



Napa Sanitation District

General Manager's Report

for

April, 2018

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: June 6, 2018

FROM: Timothy B. Healy, General Manager

SUBJECT: General Manager's Report for April 2018

REGULATORY COMPLIANCE:

Collection System Compliance:	0 Category 1 SSO's, 0 Category 2 SSO's, and 3 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 – April 30, 2018
Percent Fiscal Year:	83.3%
Operating Expenditures to date:	71.2%
Historical Expenditures to date:	81.3%
Significant Comments:	Historically, the "Operating Expenditures to date" would include 75% of the intrafund transfer from Operating to Capital that was budgeted for the year. However, cash flow in the Capital Fund has been sufficient this year and only 50% of the intrafund transfer budget has been needed. We will monitor this closely to make the fund transfers as necessary to the Capital Fund.

Sewer service charges were received from the second installment payments of the property taxes in April.

PERSONNEL:

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

New Hires:	None
Separations:	None
Promotions:	None
Recruitment Activities:	Appointment of new Operator I to fill vacancy.
Injuries:	None.

Summaries of Operational Highlights are as follows:

COLLECTIONS:

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

- The District had 0 Category 1 Sanitary Sewer Overflows (SSO's), 0 Category 2 SSO's and 3 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 3 cleanouts, repaired 3 cleanouts and repaired 1 manhole. They also repaired 3 laterals and installed 7 lateral liners. Additionally, the service response/programs crew completed 97 work orders in support of the grease and odor control program, responded to 41 customer requests for service (9 were NSD problem) and closed out 308 mark and locate request tickets.
- The preventative maintenance crews ran work orders on 121 laterals, cleaned approximately 75,384 feet of main line and CCTV inspected 19 laterals. In addition, the CCTV truck televised 20,209 feet of mainline.

TREATMENT PLANT:

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

Plant Operations:

- For April 2018, the plant's influent flow was 321.5 MG as compared to last year flow for April 2017 of 353.8 MG
- Flow to the Napa River for April 2018 was 319.8 MG compared to last year's flow of 463.4 MG.
- The production of recycle quality occurred for 24 day during April 2018 with a total distributed flow of 20.17 MG.
- There was 3.80" rainfall for April 2018 as compared to 3.06" rainfall for April 2017.
- Pond 4 end of the month recorded level reading was 36.46" as compared to April 2017 of 28.78". Total remaining pond capacity for April 2018 was 52.2% as compared to April 2017 remaining capacity of 55.7%.

Power Consumption and Production:

- This April power consumption purchased from PG&E was 357 MWH in comparison to April 2017 purchase of 378 MWH
- Cogeneration unit ran 718 of 720 hours for the month – 99.72% uptime, averaging 324.88 Kw
- Solar generation in April was 175 MWH, compared to 140 MWH in March.

Maintenance:

Significant events for the month of April 2018:

Process Maintenance

- Cogeneration unit monthly emission test - in compliance with BAAQMD permit
- Cogen service:
 - Changed oil and filters
 - Replaced pre-air filter and main air filter
- Filter Air Compressor service:
 - Rebuilt auto drains
 - Disassembled load piston assembly/cleaned and lubed
- Replaced packing on FOG transfer pump
- Neuros Blowers/replaced PLC batteries
- Replaced motor/floc stage drive # 1
- Lab dishwasher/installed dryer fans and filters
- Installed new fusing in convault #1 leak detection system

Projects

- Up-graded gallery roll-up door controls

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 April 2018. All parameters were monitored at the required frequencies. The following were notable sampling events:

- April 3, 2018: Metals, Cyanide, Mercury, Nutrients
- April 2-6, 2018: Acute Toxicity Bioassay
- April 10, 2018: Nutrients

Influent (IFF-001) Summary

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

- April 3, 2018: Metals, Cyanide, Mercury

RECYCLING:

Significant events in the Recycling Department for April 2018 include:

- Recycled water delivered for the month of April 2018 (15.996 million gallons), as compared to April 2017 (12.188 million gallons) is higher due to reservoir filling, golf course and commercial landscape demand. Delivered recycled water volume represents the sum of all use site flow meter consumption values.
- Staff provided an annual refresher-training course for recycled water customers and their user supervisor designee.
- Staff continued biosolids encapsulating operations as well as infield staging for the reporting period.

