complete renewal & replacement capital projects that impact approximately 4% of NapaSan's total assets annually.

#### Percent of Sewer Mains Rehabilitated

<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
1.82%	2.60%	1.01%	2.18%	2.0%	2.0%

#### Renewal & Replacement of Assets

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

<u>13/14</u>	<u>14/15</u>	<u>15/16</u>	<u>16/17</u>	<u>17/18</u>	<u>18/19</u>
8.8%	10.2%	4.5%	3.8%	4%	4%



## FY 2018/19 Budget

- Complete the Summer 2018 I&I Sewer Rehabilitation project and complete in-house design of the Summer 2019 I&I project to reduce peak wet-weather flow.
- Construct the 2018 Treatment Plant project.

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

### Related Department Objectives

- Review and return development plans within 30 days of submittal NapaSan.
- 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 NapaSan collection system facilities, include locating sewers, permit processing, preconstruction meetings, inspections, and updating record drawings.

### Development Review Response Time

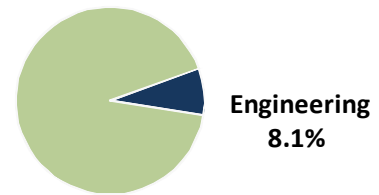
(% of applications where 30-day goal is met)

2014	2015	2016	2017	2018	2019
997.5%	94.4%	93.6%	98.3%	95%	95%

### Changes in Service Levels

- FY 18/19 budget subtracts \$195,150 in consulting support for implementation of asset management Phase 1 project in prior year.
- FY18/19 budget removes a one-time \$19,900 training expense from the prior year.
- FY 18/19 budget removes \$5,000 for GIS aerial photo update, a one-time project in the prior year.
- FY 18/19 budget includes \$5,000 for consulting support for Collection System flow modeling

### Percent of Operating Budget



### Department Operating Budget

	Actual FY 15/16	Actual FY 16/17	Adjusted FY 17/18	Estimated FY 17/18	Budget FY 18/19	Percent Change
Salaries & Benefits	\$ 799,630	\$ 1,210,787	\$ 1,272,700	\$ 1,271,721	\$ 1,186,400	(6.8%)
Services & Supplies	\$ 60,787	\$ 202,366	\$ 321,100	\$ 135,565	\$ 110,650	(65.5%)
Other	-	-	-	-	-	-
<b>TOTAL EXPENDITURES</b>	<b>\$ 860,417</b>	<b>\$ 1,413,153</b>	<b>\$ 1,593,800</b>	<b>\$ 1,407,286</b>	<b>\$ 1,297,050</b>	<b>(18.6%)</b>

### Position Authorizations

Position Series	FY 15/16	FY 16/17	FY 17/18	FY 18/19
Technical Services Director	1	1	1	1
Senior Civil Engineer	1	1	1	1
Junior/Assistant/Associate Engineer	2	2	2	2
Asset Management Analyst I	1	1	1	1
District Inspector I/II	2	2	2	2
<b>Totals</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>

## Regulatory Compliance

### Description

The Regulatory Compliance Department provides support to Technical Services Department with consistently high quality analytical laboratory and Source Control services.

Laboratory analyses fall into one of four categories:

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

### Link to District Goals in Strategic Plan

The Regulatory Compliance Department supports NapaSan's goals in the Strategic Plan through its support of the Plant Operations, Plant Maintenance, and Engineering Departments, and the Community Outreach & 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.

#### Related Department Objectives

- Implement new Environmental Laboratory Accreditation Program (ELAP) certification requirements.
- Continue to implement a successful and effective Pretreatment Program
- Continue development and implementation of a Method Detection Limit program.
- Continue to characterize NapaSan's collection system raw waste stream.
- 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.

