



Napa Sanitation District

General Manager's Report

for

November, 2017

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

Dedicated to Preserving the Napa River for Generations to Come

DATE: January 10, 2018

FROM: Timothy B. Healy, General Manager

SUBJECT: General Manager's Report for November, 2017

REGULATORY COMPLIANCE:

Collection System Compliance:	0 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, 2017 – November 30, 2017
Percent Fiscal Year:	41.7%
Operating Expenditures to date:	34.3%
Historical Expenditures to date:	44.8%
Significant Comments:	Typically the "Operating Expenditures to date" would include an intrafund transfer from Operating to Capital. However, cash flow in the Capital Fund has been sufficient this year. We will monitor this closely and make the fund transfer when funds become low in the Capital Fund.

PERSONNEL:

Significant events for the month of November, 2017 in the Human Resources Department:

New Hires:	None
Separations:	None
Promotions:	None
Recruitment Activities:	Offer letters to two Collection System Workers-in-Training. Interviews held for Laboratory Technician.
Injuries:	None.

Summaries of Operational Highlights are on following pages.

COLLECTIONS:

Significant events for the month of November 2017 in Collection System Maintenance include:

- The District had 0 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 drain pipe 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, repaired 1 cleanout, replaced 1 lateral and installed 1 CIPP liner. Additionally, the service response/programs crew completed 113 work orders in support of the grease and odor control program, responded to 48 customer requests for service (16 were NSD problem) and closed out 237 mark and locate request tickets.
- The preventative maintenance crews ran work orders on 92 laterals, cleaned approximately 73,988 feet of main line and CCTV inspected 37 laterals. The CCTV truck was out of service for upgrade.
- The repair crew also installed 11 CIPP liners in support of the Upper Lateral Program which included installing a cleanout at or near the foundation of the house.

TREATMENT PLANT:

Significant events for the month of November 2017 in the Treatment Plant Department:

Plant Operations:

- For November 2017, the plant's influent flow was 206 MG as compared to last year flow for November 2016 of 226 MG
- Flow to the Napa River for November 2017 was 315 MG compared to last year's flow of 442 MG.
- The production of recycle quality occurred for 9 days during November 2017 with a total distributed flow of 6.31 MG.
- There was 2.74" rain fall for November 2017 (Carneros Rainfall Center) as compared to 1.95" rain fall for November 2016.
- Pond 4 end of the month recorded level reading was 33.06" as compared to November 2016 of 35.10". Total remaining pond capacity for November 2017 was 46% as compared to November 2016 remaining capacity of 51%.

Power Consumption and Production:

- This November power consumption purchased from PG&E was 433 MWH in comparison to November 2016 purchase of 655 MWH.
- Cogeneration unit ran 712 of 720 hours for the month – 98.89% uptime, averaging 325.57 Kw
- Solar generation in November was 87 MWH, compared to 140 MWH in October.

Maintenance:

Significant events for the month of November, 2017:

Process Maintenance

- Cogeneration unit monthly emission test - in compliance with BAAQMD permit.
- Cogeneration Service;
 - Engine oil, filter socks, pre-filter change
- Replaced 2 I/O Modules in PLC5
- Welded center hubs on belt press conveyor drums
- Replaced level transducer in sump #2 of CCB gallery
- Stand-by generator service;
 - Engine oil & filter, air filter, fuel filter & separator changed
- Rebuild P4 #2 motor & pump
- Replaced control board and key pad on VFD #2 at P4
- Replaced Hypo line to east mix box

Projects

- Installed new flow transmitter for P4 flow meter
- Sand filter-installed new Turbidity meters for cells 3&4
- Replaced Polymer injection line at P4 pump station

Standby Power

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

Influent Pumps

- All pumps operational

Laboratory:

- Monthly **River Discharge Effluent (EFF-001)** monitoring was conducted on November 8th and November 14th, 2017. Quarterly Oil & Grease and Chronic Toxicity monitoring was conducted on November 8th. Quarterly PCB (as congeners, EPA 1668C) monitoring to satisfy the SF Bay Mercury and PCBs Watershed Permit (Order No. R2-2012-0096, NPDES No. CA0038849) was conducted on November 8th, 2017. No unusual results were identified and all parameters were within permit limits.
- Monthly **Influent (INF-001)** monitoring was conducted on November 8th, 2017. No unusual results were identified.
- Monthly **Receiving Water (RSW)** monitoring was conducted on November 8th, 2017. No unusual results were identified and all parameters were within permit limits.
- Monthly **Acute Bioassay** monitoring was sampled and analyzed from November 6th through November 10th, 2017 with 100% survival in the effluent and 95% survival in the control.
- Monthly **Recycle Effluent (REC-001)** monitoring was conducted on November 4th, 2017. No unusual results were identified and all parameters were within the State's Water Reuse Requirements.

RECYCLING:

Significant events in the Recycling Department for November 2017 include:

- Staff conducted annual Recycled Water Use Site inspections.
- Recycled water delivered for the month of November 2017 (12.095 million gallons), as compared to November 2016 (13.326 million gallons) is lower due to golf course and vineyard demand. Delivered recycled water volume represents the sum of all use site flow meter consumption values.
- Staff continued land application of biosolids at the Jameson Reuse Site.

POLLUTION PREVENTION:

Significant events in the Pollution Prevention and Outreach Division for November 2017 include:

- Two facility tours were given to students from Snow Elementary.
- The Napa Safe Medication Collection Program collected has resumed and we are contracting with DEA-registered Reverse Distributor, Assured Waste Solutions to pick up discarded medications at Family Drug. In October and November, 122 pounds of medication was collected. The total amount of unneeded medications collected since program inception in September 2010 is 20,924.2 pounds.
- The District did not issue any Toilet Rebates or ESME Washer Rebates this month.

ENGINEERING / CAPITAL PROJECTS / DEVELOPMENT:

Significant events occurring in the Engineering Division for November 2017 include:

- Consultant continued design of the West Napa Pump Station Rehabilitation Project.
- Consultant continued design of the Headworks Equipment Replacement Project.
- Contractor continued construction of the Recycled Water Reservoir Improvements Project.
- Staff continued design of the 2018 Collection System Rehabilitation Project.
- Consultant continued design of the Browns Valley Trunk Project.
- Consultant continued design of the Pond 1 Dredge Project.
- Consultant continued design of the 2018 Treatment Plant Improvements Project
- Consultant and Staff continued work on Phase 1A of the Asset Management Program.
- Contractor continued construction of the MST Recycled Water Pipeline Expansion Project.
- Contractor completed construction of the Soscol/Sousa Trunk Rehabilitation Project.
- Contractor continued construction of the 2017 Collection System Rehabilitation Project.
- Contractor continued construction of the Basin H Manhole Rehabilitation Project.
- Staff completed construction of the Upper Lateral Basin L Pilot #2 Project.
- Contractor completed construction of Manhole Adjustment Project – Phase VI.
- Contractor s construction of the Earthquake Repair Project.
- During the month of November, staff continued plan review of development projects. Due to database issues, plan review numbers were not available when this report was prepared. The next report will include development review numbers for November and December 2017.

