



Napa Sanitation District

General Manager's Report

for

November, 2018

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NAPA SANITATION DISTRICT

General Manager's Report

DATE: January 16, 2019
FROM: Timothy B. Healy, General Manager
SUBJECT: General Manager's Report for November 2018

REGULATORY COMPLIANCE:

Collection System Compliance:	1 Category 1 SSO's, 0 Category 2 SSO's, and 5 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, 2018 – November 30, 2018
Percent Fiscal Year:	41.7%
Operating Expenditures to date:	42.8%
Historical Expenditures to date:	44.2%
Significant Comments:	None

PERSONNEL:

Significant events for the month of November 2018 in the Human Resources Department:

New Hires:	None
Separations:	None
Promotions:	Sean Warner promoted to Collection System Technician
Recruitment Activities:	Continued recruitment for Operator-in-Training/Operator I
Injuries:	None

Summaries of Operational Highlights are on following pages.

COLLECTIONS:

Significant events for the month of November 2018 in Collection System Maintenance include:

- The District had 1 Category 1 Sanitary Sewer Overflows (SSO's), 0 Category 2 SSO's and 5 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 9 cleanouts and repaired 5 cleanouts. They also repaired 1 lateral and installed 3 lateral liners. Additionally, the service response/programs crew completed 88 work orders in support of the grease and odor control program, responded to 65 customer requests for service (22 were NSD problem) and closed out 180 mark and locate request tickets.
- The preventative maintenance crews ran work orders on 78 laterals, root foamed 6 laterals, cleaned approximately 51,182 feet of main line and CCTV inspected 135 laterals. In addition, the CCTV truck televised 17,501 feet of mainline.

TREATMENT PLANT:

Significant events for the month of November 2018 in the Treatment Plant Department:

Plant Operations:

- For November 2018, the plant's influent flow was 208.8 MG as compared to last year flow for November 2017 of 205.5 MG
- Flow to the Napa River for November 2018 was 263.8 MG compared to last year's flow of 305.8 MG.
- The production of recycle quality occurred for 21 days during November 2018 with a total distributed flow of 17.71 MG.
- There was 3.23" rainfall for November 2018 (Carneros Rainfall Center) as compared to 2.49" rainfall for November 2017.
- Pond 4 end of the month recorded level reading was 43.85" as compared to November 2017 of 33.06". Total remaining pond capacity for November 2018 was 49.9% as compared to November 2017 remaining capacity of 54.7%.

Power Consumption and Production:

- This November power consumption purchased from PG&E was 409 MWH in comparison to November 2017 purchase of 433 MWH.
- Cogeneration unit ran 716 of 720 hours for the month – 99.44% uptime, averaging 348.52 Kw, producing 251 MWH of energy.
- Solar generation in November was 83 MWH, compared to 99 MWH in October.

Maintenance:

Significant events for the month of November 2018:

Process Maintenance

- Cogeneration unit monthly emission test - in compliance with BAAQMD permit
- Westside Lab Sampler/replaced temperature sensor
- Replaced 6 wheels on DAFT skimmer assembly
- Cogen service:
 - Changed oil and filters
 - Replaced pre-air filter and main air filter
- Change Siloxane Filters Media
- Replaced Gas Compressor roof fan #107
- Installed ceramic high temperature thermocouple's for flare

Projects

- Equipment Audit;
 - Blower Building
 - Aeration Basins/AB Gallery
- Completed CIP 19716/ Rebuild Motor & Pump #3 at P-4 Pump Station
- Install EV/PEV charging stations (CIP 19726)
- Completed rebuild of Digester Recirculation Pump #1

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 were no violations of **Effluent** limits during the month of November, 2018. All parameters were monitored at the required frequencies. The following were notable sampling events:

- November 6, 2018: Metals, Cyanide, Mercury, Nutrients, PCB Congeners
- November 5-9, 2018: Acute Toxicity Bioassay
- November 13, 2018: Nutrients

The Total Residual Chlorine limit was exceeded once during the reporting period

- November 3, 2018 @ 2329: 0.08 mg/L Chlorine, 1 minute duration.

Influent (INF-001) Summary

Monthly **Influent** monitoring of all parameters occurred at the required frequencies. The following were notable sampling events:

- November 6, 2018: Metals, Cyanide, Mercury, Volatile/Semivolatile Organics

RECYCLING:

Significant events in the Recycling Department for November 2018 include:

- Recycled water delivered for the month of November 2018 was (22.628 million gallons), as compared to November 2017 (12.095 million gallons) is higher from the previous year due to commercial landscape and vineyard demand. Delivered recycled water volume represents the sum of all use site flow meter consumption values.
- Staff approved one connection in the MST area.
- Staff continued land application of biosolids on Jameson Reuse Site for the reporting period.

POLLUTION PREVENTION:

Significant events in the Pollution Prevention and Outreach Division November 2018 include:

- There was 1 tour of the treatment plant given to community members.
- The weight of pharmaceuticals collected in November at Family Drug in Napa was 56 pounds. The total amount of unneeded medications collected since the drug takeback program began in September 2010 is 21,521.2 pounds.
- There were 29 ESME Washer Rebates issued this month for a total of \$1,450.

ENGINEERING / CAPITAL PROJECTS / DEVELOPMENT:

Significant events occurring in the Engineering Division for November 2018 include:

- Consultant continued work on the SCADA Master Plan.
- Contractor continued construction of the Headworks Equipment Replacement Project.
- Staff continued receiving deliveries of floating reservoir covers for the Recycled Water Reservoir Improvements Project.
- Contractor continued construction of the 2018 Collection System Rehabilitation Project.
- Staff received and responded to questions from prospective bidders and issued two addenda for the Southeast Napa Sewer and Roadway Rehabilitation Project.
- Consultant continued condition assessment phase for the 66-inch Trunk Sewer Rehabilitation Project.

- Consultant continued condition assessment phase for the Primary Clarifier Rehabilitation Project.
- Consultant completed the design of the Browns Valley Trunk Project and staff issued notice inviting bids.
- Consultant continued design of the West Napa Pump Station Project.
- Consultant and Staff continued work on Phase 1A and Phase 1B of the Asset Management Program.
- Contractor continued construction of the 2018 Treatment Plant Improvement Project.
- Staff and consultant continued design of the 2019 Treatment Plant Improvement Project.
- Staff continued design of the Pond Transfer Structure Project
- Consultant continued working on the Collection System Master Plan.
- Staff and Consultant started design of the MST Truck Fill Station.
- Staff reviewed 30 sets of development plans and deemed 14 sets of plans complete. The approved plans consisted of 8 tenant improvements, 4 residential dwellings, 1 commercial building, and 1 residential lateral.

