



Napa Sanitation District

General Manager's Report

for

November, 2019

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NAPA SANITATION DISTRICT

General Manager's Report

DATE: January 15, 2020
FROM: Timothy B. Healy, General Manager
SUBJECT: General Manager's Report for November 2019

REGULATORY COMPLIANCE:

Collection System Compliance:	0 Category 1 SSO's, 0 Category 2 SSO's, and 1 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 – November 30, 2019
Percent Fiscal Year:	41.7%
Operating Expenditures to date:	36.2%
Historical Expenditures to date:	44.1%
Significant Comments:	None.

PERSONNEL:

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

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

Summaries of Operational Highlights are on following pages.

COLLECTIONS:

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

- The District had 0 Category 1 Sanitary Sewer Overflows (SSO's), 0 Category 2 SSO's and 1 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 5 cleanouts and repaired 5. They also repaired 1 lateral and lined 8 laterals. Additionally, the service response/programs crew completed 149 work orders in support of the grease and odor control program, responded to 39 customer requests for service (6 were NSD problem) and closed out 231 mark and locate request tickets.
- The preventative maintenance crews ran work orders on 97 laterals, cleaned approximately 52,374 feet of main line and CCTV inspected 30 laterals. In addition, the CCTV truck televised 10,824 feet of mainline.

TREATMENT PLANT:

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

Plant Operations:

- For November 2019, the plant's influent flow was 177.6 MG as compared to last year flow for November 2018 of 208.8 MG
- No river discharge occurred during October.
- There was 0.98" rainfall for November 2019 (Carneros Rainfall Center) as compared to 3.23" rainfall for November 2018.
- Pond 4 end of the month recorded level reading was 31.88".
- The treatment plant and pumping stations utility power was uninterrupted by PG&E Public Safety Power Shutoff events in November.

Power Consumption and Production:

- November power purchased from PG&E was 426 MWH in comparison to November 2018 purchase of 448 MWH.
- Cogeneration unit ran 714 of 720 hours for the month – 99.17% uptime, averaging 342.23Kw, producing 244 MWH of energy.
- Solar generation in November was 98 MWH, compared to 141 MWH in October and 83 MWH in November 2018.

Maintenance:

Significant events for the month of November 2019:

Process Maintenance

- Cogeneration unit monthly emission test - in compliance with BAAQMD permit
- Replaced standby generators fuel transfer pumps and motors
- Belt filter press-polymer feed pump 102/replaced rotor and stator
- Belt filter press-polymer dilution unit #2/replaced coupler and aligned
- Belt filter press #2/replaced lower hydraulic steering valve
- Amiad 3 water filter/replaced limit switches
- Replaced meters on Day Tank control panel
- Secondary pump #2/replaced motor bearings

Projects

- Retrofit Hypo pump #3/VFD and Motor
- Sodium Bisulfite tank fill station/replaced piping, strainer, valve and cam lock fittings

Standby Power

- Plant generators ran in standby mode for 2.5 hours
- Riverpark, Stonecrest, West Napa operational testing only

Influent Pumps

- All pumps operational

Laboratory:

Effluent (EFF-001) Summary

- November 6, 2019: Mercury, Metals, Cyanide, Nutrients, Chronic Toxicity, Oil & Grease, PCB Congeners
- November 3-7, 2019: Acute Toxicity Bioassay
- November 17, 18, 20, 2019: Nutrients

Influent (INF-001) Summary

- November 6, 2019: Metals, Mercury, Cyanide, Nutrients
- November 17, 2019: Nutrients

RECYCLING:

Significant events in the Recycling Department for November 2019 include:

- Recycled water delivered for the month of November 2019 was (44.586 million gallons), as compared to November 2018 (22.628 million gallons) is higher from the previous year due to golf course and commercial landscape demand. Delivered recycled water volume represents the sum of all use site flow meter consumption values.
- Staff continued the land application of biosolids at the Jameson Reuse site.

POLLUTION PREVENTION:

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

- There were five tours of the treatment plant given in November. Four tours were given to third graders from Browns Valley Elementary and one tour was given to the students in Napa Valley College's introductory engineering class. Six presentations were given in November to all of Napa High's biology classes.
- The total amount of medication collected in November has not yet been reported. The total amount of unneeded medications collected since the drug takeback program began in September 2010 is 22,074.2 pounds.
- There were no ESME Washer Rebates issued this month.
- Staff aided in planning and facilitating the screening of WASTED! The Story of Food Waste on November 1st at Copia with the Environmental Education Coalition of Napa County. Over \$1,100 was raised for the Darcy Aston Environmental Advocacy Scholarship Fund.

ENGINEERING / CAPITAL PROJECTS / DEVELOPMENT:

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

- Consultant continued work on the SCADA Master Plan.
- Consultants and staff continued work on the CMMS implementation.
- Consultant and Staff 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 administered the bidding phase and responded to questions from prospective bidders for the 2020 Collection System Rehabilitation Project.
- Consultant continued design of the 66-inch Trunk Sewer Rehabilitation Project.
- Contractor began construction of the 2019 Manhole Rehabilitation Project.
- Contractor began construction of the Sanitary Sewer Manhole Adjustment Project, Phase IX.
- Contractor completed construction of the Upper Lateral Rehabilitation Pilot Project #4.

- Consultant and staff administered the bidding phase and responded to questions from prospective bidders for 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.
- Consultant continued working on the Collection System Master Plan.
- Staff reviewed 27 sets of development plans and deemed 11 sets of plans complete. The approved plans consisted of 3 tenant improvements, 6 residential dwellings, 1 residential demolition, and 1 commercial building.