Budget Status & Cash Summary - July 1, 2017 - November 30, 2017 (41.7% of the year)

<i>Expenditures</i>	FY 17-18 Budget	Encumbrances	Expenditures to date	Committed to date	Remaining Balance	Percent Committed
Operating						
Salaries & Benefits	\$9,581,300	\$2,148	\$3,104,383	\$3,106,532	\$6,474,768	32.4%
Services & Supplies	6,054,300	1,466,662	1,760,367	3,227,028	2,827,272	53.3%
Taxes	28,650	-	-	-	28,650	0.0%
Debt Service	4,777,450	-	3,739,729	3,739,729	1,037,721 (1)	78.3%
Intrafund Transfers	8,900,000	-	-	-	8,900,000	0.0%
Total Operating:	\$29,341,700	\$1,468,810	\$8,604,479	\$10,073,289	\$19,268,411 (2)	34.3%
Capital						
Bldgs/Improvements & Equip	\$33,210,500	\$4,569,502	\$5,678,683	\$10,248,185	\$22,962,315 (3)	30.9%
Intrafund Transfers	3,630,000	-	1,249,182	1,249,182	2,380,818	34.4%
Total Capital :	\$36,840,500	\$4,569,502	\$6,927,864	\$11,497,367	\$25,343,134	31.2%
Grand Total Expenditures:	\$66,182,200	\$6,038,312	\$15,532,344	\$21,570,656	\$44,611,544	32.6%

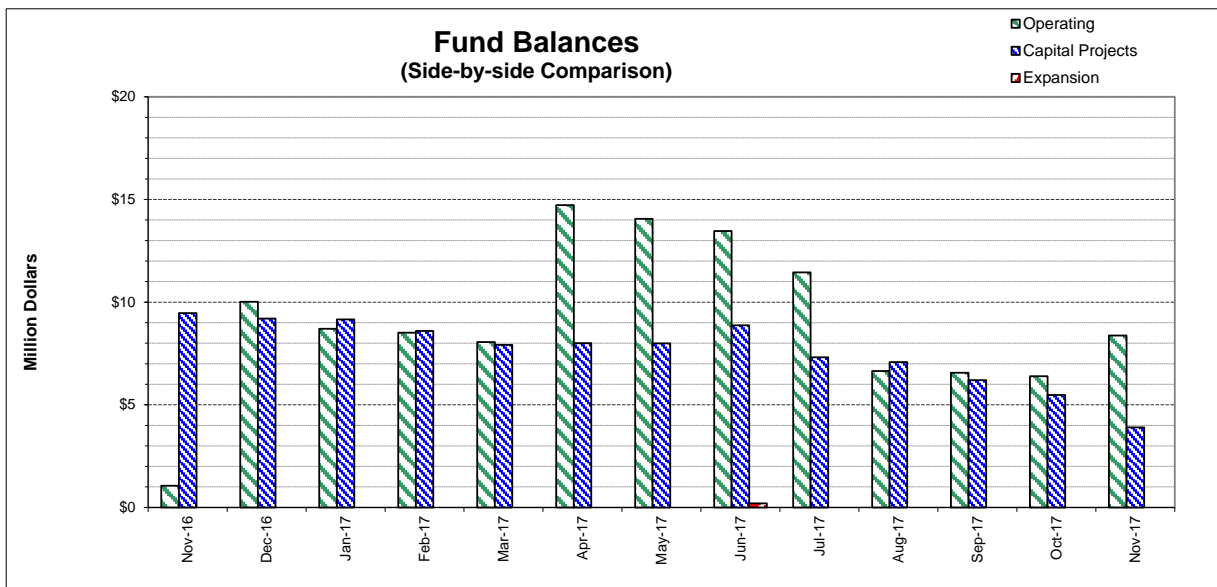
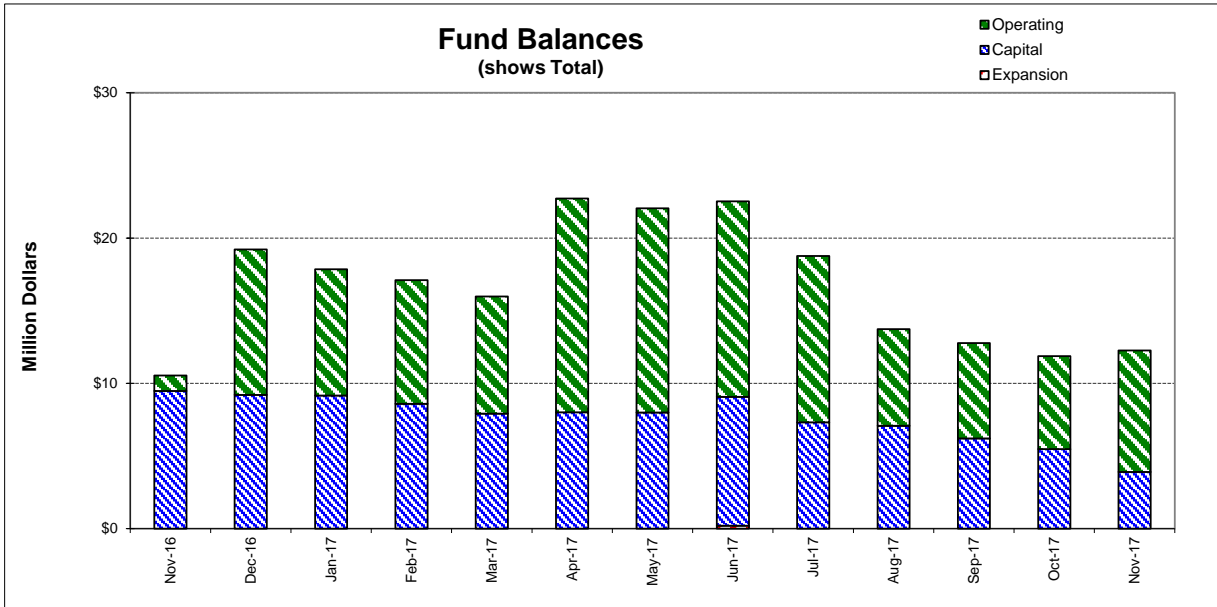
<i>Revenues</i>	FY 17-18 Budget	Encumbrances	Collected to date	Received to Date	Uncollected Revenue	Percent Collected
Operating						
Use of Money/Property	\$896,000		\$399,462	\$399,462	\$496,538	44.6%
Intergovernmental	\$15,000		\$0	-	15,000	N/A
Charges for Services	27,429,100		4,188,885	4,188,885	23,240,215	15.3%
Miscellaneous Revenues	61,000		379,834	379,834	(318,834) (4)	622.7%
Donations/Contributions (Capital Labor)	-		352,355	352,355	(352,355) (5)	N/A
Total Operating:	\$28,401,100		\$5,320,536	\$5,320,536	\$23,080,564	18.7%
Capital						
Use of Money/Property	\$0		\$287	\$287	(\$287)	N/A
Capacity Charges	3,630,000		1,058,545	1,058,545	2,571,455	29.2%
Intergovernmental	4,076,000		1,282,138	1,282,138	2,793,862	31.5%
Bond/Loan Proceeds	10,137,000		-	-	10,137,000	0.0%
Sale of Assets	25,000		7,820	7,820	17,180	N/A
Miscellaneous Revenues	-		6,870	6,870	(6,870)	N/A
Intrafund Transfers	12,530,000		1,249,182	1,249,182	11,280,818	10.0%
Total Capital:	\$30,398,000		\$3,604,841	\$3,604,841	\$26,793,159	11.9%
Grand Total Revenue:	\$58,799,100		\$8,925,377	\$8,925,377	\$49,873,723	15.2%