#### Number of regulatory analyses processed

<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
45,030	4,670	2,699	2276	2300	2400

#### Number of Process Control analyses processed

<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
15,259	12,827	12,138	13,410	13,000	12,700

#### Number of special request analyses processed

<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
196	1,885	829	55	100	100

#### Number of Quality Control/Assurance analyses processed

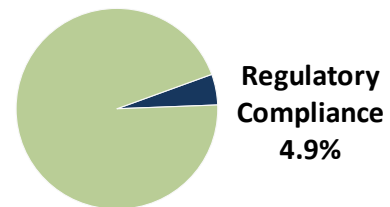
<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
5,380	2,434	2,457	8,124	9,000	9,000

***Changes in Service Levels***

- FY 18/19 budget removes \$8,000 for temporary assistance in the lab.
- FY 18/19 budget adds \$5,000 in hazardous waste disposal services (moved from Plant Maintenance).
- FY 18/19 budget adds \$2,000 of the one-time purchase of portable colorimeter, and subtracts \$8,000 for the one-time purchases of a turbidity meter and temperature data logger in prior year.



*NapaSan Lab Technicians run thousands of regulatory and process control analyses annually*

**Percent of Operating Budget****Department Operating Budget**

	Actual FY 15/16	Actual FY 16/17	Adjusted FY 17/18	Estimated FY 17/18	Budget FY 18/19	Percent Change
Salaries & Benefits	\$ 527,956	\$ 640,065	\$ 736,500	\$ 574,000	\$ 619,900	(15.8%)
Services & Supplies	\$ 178,400	\$ 227,761	\$ 181,050	\$ 139,749	\$ 170,100	(6.0%)
Other	-	-	-	-	-	-
<b>TOTAL EXPENDITURES</b>	<b>\$ 706,356</b>	<b>\$ 867,826</b>	<b>\$ 917,550</b>	<b>\$ 713,749</b>	<b>\$ 790,000</b>	<b>(13.9%)</b>

**Position Authorizations**

Position Series	FY 15/16	FY 16/17	FY 17/18	FY 18/19
Regulatory Compliance Manager	-	1	1	1
Lab Supervisor	1	-	-	-
Lab Technician I/II	3	3	3	3
<b>Totals</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>

## Community Outreach & Pollution Prevention

### Description

The Community Outreach & Pollution Prevention Program is a cross-departmental program designed to ensure that NapaSan communicates transparently with ratepayers and stakeholders, and acts proactively to disseminate its pollution prevention message. This is done through school programs, community events and treatment plant tours.

The program also works to ensure that discharges to the collection system and treatment plant are in compliance with NapaSan's Sewer Use Ordinance and will not pose a hazard to the public, NapaSan employees or NapaSan facilities and treatment processes.

NapaSan'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.

### Link to District Goals in Strategic Plan

This program supports the Strategic Plan, specifically “**Goal Three: Operational Optimization**” in the outreach to develop alternative methods for treating winery waste (**Objective 3A**) and “**Goal Five: Community Outreach and Communication**” in the development of proactive communication methods and practices (**Objective 5A**) and the completion of Communications Plan goals and objectives (**Objective 5B**). The program also contributes toward **Goal Six: Resource Recovery, Objective 6E** to improve recycled water quality through its efforts in pollution prevention.

### 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).

#### 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.

#### Restaurant Inspections (Fats, Oil & Grease)

2014	2015	2016	2017	2018	2019
162	155	154	167	165	165

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

2014	2015	2016	2017	2018	2019
3	1	0	1	0	0

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

2014	2015	2016	2017	2018	2019
2	1	1	1	0	0

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

#### Related Department Objectives

- Implement the Communications Plan and meet the identified annual goals
- Partner with local partners for collection of unwanted medications from drop-off sites.
- Conduct plant tours and make public presentations.

#### Plant Tours Conducted and Presentations Made

2014	2015	2016	2017	2018	2019
31	14	44	51	50	50

#### Pounds of Unwanted Pharmaceuticals Diverted

2014	2015	2016	2017	2018	2019
2,910	3,126	3,838	1,388	1,500	1,500

- Develop and disseminate to stakeholders pollution prevention BMPs as necessary.
- Promote classroom presentations targeting elementary school students.
- Continue Spanish language outreach for pollution prevention messages.
- Continue monitoring, sampling, reporting, and billing for all categorical dischargers.

