



Napa Sanitation District

General Manager's Report

for

September, 2019

Contents:

- a. Transmittal Memo
- b. Budget Status and Cash Summary
- c. Key Information Graphs – Fund Balances, Treatment Plant and Collection
- d. Fund Balances
- e. Development Processing
- f. Construction Inspection
- g. Pollution Prevention
- h. Recycled Water Deliveries
- i. Biosolids Handling
- j. Collection System Maintenance
- k. Treatment Plant Operations
- l. Treatment Plant Maintenance & Laboratory
- m. Capital Project Expenditure Summary



NAPA SANITATION DISTRICT

General Manager's Report

DATE: November 6, 2019

FROM: Timothy B. Healy, General Manager

SUBJECT: General Manager's Report for September 2019

REGULATORY COMPLIANCE:

Collection System Compliance:	0 Category 1 SSO's, 0 Category 2 SSO's, and 2 Category 3 SSO's
NPDES Permit (WWTP) Compliance:	Full compliance with all regulations
Air Quality Compliance:	Full compliance with all regulations
Recycled Water Compliance:	Full compliance with all regulations
Biosolids Compliance:	Full compliance with all regulations
Significant Comments:	None

FISCAL STATUS:

Period Covered:	July 1, 2019 – September 30, 2019
Percent Fiscal Year:	25.0%
Operating Expenditures to date:	28.0%
Historical Expenditures to date:	33.2%
Significant Comments:	None.

PERSONNEL:

Significant events for the month of September 2019 in the Human Resources Department:

New Hires:	None
Separations:	None
Promotions:	None
Recruitment Activities:	Opened recruitment for Collection System Worker position
Injuries:	None

Summaries of Operational Highlights are on following pages.

COLLECTIONS:

Significant events for the month of September 2019 in Collection System Maintenance include:

- The District had 0 Category 1 Sanitary Sewer Overflows (SSO's), 0 Category 2 SSO's and 2 Category 3 SSO's during the month. (A Category 1 is defined as an SSO that reached a drainage channel and/or surface water or; an SSO that reached a storm drainpipe that was not fully recovered and returned to the sanitary sewer system. A Category 2 is defined as an SSO that is equal to or greater than 1,000 gallons that did not reach a surface water. A Category 3 is defined as an SSO that is less than 1,000 gallons that did not reach a surface water. These are usually minor overflows of less than 10 gallons from cleanouts on District laterals that can be cleaned up by the crews.)
- The repair crew installed 6 cleanouts and repaired 2. They also repaired 2 laterals and lined 13 laterals. Additionally, the service response/programs crew completed 131 work orders in support of the grease and odor control program, responded to 42 customer requests for service (9 were NSD problem) and closed out 352 mark and locate request tickets.
- The preventative maintenance crews ran work orders on 110 laterals, cleaned approximately 82,028 feet of main line and CCTV inspected 23 laterals. In addition, the CCTV truck televised 22,837 feet of mainline.

TREATMENT PLANT:

Significant events for the month of September 2019 in the Treatment Plant Department:

Plant Operations:

- For September 2019, the plant's influent flow was 182.1 MG as compared to last year flow for September 2018 of 176.1 MG
- No river discharge occurred during September.
- There was 0.05" rainfall for September 2019 (Carneros Rainfall Center) as compared to 0.0" rainfall for September 2018.
- Pond 4 end of the month recorded level reading was 28.51".
- Pond 2 to pond 3 transfer structure project was complete. Began filling pond 3 near the end of September.

Power Consumption and Production:

- September power purchased from PG&E was 431 MWH in comparison to August 2019 purchase of 429 MWH.
- Cogeneration unit ran 711 of 720 hours for the month – 98.75% uptime, averaging 336.77Kw, producing 2239 MWH of energy.
- Solar generation in September was 171 MWH, compared to 200 MWH in August.

Maintenance:

Significant events for the month of September 2019:

Process Maintenance

- Cogeneration unit monthly emission test - in compliance with BAAQMD permit
- Cogen Service:
 - Changed oil & sock filters
 - Replaced pre-air filter and main air filter
- Change Siloxane Filters Media
- Belt Press #2 sludge feed pump, replaced rotor and stator
- Belt Press #2, replaced pressure belt
- Belt Press Polymer feed pump 102, replaced solenoid
- Replaced Ethernet Gateway for Neuros Blowers
- IPS Bar screen #2:
 - Replaced Motor, Gearbox, Suspension Arm, Back plate, Scraper Arms and Rollers
- Replaced HVAC Duct Boot on DAFT exhaust fan 101

Projects

- Purchased and installed Three Water Filter (CIP 18711)
- Pulled and rebuilt all three pumps at Stonecrest Pump Station (CIP 19705)
- Assisted with building bridge at Fugundes Ranch

Standby Power

- Plant generators operational testing only
- Riverpark, Stonecrest, West Napa operational testing only

Influent Pumps

- All pumps operational

Laboratory:

Effluent (EFF-001) Summary

- There was no EFF-001 discharge during the month.

Influent (INF-001) Summary

- Monthly Influent monitoring of all parameters occurred at the required frequencies. The following were notable sampling events:
- September 03, 2019: Metals, Mercury, Cyanide

RECYCLING:

Significant events in the Recycling Department for September 2019 include:

- Recycled water delivered for the month of September 2019 was (122.314 million gallons), as compared to September 2018 (109.266 million gallons) is higher from the previous year due to golf course, vineyard and trucked water demand. Delivered recycled water volume represents the sum of all use site flow meter consumption values.
- Staff approved the connection of one new recycled water customers in the MST area.
- Staff completed rehabilitation of the Fagan Creek Bridge with the assistance of Maintenance, Operations and Collections personnel.
- Staff continued the land application of biosolids at the Fegundes site.

POLLUTION PREVENTION:

Significant events in the Pollution Prevention and Outreach Division September 2019 include:

- There were no tours or presentations this month.
- The total amount of unneeded medications collected since the drug takeback program began in September 2010 is 21,997.2 pounds.
- There were no ESME Washer Rebates issued this month.
- Staff began outreach regarding the October smoke testing in Northwest Napa.
- Staff continued Citizens Academy planning and notified participants of acceptance.
- Staff aided in planning for multiple community events including the DEA Drug Takeback event scheduled for October 26th and the EECNC film event on November 1st.

ENGINEERING / CAPITAL PROJECTS / DEVELOPMENT:

Significant events occurring in the Engineering Division for September 2019 include:

- Consultant continued work on the SCADA Master Plan.
- Consultants and staff continued work on the CMMS implementation.
- Consultant continued work on the Pond 1 Dredge Project design.
- Contractor continued construction of the Headworks Equipment Replacement Project.
- Contractor continued construction of the Southeast Napa Sewer and Roadway Rehabilitation Project.
- Staff continued design of the 2020 Collection System Rehabilitation Project.
- Consultant continued design of the 66-inch Trunk Sewer Rehabilitation Project.
- Staff received and opened bids for the 2019 Manhole Rehabilitation Project.
- Staff received and opened bids for the Sanitary Sewer Manhole Adjustment Project, Phase IX.