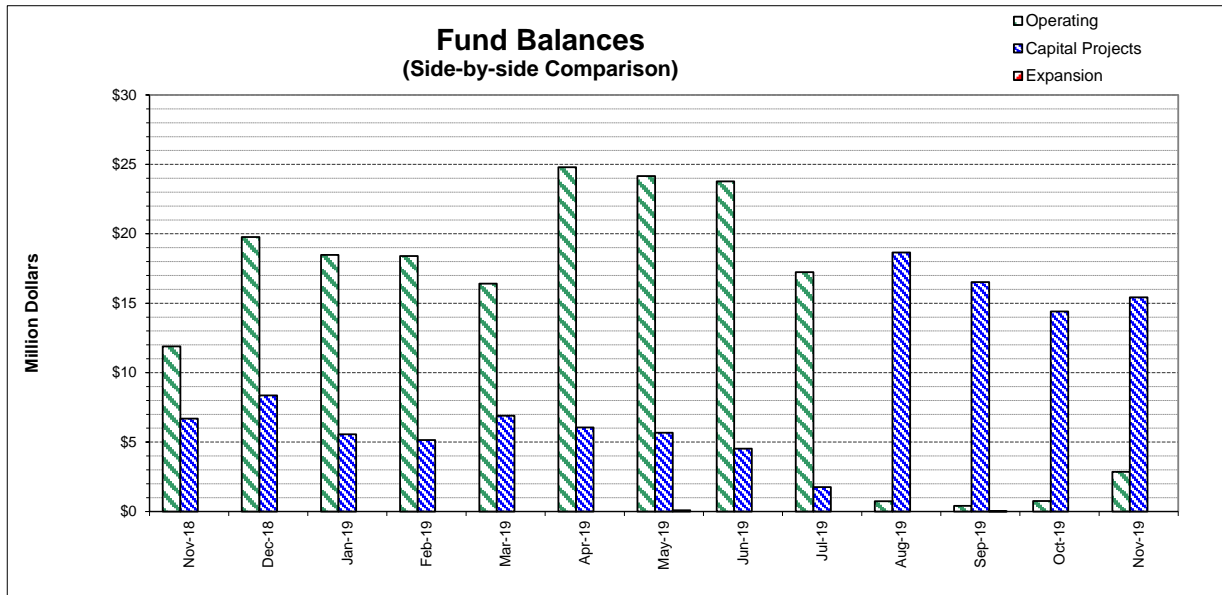
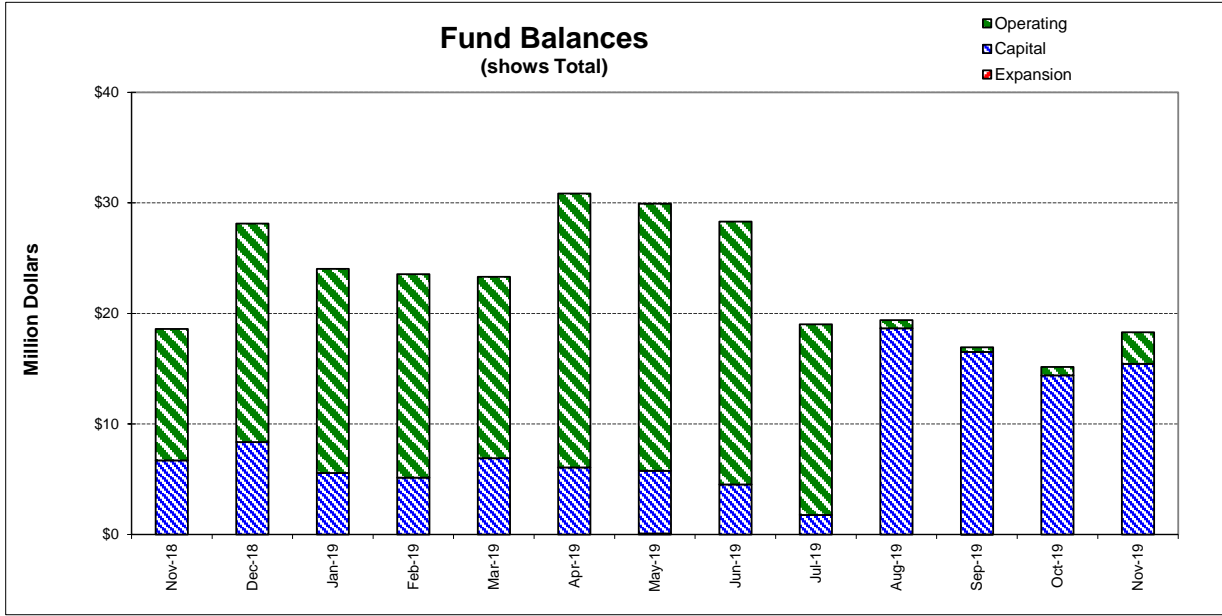
Budget Status & Cash Summary - July 1, 2019 - November 30, 2019 (41.7% of the year)