Budget Status & Cash Summary - July 1, 2018 - November 30, 2018 (41.7% of the year)

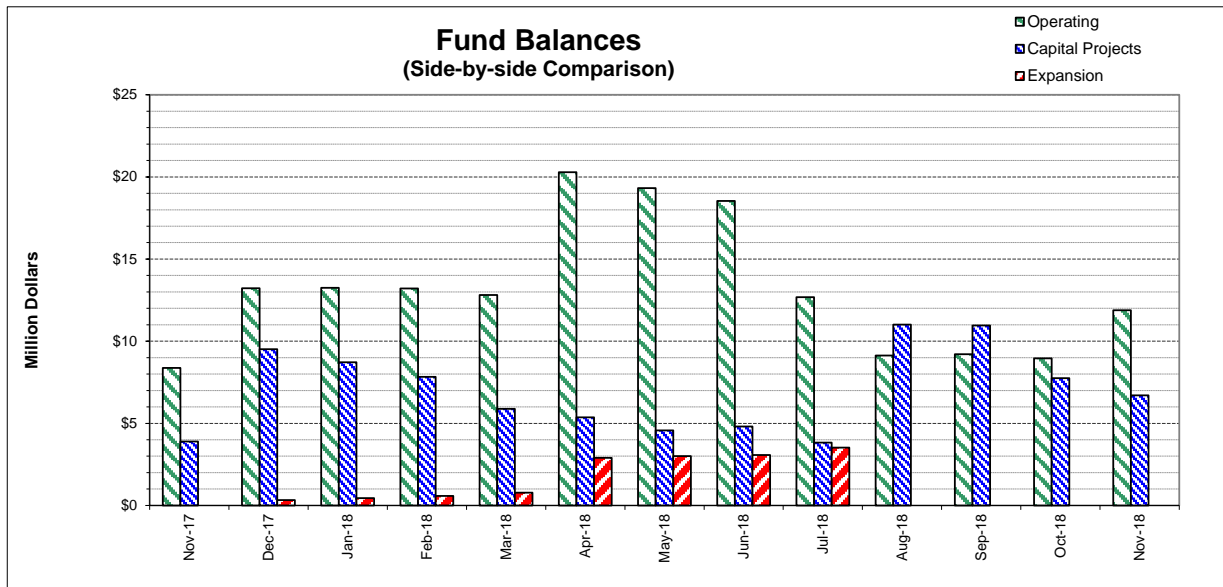
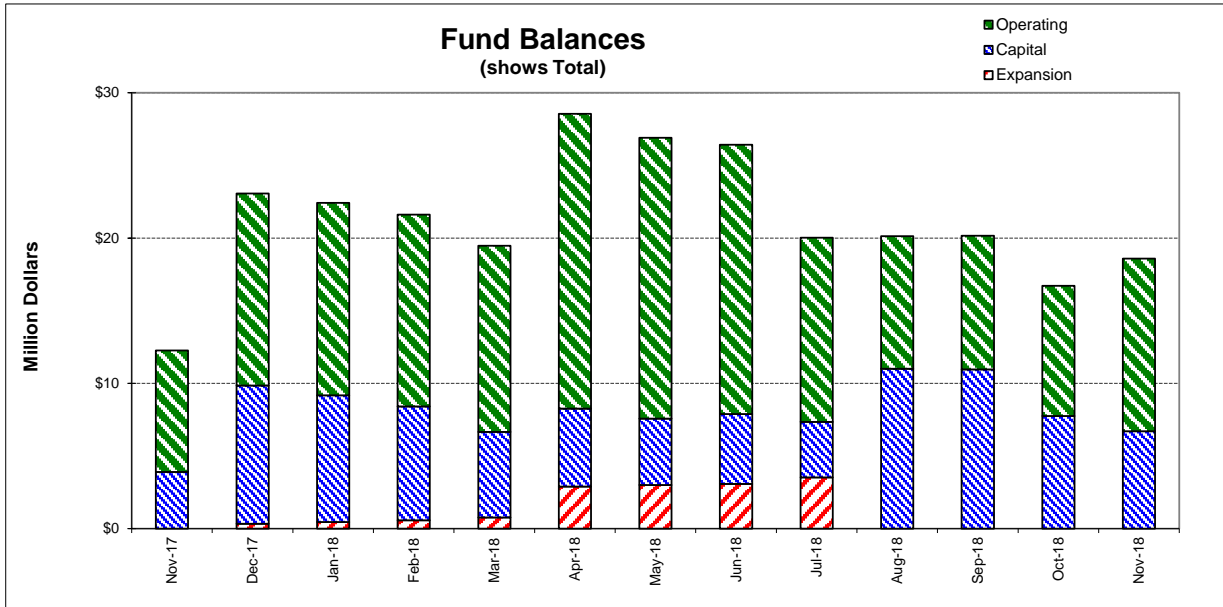
<i>Expenditures</i>	FY 18/19 Budget	Encumbrances	Expenditures to date	Committed to date	Remaining Balance	Percent Committed
Operating						
Salaries & Benefits	\$9,961,350	\$2,353	\$3,729,332	\$3,731,685	\$6,229,665	37.5%
Services & Supplies	\$6,160,950	1,218,844	1,905,882	3,124,726	3,036,224	50.7%
Taxes	29,150	-	-	-	29,150	0.0%
Debt Service	4,593,800	-	3,619,603	3,619,603	974,198 (1)	78.8%
Intrafund Transfers	8,900,000	-	2,225,000	2,225,000	6,675,000	25.0%
Total Operating:	\$29,645,250	\$1,221,197	\$11,479,816	\$12,701,014	\$16,944,236 (2)	42.8%
Capital						
Bldgs/Improvements & Equip	\$32,410,100	\$7,275,589	\$5,667,170	\$12,942,759	\$19,467,341 (3)	39.9%
Intrafund Transfers	7,250,000	-	4,357,059	4,357,059	2,892,941	60.1%
Total Capital :	\$39,660,100	\$7,275,589	\$10,024,228	\$17,299,818	\$22,360,282	43.6%
Grand Total Expenditures:	\$69,305,350	\$8,496,786	\$21,504,045	\$30,000,831	\$39,304,519	43.3%