POLLUTION PREVENTION:

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

- There were five tours of the treatment plant and one presentation given in April to students from River School and Harvest Christian Academy.
- NapaSan attended the American Canyon High School Career Fair to promote internships and temporary jobs at NapaSan and to promote careers in the water and wastewater fields.
- NapaSan helped to plan, promote, and run the Earth Day event in downtown Napa on Saturday, April 22nd. NapaSan had a booth at the event and gave out information about pollution prevention and NapaSan's services.
- In April, 66 pounds of medication was collected at Family Drug. The total amount of unneeded medications collected since the drug takeback program began in September 2010 is 21,107.2 pounds.
- There were no ESME Washer Rebates issued this month.

ENGINEERING / CAPITAL PROJECTS / DEVELOPMENT:

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

- Consultant continued design of the Headworks Equipment Replacement Project.
- Contractor completed construction of the Recycled Water Reservoir Improvements Project.
- Contractor completed construction of the 2017 Collection System Rehabilitation Project.

- Contractor began construction of the 2018 Collection System Rehabilitation Project.
- Staff continued design of the 2019 Collection System Rehabilitation Project.
- Consultant continued design of the Browns Valley Trunk Project.
- Consultant continued design of the West Napa Pump Station Project.
- Consultant continued design of the Pond 1 Dredge Project.
- Staff held a public bid opening for the 2018 Treatment Plant Improvements Project.
- Consultant and Staff continued work on Phase 1A of the Asset Management Program.
- Staff reviewed 34 sets of development plans and deemed 14 sets of plans complete. The approved plans consisted of one commercial lateral, three tenant improvements, two residential laterals, and eight residential dwellings.

Budget Status & Cash Summary - July 1, 2017 - April 30, 2018 (83.3% of the year)

<i>Expenditures</i>	FY 17-18 Budget	Encumbrances	Expenditures to date	Committed to date	Remaining Balance	Percent Committed
<u>Operating</u>						
Salaries & Benefits	\$9,581,300	\$12	\$7,016,433	\$7,016,445	\$2,564,855	73.2%
Services & Supplies	6,053,950	906,806	3,723,977	4,630,783	1,423,167	76.5%
Taxes	29,000	-	28,710	28,710	290	99.0%
Debt Service	4,777,450	-	4,775,374	4,775,374	2,076 (1)	100.0%
Intrafund Transfers	8,900,000	-	4,450,000	4,450,000	4,450,000	50.0%
Total Operating:	\$29,341,700	\$906,818	\$19,994,494	\$20,901,312	\$8,440,388 (2)	71.2%
<u>Capital</u>						
Bldgs/Improvements & Equip	\$33,785,500	\$4,542,183	\$12,286,250	\$16,828,433	\$16,957,067 (3)	49.8%
Intrafund Transfers	3,630,000	-	3,630,000	3,630,000	-	100.0%
Total Capital :	\$37,415,500	\$4,542,183	\$15,916,250	\$20,458,433	\$16,957,067	54.7%
Grand Total Expenditures:	\$66,757,200	\$5,449,002	\$35,910,744	\$41,359,746	\$25,397,454	62.0%