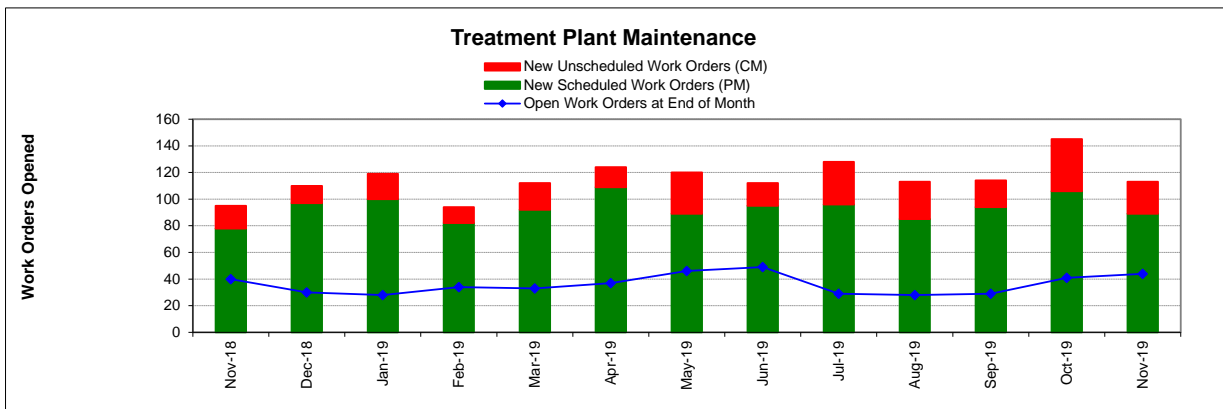
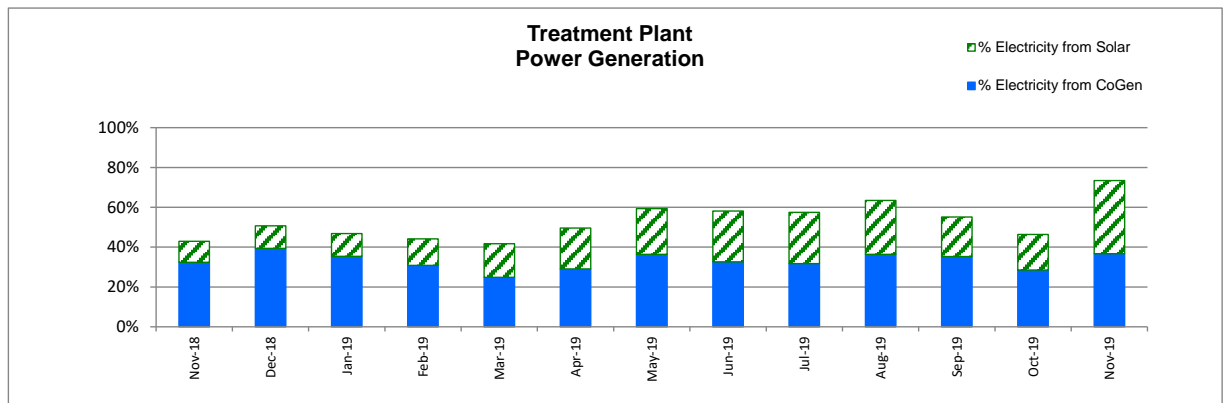
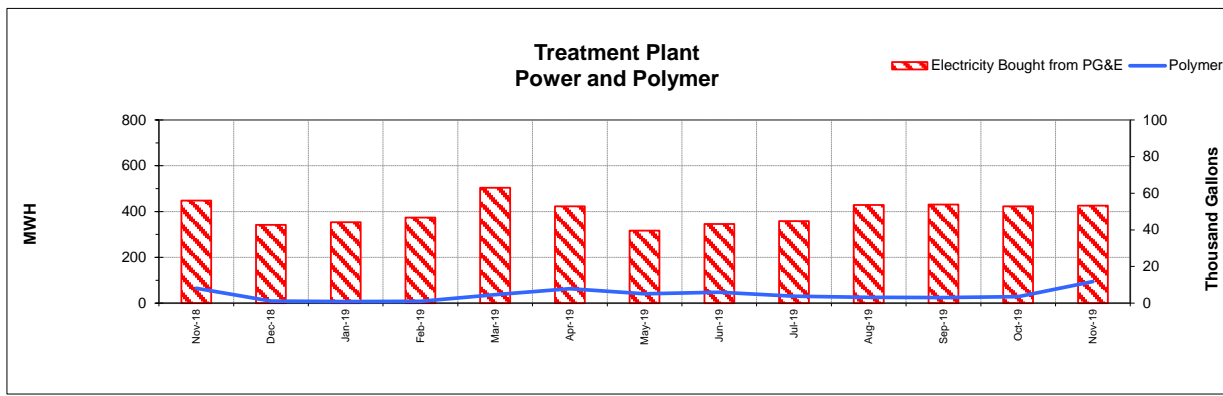
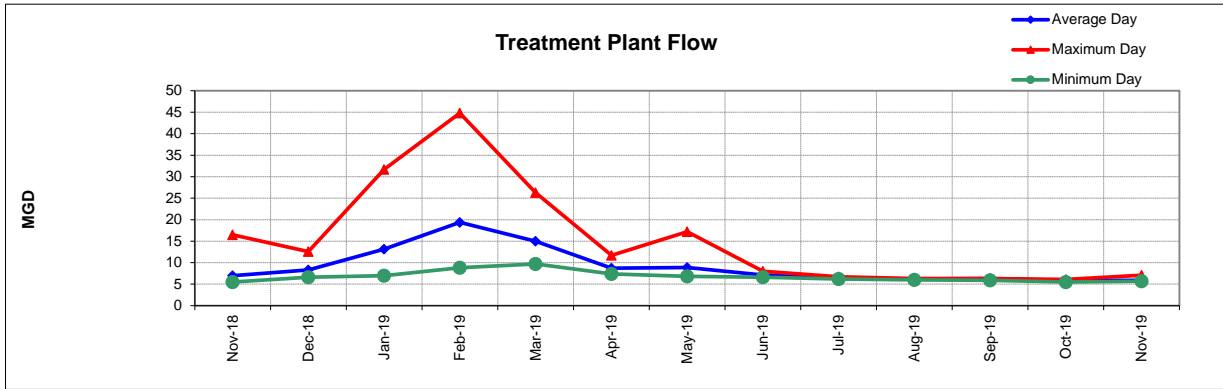
<i>Expenditures</i>	FY 19/20 Budget	Encumbrances	Expenditures to date	Committed to date	Remaining Balance	Percent Committed
Operating						
Salaries & Benefits	\$10,258,600	\$4,128	\$3,867,911	\$3,872,039	\$6,386,561	37.7%
Services & Supplies	6,281,650	1,313,841	1,977,194	3,291,036	2,990,614	52.4%
Taxes	41,800	-	-	-	41,800	0.0%
Debt Service	4,593,900	-	3,738,534	3,738,534	855,366 (1)	81.4%
Intrafund Transfers	8,900,000	-	-	-	8,900,000	0.0%
Total Operating:	\$30,075,950	\$1,317,969	\$9,583,640	\$10,901,609	\$19,174,341 (2)	36.2%
Capital						
Bldgs/Improvements & Equip	\$39,047,000	\$3,158,003	\$5,579,260	\$8,737,264	\$30,309,736 (3)	22.4%
Intrafund Transfers	5,178,000	-	3,044,280	3,044,280	2,133,720	58.8%
Total Capital :	\$44,225,000	\$3,158,003	\$8,623,540	\$11,781,544	\$32,443,456	26.6%
Grand Total Expenditures:	\$74,300,950	\$4,475,973	\$18,207,180	\$22,683,152	\$51,617,798	30.5%
<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		\$510,306	\$510,306	\$67,694	88.3%
Charges for Services	31,213,500		5,266,199	5,266,199	25,947,301	16.9%
Miscellaneous Revenues	60,000		28,369	28,369	31,631	47.3%
Donations/Contributions (Capital Labor)	-		333,548	333,548	(333,548) (4)	N/A
Total Operating:	\$31,851,500		\$6,138,422	\$6,138,422	\$25,713,078	19.3%
Capital						
Use of Money/Property	\$0		\$1,741	\$1,741	(\$1,741)	N/A
Capacity Charges	5,178,000		2,692,884	2,692,884	2,485,116	52.0%
Bond/Loan Proceeds	15,416,600		-	-	15,416,600 (5)	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		3,044,280	3,044,280	11,033,720	21.6%
Total Capital:	\$34,702,600		\$5,964,860	\$5,964,860	\$28,737,740	17.2%
Grand Total Revenue:	\$66,554,100		\$12,103,282	\$12,103,282	\$54,450,818	18.2%