- Contractor began construction of the Upper Lateral Rehabilitation Pilot Project #4.
- Consultant continued design of the Primary Clarifier Rehabilitation Project.
- Consultant continued work on the SWRF Buried Metallic Piping Condition Assessment Project.
- Consultant continued design of the West Napa Pump Station Project.
- Contractor continued construction of the 2019 Treatment Plant Improvements Project.
- Contractor completed construction of the Pond Transfer Structures Project.
- Consultant continued working on the Collection System Master Plan.
- Contractor completed construction of the MST Truck Fill Station Project.
- Staff reviewed 26 sets of development plans and deemed 11 sets of plans complete. The approved plans consisted of 4 tenant improvements, 5 residential dwellings, 1 residential lateral, and 1 residential demolition.

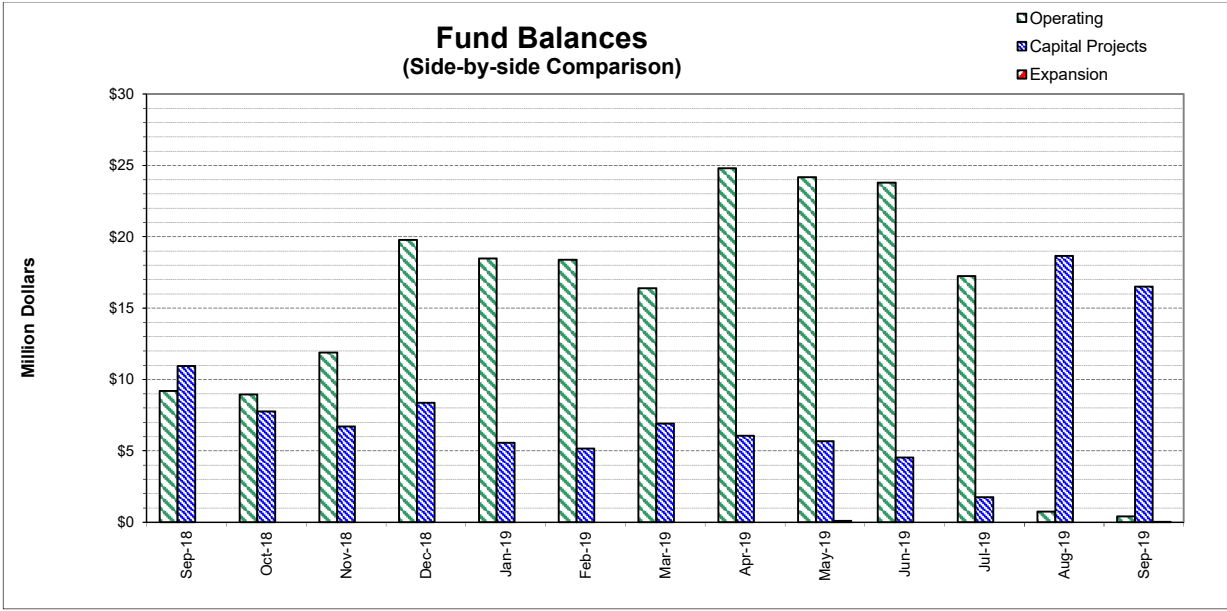
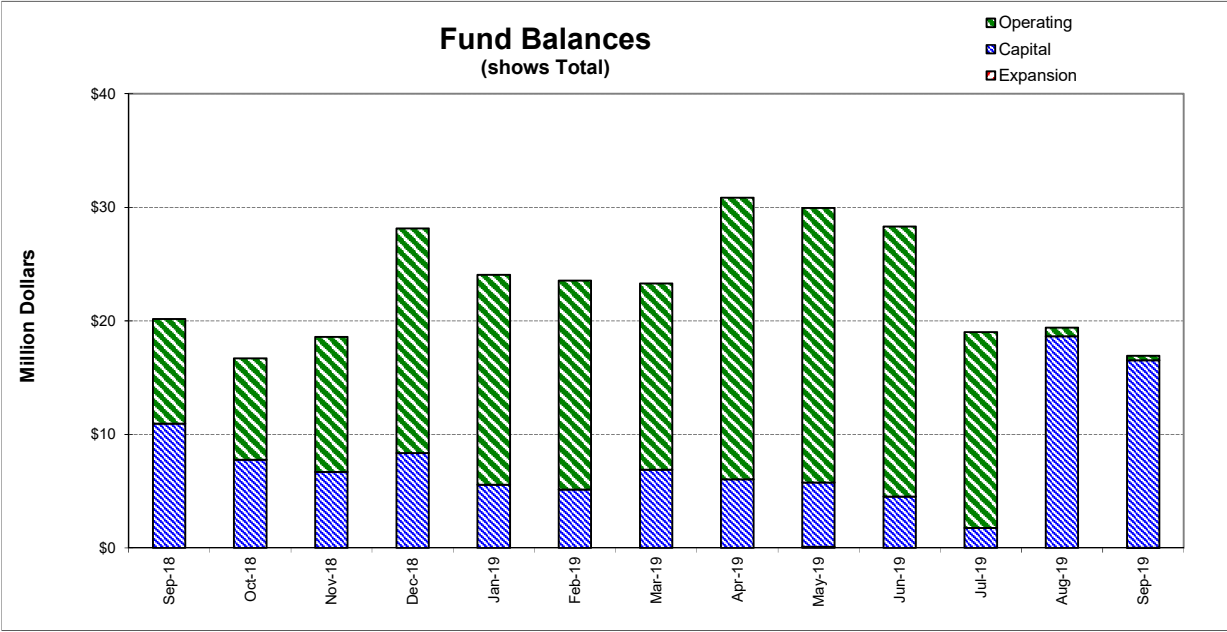
Budget Status & Cash Summary - July 1, 2019 - September 30, 2019 (25.0% of the year)