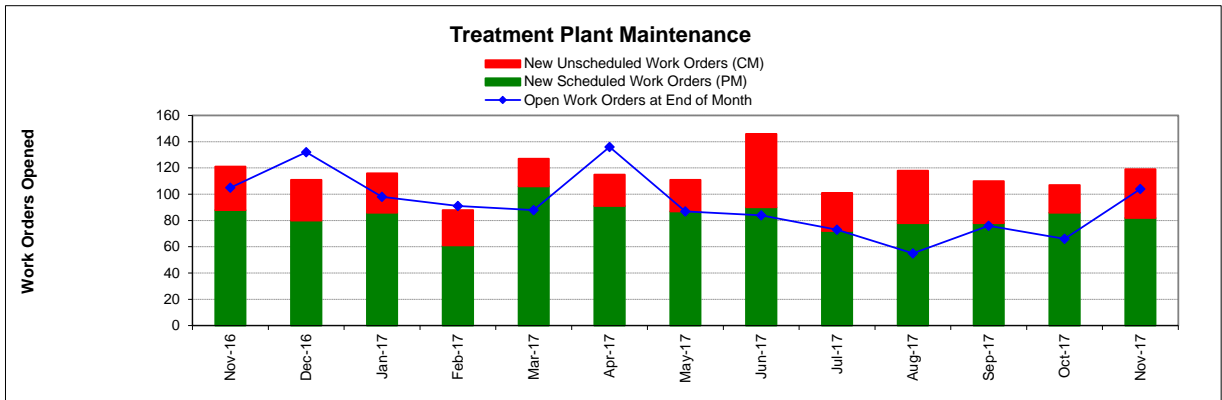
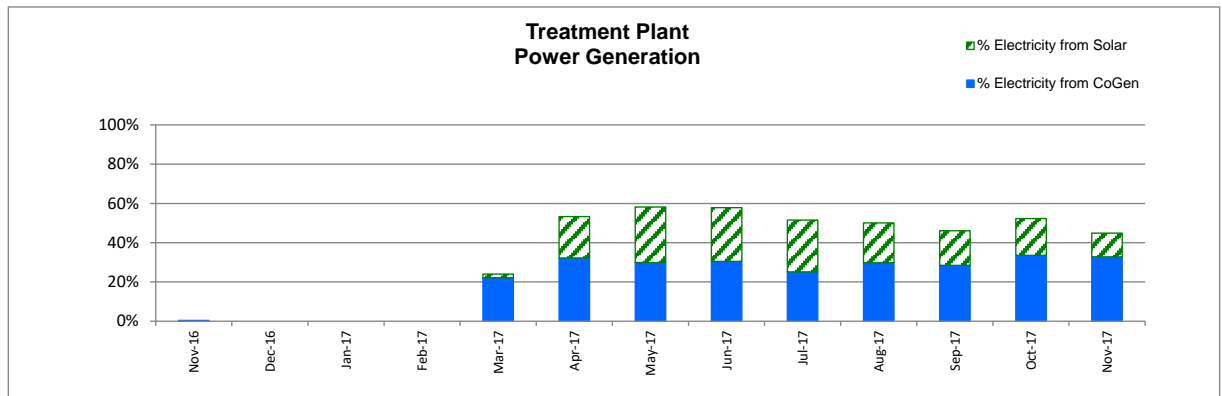
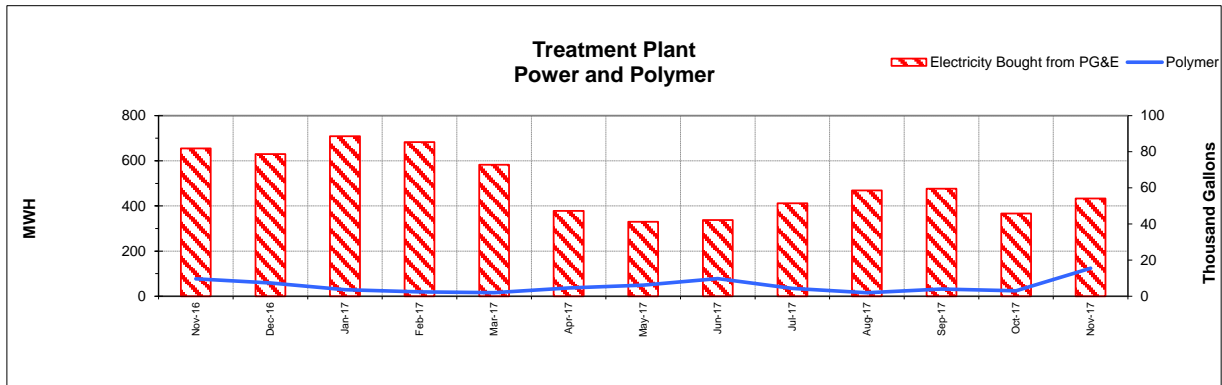
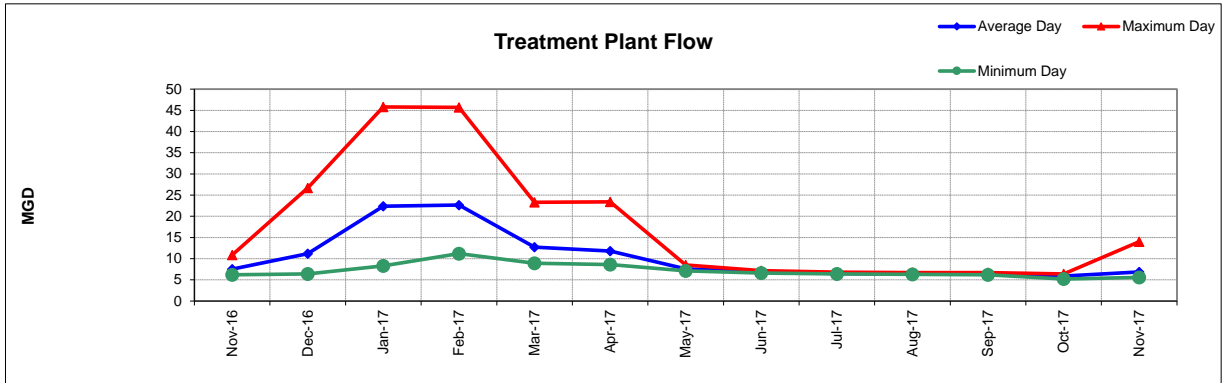
Cash on Hand as of 11/30/17 **\$12,268,800**