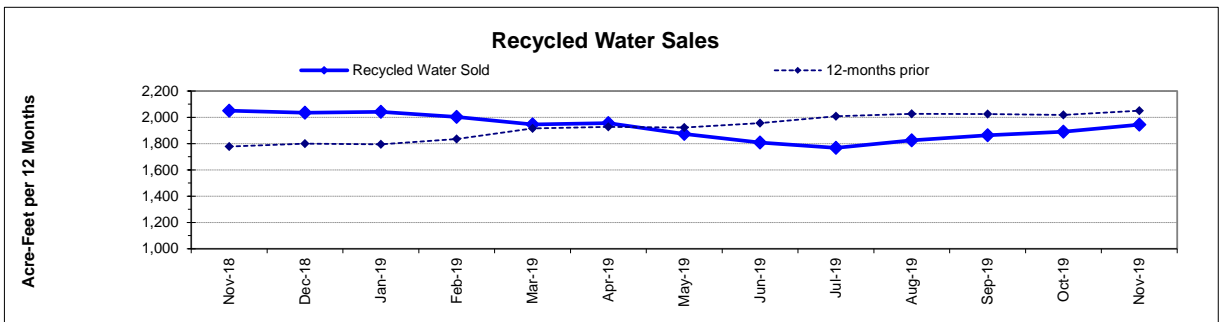
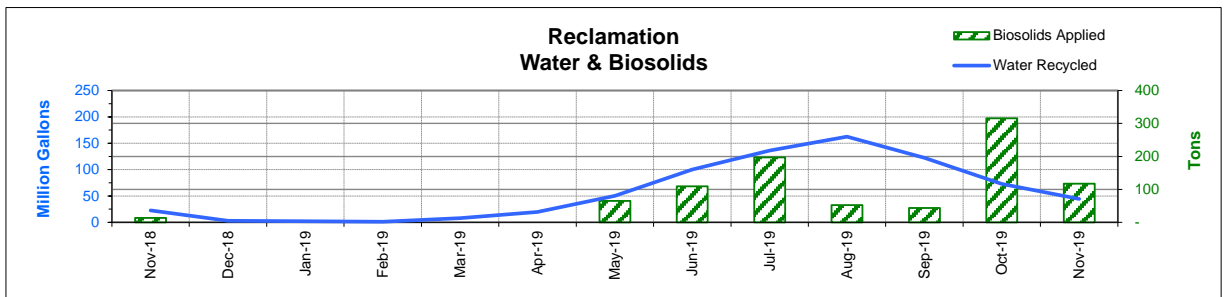
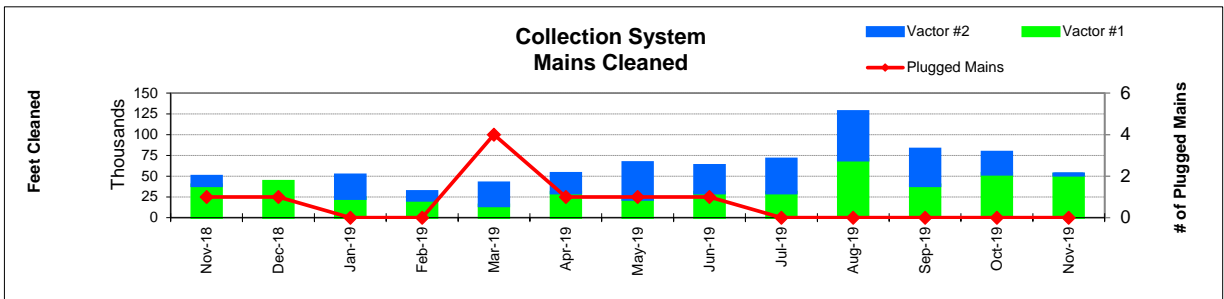
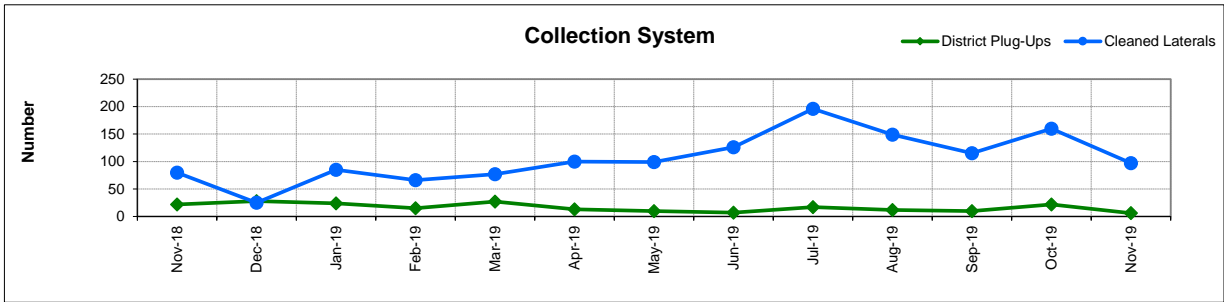
Cash on Hand as of 11/30/19 **\$18,288,363**