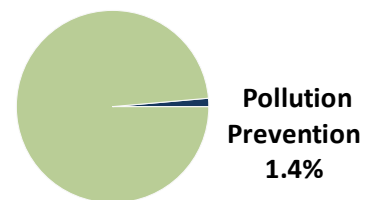


*School tour of the Treatment Plant Headworks*

### *Changes in Service Levels*

- FY 18/19 budget removes one-time website development expenses from prior year.
- FY 18/19 budget removes one-time marketing development support for implementing messaging on NapaSan vehicles, but adds marketing support for additional outreach related to the upcoming 75<sup>th</sup> Anniversary of the district.
- FY 18/19 budget removes support for the Residential High-Efficiency clothes water rebate program, as this grant-based program has concluded with PG&E.

### Percent of Operating Budget



### Department Operating Budget

	Actual FY 15/16	Actual FY 16/17	Adjusted FY 17/18	Estimated FY 17/18	Budget FY 18/19	Percent Change
Salaries & Benefits	\$ 84,433	\$ 144,385	\$ 132,500	\$ 135,550	\$ 124,550	(6.0%)
Services & Supplies	\$ 111,666	\$ 76,992	\$ 116,850	\$ 91,725	\$ 101,250	(13.4%)
Other	-	-	-	-	-	-
<b>TOTAL EXPENDITURES</b>	<b>\$ 196,099</b>	<b>\$ 221,378</b>	<b>\$ 249,350</b>	<b>\$ 227,275</b>	<b>\$ 225,800</b>	<b>(9.4%)</b>

### Position Authorizations

Position Series	FY 15/16	FY 16/17	FY 17/18	FY 18/19
Pollution Prevention and Outreach Specialist	1	1	1	1
<b>Totals</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>



## 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 NapaSan memberships in organizations and associations, liability insurance, refunds of sewer service charges, debt service payments, and interfund transfers.

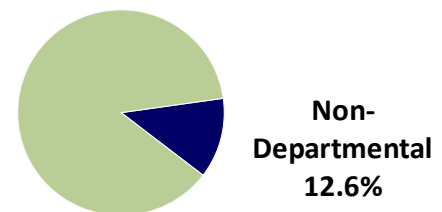
### Changes in Service Levels

- Expenses for health benefits for current retirees (OPEBs) are now recorded in this department, rather than allocated to the departmental operating budgets (\$383,500). This change allows for a more transparent reporting of OPEB expenses.
- Expenses for CalPERS Unfunded Actuarial Liability (UAL) is now recorded in this department, rather than being allocated to the departmental operating budgets (\$1,211,350). This change allows for a more transparent reporting of the UAL expenses.
- The FY 18/19 includes an additional \$135,000 payment towards UAL expenses in excess of the minimum CalPERS contribution.
- There is an increase in the FY 18/19 budget of \$16,500 for liability insurance premiums.
- The FY 18/19 budget includes membership in the National Association of Clean Water Agencies (\$7,100).



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

### Percent of Operating Budget



### Non-Departmental Operating Budget

	Actual FY 15/16	Actual FY 16/17	Adjusted FY 17/18	Estimated FY 17/18	Budget FY 18/19	Percent Change
Salaries & Benefits	-	-	-	-	\$ 1,729,850	-
Services & Supplies	\$ 239,951	\$ 249,053	\$ 268,300	\$ 264,888	\$ 291,900	8.8%
<b>Total Operating Expenditures</b>	<b>\$ 239,951</b>	<b>\$ 249,053</b>	<b>\$ 268,300</b>	<b>\$ 264,888</b>	<b>\$ 2,021,750</b>	<b>653.5%</b>
Debt Service, Transfers and Taxes	\$ 12,447,473	\$ 6,995,891	\$ 13,677,450	\$ 13,673,500	\$ 13,493,800	(1.3%)
<b>TOTAL EXPENDITURES</b>	<b>\$ 12,687,424</b>	<b>\$ 7,244,944</b>	<b>\$ 13,945,750</b>	<b>\$ 13,938,388</b>	<b>\$ 15,515,550</b>	<b>11.3%</b>