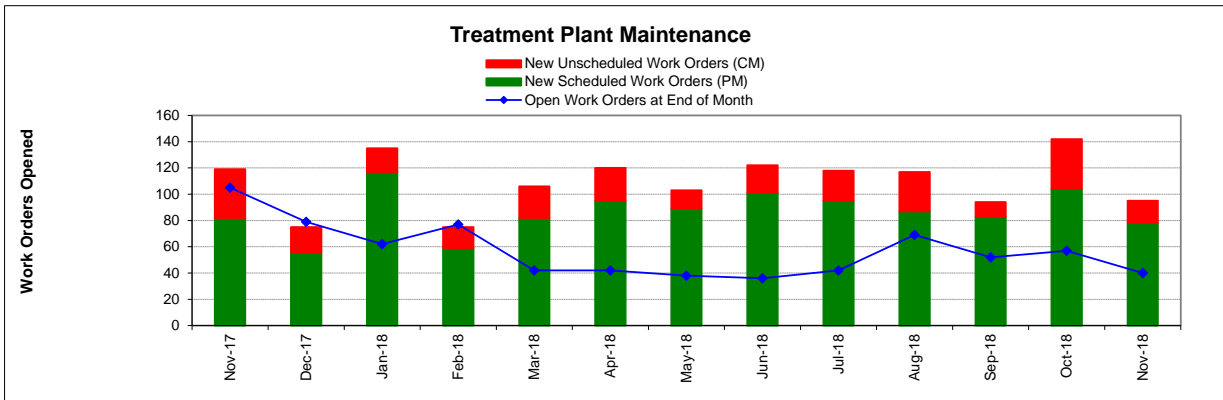
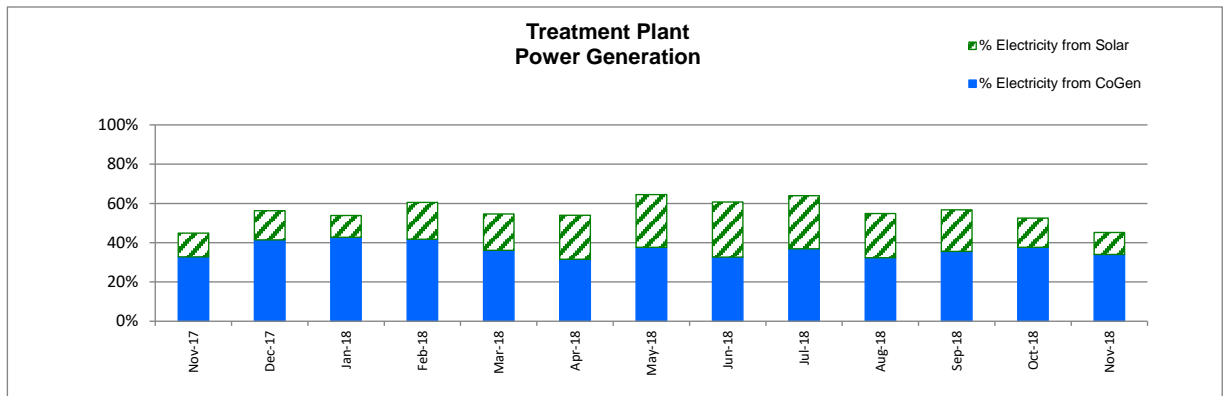
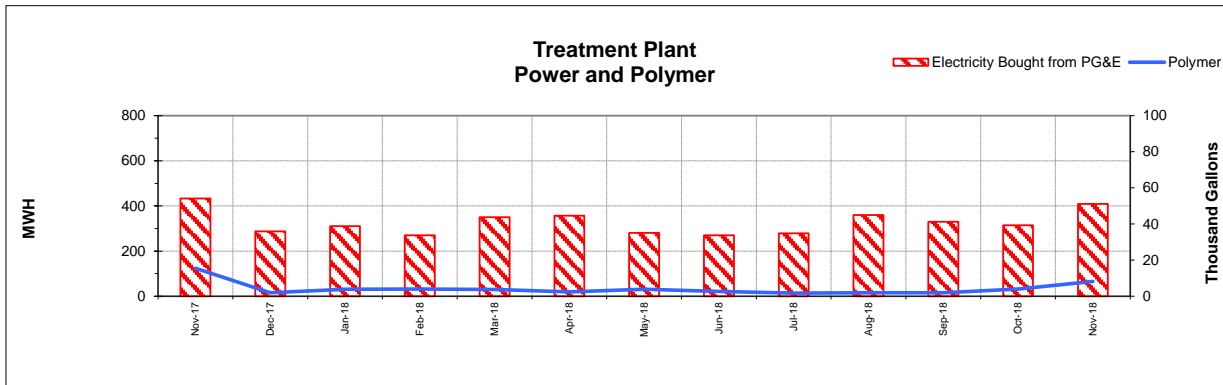
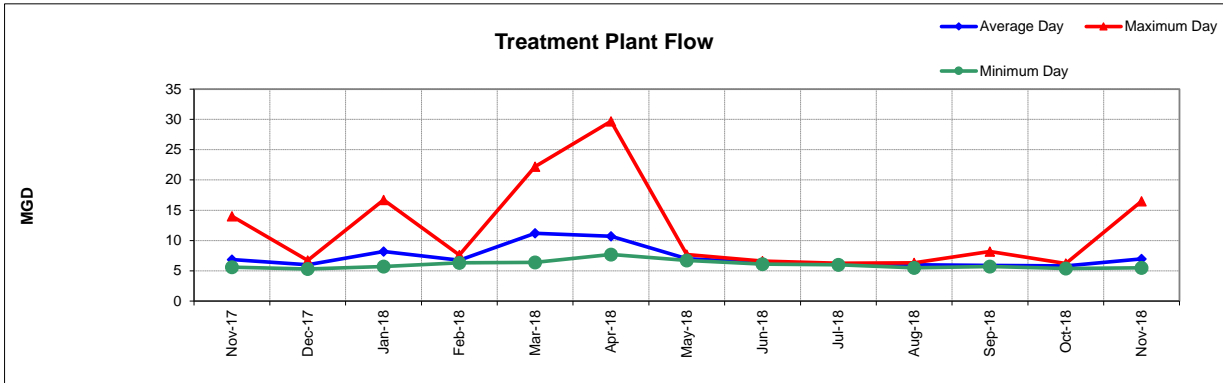
<i>Revenues</i>	FY 18/19 Budget	Encumbrances	Revenues to date	Revenues posted to date	Unposted Revenue	Percent Posted
Operating						
Use of Money/Property	\$1,036,000		\$459,970	\$459,970	\$576,030	44.4%
Charges for Services	29,571,800		5,333,772	5,333,772	24,238,028	18.0%
Miscellaneous Revenues	63,000		35,423	35,423	27,577	56.2%
Donations/Contributions (Capital Labor)	-		360,113	360,113	(360,113) (4)	N/A
Total Operating:	\$30,670,800		\$6,189,279	\$6,189,279	\$24,481,521	20.2%
Capital						
Use of Money/Property	\$0		\$0	\$0	\$0	N/A
Capacity Charges	4,614,600		1,308,925	1,308,925	3,305,675	28.4%
Intergovernmental	375,000		4,528	4,528	370,472	1.2%
Bond/Loan Proceeds	9,075,000		-	-	9,075,000	0.0%
Sale of Assets	25,000		81,370	81,370	(56,370)	N/A
Miscellaneous Revenues	5,000		-	-	5,000	N/A
Intrafund Transfers	16,150,000		6,582,059	6,582,059	9,567,941	40.8%
Total Capital:	\$30,244,600		\$7,976,882	\$7,976,882	\$22,267,718	26.4%
Grand Total Revenue:	\$60,915,400		\$14,166,161	\$14,166,161	\$46,749,239	23.3%