<i>Revenues</i>	FY 17-18 Budget	Encumbrances	Collected to date	Received to Date	Uncollected Revenue	Percent Collected
<u>Operating</u>						
Use of Money/Property	\$896,000		\$856,740	\$856,740	\$39,260	95.6%
Intergovernmental	\$15,000		\$0	-	15,000	N/A
Charges for Services	27,429,100		26,283,374	26,283,374	1,145,726	95.8%
Miscellaneous Revenues	61,000		410,933	410,933	(349,933) (4)	673.7%
Donations/Contributions (Capital Labor)	-		688,028	688,028	(688,028) (5)	N/A
Total Operating:	\$28,401,100		\$28,239,075	\$28,239,075	\$162,025	99.4%
<u>Capital</u>						
Use of Money/Property	\$0		\$2,917	\$2,917	(\$2,917)	N/A
Capacity Charges	3,630,000		6,413,599	6,413,599	(2,783,599) (6)	176.7%
Intergovernmental	4,076,000		2,142,031	2,142,031	1,933,969	52.6%
Bond/Loan Proceeds	10,137,000		-	-	10,137,000	0.0%
Sale of Assets	25,000		8,372	8,372	16,628	N/A
Miscellaneous Revenues	-		6,870	6,870	(6,870)	N/A
Intrafund Transfers	12,530,000		8,080,000	8,080,000	4,450,000	64.5%
Total Capital:	\$30,398,000		\$16,653,790	\$16,653,790	\$13,744,210	54.8%
Grand Total Revenue:	\$58,799,100		\$44,892,865	\$44,892,865	\$13,906,235	76.3%

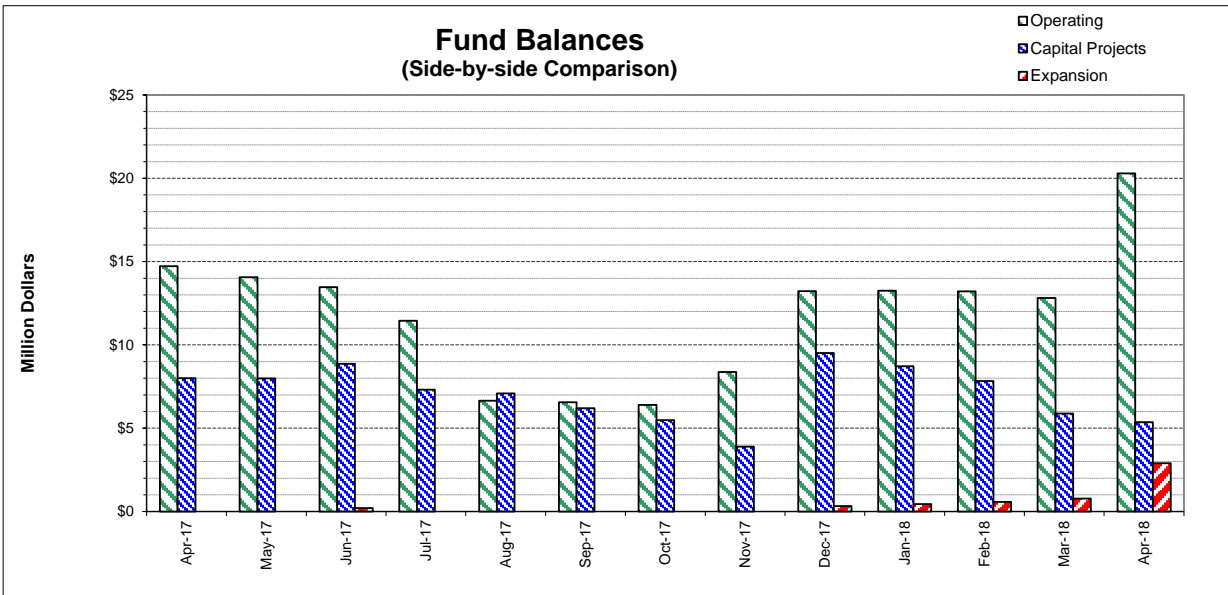
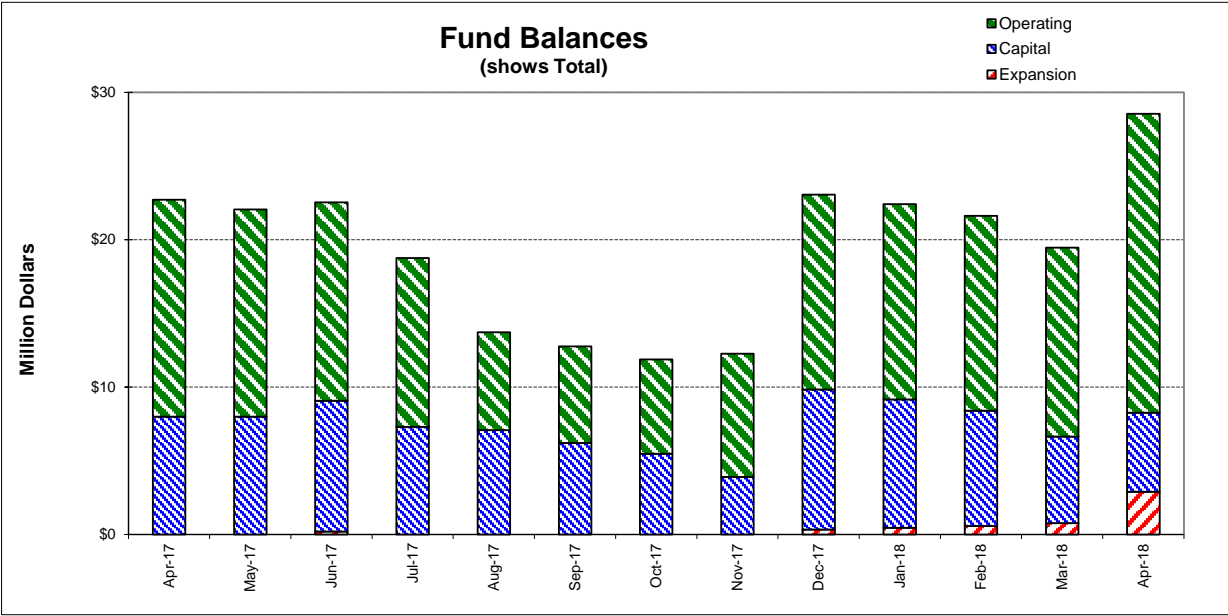
Cash on Hand as of 4/30/18