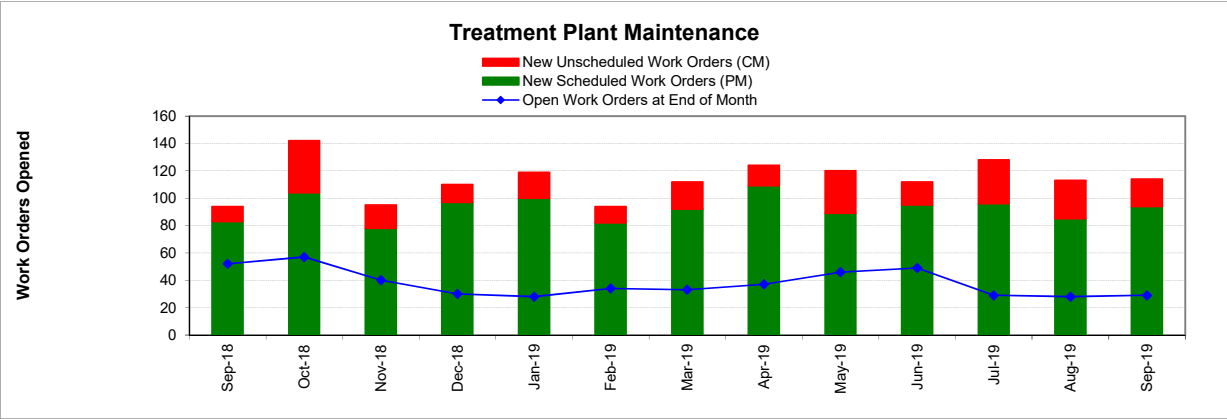
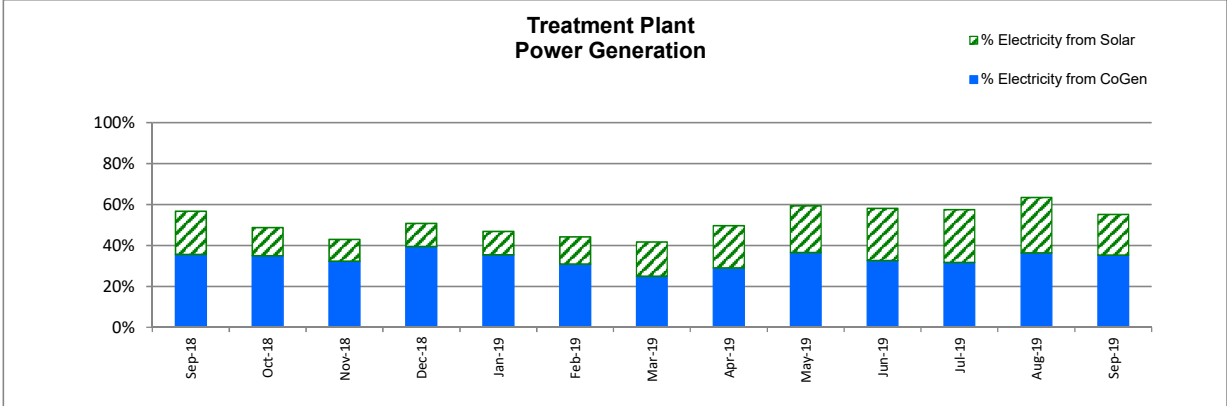
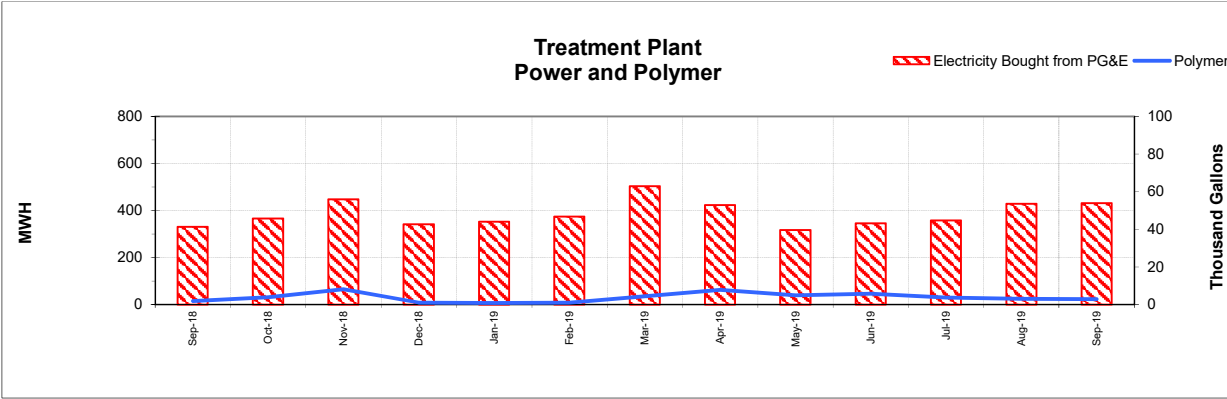
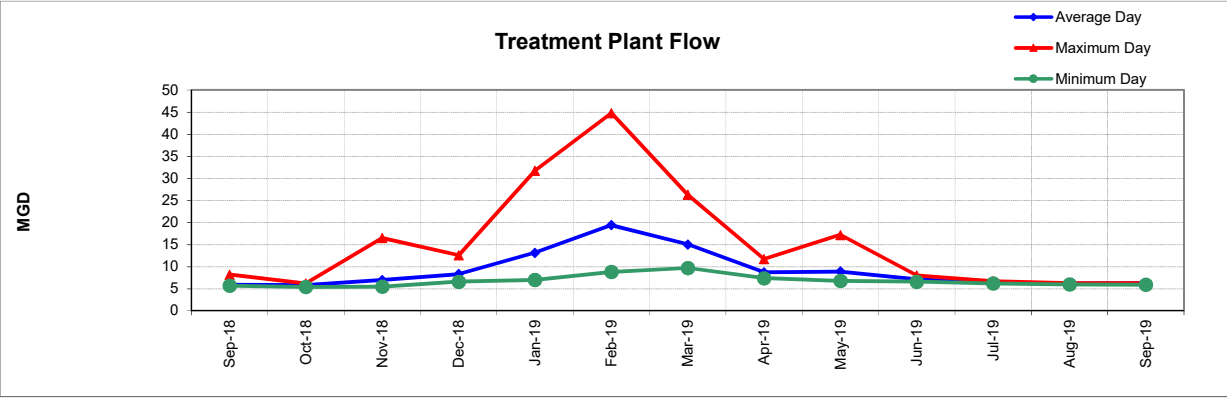
<i>Expenditures</i>	FY 19/20 Budget	Encumbrances	Expenditures to date	Committed to date	Remaining Balance	Percent Committed
Operating						
Salaries & Benefits	\$10,258,600	\$4,882	\$2,073,127	\$2,078,008	\$8,180,592	20.3%
Services & Supplies	6,281,650	1,466,932	1,194,327	2,661,258	3,620,392	42.4%
Taxes	41,800	-	-	-	41,800	0.0%
Debt Service	4,593,900	-	3,673,488	3,673,488	920,413 (1)	80.0%
Intrafund Transfers	8,900,000	-	-	-	8,900,000	0.0%
Total Operating:	\$30,075,950	\$1,471,813	\$6,940,941	\$8,412,754	\$21,663,196 (2)	28.0%
Capital						
Bldgs/Improvements & Equip	\$39,047,000	\$6,044,374	\$2,109,053	\$8,153,428	\$30,893,572 (3)	20.9%
Intrafund Transfers	5,178,000	-	1,725,896	1,725,896	3,452,104	33.3%
Total Capital :	\$44,225,000	\$6,044,374	\$3,834,949	\$9,879,323	\$34,345,677	22.3%
Grand Total Expenditures:	\$74,300,950	\$7,516,188	\$10,775,890	\$18,292,077	\$56,008,873	24.6%
<i>Revenues</i>	FY 19/20 Budget	Encumbrances	Revenues to date	Revenues posted to date	Unposted Revenue	Percent Posted
Operating						
Use of Money/Property	\$578,000		\$496,718	\$496,718	\$81,282	85.9%
Charges for Services	31,213,500		1,844,583	1,844,583	29,368,917	5.9%
Miscellaneous Revenues	60,000		9,790	9,790	50,210	16.3%
Donations/Contributions (Capital Labor)	-		207,254	207,254	(207,254) (4)	N/A
Total Operating:	\$31,851,500		\$2,558,345	\$2,558,345	\$29,293,155	8.0%
Capital						
Use of Money/Property	\$0		\$1,741	\$1,741	(\$1,741)	N/A
Capacity Charges	5,178,000		1,374,977	1,374,977	3,803,023	26.6%
Bond/Loan Proceeds	15,416,600		-	-	15,416,600	0.0%
Sale of Assets	25,000		1,104	1,104	23,896	4.4%
Miscellaneous Revenues	5,000		-	-	5,000	0.0%
Intrafund Transfers	14,078,000		1,725,896	1,725,896	12,352,104	12.3%
Total Capital:	\$34,702,600		\$3,328,569	\$3,328,569	\$31,374,031	9.6%
Grand Total Revenue:	\$66,554,100		\$5,886,914	\$5,886,914	\$60,667,186	8.8%