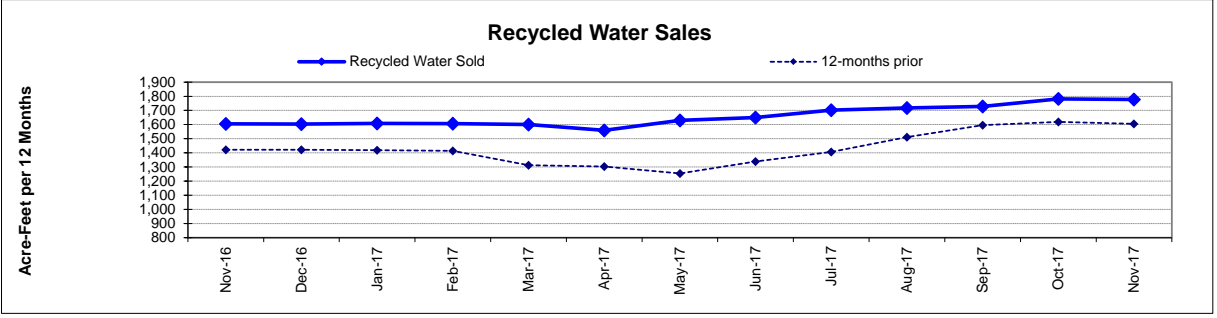
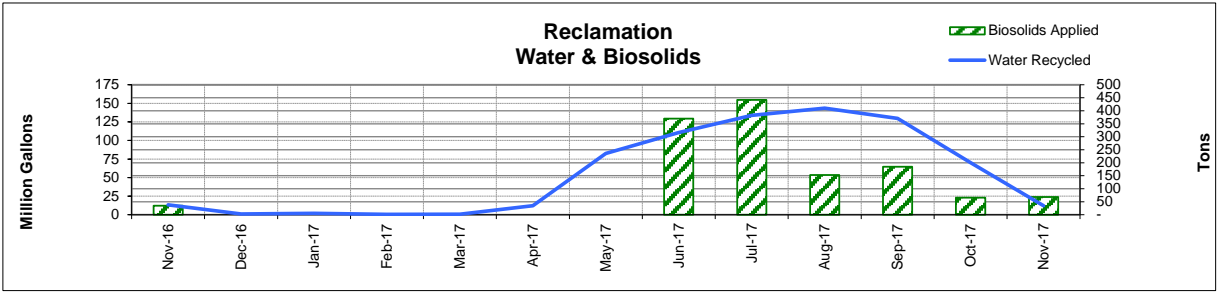
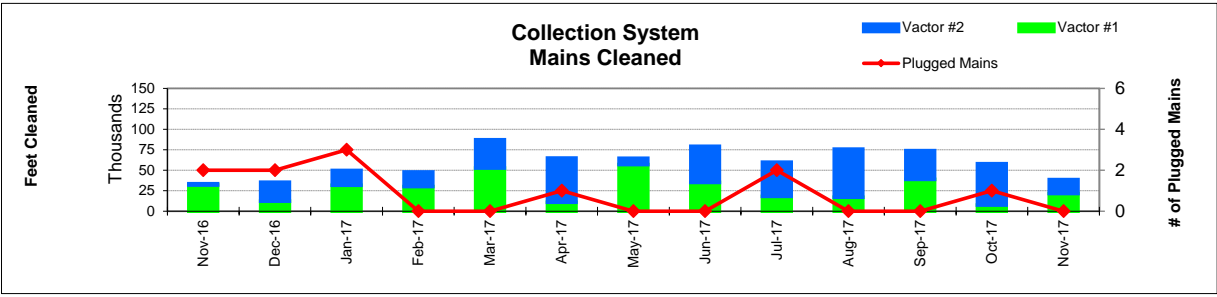
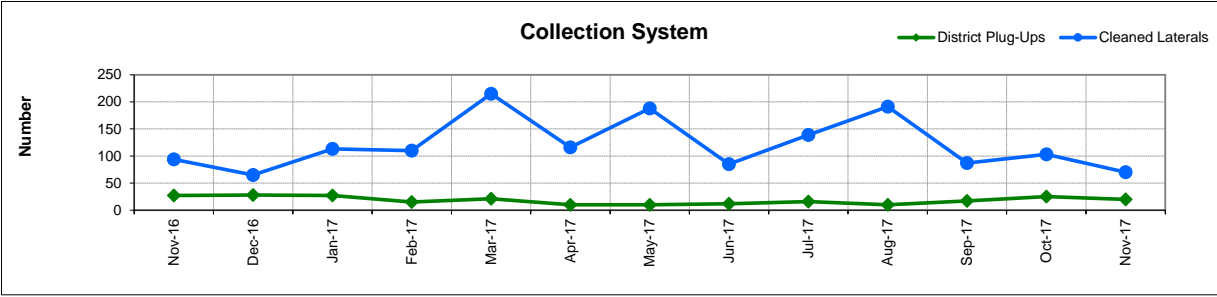
**excluding Debt Service restricted funds
10/31/17 - Effective Rate of Return = 1.16%

Note: Rate of return for November not available at the time
of this report.