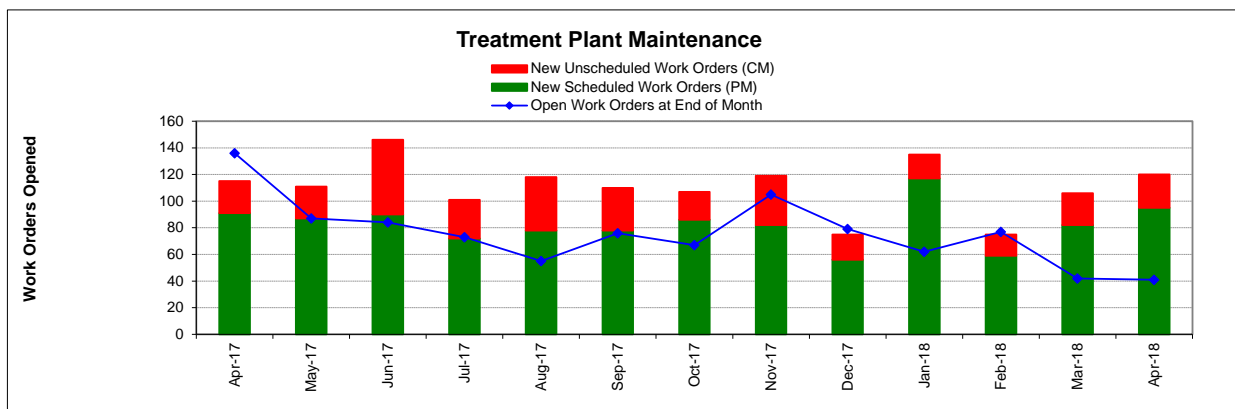
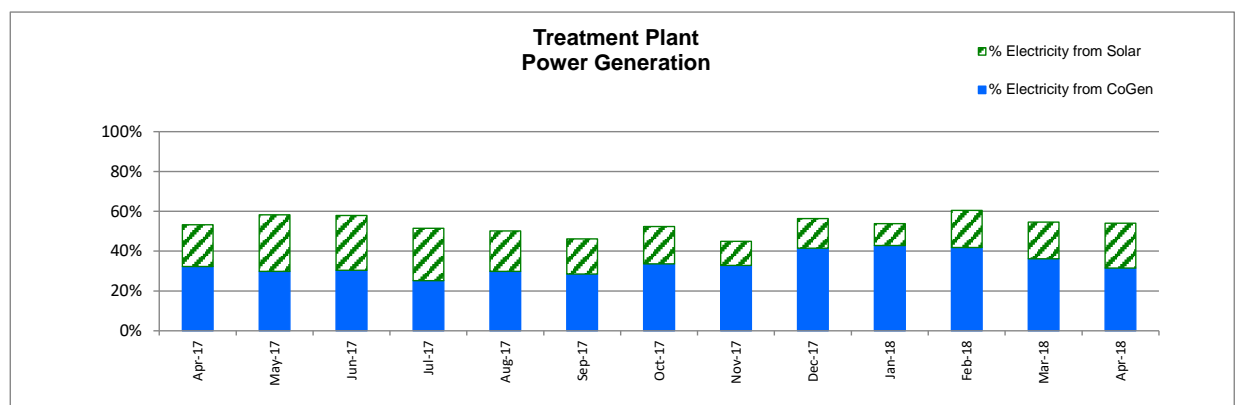