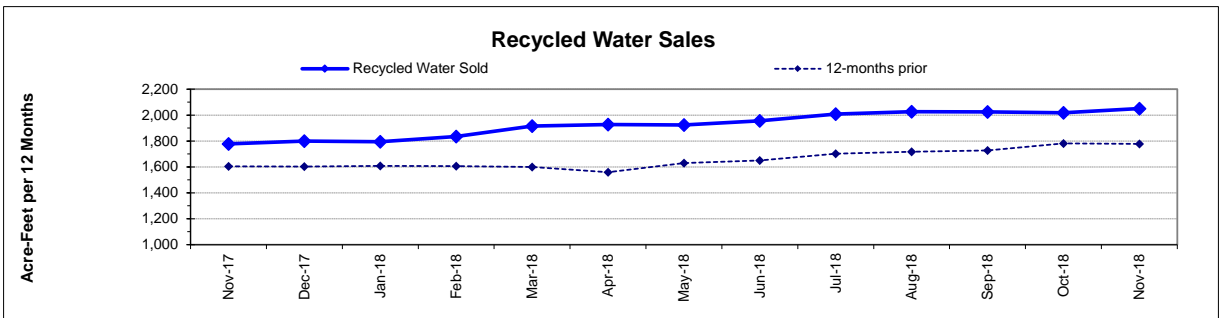
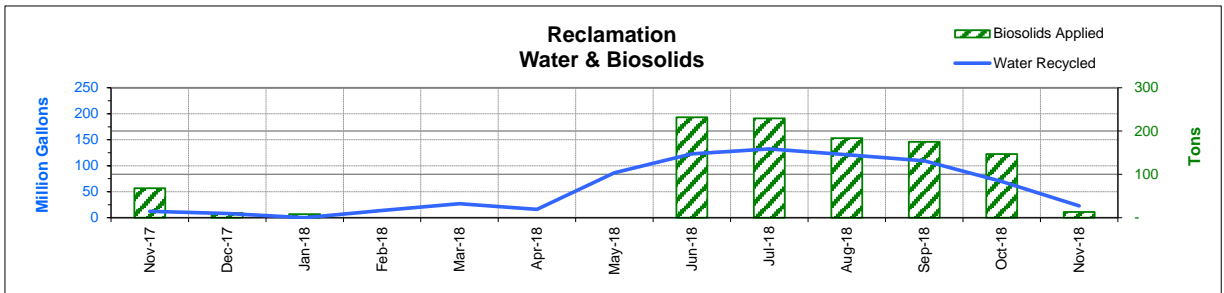
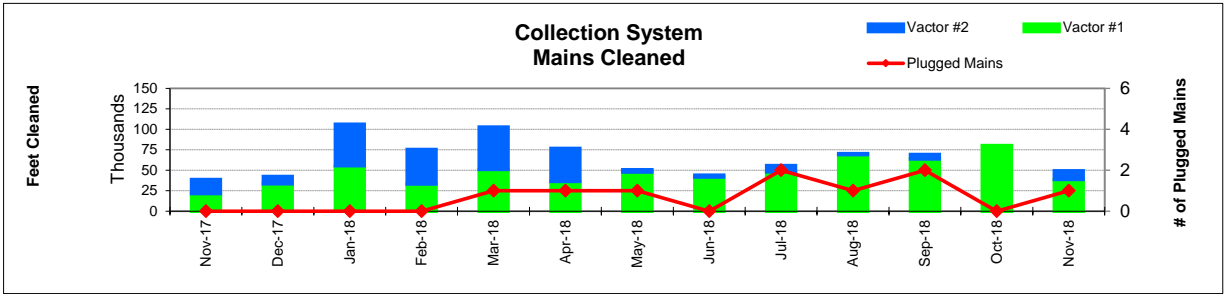
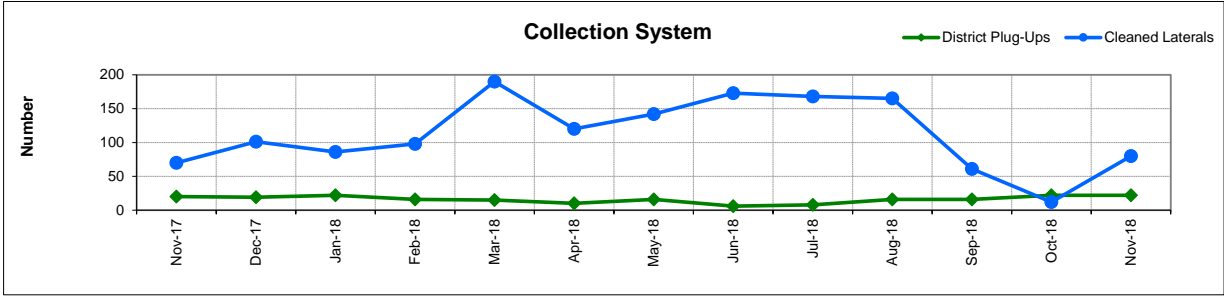
Cash on Hand as of 11/30/18 **\$18,586,000**

**excluding Debt Service restricted funds
11/30/18 -Effective Rate of Return = 1.94%

1. Series 2012A's and 2017's principal/interest payments are made in Aug & Feb
2. Includes Debt Service and Intrafund Transfers; otherwise is 42.5%
3. See Capital Project Status report for details
4. In-house Labor for Capital Projects (Contra acct for Salaries)







FUND BALANCES - MONTHLY

CATEGORY	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18
<i>(Thousand Dollars)</i>													
7800	8,372	13,220	13,251	13,210	12,818	20,290	19,326	18,538	12,676	9,123	9,204	8,951	11,888
7850	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal Operating	8,372	13,220	13,251	13,210	12,818	20,290	19,326	18,538	12,676	9,123	9,204	8,951	11,888
Capital Improvement Projects	3,897	9,514	8,720	7,830	5,877	5,365	4,573	4,808	3,825	11,009	10,956	7,755	6,698
Debt Proceeds	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal Capital	3,897	9,514	8,720	7,830	5,877	5,365	4,573	4,808	3,825	11,009	10,956	7,755	6,698
Total Discretionary Funds	12,269	22,734	21,971	21,040	18,695	25,655	23,899	23,346	16,501	20,132	20,160	16,706	18,586
Expansion Fund (Restricted)	-	332	449	577	775	2,898	3,007	3,075	3,520	-	-	-	-
Total Restricted Funds	-	332	449	577	775	2,898	3,007	3,075	3,520	-	-	-	-
TOTAL ALL FUNDS	12,269	23,066	22,420	21,617	19,470	28,553	26,906	26,421	20,021	20,132	20,160	16,706	18,586