1. Series 2009B's and 2012A's principal/interest payments are made in Aug & Feb
2. Includes Debt Service and Intrafund Transfers; otherwise is 40.4%
3. See Capital Project Status report for details
4. Includes reimbursement from NBWRA from FY 16-17.
5. In-house Labor for Capital Projects (Contra acct for Salaries)







FUND BALANCES - MONTHLY

CATEGORY	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17
<i>(Thousand Dollars)</i>													
7800	1,062	10,012	8,701	8,506	8,055	14,722	14,059	13,463	11,450	6,645	6,560	6,395	8,372
7850	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal Operating	1,062	10,012	8,701	8,506	8,055	14,722	14,059	13,463	11,450	6,645	6,560	6,395	8,372
Capital Improvement Projects	9,470	9,204	9,154	8,598	7,921	8,001	7,995	8,867	7,312	7,083	6,205	5,480	3,897
Debt Proceeds	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal Capital	9,470	9,204	9,154	8,598	7,921	8,001	7,995	8,867	7,312	7,083	6,205	5,480	3,897
Total Discretionary Funds	10,532	19,216	17,855	17,104	15,976	22,723	22,054	22,330	18,762	13,728	12,765	11,875	12,269
Expansion Fund (Restricted)	-	-	-	-	-	-	-	202	-	-	-	-	-
Total Restricted Funds	-	-	-	-	-	-	-	202	-	-	-	-	-
TOTAL ALL FUNDS	10,532	19,216	17,855	17,104	15,976	22,723	22,054	22,532	18,762	13,728	12,765	11,875	12,269

DEVELOPMENT WORKLOAD - MONTHLY

CATEGORY	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17
<u>Phone Requests</u>													
Maps/Drawings	7	4	9	7	4	5	5	5	3	4	5	6	-
Lateral Permits	-	-	-	2	2	-	-	-	-	-	-	-	-
Policy Questions	8	6	6	10	6	4	10	19	11	6	4	7	-
Development Questions	48	47	45	60	63	62	91	95	51	71	28	39	-
Miscellaneous	6	4	8	6	6	8	8	10	11	3	3	2	-
TOTAL	69	61	68	85	81	79	114	129	76	84	40	54	-
<u>Counter Requests</u>													
Maps/Drawings	-	1	2	1	-	1	3	6	2	-	1	-	-
Lateral Permits	14	7	11	5	11	10	10	18	15	6	16	4	-
Policy Questions	1	-	3	2	1	-	5	2	5	2	2	2	-
Development Questions	8	4	9	13	5	15	29	21	8	14	8	7	-
Miscellaneous	1	2	3	1	-	1	5	6	2	2	2	3	-
TOTAL	24	14	28	22	17	27	52	53	32	24	29	16	-
<u>Initial Request (Referrals)</u>	21	23	17	11	25	17	22	20	10	11	14	11	-
<u>Connection Permits Issued</u>													
Residential Permits	-	-	-	1	3	1	1	12	1	4	2	1	-
Commercial Permits	4	3	-	1	3	1	4	2	2	5	4	2	-
Industrial Permits	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMITS	4	3	-	2	6	2	5	14	3	9	6	3	-
Residential Units	-	-	-	1	3	1	2	35	1	4	2	1	-
Commercial Units	4	3	-	3	-	1	4	7	2	6	4	2	-
TOTAL UNITS	4	3	-	4	3	2	6	42	3	10	6	3	-
<u>Annexations</u>													
Submitted	1	-	-	-	-	-	-	-	-	-	-	-	-
Acreage	27.11	-	-	-	-	-	-	-	-	-	-	-	-
<u>Plans Reviewed</u>													
<u>Subdivisions/Sites</u>													
First Submittal	5	2	10	2	4	11	6	8	10	5	10	6	-
Second Submittal	-	2	2	3	7	6	8	4	5	7	1	1	-
Third Submittal	1	3	2	1	5	1	2	8	4	2	1	7	-
<u>Building/Tenant Improvements</u>													
First Submittal	5	4	10	5	7	4	9	17	8	19	15	9	-
Second Submittal	4	4	5	2	5	4	4	5	9	6	5	9	-
Third Submittal	8	6	2	1	10	3	7	8	6	7	3	2	-
<u>Miscellaneous Plan Reviews</u>	-	-	1	-	-	-	-	-	-	-	-	-	-
TOTAL PLANS REVIEWED	23	21	32	14	38	29	36	50	42	46	35	34	-

INSPECTION WORKLOAD - MONTHLY

CATEGORY	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17
<u>CONSTRUCTION</u>													
Locating Sewers	-	-	-	-	-	-	-	-	-	-	-	1	-
Permit Processing	-	-	-	-	-	-	-	1	-	-	-	-	-
Preconstruction Meetings	6	5	9	6	6	4	1	2	3	2	-	-	-
Inspections - Mains	10	1	-	-	6	1	-	4	-	-	2	-	5
Inspections - Manholes	27	89	46	16	15	61	1	9	3	3	40	72	57
Inspections - Laterals	37	11	24	17	50	14	3	8	11	8	6	2	12
Inspections - Cleanouts	71	20	42	38	74	25	-	2	4	3	4	4	1
Inspections - Review Video	2	4	1	-	-	-	2	-	3	-	-	-	-
Demo - Septic Tanks	-	-	-	-	-	-	-	-	-	-	-	-	-
Demo - Buildings	-	-	2	-	1	2	-	-	-	-	-	-	-
Update Record Drawings	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	153	130	124	77	152	107	7	26	24	16	52	79	75
<u>MISCELLANEOUS</u>													
Meter Readings	-	18	100	-	13	24	-	-	-	-	-	-	-
Washdown Facility Inspections	19	-	-	-	-	-	-	-	-	-	-	-	-
General Customer Assistance	-	6	11	11	10	12	11	30	-	28	30	31	18
City of Napa Water Discharge	-	-	-	-	-	-	-	-	34	-	-	-	-
TOTAL	19	24	111	11	23	36	11	30	34	28	30	31	18
<u>SPECIAL PROJECTS</u>	32	2	0	6	16	0	0	22	21	23	36	24	9

POLLUTION PREVENTION WORKLOAD - MONTHLY

CATEGORY	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17
<u>Outreach Activities</u>													
Plant Tours Conducted	8	0	1	4	11	3	4	1	2	1	9	1	2
Presentations Made	3	0	1	2	1	1	5	1	0	0	3	0	0
Total Outreach Activities	11	-	2	6	12	4	9	2	2	1	12	1	2
<u>Inspections Conducted</u>													
Food Service Facilities	-	37	21	53	35	25	-	-	-	-	-	-	-
Auto Body & Car Wash	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-	1
Total Inspections	-	37	21	53	35	25	-	-	-	-	-	-	1
<u>Compliance Issues</u>													
NOVs Issued	-	2	-	1	4	-	-	1	-	-	1	2	-
NOEs Issued	1	2	-	1	1	-	1	-	-	1	1	1	-
Non-Compliant-FOG	-	-	-	1	1	-	-	-	-	-	-	-	-
Total Compliance Issues	1	4	-	3	6	-	1	1	-	1	2	3	-
<u>Pollution Prevention</u>													
Clothes Washer Rebates	20	26	28	21	-	-	28	21	1	1	19	-	-
Toilet Retrofit Rebates	8	12	5	4	7	1	2	7	16	6	3	-	-
Pharmaceuticals Diverted (in lbs)	291	63	332	201	210	185	302	368	-	-	-	59	63