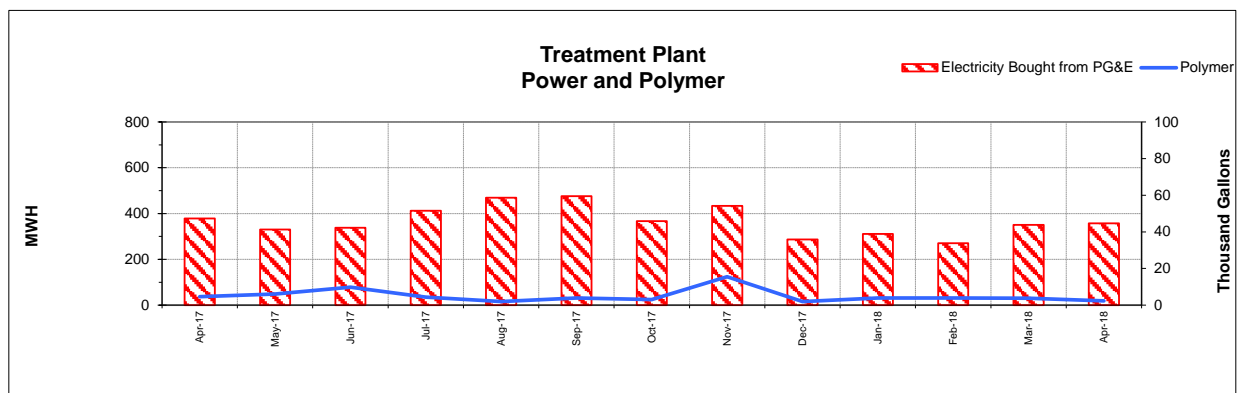
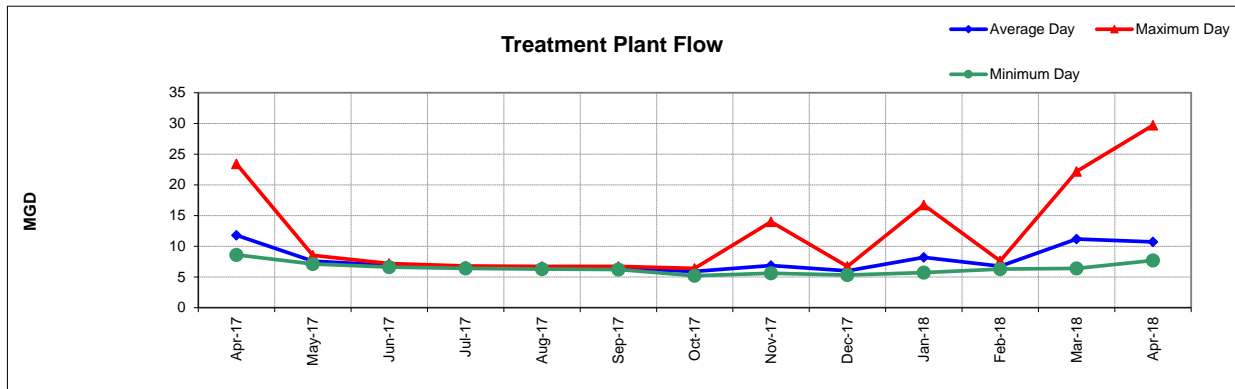
\$28,553,475