DEVELOPMENT WORKLOAD - MONTHLY

CATEGORY	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18
<u>Phone Requests</u>													
Maps/Drawings	3	3	6	6	6	3	6	8	4	2	2	3	1
Lateral Permits	-	-	-	-	-	-	-	-	-	-	-	-	-
Policy Questions	8	6	4	12	17	5	9	8	9	10	4	6	3
Development Questions	40	23	55	63	39	44	79	80	61	63	28	70	41
Miscellaneous	3	10	8	7	15	11	17	27	37	24	26	20	18
TOTAL	54	42	73	88	77	63	111	123	111	99	60	99	63
<u>Counter Requests</u>													
Maps/Drawings	-	-	1	-	-	-	1	1	-	3	-	1	-
Lateral Permits	5	7	11	9	17	12	10	12	9	9	3	9	5
Policy Questions	1	2	-	2	2	-	1	-	2	3	-	2	-
Development Questions	9	9	7	9	15	11	13	12	12	9	5	6	6
Miscellaneous	-	1	1	1	3	-	1	1	2	2	2	0	-
TOTAL	15	19	20	21	37	23	26	26	25	26	10	18	11
<u>Initial Request (Referrals)</u>	17	5	7	13	20	15	20	13	13	17	16	21	20
<u>Connection Permits Issued</u>													
Residential Permits	1	5	3	12	19	16	3	3	5	16	9	1	1
Commercial Permits	2	3	5	3	1	3	2	3	5	5	1	-	2
Industrial Permits	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMITS	3	8	8	15	20	19	5	6	10	21	10	1	3
Residential Units	1	5	3	12	336	16	3	3	5	16	18	1	1
Commercial Units	2	3	5	3	1	102	174	3	5	8	1	-	2
TOTAL UNITS	3	8	8	15	337	118	177	6	10	24	19	1	3
<u>Annexations</u>													
Submitted	-	-	-	-	-	-	-	-	1	1	1	-	1
Acreage	-	-	-	-	-	-	-	-	0.60	11.60	5.79	-	158.20
<u>Plans Reviewed</u>													
<u>Subdivisions/Sites</u>													
First Submittal	2	3	9	19	18	14	4	10	10	18	9	10	10
Second Submittal	1	4	2	5	9	6	8	3	5	8	4	5	2
Third Submittal	2	3	5	4	6	2	2	2	3	3	4	2	1
<u>Building/Tenant Improvements</u>													
First Submittal	5	10	5	16	14	7	19	18	10	8	8	11	8
Second Submittal	10	3	1	2	9	1	7	6	8	6	1	5	6
Third Submittal	7	5	2	3	3	4	2	3	5	4	3	1	3
<u>Miscellaneous Plan Reviews</u>	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PLANS REVIEWED	27	28	24	49	59	34	42	42	41	47	29	34	30

INSPECTION WORKLOAD - MONTHLY

CATEGORY	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18
<u>CONSTRUCTION</u>													
Locating Sewers	-	-	-	-	-	-	-	-	-	1	-	-	1
Permit Processing	-	-	-	-	-	-	-	-	-	-	-	-	-
Preconstruction Meetings	1	1	7	7	5	5	7	2	3	1	3	-	1
Inspections - Mains	-	5	-	20	6	2	4	-	2	6	11	1	-
Inspections - Manholes	45	62	41	38	13	16	25	12	-	6	76	76	21
Inspections - Laterals	7	15	23	26	23	17	25	15	7	13	3	8	3
Inspections - Cleanouts	11	10	31	36	24	26	43	7	3	2	2	6	8
Inspections - Review Video	-	-	-	-	1	2	-	17	1	-	2	-	1
Demo - Septic Tanks	-	-	-	-	-	-	-	-	-	-	-	-	-
Demo - Buildings	-	-	-	-	-	-	-	-	1	-	-	-	-
Update Record Drawings	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	64	93	102	127	72	68	104	53	17	29	97	91	35
<u>MISCELLANEOUS</u>													
Meter Readings	-	-	11	24	-	1	13	-	-	-	-	-	1
Washdown Facility Inspections	-	-	-	-	-	12	-	-	-	-	-	-	-
General Customer Assistance	30	25	26	18	38	11	28	21	40	27	31	50	25
City of Napa Water Discharge	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	30	25	37	42	38	24	41	21	40	27	31	50	26
<u>SPECIAL PROJECTS</u>													
	6	1	7	0	5	6	0	9	21	23	35	36	19

POLLUTION PREVENTION WORKLOAD - MONTHLY

CATEGORY	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18
<u>Outreach Activities</u>													
Plant Tours Conducted	2	0	3	0	1	5	5	3	1	3	6	4	1
Presentations Made	0	0	0	0	2	1	5	0	1	0	2	10	0
Total Outreach Activities	2	-	3	-	3	6	10	3	2	3	8	14	1
<u>Inspections Conducted</u>													
Food Service Facilities	-	-	6	22	64	51	10	-	-	-	-	-	-
Auto Body & Car Wash	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	1	-	-	-	-	-	-	-	-	-	-	-	1
Total Inspections	1	-	6	22	64	51	10	-	-	-	-	-	1
<u>Compliance Issues</u>													
NOVs Issued	-	1	-	3	2	2	1	3	-	3	1	2	1
NOEs Issued	-	1	1	3	-	1	-	1	-	1	-	1	1
Non-Compliant-FOG	-	1	-	-	-	-	-	-	-	-	-	-	-
Total Compliance Issues	-	3	1	6	2	3	1	4	-	4	1	3	2
<u>Pollution Prevention</u>													
Clothes Washer Rebates	-	-	25	14	21	-	8	21	-	-	-	-	29
Toilet Retrofit Rebates	-	-	-	-	-	-	-	-	-	-	-	-	-
Pharmaceuticals Diverted (in lbs)	63	-	35	-	82	66	-	74	90	65	61	68	56