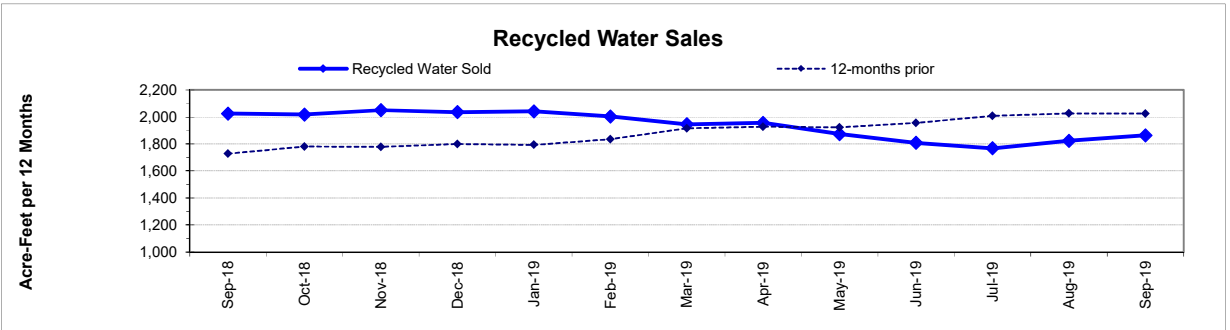
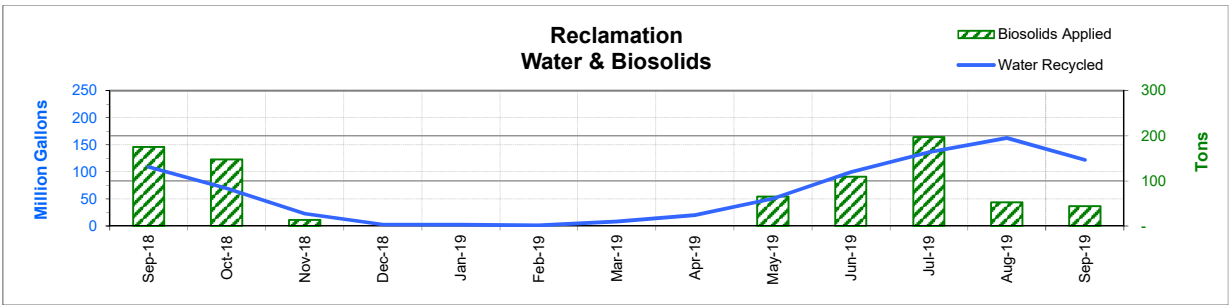
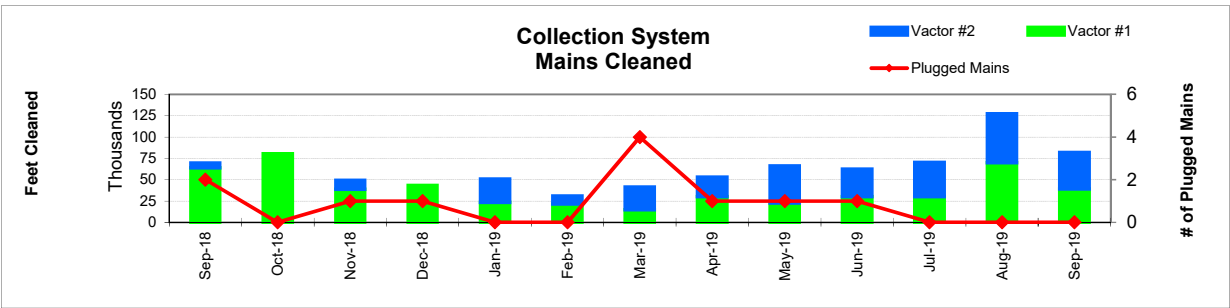
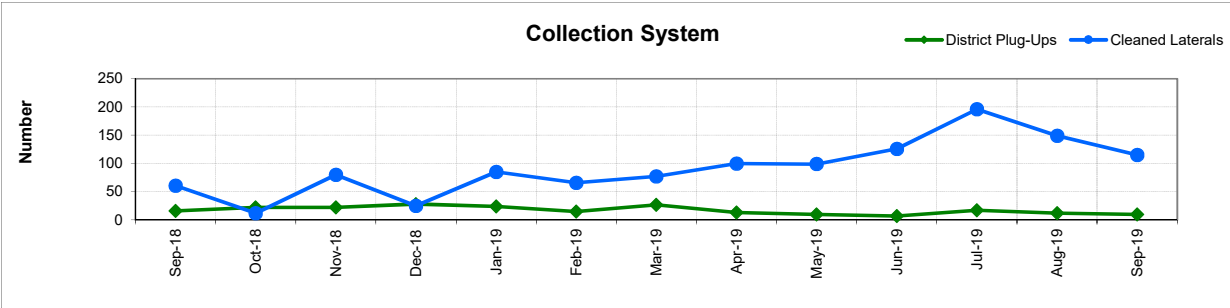
Cash on Hand as of 9/30/19 **\$16,932,577**

**excluding Debt Service restricted funds
9/30/19 -Effective Rate of Return = 2.30%

1. Series 2012A's and 2017's principal/interest payments are made in Jul & Feb
2. Includes Debt Service and Intrafund Transfers; otherwise is 28.6%
3. See Capital Project Status report for details
4. In-house Labor for Capital Projects (Contra acct for Salaries)