**excluding Debt Service restricted funds
11/30/19 -Effective Rate of Return = 2.82%

1. Series 2012A's and 2017's principal/interest payments are made in Jul & Feb
2. Includes Debt Service and Intrafund Transfers; otherwise is 43.2%
3. See Capital Project Status report for details
4. In-house Labor for Capital Projects (Contra acct for Salaries)
5. Waiting for approval of SRF Loan for BVT and WNPS Projects







FUND BALANCES - MONTHLY

CATEGORY	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19
<i>(Thousand Dollars)</i>													
7800	11,888	19,772	18,473	18,394	16,405	24,793	24,164	23,784	17,246	748	415	753	2,858
7850	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal Operating	11,888	19,772	18,473	18,394	16,405	24,793	24,164	23,784	17,246	748	415	753	2,858
Capital Improvement Projects	6,698	8,363	5,567	5,153	6,899	6,058	5,671	4,525	1,764	18,655	16,516	14,400	15,430
Debt Proceeds	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal Capital	6,698	8,363	5,567	5,153	6,899	6,058	5,671	4,525	1,764	18,655	16,516	14,400	15,430
Total Discretionary Funds	18,586	28,135	24,040	23,547	23,304	30,851	29,835	28,309	19,010	19,403	16,931	15,153	18,288
Expansion Fund (Restricted)	-	-	-	-	-	-	93	-	-	-	2	-	-
Total Restricted Funds	-	-	-	-	-	-	93	-	-	-	2	-	-
TOTAL ALL FUNDS	18,586	28,135	24,040	23,547	23,304	30,851	29,928	28,309	19,010	19,403	16,933	15,153	18,288

DEVELOPMENT WORKLOAD - MONTHLY

CATEGORY	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19
<u>Phone Requests</u>													
Maps/Drawings	1	2	6	2	4	-	17	8	1	-	4	-	11
Lateral Permits	-	-	-	-	-	-	-	-	-	-	-	-	-
Policy Questions	3	6	8	7	5	5	10	6	8	1	4	2	2
Development Questions	41	44	40	35	48	53	79	64	43	29	38	32	40
Miscellaneous	18	25	27	18	25	29	29	18	25	16	18	29	13
TOTAL	63	77	81	62	82	87	135	96	77	46	64	63	66
<u>Counter Requests</u>													
Maps/Drawings	-	1	-	-	-	1	-	-	1	-	-	1	-
Lateral Permits	5	10	12	8	11	7	11	7	8	12	13	7	7
Policy Questions	-	1	-	-	3	4	-	-	-	-	-	-	1
Development Questions	6	5	10	9	13	10	7	10	3	4	13	4	7
Miscellaneous	-	1	1	-	-	0	2	0	0	1	0	-	-
TOTAL	11	18	23	17	27	22	20	17	12	17	26	12	15
<u>Initial Request (Referrals)</u>	20	15	18	14	16	24	20	9	14	16	13	13	11
<u>Connection Permits Issued</u>													
Residential Permits	1	2	-	4	5	2	6	3	2	14	2	5	3
Commercial Permits	2	-	1	-	1	2	3	1	6	1	2	1	3
Industrial Permits	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMITS	3	2	1	4	6	4	9	4	8	15	4	6	6
Residential Units	1	2	-	4	36	2	6	3	6	14	2	22	5
Commercial Units	2	-	1	-	1	2	3	1	2	1	2	1	133
TOTAL UNITS	3	2	1	4	37	4	9	4	8	15	4	23	138
<u>Annexations</u>													
Submitted	1	-	1	-	-	-	1	-	1	-	-	1	-
Acreage	158.20	-	4.90	-	-	-	0.50	-	16.04	-	-	44.84	-
<u>Plans Reviewed</u>													
<u>Subdivisions/Sites</u>													
First Submittal	10	9	2	5	6	5	14	8	7	8	8	5	8
Second Submittal	2	5	7	5	6	3	8	6	5	5	2	2	6
Third Submittal	1	1	1	5	3	4	10	5	5	1	3	7	3
<u>Building/Tenant Improvements</u>													
First Submittal	8	11	5	8	7	15	3	9	12	6	6	13	4
Second Submittal	6	-	4	2	5	2	3	4	4	1	4	5	1
Third Submittal	3	1	1	2	3	7	-	7	6	4	3	7	5
<u>Miscellaneous Plan Reviews</u>	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PLANS REVIEWED	30	27	20	27	30	36	38	39	39	25	26	39	27

INSPECTION WORKLOAD - MONTHLY

CATEGORY	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19
<u>CONSTRUCTION</u>													
Locating Sewers	1	2	4	-	-	-	-	-	-	-	-	-	-
Permit Processing	-	-	-	-	-	-	-	-	-	-	-	-	-
Preconstruction Meetings	1	3	-	-	3	5	7	2	5	11	4	6	1
Inspections - Mains	-	1	-	1	1	-	-	1	5	1	11	-	1
Inspections - Manholes	21	30	49	75	19	18	6	7	13	12	77	1	6
Inspections - Laterals	3	28	18	23	31	21	8	27	40	15	5	12	22
Inspections - Cleanouts	8	37	31	39	39	46	43	24	59	43	7	54	33
Inspections - Review Video	1	2	-	2	2	1	1	1	-	-	2	-	1
Demo - Septic Tanks	-	-	-	-	-	-	-	-	-	-	-	-	-
Demo - Buildings	-	-	-	2	-	-	-	-	-	-	-	-	-
Update Record Drawings	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	35	103	102	142	95	91	65	62	122	82	106	73	64
<u>MISCELLANEOUS</u>													
Meter Readings	1	10	26	4	-	4	14	-	-	-	-	-	-
Washdown Facility Inspections	-	-	-	-	-	-	-	-	-	-	-	-	-
General Customer Assistance	25	30	34	41	13	20	16	-	-	32	31	12	12
City of Napa Water Discharge	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	26	40	60	45	13	24	30	-	-	32	31	12	12
<u>SPECIAL PROJECTS</u>													
	19	0	7	7	21	20	21	40	25	22	35	23	19