RECYCLED WATER DELIVERIES - MONTHLY

	Acres	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18
MONTHLY (MG)														
Water Sold														
Golf Courses	405.0	5.504	6.253	0.001	6.152	2.748	3.320	52.726	68.294	64.047	57.269	44.197	23.612	3.322
Cemeteries	57.1	0.193	0.003	-	0.005	0.154	0.385	3.183	3.643	4.903	4.920	4.142	3.239	2.872
Parks	18.5	0.020	-	-	-	-	-	0.823	0.949	1.051	0.846	0.527	0.050	0.611
Schools	21.0	0.195	0.019	-	0.255	0.198	0.242	1.727	2.151	2.122	2.044	1.571	1.231	0.745
Commerical	167.6	4.387	1.402	-	1.835	1.765	3.169	9.893	12.414	15.863	19.184	16.950	19.637	7.652
Vineyards	564.0	1.766	0.225	-	5.695	21.988	8.001	6.377	21.260	43.468	32.727	21.248	9.649	7.015
Trucked Water	175.0	0.030	0.014	-	0.017	0.029	0.880	0.143	0.737	0.666	0.637	0.399	0.289	0.403
Subtotal Sales	1,408.2	12.095	7.916	0.001	13.960	26.881	15.996	74.872	109.448	132.120	117.628	89.035	57.707	22.620
District Use														
Jameson	330.0	-	-	-	0.077	-	-	-	-	-	0.163	4.785	-	-
Somky	213.0	-	-	-	-	-	-	11.710	13.263	0.208	3.226	15.447	12.002	0.008
Fagundes/Airport	50.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal District	593.5	-	-	-	0.077	-	-	11.710	13.263	0.208	3.389	20.232	12.002	0.008
TOTAL DELIVERED	2,001.7	12.095	7.916	0.001	14.037	26.881	15.996	86.582	122.711	132.327	121.016	109.266	69.709	22.628
ANNUAL (AF)														
Water Sold														
Golf Courses	405.0	1,045	1,064	1,064	1,083	1,091	1,093	1,091	1,097	1,067	1,063	1,035	1,025	1,019
Cemeteries	57.1	16	16	16	16	16	17	25	34	46	58	69	76	84
Parks	18.5	14	14	14	14	14	14	14	14	14	14	14	13	15
Schools	21.0	36	36	36	37	37	38	39	38	37	37	37	36	38
Commerical	167.6	325	328	324	329	333	335	318	303	298	303	309	327	337
Vineyards	564.0	336	336	336	353	420	423	427	460	534	540	550	529	545
Trucked Water	175.0	6	5	5	5	5	8	8	10	11	11	12	12	13
Subtotal Sales	1,408.2	1,778	1,799	1,794	1,835	1,916	1,928	1,923	1,955	2,008	2,026	2,025	2,018	2,051
District Use														
Jameson	330.0	143	143	143	143	143	143	143	143	121	64	15	15	15
Somky	213.0	223	223	223	223	223	223	240	244	210	178	166	171	171
Fagundes/Airport	50.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal District	593.5	366	366	366	366	366	366	383	387	330	243	182	187	187
TOTAL DELIVERED	2,001.7	2,144	2,165	2,160	2,202	2,282	2,294	2,306	2,343	2,338	2,269	2,207	2,205	2,237

BIOSOLIDS HANDLING - MONTHLY

Site	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18
<u>Land Applied by NSD</u>													
Somky											175		
Airport/Fagundes													
Jameson Canyon	68	11	8	-	-	-	-	232	229	184		147	13
Subtotal by NSD	68	11	8	-	-	-	-	232	229	184	175	147	13
<u>Land Applied by Contractor</u>													
Somky													
Airport/Fagundes													
Jameson Canyon													
Subtotal by Contractor	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Land Applied	68	11	8	-	-	-	-	232	229	184	175	147	13
Off Site (Contractor)													
Total (tons)	68	11	8	-	-	-	-	232	229	184	175	147	13

COLLECTION SYSTEM MAINTENANCE - MONTHLY

CATEGORY	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18
<u>Plugups</u>													
Total Calls	63	48	62	49	67	40	44	25	37	39	53	57	64
Business Hours	38	27	40	35	53	23	32	16	24	28	32	36	34
After Hours	25	21	22	14	16	17	12	9	9	11	21	21	30
District's	20	19	22	16	15	10	16	6	8	16	16	22	22
Property Owner's	43	29	40	33	40	30	28	19	29	23	36	35	41
Plugged Main Lines					1	1	1		2	1	2	-	1
Run Lateral w/Eel	70	101	86	98	190	120	142	173	168	165	61	12	80
<u>Cleaning (feet of sewer)</u>													
Vactor #1	21,500	33,612	55,782	33,391	51,027	36,507	47,937	41,767	48,278	69,132	63,968	80,207	38,882
Vactor #2	17,254	8,642	50,441	41,842	51,666	40,119	2,708	2,065	7,290	1,072	5,367	-	10,373
Hydro		1,251											
Rodder			765										
Total (feet)	38,754	43,505	106,988	75,233	102,693	76,625	50,645	43,832	55,568	70,204	69,335	80,207	49,254
<u>Cleaning Days</u>													
Vactor #1	10	14	18	11	15	14	20	19	16	21	19	22	17
Vactor #2	10	5	14	13	18	13	1	1	3	1	3	-	3
Hydro													
Rodder			1										
<u>Feet/day</u>													
Vactor #1	1,950	2,300	3,250	3,150	3,100	2,850	2,400	2,200	2,900	3,200	3,150	3,650	2,450
Vactor #2	2,150	2,400	3,100	3,050	3,400	2,600	2,400	2,200	3,000	3,300	3,350	3,650	2,300
Vactor #2	1,750	1,750	3,600	3,200	2,850	3,100	2,700	2,050	2,450	1,050	1,800		2,050
Hydro													
Rodder			750										
<u>Video Inspections</u>													
Mains (feet)	10,767	6,320	17,644	12,878	21,714	18,530	26,140	18,248	18,188	27,761	18,443	31,889	17,526
Laterals (each)	172	186	114	122	211	179	197	223	266	234	232	297	201
<u>Construction (each)</u>													
Cleanouts	6	11	15	16	8	6	10	8	27	25	6	5	50
Laterals	1	1	1	4	1	10	24	10	9	8	8	4	4
Mains		1		1								1	
Manholes						1	2			2	1	1	
Other	79					3							
<u>USA Markings</u>													
Regular (w/in 2 days)	363	210	281	277	266	280	282	277	397	296	286	378	159
Emergency (w/in 2 hours)	9	13	15	3	18	31	37	16	8	12	15	15	32