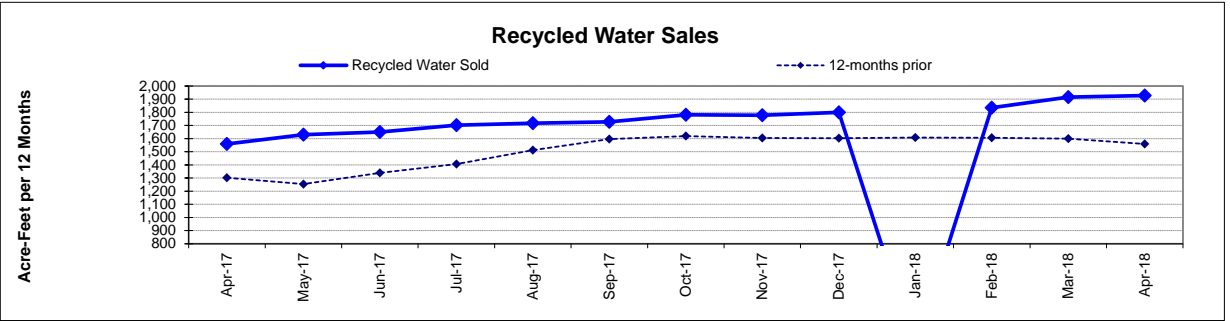
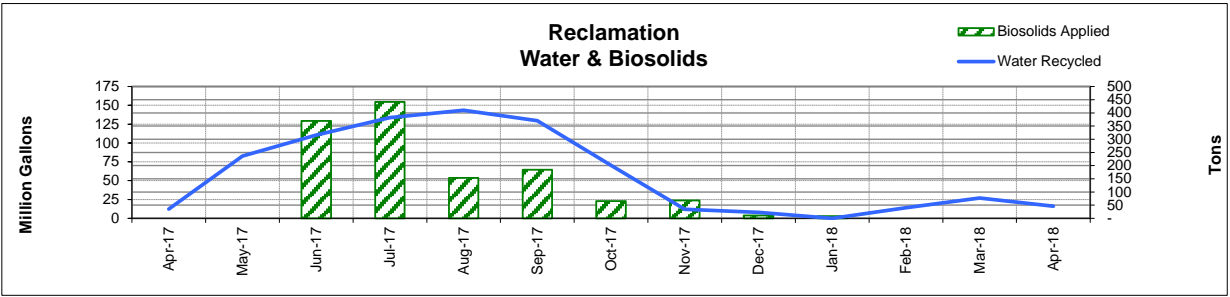
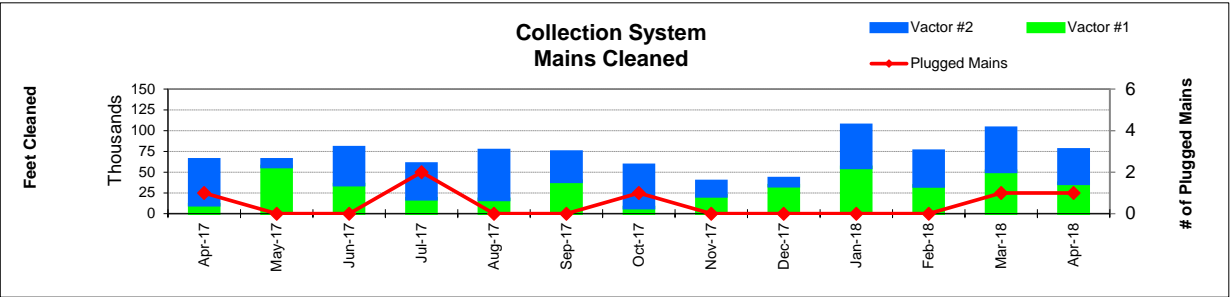
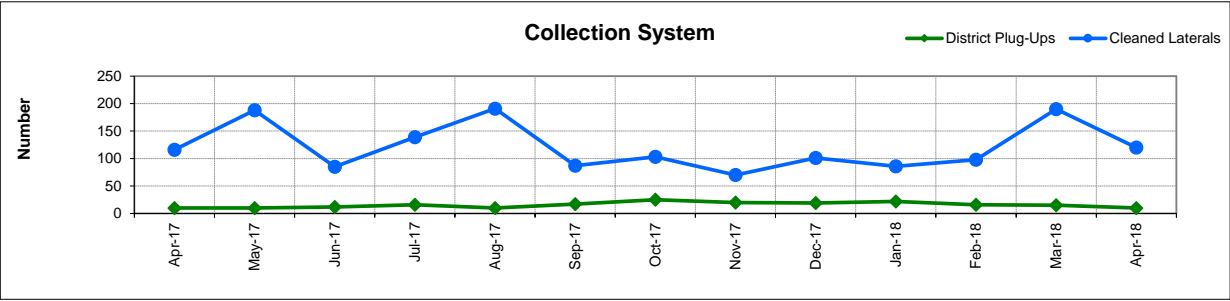
**excluding Debt Service restricted funds