POLLUTION PREVENTION WORKLOAD - MONTHLY

CATEGORY	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19
<u>Outreach Activities</u>													
Plant Tours Conducted	1	1	2	6	1	10	1	6	1	0	0	2	5
Presentations Made	0	0	1	0	2	3	1	2	0	0	0	4	6
Total Outreach Activities	1	1	3	6	3	13	2	8	1	-	-	6	11
<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	-	1	1	1	1	2	1	-	1	1	1	3
NOEs Issued	1	-	-	1	-	-	-	-	-	-	-	-	1
Non-Compliant-FOG	-	-	1	-	-	-	-	-	-	-	-	-	-
Total Compliance Issues	2	-	2	2	1	1	2	1	-	1	1	1	4
<u>Pollution Prevention</u>													
Clothes Washer Rebates	29	23	6	8	-	19	-	2	-	-	-	-	-
Toilet Retrofit Rebates	-	-	-	-	-	-	-	-	-	-	-	-	-
Pharmaceuticals Diverted (in lbs)	56	-	124	-	102	-	45	73	132	-	-	77	-

RECYCLED WATER DELIVERIES - MONTHLY

	Acres	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19
MONTHLY (MG)														
Water Sold														
Golf Courses	405.0	3.322	0.008	0.002	-	0.014	9.555	25.976	58.629	69.590	65.339	49.784	31.724	16.340
Cemeteries	57.1	2.872	0.690	0.380	-	0.273	1.494	3.671	3.658	5.515	5.659	4.822	4.061	3.028
Parks	18.5	0.611	-	0.002	-	-	0.020	0.263	0.843	0.939	1.219	1.111	0.615	0.028
Schools	21.0	0.745	0.060	0.098	0.043	0.041	0.251	0.988	1.655	2.196	1.712	1.635	1.312	0.792
Commerical	167.6	7.652	1.891	1.379	0.557	0.648	4.974	10.516	12.142	18.578	17.787	15.775	13.443	11.762
Vineyards	564.0	7.015	0.239	0.380	0.513	7.149	3.250	6.107	10.475	20.951	42.981	27.367	13.852	7.027
Trucked Water	175.0	0.403	0.033	0.007	0.020	0.017	0.110	0.421	0.533	1.293	1.374	1.425	1.401	1.097
Subtotal Sales	1,408.2	22.620	2.921	2.248	1.133	8.142	19.654	47.943	87.935	119.063	136.071	101.920	66.409	40.073
District Use														
Jameson	330.0	-	-	-	-	-	-	-	-	-	0.470	-	-	-
Somky	213.0	0.008	-	-	-	-	-	2.504	11.985	17.012	25.944	20.394	6.391	4.513
Fagundes/Airport	50.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal District	593.5	0.008	-	-	-	-	-	2.504	11.985	17.012	26.413	20.394	6.391	4.513
TOTAL DELIVERED	2,001.7	22.628	2.921	2.248	1.133	8.142	19.654	50.447	99.920	136.074	162.484	122.314	72.800	44.586
ANNUAL (AF)														
Water Sold														
Golf Courses	405.0	1,019	1,000	1,000	981	972	991	909	880	897	921	939	963	1,003
Cemeteries	57.1	84	86	88	88	88	91	93	93	95	97	99	102	102
Parks	18.5	15	15	15	15	15	15	13	13	13	14	16	17	15
Schools	21.0	38	38	38	38	37	37	35	33	34	33	33	33	33
Commerical	167.6	337	338	343	339	335	341	343	342	350	346	342	323	336
Vineyards	564.0	545	545	546	531	485	470	470	436	367	399	418	431	431
Trucked Water	175.0	13	13	13	13	13	11	11	11	13	15	18	22	24
Subtotal Sales	1,408.2	2,051	2,035	2,042	2,003	1,945	1,956	1,874	1,808	1,768	1,824	1,864	1,891	1,944
District Use														
Jameson	330.0	15	15	15	15	15	15	15	15	15	16	1	1	1
Somky	213.0	171	171	171	171	171	171	143	139	191	261	276	259	272
Fagundes/Airport	50.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal District	593.5	187	187	187	187	187	187	158	154	206	277	277	260	274
TOTAL DELIVERED	2,001.7	2,237	2,222	2,229	2,189	2,132	2,143	2,032	1,962	1,974	2,101	2,141	2,151	2,218

BIOSOLIDS HANDLING - MONTHLY

Site	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19
<u>Land Applied by NSD</u>													
Somky							65	109					
Airport/Fagundes											44		
Jameson Canyon	13	-	-	-	-	-	-	-	197	52		316	117
Subtotal by NSD	13	-	-	-	-	-	65	109	197	52	44	316	117
<u>Land Applied by Contractor</u>													
Somky													
Airport/Fagundes													
Jameson Canyon													
Subtotal by Contractor	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Land Applied	13	-	-	-	-	-	65	109	197	52	44	316	117
Off Site (Contractor)													
Total (tons)	13	-	-	-	-	-	65	109	197	52	44	316	117