WASTEWATER PLANT OPERATIONS DATA - MONTHLY

CATEGORY	Units	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18
FLOWES		30	31	31	28	31	30	31	30	31	31	30	31	30
Influent	MG	205.5	186.3	254.0	189.3	347.0	321.5	216.7	191.0	189.8	186.1	176.1	180.0	208.8
Average Day	MGD	6.9	6.0	8.2	6.8	11.2	10.7	7.0	6.4	6.1	6.0	5.9	5.8	7.0
Maximum Day	Date	17-Nov	1-Dec	10-Jan	1-Feb	23-Mar	8-Apr	1-May	4-Jun	1-Jul	19-Aug	16-Sep	2-Oct	29-Nov
Maximum Day Flow	MG	14.0	6.7	16.7	7.6	22.2	29.7	7.7	6.6	6.3	6.3	8.2	6.2	16.5
Minimum Day	Date	1-Nov	26-Dec	2-Jan	24-Feb	1-Mar	30-Apr	31-May	27-Jun	6-Jul	22-Aug	21-Sep	31-Oct	1-Nov
Minimum Day Flow	MG	5.6	5.3	5.7	6.3	6.4	7.7	6.7	6.1	6.0	5.5	5.7	5.4	5.5
Effluent	MG	314.7	169.1	302.3	176.2	415.7	342.1	95.8	134.0	133.0	124.4	104.7	68.1	289.9
River Discharge	MG	305.8	163.8	302.0	164.6	398.9	319.8	-	-	-	-	-	-	263.8
Recycled Flow	MG	8.9	5.3	0.3	14.4	23.0	20.2	95.8	134.0	133.0	124.4	104.7	68.1	26.1
BIOSOLIDS	Tons	731	617	713	770	836	605	719	760	798	775	943	745	572
Wet Tons Generated from Pond	Tons													
Wet Tons Generated from Plant	Tons	731	617	713	770	836	605	719	760	798	775	943	745	572
% Solids Liquid	%													
% Solids Cake	%													
% Solids Land Application	%													
Wet Tons Hauled Offsite	Tons													
POLYMER USE	Gallons	15,506	1,939	3,839	3,931	3,764	2,365	3,816	2,636	1,732	1,936	1,915	4,044	8,169
Pond Pre-Flocculators	Gallons	11,711		2,460	-	-	282	-	-	-	-	-	59	2,293
Flocculator Polymer 1	Gallons													
Flocculator Polymer 2	Gallons	-	250	589	253	1,033	452	-	-	-	-	-	34	784
Filter Polymer 1	Gallons	830	728		3,019	1,963	1,015	2,850	1,677	824	1,361	1,259	2,944	4,503
Filter Polymer 2	Gallons		151	790			-	-	-	-	-	-	-	-
Belt Presses	Gallons	784	810	13	659	769	617	966	959	908	575	656	1,007	589
ENERGY														
Total Electricity Used	MWH	719	658	673	684	759	777	748	813	775	797	764	662	746
Purchased from PGE	MWH	433	287	311	270	350	357	281	270	279	360	330	314	409
Produced from Co-Gen	MWH	236	273	288	286	269	245	282	266	286	258	272	249	254
Percent Produced	%	33%	41%	43%	42%	36%	32%	38%	33%	37%	32%	36%	38%	34%
Purchased from Solar	MWH	87	98	74	128	140	175	200	227	210	179	162	99	83
Percent Produced		12%	15%	11%	19%	18%	22%	27%	28%	27%	22%	21%	15%	11%
Purchased Natural Gas	Therms	99	91	2,404	1,214	166	24	22	63	116	68	34	532	516
Methane Flared Off	KSCF	82	192	523	733	79	43	110	308	344	259	391	507	192
Stand By Calls	#	47	66	23	43	40	36	135	52	57	71	40	75	133
Violations	#	-	-	-	-	-	-	-	-	-	-	-	-	-

WASTEWATER PLANT MAINTENANCE and LABORATORY DATA - MONTHLY

CATEGORY	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18
<u>Scheduled</u>													
Old	33	61	39	27	39	12	6	8	9	13	31	20	21
New	82	56	117	59	82	95	89	101	95	87	83	104	78
Completed	54	78	129	41	109	101	87	100	91	69	94	103	89
New Balance	61	39	27	39	12	6	8	9	13	31	20	21	10
<u>Unscheduled</u>													
Old	34	44	40	35	38	30	36	30	27	29	38	32	36
New	37	19	18	16	24	25	14	21	23	30	11	38	17
Completed	27	23	23	13	32	19	20	24	21	21	17	34	23
New Balance	44	40	35	38	30	36	30	27	29	38	32	36	30
<u>Total Work Orders</u>													
Old	66	105	79	62	77	42	42	38	36	42	69	52	57
New	119	75	135	75	106	120	103	122	118	117	94	142	95
Completed	81	101	152	60	141	121	107	125	112	90	111	137	112
New Balance	105	79	62	77	42	42	38	36	42	69	52	57	40
<u>LAB ANALYSES</u>													
Sample Type													
Regulatory	178	163	123	190	208	200	188	146	139	182	132	129	195
Process Control	1,220	1,139	1,071	1,080	1,103	1,103	796	871	917	890	926	486	1,154
Special Request	4	6	4	2	4	1	6	34	2	-	-	13	-
Quality Control/Assurance	1,110	874	692	794	741	936	489	500	483	622	401	328	1,128
TOTAL	2,512	2,182	1,890	2,066	2,056	2,240	1,479	1,551	1,541	1,694	1,459	956	2,477