FUND BALANCES - MONTHLY

CATEGORY	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
<i>(Thousand Dollars)</i>													
7800	9,204	8,951	11,888	19,772	18,473	18,394	16,405	24,793	24,164	23,784	17,246	748	415
7850	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal Operating	9,204	8,951	11,888	19,772	18,473	18,394	16,405	24,793	24,164	23,784	17,246	748	415
Capital Improvement Projects	10,956	7,755	6,698	8,363	5,567	5,153	6,899	6,058	5,671	4,525	1,764	18,655	16,516
Debt Proceeds	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal Capital	10,956	7,755	6,698	8,363	5,567	5,153	6,899	6,058	5,671	4,525	1,764	18,655	16,516
Total Discretionary Funds	20,160	16,706	18,586	28,135	24,040	23,547	23,304	30,851	29,835	28,309	19,010	19,403	16,931
Expansion Fund (Restricted)	-	-	-	-	-	-	-	-	93	-	-	-	2
Total Restricted Funds	-	-	-	-	-	-	-	-	93	-	-	-	2
TOTAL ALL FUNDS	20,160	16,706	18,586	28,135	24,040	23,547	23,304	30,851	29,928	28,309	19,010	19,403	16,933

DEVELOPMENT WORKLOAD - MONTHLY

CATEGORY	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
<u>Phone Requests</u>													
Maps/Drawings	2	3	1	2	6	2	4	0	17	8	1	0	4
Lateral Permits	-	-	-	-	-	-	-	-	-	-	-	-	0
Policy Questions	4	6	3	6	8	7	5	5	10	6	8	1	4
Development Questions	28	70	41	44	40	35	48	53	79	64	43	29	38
Miscellaneous	26	20	18	25	27	18	25	29	29	18	25	16	18
TOTAL	60	99	63	77	81	62	82	87	135	96	77	46	64
<u>Counter Requests</u>													
Maps/Drawings	-	1	-	1	-	-	-	1	0	0	1	0	0
Lateral Permits	3	9	5	10	12	8	11	7	11	7	8	12	13
Policy Questions	-	2	-	1	-	-	3	4	0	0	0	0	0
Development Questions	5	6	6	5	10	9	13	10	7	10	3	4	13
Miscellaneous	2	0	-	1	1	-	-	0	2	0	0	1	0
TOTAL	10	18	11	18	23	17	27	22	20	17	12	17	26
<u>Initial Request (Referrals)</u>	16	21	20	15	18	14	16	24	20	9	14	16	13
<u>Connection Permits Issued</u>													
Residential Permits	9	1	1	2	-	4	5	2	6	3	2	14	2
Commercial Permits	1	-	2	-	1	-	1	2	3	1	6	1	2
Industrial Permits	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMITS	10	1	3	2	1	4	6	4	9	4	8	15	4
Residential Units	18	1	1	2	-	4	36	2	6	3	6	14	2
Commercial Units	1	-	2	-	1	-	1	2	3	1	2	1	2
TOTAL UNITS	19	1	3	2	1	4	37	4	9	4	8	15	4
<u>Annexations</u>													
Submitted	1	-	1	-	1	-	-	-	1	-	1	-	-
Acreage	5.79	-	158.20	-	4.90	-	-	-	0.50	-	16.04	-	-
<u>Plans Reviewed</u>													
<u>Subdivisions/Sites</u>													
First Submittal	9	10	10	9	2	5	6	5	14	8	7	8	8
Second Submittal	4	5	2	5	7	5	6	3	8	6	5	5	2
Third Submittal	4	2	1	1	1	5	3	4	10	5	5	1	3
<u>Building/Tenant Improvements</u>													
First Submittal	8	11	8	11	5	8	7	15	3	9	12	6	6
Second Submittal	1	5	6	-	4	2	5	2	3	4	4	1	4
Third Submittal	3	1	3	1	1	2	3	7	-	7	6	4	3
<u>Miscellaneous Plan Reviews</u>	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PLANS REVIEWED	29	34	30	27	20	27	30	36	38	39	39	25	26

INSPECTION WORKLOAD - MONTHLY

CATEGORY	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
<u>CONSTRUCTION</u>													
Locating Sewers	-	-	1	2	4	-	-	-	-	-	-	-	-
Permit Processing	-	-	-	-	-	-	-	-	-	-	-	-	-
Preconstruction Meetings	3	-	1	3	-	-	3	5	7	2	5	11	4
Inspections - Mains	11	1	-	1	-	1	1	-	-	1	5	1	11
Inspections - Manholes	76	76	21	30	49	75	19	18	6	7	13	12	77
Inspections - Laterals	3	8	3	28	18	23	31	21	8	27	40	15	5
Inspections - Cleanouts	2	6	8	37	31	39	39	46	43	24	59	43	7
Inspections - Review Video	2	-	1	2	-	2	2	1	1	1	-	-	2
Demo - Septic Tanks	-	-	-	-	-	-	-	-	-	-	-	-	-
Demo - Buildings	-	-	-	-	-	2	-	-	-	-	-	-	-
Update Record Drawings	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	97	91	35	103	102	142	95	91	65	62	122	82	106
<u>MISCELLANEOUS</u>													
Meter Readings	-	-	1	10	26	4	-	4	14	-	-	-	-
Washdown Facility Inspections	-	-	-	-	-	-	-	-	-	-	-	-	-
General Customer Assistance	31	50	25	30	34	41	13	20	16	-	-	32	31
City of Napa Water Discharge	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	31	50	26	40	60	45	13	24	30	-	-	32	31
<u>SPECIAL PROJECTS</u>													
	35	36	19	0	7	7	21	20	21	40	25	22	35

POLLUTION PREVENTION WORKLOAD - MONTHLY

CATEGORY	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
<u>Outreach Activities</u>													
Plant Tours Conducted	6	4	1	1	2	6	1	10	1	6	1	0	0
Presentations Made	2	10	0	0	1	0	2	3	1	2	0	0	0
Total Outreach Activities	8	14	1	1	3	6	3	13	2	8	1	-	-
<u>Inspections Conducted</u>													
Food Service Facilities	-	-	-	1	22	41	26	47	21	-	-	1	-
Auto Body & Car Wash	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	1	-	-	-	-	-	-	-	-	-	-
Total Inspections	-	-	1	1	22	41	26	47	21	-	-	1	-
<u>Compliance Issues</u>													
NOVs Issued	1	2	1	-	1	1	1	1	2	1	-	1	1
NOEs Issued	-	1	1	-	-	1	-	-	-	-	-	-	-
Non-Compliant-FOG	-	-	-	-	1	-	-	-	-	-	-	-	-
Total Compliance Issues	1	3	2	-	2	2	1	1	2	1	-	1	1
<u>Pollution Prevention</u>													
Clothes Washer Rebates	-	-	29	23	6	8	-	19	-	2	-	-	-
Toilet Retrofit Rebates	-	-	-	-	-	-	-	-	-	-	-	-	-
Pharmaceuticals Diverted (in lbs)	61	68	56	-	124	-	102	-	45	73	132	-	-