COLLECTION SYSTEM MAINTENANCE - MONTHLY

CATEGORY	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19
<u>Plugups</u>													
Total Calls	64	77	70	43	46	43	46	40	45	46	45	68	39
Business Hours	34	44	47	39	21	23	28	31	33	30	36	51	28
After Hours	30	33	23	4	25	20	18	9	12	16	9	17	10
District's	22	28	24	15	27	13	10	7	17	12	10	22	6
Property Owner's	41	49	46	28	20	30	35	32	26	34	32	43	32
Plugged Main Lines	1	1	-	-	4	1	1	1	-	-	-		
Run Lateral w/Eel	80	25	85	66	77	100	99	126	196	149	115	160	97
<u>Cleaning (feet of sewer)</u>													
Vactor #1	38,882	43,194	23,544	21,454	14,808	30,224	22,498	30,232	30,283	69,780	38,969	52,711	51,764
Vactor #2	10,373	-	27,335	9,420	26,687	22,691	43,466	32,180	39,800	57,405	43,059	25,762	610
Hydro													
Rodder													
Total (feet)	49,254	43,194	50,879	30,875	41,495	52,916	65,964	62,412	70,083	127,185	82,028	78,473	52,374
<u>Cleaning Days</u>													
Vactor #1	17	19	13	10	6	13	10	12	12	18	18	20	18
Vactor #2	3		7	6	15	8	19	15	16	21	15	8	1
Hydro													
Rodder													
<u>Feet/day</u>													
Vactor #1	2,450	2,250	1,800	2,150	2,450	2,300	2,250	2,500	2,500	3,900	2,150	2,650	2,900
Vactor #2	3,450		3,900	1,550	1,800	2,850	2,300	2,150	2,500	2,750	2,850	3,200	600
Hydro													
Rodder													
<u>Video Inspections</u>													
Mains (feet)	17,526	12,509	14,335	5,812	13,050	15,089	24,716	23,914	32,551	40,819	22,837	17,404	10,825
Laterals (each)	201	138	175	133	144	204	173	177	254	214	190	247	165
<u>Construction (each)</u>													
Cleanouts	50	1	18	3	17	15	12	24	15	17	15	20	10
Laterals	4	15	6	3	3	4	13	12	14	16	16	10	9
Mains		-	-		1				-	-		-	
Manholes		-	-		1				-	2		2	
Other													
<u>USA Markings</u>													
Regular (w/in 2 days)	159	159	171	224	338	327	338	292	378	363	331	332	224
Emergency (w/in 2 hours)	32	12	24	15	22	20	20	24	21	28	23	21	7

WASTEWATER PLANT OPERATIONS DATA - MONTHLY

CATEGORY	Units	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19
FLOWES		30	31	31	28	31	30	31	30	31	31	30	31	30
Influent	MG	208.8	257.6	407.2	542.7	465.3	261.4	275.4	213.6	199.3	192.5	182.1	181.6	177.6
Average Day	MGD	7.0	8.3	13.1	19.4	15.0	8.7	8.9	7.1	6.4	6.2	6.3	5.9	5.9
Maximum Day	Date	29-Nov	1-Dec	17-Jan	14-Feb	6-Mar	1-Apr	19-May	1-Jun	2-Jul	29-Aug	2-Sep	29-Oct	27-Nov
Maximum Day Flow	MG	16.5	12.6	31.7	44.8	26.3	11.7	17.2	8.0	6.7	6.3	6.3	6.1	7.1
Minimum Day	Date	1-Nov	13-Dec	3-Jan	1-Feb	19-Mar	30-Apr	14-May	27-Jun	24-Jul	6-Jan	24-Sep	10-Oct	1-Nov
Minimum Day Flow	MG	5.5	6.6	7.0	8.8	9.7	7.4	6.8	6.6	6.2	6.0	5.9	5.5	5.7
Effluent	MG	289.9	384.2	497.1	507.1	618.1	455.7	55.5	108.7	128.8	167.8	123.5	78.4	309.4
River Discharge	MG	263.8	378.9	491.6	507.1	618.1	424.4	-	-	-	-	-	-	265.0
Recycled Flow	MG	26.1	5.2	5.5	-	8.5	25.4	55.5	108.7	128.8	167.8	123.5	78.4	44.6
BIOSOLIDS	Tons	572	767	700	451	413	575	493	506	624	830	714	750	762
Wet Tons Generated from Pond	Tons													
Wet Tons Generated from Plant	Tons	572	767	700	451	413	575	493	506	624	830	714	750	762
% Solids Liquid	%													
% Solids Cake	%													
% Solids Land Application	%													
Wet Tons Hauled Offsite	Tons													
POLYMER USE	Gallons	8,169	1,155	868	1,046	4,557	7,851	5,053	5,921	3,745	3,153	3,038	3,499	11,780
Pond Pre-Flocculators	Gallons	2,293	-	-	-	2,668	4,704	288	224	494	326	257	540	6,311
Flocculator Polymer 1	Gallons	-	-	-	-	-	-	-	-	-	-	-	-	-
Flocculator Polymer 2	Gallons	784	294	-	-	974	755	79	-	119	61	86	203	427
Filter Polymer 1	Gallons	4,503		178	404	460	1,584	4,100	5,102	2,499	1,963	1,832	1,841	4,401
Filter Polymer 2	Gallons	-		-	-	-	-	-	-	-	-	-	-	-
Belt Presses	Gallons	589	788	690	642	455	808	586	595	633	803	863	915	641
ENERGY														
Total Electricity Used	MWH	785	684	663	670	864	840	779	827	842	739	859	789	673
Purchased from PGE	MWH	448	342	353	374	504	423	317	346	358	429	431	423	426
Produced from Co-Gen	MWH	254	265	235	207	215	244	284	270	267	269	257	225	247
Percent Produced	%	32%	39%	35%	31%	25%	29%	36%	33%	32%	36%	35%	29%	37%
Purchased from Solar	MWH	83	77	75	89	145	173	178	211	217	200	171	141	98
Percent Produced		11%	11%	11%	13%	17%	21%	23%	25%	26%	27%	20%	18%	37%
Purchased Natural Gas	Therms	1,912	1,560	2,147	1,789	2,299	1,558	1,475	1,448	1,727	1,979	1,563	1,471	2,602
Methane Flared Off	KSCF	192	266	34	7	14	130	164	324	282	251	126	220	214
Stand By Calls	#	133	55	71	75	52	26	80	67	64	50	50	59	88
Violations	#	-	-	-	-	-	-	-	-	-	-	-	-	-