RECYCLED WATER DELIVERIES - MONTHLY

	Acres	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17
MONTHLY (MG)														
<u>Water Sold</u>														
Golf Courses	405.0	6.308	0.002	0.245	-	0.081	2.513	53.481	66.261	73.994	58.595	53.035	26.903	5.504
Cemeteries	5.0	0.010	0.000	-	-	-	-	0.705	0.754	0.834	1.116	0.634	0.833	0.193
Parks	18.5	-	-	-	-	0.002	0.001	0.624	1.020	0.902	0.866	0.650	0.333	0.020
Schools	21.0	0.014	0.006	0.005	-	0.005	0.013	1.396	2.604	2.250	2.178	1.613	1.485	0.195
Commerical	167.6	3.457	0.490	1.191	0.404	0.501	2.493	15.246	17.491	17.468	17.399	15.227	13.665	4.387
Vineyards	564.0	3.528	0.302	0.194	0.063	0.101	7.119	4.868	10.709	19.143	30.814	18.019	16.506	1.766
Trucked Water	175.0	0.008	0.188	0.009	0.002	0.015	0.018	0.027	0.051	0.474	0.602	0.274	0.197	0.030
Subtotal Sales	1,356.1	13.326	0.988	1.644	0.469	0.705	12.156	76.347	98.891	115.065	111.571	89.451	59.922	12.095
<u>District Use</u>														
Jameson	330.0	-	-	0.089	-	0.087	0.032	-	-	7.298	18.483	20.751	-	-
Somky	213.0	0.001	-	-	-	0.002	-	6.256	11.738	11.488	13.426	19.372	10.364	-
Fagundes/Airport	50.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal District	593.5	0.001	-	0.089	-	0.089	0.032	6.256	11.738	18.786	31.910	40.122	10.364	-
TOTAL DELIVERED	1,949.6	13.327	0.988	1.733	0.469	0.794	12.188	82.603	110.628	133.851	143.481	129.574	70.286	12.095
ANNUAL (AF)														
<u>Water Sold</u>														
Golf Courses	405.0	971	968	969	969	969	936	985	1,013	1,047	1,033	1,044	1,048	1,045
Cemeteries	5.0	14	14	14	14	14	14	14	14	14	15	13	15	16
Parks	18.5	16	16	16	16	16	16	16	16	14	13	13	13	14
Schools	21.0	34	34	34	34	34	33	32	32	32	33	33	36	36
Commerical	167.6	301	301	304	305	299	287	300	301	309	309	310	322	325
Vineyards	564.0	265	266	266	265	264	270	279	270	281	308	310	342	336
Trucked Water	175.0	4	5	5	5	5	4	4	4	5	5	5	6	6
Subtotal Sales	1,356.1	1,605	1,603	1,609	1,607	1,600	1,559	1,630	1,650	1,702	1,717	1,728	1,782	1,778
<u>District Use</u>														
Jameson	330.0	163	163	163	163	163	163	163	158	164	183	182	143	143
Somky	213.0	222	222	222	222	222	222	241	268	254	230	222	223	223
Fagundes/Airport	50.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal District	593.5	385	385	385	385	385	385	404	427	419	413	404	366	366
TOTAL DELIVERED	1,949.6	1,990	1,988	1,994	1,992	1,985	1,945	2,034	2,077	2,121	2,130	2,132	2,148	2,144

BIOSOLIDS HANDLING - MONTHLY

Site	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17
<u>Land Applied by NSD</u>													
Somky													
Airport/Fagundes													
Jameson Canyon	35	-	-	-	-	-	-	370	442	153	184	65	68
Subtotal by NSD	35	-	-	-	-	-	-	370	442	153	184	65	68
<u>Land Applied by Contractor</u>													
Somky													
Airport/Fagundes													
Jameson Canyon													
Subtotal by Contractor	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Land Applied	35	-	-	-	-	-	-	370	442	153	184	65	68
Off Site (Contractor)													
Total (tons)	35	-	-	-	-	-	-	370	442	153	184	65	68

COLLECTION SYSTEM MAINTENANCE - MONTHLY

CATEGORY	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17
<u>Plugups</u>													
Total Calls	68	84	75	51	61	39	37	44	43	36	42	54	63
Business Hours	38	54	49	30	43	25	21	25	25	27	26	33	38
After Hours	30	30	26	21	18	14	16	19	18	9	16	21	25
District's	27	28	27	15	21	10	10	12	16	10	17	25	20
Property Owner's	41	56	48	36	40	29	27	32	27	26	25	29	43
Plugged Main Lines	2	2	3										
Run Lateral w/Eel	94	65	113	110	215	116	188	85	139	191	87	103	70
<u>Cleaning (feet of sewer)</u>													
Vactor #1	32,046	12,220	31,694	30,016	52,800	10,888	56,860	35,077	18,053	17,179	38,849	7,417	21,500
Vactor #2	1,512	23,277	18,222	18,062	34,405	53,959	7,819	44,357	41,749	58,712	35,140	50,621	17,254
Hydro													
Rodder													
Total (feet)	33,557	35,497	49,915	48,077	87,205	64,846	64,679	79,433	59,802	75,891	73,989	58,038	38,754
<u>Cleaning Days</u>													
Cleaning Days	16	15	16	18	25	22	20	28	21	31	25	21	20
Vactor #1	15	7	9	11	14	5	16	12	8	8	14	3	10
Vactor #2	1	8	7	7	11	17	4	16	13	23	11	18	10
Hydro													
Rodder													
<u>Feet/day</u>													
Feet/day	2,100	2,350	3,100	2,650	3,500	2,950	3,250	2,850	2,850	2,450	2,950	2,750	1,950
Vactor #1	2,150	1,750	3,500	2,750	3,750	2,200	3,550	2,900	2,250	2,150	2,750	2,450	2,150
Vactor #2	1,500	2,900	2,600	2,600	3,150	3,150	1,950	2,750	3,200	2,550	3,200	2,800	1,750
Hydro													
Rodder													
<u>Video Inspections</u>													
Mains (feet)	6,826	13,141	5,981	6,398	17,209	15,580	25,066	24,881	15,731	15,789			
Laterals (each)	182	191	203	175	324	249	251	205	265	246	170	184	172
<u>Construction (each)</u>													
Cleanouts	10	6	4	10	16	4	16	7	31	17	7	4	6
Laterals	5		1		4	3	4	15		9	1	1	1
Mains													
Manholes					1								
Other							50			2		57	79
<u>USA Markings</u>													
Regular (w/in 2 days)	214	160	151	186	254	305	297	258	215	264	233	252	363
Emergency (w/in 2 hours)	4	18	7	7	13	8	3	6	5	3	7	33	9