RECYCLED WATER DELIVERIES - MONTHLY

	Acres	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
MONTHLY (MG)														
Water Sold														
Golf Courses	405.0	44.197	23.612	3.322	0.008	0.002	-	0.014	9.555	25.976	58.629	69.590	65.339	49.784
Cemeteries	57.1	4.142	3.239	2.872	0.690	0.380	-	0.273	1.494	3.671	3.658	5.515	5.659	4.822
Parks	18.5	0.527	0.050	0.611	-	0.002	-	-	0.020	0.263	0.843	0.939	1.219	1.111
Schools	21.0	1.571	1.231	0.745	0.060	0.098	0.043	0.041	0.251	0.988	1.655	2.196	1.712	1.635
Commerical	167.6	16.950	19.637	7.652	1.891	1.379	0.557	0.648	4.974	10.516	12.142	18.578	17.787	15.775
Vineyards	564.0	21.248	9.649	7.015	0.239	0.380	0.513	7.149	3.250	6.107	10.475	20.951	42.981	27.367
Trucked Water	175.0	0.399	0.289	0.403	0.033	0.007	0.020	0.017	0.110	0.421	0.533	1.293	1.374	1.425
Subtotal Sales	1,408.2	89.035	57.707	22.620	2.921	2.248	1.133	8.142	19.654	47.943	87.935	119.063	136.071	101.920
District Use														
Jameson	330.0	4.785	-	-	-	-	-	-	-	-	-	-	0.470	-
Somky	213.0	15.447	12.002	0.008	-	-	-	-	-	2.504	11.985	17.012	25.944	20.394
Fagundes/Airport	50.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal District	593.5	20.232	12.002	0.008	-	-	-	-	-	2.504	11.985	17.012	26.413	20.394
TOTAL DELIVERED	2,001.7	109.266	69.709	22.628	2.921	2.248	1.133	8.142	19.654	50.447	99.920	136.074	162.484	122.314
ANNUAL (AF)														
Water Sold														
Golf Courses	405.0	1,035	1,025	1,019	1,000	1,000	981	972	991	909	880	897	921	939
Cemeteries	57.1	69	76	84	86	88	88	88	91	93	93	95	97	99
Parks	18.5	14	13	15	15	15	15	15	15	13	13	13	14	16
Schools	21.0	37	36	38	38	38	38	37	37	35	33	34	33	33
Commerical	167.6	309	327	337	338	343	339	335	341	343	342	350	346	342
Vineyards	564.0	550	529	545	545	546	531	485	470	470	436	367	399	418
Trucked Water	175.0	12	12	13	13	13	13	13	11	11	11	13	15	18
Subtotal Sales	1,408.2	2,025	2,018	2,051	2,035	2,042	2,003	1,945	1,956	1,874	1,808	1,768	1,824	1,864
District Use														
Jameson	330.0	15	15	15	15	15	15	15	15	15	15	15	16	1
Somky	213.0	166	171	171	171	171	171	171	171	143	139	191	261	276
Fagundes/Airport	50.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal District	593.5	182	187	187	187	187	187	187	187	158	154	206	277	277
TOTAL DELIVERED	2,001.7	2,207	2,205	2,237	2,222	2,229	2,189	2,132	2,143	2,032	1,962	1,974	2,101	2,141

BIOSOLIDS HANDLING - MONTHLY

Site	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
<u>Land Applied by NSD</u>													
Somky	175								65	109			
Airport/Fagundes													44
Jameson Canyon		147	13	-	-	-	-	-	-	-	197	52	
Subtotal by NSD	175	147	13	-	-	-	-	-	65	109	197	52	44
<u>Land Applied by Contractor</u>													
Somky													
Airport/Fagundes													
Jameson Canyon													
Subtotal by Contractor	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Land Applied	175	147	13	-	-	-	-	-	65	109	197	52	44
Off Site (Contractor)													
Total (tons)	175	147	13	-	-	-	-	-	65	109	197	52	44

COLLECTION SYSTEM MAINTENANCE - MONTHLY

CATEGORY	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
Plugups													
Total Calls	53	57	64	77	70	43	46	43	46	40	45	46	45
Business Hours	32	36	34	44	47	39	21	23	28	31	33	30	36
After Hours	21	21	30	33	23	4	25	20	18	9	12	16	
District's	16	22	22	28	24	15	27	13	10	7	17	12	10
Property Owner's	36	35	41	49	46	28	20	30	35	32	26	34	32
Plugged Main Lines	2	-	1	1	-	-	4	1	1	1	-	-	-
Run Lateral w/Eel	61	12	80	25	85	66	77	100	99	126	196	149	115
Cleaning (feet of sewer)													
Vactor #1	63,968	80,207	38,882	43,194	23,544	21,454	14,808	30,224	22,498	30,232	30,283	69,780	38,969
Vactor #2	5,367	-	10,373	-	27,335	9,420	26,687	22,691	43,466	32,180	39,800	57,405	43,059
Hydro													
Rodder													
Total (feet)	69,335	80,207	49,254	43,194	50,879	30,875	41,495	52,916	65,964	62,412	70,083	127,185	82,028
Cleaning Days													
Vactor #1	19	22	17	19	13	10	6	13	10	12	12	18	18
Vactor #2	3	-	3		7	6	15	8	19	15	16	21	15
Hydro													
Rodder													
Feet/day													
Vactor #1	3,150	3,650	2,450	2,250	2,550	1,950	2,000	2,500	2,250	2,300	2,500	3,250	2,500
Vactor #2	3,350	3,650	2,300	2,250	1,800	2,150	2,450	2,300	2,250	2,500	2,500	3,900	2,150
Vactor #2	1,800		3,450		3,900	1,550	1,800	2,850	2,300	2,150	2,500	2,750	2,850
Hydro													
Rodder													
Video Inspections													
Mains (feet)	18,443	31,889	17,526	12,509	14,335	5,812	13,050	15,089	24,716	23,914	32,551	40,819	22,837
Laterals (each)	232	297	201	138	175	133	144	204	173	177	254	214	190
Construction (each)													
Cleanouts	6	5	50	1	18	3	17	15	12	24	15	17	15
Laterals	8	4	4	15	6	3	3	4	13	12	14	16	16
Mains		1		-	-		1				-	-	
Manholes	1	1		-	-		1				-	2	
Other													
USA Markings													
Regular (w/in 2 days)	286	378	159	159	171	224	338	327	338	292	378	363	331
Emergency (w/in 2 hours)	15	15	32	12	24	15	22	20	20	24	21	28	23