4/30/18 -Effective Rate of Return = 1.55%

1. Series 2009B's and 2012A's principal/interest payments are made in Aug & Feb
2. Includes Debt Service and Intrafund Transfers; otherwise is 74.5%
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)
6. Vista Tulocay Apts and WaterMark Senior Housing added to system







FUND BALANCES - MONTHLY

CATEGORY	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18
<i>(Thousand Dollars)</i>													
7800	14,722	14,059	13,463	11,450	6,645	6,560	6,395	8,372	13,220	13,251	13,210	12,818	20,290
7850	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal Operating	14,722	14,059	13,463	11,450	6,645	6,560	6,395	8,372	13,220	13,251	13,210	12,818	20,290
Capital Improvement Projects	8,001	7,995	8,867	7,312	7,083	6,205	5,480	3,897	9,514	8,720	7,830	5,877	5,365
Debt Proceeds	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal Capital	8,001	7,995	8,867	7,312	7,083	6,205	5,480	3,897	9,514	8,720	7,830	5,877	5,365
Total Discretionary Funds	22,723	22,054	22,330	18,762	13,728	12,765	11,875	12,269	22,734	21,971	21,040	18,695	25,655
Expansion Fund (Restricted)	-	-	202	-	-	-	-	-	332	449	577	775	2,898
Total Restricted Funds	-	-	202	-	-	-	-	-	332	449	577	775	2,898
TOTAL ALL FUNDS	22,723	22,054	22,532	18,762	13,728	12,765	11,875	12,269	23,066	22,420	21,617	19,470	28,553

DEVELOPMENT WORKLOAD - MONTHLY

CATEGORY	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18
<u>Phone Requests</u>													
Maps/Drawings	5	5	5	3	4	5	6	3	3	6	6	6	3
Lateral Permits	-	-	-	-	-	-	-	-	-	-	-	-	-
Policy Questions	4	10	19	11	6	4	7	8	6	4	12	17	5
Development Questions	62	91	95	51	71	28	39	40	23	55	63	39	44
Miscellaneous	8	8	10	11	3	3	2	3	10	8	7	15	11
TOTAL	79	114	129	76	84	40	54	54	42	73	88	77	63
<u>Counter Requests</u>													
Maps/Drawings	1	3	6	2	-	1	-	-	-	1	-	-	-
Lateral Permits	10	10	18	15	6	16	4	5	7	11	9	17	12
Policy Questions	-	5	2	5	2	2	2	1	2	-	2	2	-
Development Questions	15	29	21	8	14	8	7	9	9	7	9	15	11
Miscellaneous	1	5	6	2	2	2	3	-	1	1	1	3	-
TOTAL	27	52	53	32	24	29	16	15	19	20	21	37	23
<u>Initial Request (Referrals)</u>	17	22	20	10	11	14	11	17	5	7	13	20	15
<u>Connection Permits Issued</u>													
Residential Permits	1	1	12	1	4	2	1	1	5	3	12	19	16
Commercial Permits	1	4	2	2	5	4	2	2	3	5	3	1	3
Industrial Permits	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMITS	2	5	14	3	9	6	3	3	8	8	15	20	19
Residential Units	1	2	35	1	4	2	1	1	5	3	12	336	16
Commercial Units	1	4	7	2	6	4	2	2	3	5	3	1	102
TOTAL UNITS	2	6	42	3	10	6	3	3	8	8	15	337	118
<u>Annexations</u>													
Submitted	-	-	-	-	-	-	-	-	-	-	-	-	-
Acreage	-	-	-	-	-	-	-	-	-	-	-	-	-
<u>Plans Reviewed</u>													
<u>Subdivisions/Sites</u>													
First Submittal	11	6	8	10	5	10	6	2	3	9	19	18	14
Second Submittal	6	8	4	5	7	1	1	1	4	2	5	9	6
Third Submittal	1	2	8	4	2	1	7	2	3	5	4	6	2
<u>Building/Tenant Improvements</u>													
First Submittal	4	9	17	8	19	15	9	5	10	5	16	14	7
Second Submittal	4	4	5	9	6	5	9	10	3	1	2	9	1
Third Submittal	3	7	8	6	7	3	2	7	5	2	3	3	4
<u>Miscellaneous Plan Reviews</u>	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PLANS REVIEWED	29	36	50	42	46	35	34	27	28	24	49	59	34