WASTEWATER PLANT OPERATIONS DATA - MONTHLY

CATEGORY	Units	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17
 FLOWS		30	31	31	28	31	30	31	30	31	31	30	31	30
Influent	MG	226.4	346.3	693.3	634.5	394.1	353.8	234.9	206.4	201.5	199.7	191.6	183.0	205.5
Average Day	MGD	7.5	11.2	22.4	22.7	12.7	11.8	7.6	6.9	6.5	6.4	6.4	5.9	6.9
Maximum Day	Date	20-Nov	16-Dec	10-Jan	7-Feb	23-Mar	9-Apr	1-May	11-Jun	4-Jul	21-Aug	18-Sep	11-Oct	17-Nov
Maximum Day Flow	MG	10.9	26.7	45.8	45.7	23.3	23.4	8.5	7.2	6.8	6.7	6.7	6.4	14.0
Minimum Day	Date	8-Nov	7-Dec	1-Jan	1-Feb	20-Mar	30-Apr	24-May	30-Jun	31-Jul	30-Aug	4-Sep	1-Oct	1-Nov
Minimum Day Flow	MG	6.2	6.4	8.3	11.2	8.9	8.6	7.1	6.6	6.4	6.3	6.2	5.2	5.6
Effluent	MG	442.0	369.9	529.2	718.6	730.8	480.3	98.9	117.1	146.3	158.0	142.9	80.0	314.7
River Discharge	MG	426.1	357.6	529.2	718.6	725.8	463.4	-	-	-	-	-	-	305.8
Recycled Flow	MG	16.0	12.2	-	-	5.0	16.8	98.9	123.3	134.0	158.0	142.9	73.0	8.9
BIOSOLIDS	Tons	591	658	439	355	488	568	507	639	521	952	703	612	731
Wet Tons Generated from Pond	Tons													
Wet Tons Generated from Plant	Tons	591	658	439	355	488	568	507	639	521	952	703	612	731
Wet Tons Hauled Offsite	Tons													
POLYMER USE	Gallons	9,676	7,306	3,670	2,394	1,979	4,644	6,112	9,760	4,352	1,987	3,927	3,051	15,506
Pond Pre-Flocculators	Gallons	6,988	3,966	2,003	-	-	2,676	-	-	-	-	-	-	11,711
Flocculator Polymer 1	Gallons													
Flocculator Polymer 2	Gallons	1,150	913	1,148	1,927	1,325	720	-	-	-	-	115	-	-
Filter Polymer 1	Gallons	766	1,697	-		47	746	5,662	8,984	3,739	914	3,077	2,358	830
Filter Polymer 2	Gallons													
Belt Presses	Gallons	772	730	519	467	607	502	450	776	613	1,073	735	693	784
ENERGY														
Total Electricity Used	MWH	657	630	709	683	749	759	713	739	807	849	870	747	719
Purchased from PGE	MWH	655	630	709	683	583	378	330	338	412	469	476	367	433
Produced from Co-Gen	MWH	3	-	-	-	166	245	213	225	203	253	248	251	236
Percent Produced	%	0%				22%	32%	30%	30%	25%	30%	29%	34%	33%
Purchased from Solar	MWH	-	-	-	-	14	159	202	203	213	172	153	140	87
Percent Produced						2%	21%	28%	27%	26%	20%	18%	19%	12%
Purchased Natural Gas	Therms	36	4	-	13	205	50	21	51	858	56	60	19	99
Methane Flared Off	KSCF	4,051	4,407	3,225	2,722	986	56	15	225	127	156	164	5	82
Stand By Calls	#	52	50	24	41	63	42	55	86	48	44	78	36	47
Violations	#	-	-	-	-	-	-	-	-	-	-	-	-	-

WASTEWATER PLANT MAINTENANCE and LABORATORY DATA - MONTHLY

CATEGORY	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17
<u>Scheduled</u>													
Old	57	48	75	49	43	40	75	41	37	28	17	33	33
New	88	80	86	61	106	91	87	90	72	78	78	86	82
Completed	97	53	112	67	109	56	121	94	81	89	62	86	54
New Balance	48	75	49	43	40	75	41	37	28	17	33	33	61
<u>Unscheduled</u>													
Old	56	57	57	49	48	48	61	46	47	45	38	43	33
New	33	31	30	27	21	24	24	56	29	40	32	21	37
Completed	32	31	38	28	21	11	39	55	31	47	27	31	27
New Balance	57	57	49	48	48	61	46	47	45	38	43	33	43
<u>Total Work Orders</u>													
Old	113	105	132	98	91	88	136	87	84	73	55	76	66
New	121	111	116	88	127	115	111	146	101	118	110	107	119
Completed	129	84	151	95	130	67	161	149	112	132	89	117	81
New Balance	105	132	98	91	88	136	87	84	73	55	76	66	104
<u>LAB ANALYSES</u>													
Sample Type													
Regulatory	168	175	192	214	210	218	177	230	173	193	194	156	178
Process Control	1,315	1,209	1,189	1,051	1,370	1,167	820	1,107	1,024	1,104	1,091	1,137	1,220
Special Request	39	40	3	1	1	-	6	200	-	-	7	8	4
Quality Control/Assurance	302	299	303	272	301	497	523	574	464	549	428	420	1,110
TOTAL	1,824	1,723	1,687	1,538	1,882	1,882	1,526	2,111	1,661	1,846	1,720	1,721	2,512

**Summary of NSD Capital Project Status
through 11-30-17**

Proj #	Description	FY 17-18 Budget	FY 16-17 Carryovers	Adj.	Final FY 17-18 Budget	Encumbrance	Costs Paid to Date	Budget Remaining	% Budget Expended
	<u>COLLECTION SYSTEM</u>								
13701	Main Line Sewer Rehab	91,800			91,800	-	-	91,800	-
13702	Manhole Raising/Rehab	206,000			206,000	145,500	17,636	42,864	9%
13703	Lateral Replacement/Rehab	74,500			74,500	8,945	40,648	24,906	55%
13704	Cleanouts Installation/Rehab	90,000			90,000	4,029	33,260	52,711	37%
13705	I&I Reduction Program	207,000	29,000		236,000	6,781	15,729	213,490	7%
14703	Browns Valley Rd & First St	9,237,000	3,004,750	(1,000,000)	11,241,750	130,905	120,973	10,989,873	1%
17702	Upper Lateral Rehab - Basin L (Pilot #2)	155,300		(110,000)	45,300	-	23,687	21,613	52%
17704	Infltrtn Rehab - SSMH/PL (CI-)	-	73,900		73,900	-	-	73,900	-
17705	Soscol Ave (8th to Oil Co Rd)	950,000	415,450		1,365,450	34,485	1,310,815	20,150	96%
17707	66-inch Trunk CCTV Inspection	-	149,350	90,000	239,350	6,609	66,705	166,037	28%
17708	Basin G - I&I Reduction #1	2,942,000	1,504,100		4,446,100	2,279,773	1,728,306	438,021	39%
17734	Homewood/Westwood I/I Reduction	-	60,300		60,300	-	17,537	42,763	29%
18701	I&I Smoke Testing	100,000			100,000	-	-	100,000	-
18702	Collection System Asset Management Software	350,000			350,000	-	-	350,000	-
18703	Upper Lateral Rehab - Basin L (Pilot) #3	5,000			5,000	-	-	5,000	-
18704	Manhole Rehab - Nipak - Basin H	284,600			284,600	158,684	6,274	119,642	2%
18705	Sewer System Inflow/Infiltration 2018	1,650,000		834,000	2,484,000	27,092	65,711	2,391,197	3%
18706	Sewer System Inflow/Infiltration 2019	20,000			20,000	-	-	20,000	-
	<u>COLLECTION SYSTEM - EQUIPMENT</u>								
18707	Locatable Mini-Camera #2 Replacement	11,100			11,100	-	8,836	2,265	80%
18708	Manhole - Smart Covers (4)	25,000			25,000	-	-	25,000	-
18709	Vehicle 504 - TV Truck	270,000			270,000	-	187,154	82,846	69%
18735	Permaliner Picote	-		20,000	20,000	-	15,476	4,524	77%
18738	Combination Truck Veh #529B	-		-	-	-	-	-	-
	<u>LIFT STATIONS</u>								
17711	West Napa PS - Rehab	-	1,746,365		1,746,365	41,077	22,919	1,682,369	1%
	<u>TREATMENT</u>								
13745	Pond 1 Dredge	400,000			400,000	27,771	-	372,229	-
16708	Algae to Digester/Thermal Stdy	-	46,800		46,800	22,913	698	23,189	1%
	<u>TREATMENT - EQUIPMENT</u>								