WASTEWATER PLANT MAINTENANCE and LABORATORY DATA - MONTHLY

CATEGORY	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19
<u>Scheduled</u>													
Old	21	10	6	5	11	10	15	25	31	7	7	8	17
New	78	97	100	82	92	109	89	95	96	85	94	106	89
Completed	89	101	101	76	93	104	79	89	120	85	93	97	82
New Balance	10	6	5	11	10	15	25	31	7	7	8	17	24
<u>Unscheduled</u>													
Old	36	30	24	23	23	23	22	21	18	22	21	21	24
New	17	13	19	12	20	15	31	17	32	28	20	39	24
Completed	23	19	20	12	20	16	32	20	28	29	20	36	28
New Balance	30	24	23	23	23	22	21	18	22	21	21	24	20
<u>Total Work Orders</u>													
Old	57	40	30	28	34	33	120	46	49	29	28	29	41
New	95	110	119	94	112	124	11	112	128	113	114	145	113
Completed	112	120	120	88	112	120	46	109	150	113	113	133	110
New Balance	40	30	28	34	33	37	46	49	29	28	29	41	44
<u>LAB ANALYSES</u>													
<u>Sample Type</u>													
Regulatory	195	175	169	117	164	155	190	138	129	149	142	147	240
Process Control	1,154	1,087	1,155	1,111	1,199	1,195	760	770	869	838	818	893	1,010
Special Request	-	2	-	8	2	-	1	15	1	22	26	46	38
Quality Control/Assurance	1,128	705	776	639	754	1,447	812	539	632	600	607	774	957
TOTAL	2,477	1,969	2,100	1,875	2,119	2,797	1,763	1,462	1,631	1,609	1,593	1,860	2,245

**Summary of NSD Capital Project Status
through 11-30-19**

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	-	2,604	57,396	4%
13702	Manhole Raising/Rehabilitation	332,600			332,600	212,850	5,831	113,919	2%
13703	Lateral Replacement/Rehabilitation	110,000			110,000	-	65,813	44,187	60%
13704	Cleanouts Installation/Rehabilitation	107,000			107,000	-	22,142	84,858	21%
13705	Inflow & Infiltration (I&I) Reduction Program	221,700			221,700	-	10,940	210,760	5%
14703	Browns Valley Rd & First St	7,000,000			7,000,000	-	3,226	6,996,774	0%
17704	Infltrtn Rehab - SSMH/PL (CI-)	-	25,500		25,500	-	-	25,500	-
18701	I&I Smoke Testing	150,000			150,000	15,689	27,061	107,249	18%
18702	Collection System Asset Management Software	-	443,550		443,550	282,075	114,113	47,363	26%
18703	Upper Lateral Rehab - Basin L (Pilot) #3	166,300	3,200		169,500	30,561	32,522	106,418	19%
18706	Sewer System Inflow/Infiltration 2019	3,538,100	313,850		3,851,950	431,194	2,128,315	1,292,441	55%
19701	66-inch Trunk Rehabilitation (Kaiser to IPS)	4,000,000	450,000		4,450,000	308,034	137,645	4,004,321	3%
19703	2020 Collection System Rehabilitation	3,169,600	9,800		3,179,400	-	31,325	3,148,075	1%
19727	Collection System Master Plan	1,071,200	632,350		1,703,550	424,171	99,597	1,179,782	6%
20701	Upper Lateral Rehab - Pilot #5	5,000			5,000	-	50	4,950	1%
20702	Manhole Rehabilitation	250,000			250,000	182,120	2,253	65,627	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	-	5,688	412	93%
	<u>COLLECTION SYSTEM - LIFT STATIONS</u>								
17711	West Napa PS - Rehab	5,500,000			5,500,000	109,280	128,677	5,262,044	2%
19705	Stonecrest PS Pump Rebuild	-	40,100		40,100	9,840	15,266	14,994	38%
	<u>TREATMENT - PROJECTS</u>								
13745	Pond 1 Dredge	2,100,000	237,150		2,337,150	14,051	29,430	2,293,669	1%
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	338,519	902,580	31,601	71%
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	85,780	14,717	1,399,502	1%

**Summary of NSD Capital Project Status
through 11-30-19**

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	112,093	41,688	812,519	4%
17715	Turbidimeters (7) Tertiary Rplcmnts	-	16,000		16,000	-	-	16,000	-
17726	Headworks Equipment Rehab/Replacment	1,000,000	667,600		1,667,600	314,202	1,247,504	105,894	75%
18711	3W Strainer	-	24,350		24,350	-	-	24,350	-
18715	Muffle Furnace - Replacement	-	5,000		5,000	-	4,321	679	86%
18716	Rotork Actuator Replacement	-	6,400		6,400	-	-	6,400	-
18719	Filter Flow Control - Rotork Valves	-	9,900		9,900	-	-	9,900	-
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	-	19,115	75,885	20%
19709	Main - Polymer Tank (3) Replacement	-	10,000		10,000	-	-	10,000	-
19710	Main - 12kV Redundant Line	-	119,150		119,150	-	217	118,933	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	13,071	15,478	57,150	18%
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	25,713	-	34,287	-
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	30,502	-	2,798	-
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	-	14,596	5,404	73%
	<u>SCADA</u>								

**Summary of NSD Capital Project Status
through 11-30-19**

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	10,027	28,533	49,690	32%
	<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	57,487	290,668	96,245	65%
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	-	110,095	226,905	33%
19723	AV System Replacement - Conference Rooms	-	20,000		20,000	-	-	20,000	-
19725	Vehicle 011 - CSET Trailer	-	7,100		7,100	-	3,800	3,300	54%
		\$33,873,300	\$5,173,700	-	\$39,047,000	\$3,158,003	\$5,579,260	\$30,309,736	14%