WASTEWATER PLANT OPERATIONS DATA - MONTHLY

CATEGORY	Units	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
FLOWES		30	31	30	31	31	28	31	30	31	30	31	31	30
Influent	MG	176.1	180.0	208.8	257.6	407.2	542.7	465.3	261.4	275.4	213.6	199.3	192.5	182.1
Average Day	MGD	5.9	5.8	7.0	8.3	13.1	19.4	15.0	8.7	8.9	7.1	6.4	6.2	6.3
Maximum Day	Date	16-Sep	2-Oct	29-Nov	1-Dec	17-Jan	14-Feb	6-Mar	1-Apr	19-May	1-Jun	2-Jul	29-Aug	2-Sep
Maximum Day Flow	MG	8.2	6.2	16.5	12.6	31.7	44.8	26.3	11.7	17.2	8.0	6.7	6.3	6.3
Minimum Day	Date	21-Sep	31-Oct	1-Nov	13-Dec	3-Jan	1-Feb	19-Mar	30-Apr	14-May	27-Jun	24-Jul	6-Jan	24-Sep
Minimum Day Flow	MG	5.7	5.4	5.5	6.6	7.0	8.8	9.7	7.4	6.8	6.6	6.2	6.0	5.9
Effluent	MG	104.7	68.1	289.9	384.2	497.1	507.1	618.1	455.7	55.5	108.7	128.8	167.8	123.5
River Discharge	MG	-	-	263.8	378.9	491.6	507.1	618.1	424.4	-	-	-	-	-
Recycled Flow	MG	104.7	68.1	26.1	5.2	5.5	-	8.5	25.4	55.5	108.7	128.8	167.8	123.5
BIOSOLIDS	Tons	943	745	572	767	700	451	413	575	493	506	624	830	714
Wet Tons Generated from Pond	Tons													
Wet Tons Generated from Plant	Tons	943	745	572	767	700	451	413	575	493	506	624	830	714
% Solids Liquid	%													
% Solids Cake	%													
% Solids Land Application	%													
Wet Tons Hauled Offsite	Tons													
POLYMER USE	Gallons	1,915	4,044	8,169	1,155	868	1,046	4,557	7,851	5,053	5,921	3,745	3,153	3,038
Pond Pre-Flocculators	Gallons	-	59	2,293	-	-	-	2,668	4,704	288	224	494	326	257
Flocculator Polymer 1	Gallons	-	-	-	-	-	-	-	-	-	-	-	-	-
Flocculator Polymer 2	Gallons	-	34	784	294	-	-	974	755	79	-	119	61	86
Filter Polymer 1	Gallons	1,259	2,944	4,503		178	404	460	1,584	4,100	5,102	2,499	1,963	1,832
Filter Polymer 2	Gallons	-	-	-		-	-	-	-	-				
Belt Presses	Gallons	656	1,007	589	788	690	642	455	808	586	595	633	803	863
ENERGY														
Total Electricity Used	MWH	765	714	785	684	663	670	864	840	779	827	842	739	859
Purchased from PGE	MWH	331	366	448	342	353	374	504	423	317	346	358	429	431
Produced from Co-Gen	MWH	272	249	254	265	235	207	215	244	284	270	267	269	257
Percent Produced	%	36%	35%	32%	39%	35%	31%	25%	29%	36%	33%	32%	36%	35%
Purchased from Solar	MWH	162	99	83	77	75	89	145	173	178	211	217	200	171
Percent Produced		21%	14%	11%	11%	11%	13%	17%	21%	23%	25%	26%	27%	20%
Purchased Natural Gas	Therms	1,124	1,461	1,912	1,560	2,147	1,789	2,299	1,558	1,475	1,448	1,727	1,979	1,563
Methane Flared Off	KSCF	391	507	192	266	34	7	14	130	164	324	282	251	126
Stand By Calls	#	40	75	133	55	71	75	52	26	80	67	64	50	50
Violations	#	-	-	-	-	-	-	-	-	-	-	-	-	-

WASTEWATER PLANT MAINTENANCE and LABORATORY DATA - MONTHLY

CATEGORY	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
<u>Scheduled</u>													
Old	31	20	21	10	6	5	11	10	15	25	31	7	7
New	83	104	78	97	100	82	92	109	89	95	96	85	94
Completed	94	103	89	101	101	76	93	104	79	89	120	85	93
New Balance	20	21	10	6	5	11	10	15	25	31	7	7	8
<u>Unscheduled</u>													
Old	38	32	36	30	24	23	23	23	22	21	18	22	21
New	11	38	17	13	19	12	20	15	31	17	32	28	20
Completed	17	34	23	19	20	12	20	16	32	20	28	29	20
New Balance	32	36	30	24	23	23	23	22	21	18	22	21	21
<u>Total Work Orders</u>													
Old	69	52	57	40	30	28	34	33	120	46	49	29	28
New	94	142	95	110	119	94	112	124	11	112	128	113	114
Completed	111	137	112	120	120	88	112	120	46	109	150	113	113
New Balance	52	57	40	30	28	34	33	37	46	49	29	28	29
<u>LAB ANALYSES</u>													
Sample Type													
Regulatory	132	129	195	175	169	117	164	155	190	138	129	149	142
Process Control	926	486	1,154	1,087	1,155	1,111	1,199	1,195	760	770	869	838	818
Special Request	-	13	-	2	-	8	2	-	1	15	1	22	26
Quality Control/Assurance	401	328	1,128	705	776	639	754	1,447	812	539	632	600	607
TOTAL	1,459	956	2,477	1,969	2,100	1,875	2,119	2,797	1,763	1,462	1,631	1,609	1,593

**Summary of NSD Capital Project Status
through 09-30-19**

Proj #	Description	FY 19/20 Budget	FY 18/19 Carryovers	Adj.	Final FY 19/20 Budget	Encumbrance	Costs Paid to Date	Budget Remaining	% Budget Expended
	<u>COLLECTION SYSTEM - PROJECTS</u>								
13701	Main Line Sewer Rehabilitation	60,000			60,000	-	1,424	58,576	2%
13702	Manhole Raising/Rehabilitation	332,600			332,600	-	2,478	330,122	1%
13703	Lateral Replacement/Rehabilitation	110,000			110,000	194	46,301	63,505	42%
13704	Cleanouts Installation/Rehabilitation	107,000			107,000	-	17,526	89,474	16%
13705	Inflow & Infiltration (I&I) Reduction Program	221,700			221,700	54,350	10,545	156,805	5%
14703	Browns Valley Rd & First St	7,000,000			7,000,000	-	1,492	6,998,508	0%
17704	Infltrtn Rehab - SSMH/PL (CI-)	-	25,500		25,500	-	-	25,500	-
18701	I&I Smoke Testing	150,000			150,000	41,956	361	107,683	0%
18702	Collection System Asset Management Software	-	443,550		443,550	324,585	65,466	53,499	15%
18703	Upper Lateral Rehab - Basin L (Pilot) #3	166,300	3,200		169,500	78,223	4,162	87,115	2%
18706	Sewer System Inflow/Infiltration 2019	3,538,100	313,850		3,851,950	1,861,255	677,719	1,312,976	18%
19701	66-inch Trunk Rehabilitation (Kaiser to IPS)	4,000,000	450,000		4,450,000	439,233	4,482	4,006,285	0%
19703	2020 Collection System Rehabilitation	3,169,600	9,800		3,179,400	-	15,256	3,164,144	0%
19727	Collection System Master Plan	1,071,200	632,350		1,703,550	424,171	93,569	1,185,810	5%
20701	Upper Lateral Rehab - Pilot #5	5,000			5,000	-	50	4,950	1%
20702	Manhole Rehabilitation	250,000			250,000	-	1,943	248,057	1%
20703	2021 Collection System Rehabilitation	20,000			20,000	-	-	20,000	-
	<u>COLLECTION SYSTEM - EQUIPMENT</u>								
20704	Locatable Mini-Camera #3 Replacement	11,900		(200)	11,700	-	9,382	2,318	80%
20705	Eel Replacement #2	5,900		200	6,100	6,023	-	77	-
	<u>COLLECTION SYSTEM - LIFT STATIONS</u>								
17711	West Napa PS - Rehab	5,500,000			5,500,000	126,187	110,566	5,263,248	2%
19705	Stonecrest PS Pump Rebuild	-	40,100		40,100	19,212	5,894	14,994	15%
	<u>TREATMENT - PROJECTS</u>								
13745	Pond 1 Dredge	2,100,000	237,150		2,337,150	32,909	7,345	2,296,897	0%
18736	Treatment Plant Project 2018	-	15,000		15,000	10,901	139	3,961	1%
18740	Treatment Plant Project 2019	600,000	672,700		1,272,700	911,208	309,436	52,057	24%
19717	WWTP MP - Pond Transfer Structures 2 to 3	-	259,700		259,700	-	12,800	246,900	5%
20706	WWTP Master Plan	5,000			5,000	-	-	5,000	-
20707	Pond Levee Repair	100,000			100,000	-	-	100,000	-
20708	2020 Treatment Plant Improvements Project	1,500,000			1,500,000	98,510	1,915	1,399,575	0%