**Summary of NSD Capital Project Status
through 11-30-17**

Proj #	Description	FY 17-18 Budget	FY 16-17 Carryovers	Adj.	Final FY 17-18 Budget	Encumbrance	Costs Paid to Date	Budget Remaining	% Budget Expended
13735	Dual Fuel Boiler Burner	155,300			155,300	-	-	155,300	-
13741	Secondary PS Pump Rebuild (3)	38,800			38,800	32,296	-	6,504	-
13743	Risidual Analyzers (Deox) Replacements	5,000	3,500	40,000	48,500	-	43,925	4,575	91%
15711	Rotork Actuator Replacement	-	7,600		7,600	-	-	7,600	-
15713	Aeration Basin Instrmntn/Ctrl	-	10,000		10,000	-	290	9,710	3%
16714	High Voltage System Repairs	-	66,500	(66,500)	-	-	-	-	-
17713	Secondary PS VFD Rplcmnt (3)	55,400	51,150	(106,550)	-	-	-	-	-
17714	WWTP MP - 3W Sys Imprvmnts	440,000	36,100	(476,100)	-	-	-	-	-
17715	Turbidimeters (7) Tertiary Rplcmnts	20,000	15,400		35,400	14,041	19,405	1,954	55%
17718	Energy Audit - LED Pole/Arm Mounted Fixtures	-	44,750	(15,000)	29,750	4,297	267	25,186	1%
17725	Main - Sump #3 Modification	-	10,000		10,000	-	-	10,000	-
18710	3W Pipeline - Soscol PS to Plant - Rehab	33,300			33,300	-	-	33,300	-
18711	3W Strainer	83,200			83,200	-	-	83,200	-
18712	3W VFD	62,100		(62,100)	-	-	-	-	-
18713	Primary Influent Pipe - East Gallery	250,000		(250,000)	-	-	-	-	-
18714	Distillation System	6,000			6,000	-	-	6,000	-
18715	Muffle Furnace - Replacement	15,000		(10,000)	5,000	-	-	5,000	-
18716	Rotork Actuator Replacement	91,800			91,800	-	-	91,800	-
18717	Septage Card Reader Replacement	21,400			21,400	-	-	21,400	-
18718	Secondary Clarifier Mech/Struct Rehabilitation	50,000			50,000	23,190	26,810	-	54%
18719	Filter Flow Control - Rotork Valves	46,600			46,600	-	-	46,600	-
18720	Neuros Blowers Rebuild	62,100			62,100	-	-	62,100	-
18721	CCB #3 Effluent Gate	5,000		(5,000)	-	-	-	-	-
18722	FOG Station Water Heater	5,000			5,000	-	-	5,000	-
18723	Pond 4 PS - Repair Leak	24,000		(24,000)	-	-	-	-	-
18724	Filter 1-4 Air Valve	10,000		(10,000)	-	-	-	-	-
18725	Belt Press Hydraulic Actuator Replace	20,000			20,000	-	-	20,000	-
18734	Boat Motor Vehicle 302	-		10,000	10,000	-	9,383	617	94%
18739	Pond 1 Transformer Repair	-		-	-	-	-	-	-
	TREATMENT - STRUCTURES								
17726	Headworks Equipment Rehab/Replacment	250,000	42,100		292,100	125,264	137,064	29,772	47%
18726	Building HVAC and Lab Ventilation	500,000		(500,000)	-	-	-	-	-
18727	Earthquake - Structural Repair	300,000		350,000	650,000	337,314	155,583	157,103	24%
18728	Roof Rplcmnt - Solids Handling/Digester Tower	232,900			232,900	166,935	-	65,965	-

**Summary of NSD Capital Project Status
through 11-30-17**

Proj #	Description	FY 17-18 Budget	FY 16-17 Carryovers	Adj.	Final FY 17-18 Budget	Encumbrance	Costs Paid to Date	Budget Remaining	% Budget Expended
18736	Treatment Plant Project 2018	-		1,500,250	1,500,250	68,601	19,738	1,411,910	1%
18737	Flash Mixer Replacement	-		-	-	-	-	-	-
	<u>SCADA</u>								
18729	SCADA MP Project #1 - Network Monitoring	50,000			50,000	-	-	50,000	-
	<u>RECYCLING - DISTRICT</u>								
16716	Line Recycled Water Reservoir	1,800,000	169,550	650,000	2,619,550	84,844	29,255	2,505,450	1%
18730	Jameson 24" Flow Meter Rehab	6,200			6,200	-	-	6,200	-
18731	Coombsville Truck Fill Station	100,000			100,000	23,057	206	76,737	0%
	<u>RECYCLING - EXPANSION</u>								
13727	North Bay Wate Reuse Project	150,000			150,000	-	80,485	69,515	54%
14726	MST RW Pipeline Construction	-	5,000		5,000	-	292	4,708	6%
16722	MST RW Pipeline Extension	2,800,000	(158,465)		2,641,535	795,100	1,351,971	494,464	51%
	<u>OTHER</u>								
13729	Development Technical Support	239,900			239,900	-	113,685	126,215	47%
18732	Box Culvert - Fugundes Emergency Access	5,000			5,000	-	-	5,000	-
18733	GPS Handheld	15,000			15,000	-	7,958	7,042	53%
GRAND TOTAL ALL PROJECTS		\$25,018,300	\$7,333,200	\$859,000	\$33,210,500	\$4,569,502	\$5,678,683	\$22,962,316	17%