**Summary of NSD Capital Project Status
through 11-30-18**

Proj #	Description	FY 18/19 Budget	FY 17/18 Carryovers	Adj.	Final FY 18/19 Budget	Encumbrance	Costs Paid to Date	Budget Remaining	% Budget Expended
	<u>COLLECTION SYSTEM</u>								
13701	Main Line Sewer Rehabilitation	95,000			95,000	6,750	22,762	65,488	24%
13702	Manhole Raising/Rehabilitation	428,500			428,500	3,839	276,895	147,766	65%
13703	Lateral Replacement/Rehabilitation	77,100			77,100	4,693	42,841	29,566	56%
13704	Cleanouts Installation/Rehabilitation	93,200			93,200	-	38,491	54,709	41%
13705	Inflow & Infiltration (I&I) Reduction Program	214,200			214,200	121,520	9,390	83,290	4%
14703	Browns Valley Rd & First St	5,075,000			5,075,000	80,425	144,758	4,849,816	3%
17704	Infltrtn Rehab - SSMH/PL (CI-)	-	73,900	(40,000)	33,900	8,400	-	25,500	-
17708	Basin G - I&I Reduction #1	-	200,000		200,000	-	179,892	20,108	90%
18701	I&I Smoke Testing	-	99,750		99,750	38,789	32,751	28,210	33%
18702	Collection System Asset Management Software	275,000	349,550		624,550	406,634	87,824	130,092	14%
18703	Upper Lateral Rehab - Basin L (Pilot) #3	-	5,000		5,000	-	414	4,586	8%
18705	Sewer System Inflow/Infiltration 2018	2,600,000	2,298,750		4,898,750	2,794,882	1,725,312	378,556	35%
18706	Sewer System Inflow/Infiltration 2019	2,321,100	13,900	335,850	2,670,850	-	23,057	2,647,793	1%
19701	66-inch Trunk Rehabilitation (Kaiser to IPS)	1,400,000			1,400,000	82,259	128,600	1,189,141	9%
19702	72-inch Trunk Construction (Kaiser to IPS)	1,000,000		(1,000,000)	-	-	-	-	-
19703	2020 Collection System Rehabilitation	20,000			20,000	-	-	20,000	-
19727	Collection System Master Plan	-		1,000,000	1,000,000	347,100	63,508	589,392	6%
	<u>COLLECTION SYSTEM - EQUIPMENT</u>								
18708	Manhole - Smart Covers (4)	-	15,000		15,000	13,190	-	1,810	-
18738	Combination Truck Veh #529B	-	3,600		3,600	3,600	-	-	-
19704	Vehicle 180 - Ford F150 - USA Truck	35,400			35,400	-	-	35,400	-
19729	Replace Coll Veh #166	-		40,000	40,000	-	-	40,000	-
	<u>LIFT STATIONS</u>								
17711	West Napa PS - Rehab	5,200,000			5,200,000	659,603	133,409	4,406,988	3%
19705	Stonecrest PS Pump Rebuild	45,000			45,000	30,000	-	15,000	-
	<u>TREATMENT</u>								
13745	Pond 1 Dredge	600,000			600,000	14,680	7,968	577,353	1%
	<u>TREATMENT - EQUIPMENT</u>								
13735	Dual Fuel Boiler Burner	-	155,300		155,300	-	-	155,300	-
15711	Rotork Actuator Replacement	-	7,600		7,600	-	-	7,600	-
15713	Aeration Basin Instrmntn/Ctrl	-	6,750		6,750	-	-	6,750	-

**Summary of NSD Capital Project Status
through 11-30-18**

Proj #	Description	FY 18/19 Budget	FY 17/18 Carryovers	Adj.	Final FY 18/19 Budget	Encumbrance	Costs Paid to Date	Budget Remaining	% Budget Expended
16712	Main - Primary Clarifier Mech/Struct Rehabilitation	150,000			150,000	63,908	1,470	84,622	1%
17713	Secondary PS VFD Rplcmnt (3)	57,400		(57,400)	-	-	-	-	-
17715	Turbidimeters (7) Tertiary Rplcmnts	-	16,000		16,000	-	-	16,000	-
18711	3W Strainer	-	52,750		52,750	-	-	52,750	-
18715	Muffle Furnace - Replacement	-	5,000		5,000	-	-	5,000	-
18716	Rotork Actuator Replacement	-	67,200	18,600	85,800	-	79,396	6,404	93%
18719	Filter Flow Control - Rotork Valves	-	46,600		46,600	-	33,436	13,164	72%
18720	Neuros Blowers Rebuild	64,300			64,300	-	-	64,300	-
18722	FOG Station Water Heater	-	5,000		5,000	-	-	5,000	-
18725	Belt Press Hydraulic Actuator Replace	-	20,000		20,000	-	18,764	1,236	94%
18740	Main - Chemical Storage Building Piping Repair	250,000	25,000	1,000,000	1,275,000	181,876	21,749	1,071,375	2%
19706	WWTP MP - 3W System Improvements Phase 2	300,000			300,000	-	-	300,000	-
19707	Portable Pumps 10-inch (2)	172,100		42,400	214,500	214,379	-	121	-
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	120,000			120,000	-	-	120,000	-
19711	Main - CCB Coating - E&W Channels	50,000			50,000	-	-	50,000	-
19712	Main - Utility Generator Power Transition	75,000			75,000	-	-	75,000	-
19713	Main - Cogen Hot Water to FOG Pad	50,000			50,000	-	-	50,000	-
19714	Main - Ventilation System Expansion Boots	50,000			50,000	29,436	-	20,564	-
19715	Main - ARV Replacement	30,000			30,000	-	28,922	1,078	96%
19716	Main - P4PS Pump #3 Rebuild	40,000			40,000	-	-	40,000	-
19728	Lab Sampler	-		15,000	15,000	-	-	15,000	-
	<u>TREATMENT - STRUCTURES</u>								
17726	Headworks Equipment Rehab/Replacment	1,900,000	9,250		1,909,250	1,442,078	48,928	418,244	3%
18736	Treatment Plant Project 2018	2,100,000	854,000		2,954,000	467,938	2,218,668	267,394	75%
19717	WWTP MP - Pond Transfer Structures 2 to 3	5,000			5,000	-	64	4,936	1%
	<u>SCADA</u>								
18729	SCADA MP Project #1 - Network Monitoring	-	48,700		48,700	-	2,275	46,425	5%
19718	SCADA MP Phase 5 Security Study	250,000			250,000	190,139	-	59,861	-
	<u>RECYCLING - DISTRICT</u>								
16716	Line Recycled Water Reservoir	-	100,000		100,000	2,125	82,966	14,909	83%
18730	Jameson 24" Flow Meter Rehab	-	6,200		6,200	-	-	6,200	-

**Summary of NSD Capital Project Status
through 11-30-18**

Proj #	Description	FY 18/19 Budget	FY 17/18 Carryovers	Adj.	Final FY 18/19 Budget	Encumbrance	Costs Paid to Date	Budget Remaining	% Budget Expended
18731	Coombsville Truck Fill Station	375,000	65,050		440,050	47,190	29,467	363,393	7%
19719	24-inch Valve Replacement - Kirkland Line	5,000			5,000	-	-	5,000	-
19720	Jameson PS VFD	68,900			68,900	-	-	68,900	-
19721	Soscol RW Pump Replacement/Rehab	150,000			150,000	-	-	150,000	-
19722	Vehicle 723/720 - Attachments/Implements	28,700			28,700	25,783	-	2,917	-
	<u>RECYCLING - EXPANSION</u>								
13727	North Bay Wate Reuse Project	150,000			150,000	-	54,031	95,970	36%
	<u>OTHER</u>								
13729	Development Technical Support	248,300		120,100	368,400	-	127,160	241,240	35%
19723	AV System Replacement - Conference Rooms	20,000			20,000	-	-	20,000	-
19724	Fence Repair - District Wide	25,000			25,000	12,000	-	13,000	-
19725	Vehicle 011 - CSET Trailer	23,700			23,700	-	-	23,700	-
19726	Vehicle 607 - Electrical Hybrid Vehicle	42,800			42,800	-	2,003	40,797	5%
GRAND TOTAL ALL PROJECTS		\$26,385,700	\$4,549,850	\$1,474,550	\$32,410,100	\$7,293,217	\$5,667,170	\$19,449,714	17%