**Summary of NSD Capital Project Status
through 09-30-19**

Proj #	Description	FY 19/20 Budget	FY 18/19 Carryovers	Adj.	Final FY 19/20 Budget	Encumbrance	Costs Paid to Date	Budget Remaining	% Budget Expended
	<u>TREATMENT - EQUIPMENT</u>								
13735	Dual Fuel Boiler Burner	-	121,550		121,550	98,723	-	22,828	-
15707	Main - DAFT Overflow Pumps (2) Cornell	11,900			11,900	-	-	11,900	-
15711	Rotork Actuator Replacement	-	7,600		7,600	-	-	7,600	-
16712	Main - Primary Clarifier Mech/Struct Rehabilitation	814,000	152,300		966,300	121,989	29,792	814,519	3%
17715	Turbidimeters (7) Tertiary Rplcmnts	-	16,000		16,000	-	-	16,000	-
17726	Headworks Equipment Rehab/Replacment	1,000,000	667,600		1,667,600	1,200,229	355,172	112,199	21%
18711	3W Strainer	-	24,350		24,350	-	-	24,350	-
18715	Muffle Furnace - Replacement	-	5,000		5,000	4,317	-	683	-
18716	Rotork Actuator Replacement	-	6,400		6,400	6,399	-	1	-
18719	Filter Flow Control - Rotork Valves	-	9,900		9,900	6,969	-	2,931	-
18720	Neuros Blowers Rebuild	-	64,300		64,300	-	-	64,300	-
18722	FOG Station Water Heater	20,000	5,000		25,000	-	-	25,000	-
19706	WWTP MP - 3W System Improvements Phase 2	-	295,600		295,600	-	110	295,490	0%
19708	Main - Rotork Actuator Replacement	-	95,000		95,000	-	-	95,000	-
19709	Main - Polymer Tank (3) Replacement	-	10,000		10,000	-	-	10,000	-
19710	Main - 12kV Redundant Line	-	119,150		119,150	-	72	119,078	0%
19712	Main - Utility Generator Power Transition	-	35,000		35,000	-	-	35,000	-
19713	Main - Cogen Hot Water to FOG Pad	-	50,000		50,000	-	-	50,000	-
19715	Main - ARV Replacement	31,100			31,100	-	-	31,100	-
20709	Main - AB Caustic Pumps & Enclosure	85,700			85,700	8,708	-	76,992	-
20710	Main - Septage Pump & Motor Replacement	28,700			28,700	-	-	28,700	-
20711	Main - Marsh-to-Pond Pump Station Upgrade	88,700			88,700	-	-	88,700	-
20712	Main - Grit Pump Rebuild	60,000			60,000	-	-	60,000	-
20713	Main - Elevator Control Update	400,000			400,000	-	-	400,000	-
20714	Main - Flare Rebuild	50,000			50,000	-	-	50,000	-
20715	Main - Concrete Pipe Chase Covers	80,000			80,000	-	-	80,000	-
20716	Plant Door Replacement - Phase 1	22,200			22,200	-	-	22,200	-
20717	Vehicle 163 - Ford Ranger (Replace w/ F-150)	33,300			33,300	-	-	33,300	-
20718	Vehicle 162 - Ford F-250 Diesel	43,600			43,600	41,122	-	2,478	-
20719	Vehicle 206 - Forklift TH103 (Telehandler)	103,100			103,100	-	-	103,100	-
	<u>LAB - EQUIPMENT</u>								
20720	Lab - Sampler 4700 Replacement (2)	20,000			20,000	-	-	20,000	-
	<u>SCADA</u>								

**Summary of NSD Capital Project Status
through 09-30-19**

Proj #	Description	FY 19/20 Budget	FY 18/19 Carryovers	Adj.	Final FY 19/20 Budget	Encumbrance	Costs Paid to Date	Budget Remaining	% Budget Expended
18729	SCADA MP Project #1 - Network Monitoring	-	46,200		46,200	-	-	46,200	-
19718	SCADA MP Phase 5 Security Study	-	88,250		88,250	16,267	21,587	50,396	24%
	<u>RECYCLING - PROJECTS</u>								
13727	North Bay Wate Reuse Project	150,000			150,000	-	-	150,000	-
18730	Jameson 24" Flow Meter Rehab	-	6,200		6,200	-	-	6,200	-
18731	Coombsville Truck Fill Station	300,000	144,400		444,400	110,738	235,553	98,109	53%
19719	24-inch Valve Replacement - Kirkland Line	-	5,000		5,000	-	-	5,000	-
19720	Jameson PS VFD	-	68,900		68,900	-	-	68,900	-
20721	Kirkland Recycled Water Pipeline Rehabilitaton	60,000			60,000	-	1,020	58,980	2%
	<u>RECYCLING - EQUIPMENT</u>								
19722	Vehicle 723/720 - Attachments/Implements	29,700		(29,700)	-	-	-	-	-
20722	Badger Meter Replacement	80,000			80,000	-	-	80,000	-
20723	CT-5 Composter (Ag-Bag)	-	-	29,700	29,700	-	-	29,700	-
	<u>OTHER</u>							-	-
13729	Development Technical Support	337,000			337,000	-	63,286	273,714	19%
19723	AV System Replacement - Conference Rooms	-	20,000		20,000	-	-	20,000	-
19725	Vehicle 011 - CSET Trailer	-	7,100		7,100	-	2,209	4,891	31%
		\$33,873,300	\$5,173,700	-	\$39,047,000	\$6,044,374	\$2,109,053	\$30,893,575	5%