INSPECTION WORKLOAD - MONTHLY

CATEGORY	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18
<u>CONSTRUCTION</u>													
Locating Sewers	-	-	-	-	-	-	1	-	-	-	-	-	-
Permit Processing	-	-	1	-	-	-	-	-	-	-	-	-	-
Preconstruction Meetings	4	1	2	3	2	-	-	1	1	7	7	5	5
Inspections - Mains	1	-	4	-	-	2	-	-	5	-	20	6	2
Inspections - Manholes	61	1	9	3	3	40	72	45	62	41	38	13	16
Inspections - Laterals	14	3	8	11	8	6	2	7	15	23	26	23	17
Inspections - Cleanouts	25	-	2	4	3	4	4	11	10	31	36	24	26
Inspections - Review Video	-	2	-	3	-	-	-	-	-	-	-	1	2
Demo - Septic Tanks	-	-	-	-	-	-	-	-	-	-	-	-	-
Demo - Buildings	2	-	-	-	-	-	-	-	-	-	-	-	-
Update Record Drawings	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	107	7	26	24	16	52	79	64	93	102	127	72	68
<u>MISCELLANEOUS</u>													
Meter Readings	24	-	-	-	-	-	-	-	-	11	24	-	1
Washdown Facility Inspections	-	-	-	-	-	-	-	-	-	-	-	-	12
General Customer Assistance	12	11	30	34	28	30	31	30	25	26	18	38	11
City of Napa Water Discharge	-	-	-	-	-	-	-	-	-	0	-	-	-
TOTAL	36	11	30	34	28	30	31	30	25	37	42	38	24
<u>SPECIAL PROJECTS</u>													
	0	0	22	21	23	36	24	6	1	7	0	5	6

POLLUTION PREVENTION WORKLOAD - MONTHLY

CATEGORY	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18
<u>Outreach Activities</u>													
Plant Tours Conducted	3	4	1	2	1	9	1	2	0	3	0	1	5
Presentations Made	1	5	1	0	0	3	0	0	0	0	0	2	1
Total Outreach Activities	4	9	2	2	1	12	1	2	-	3	-	3	6
<u>Inspections Conducted</u>													
Food Service Facilities	25	-	-	-	-	-	-	-	-	6	22	64	51
Auto Body & Car Wash	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	1	-	-	-	-	-
Total Inspections	25	-	-	-	-	-	-	1	-	6	22	64	51
<u>Compliance Issues</u>													
NOVs Issued	-	-	1	-	-	1	2	-	1	-	3	2	2
NOEs Issued	-	1	-	-	1	1	1	-	1	1	3	-	1
Non-Compliant-FOG	-	-	-	-	-	-	-	-	1	-	-	-	-
Total Compliance Issues	-	1	1	-	1	2	3	-	3	1	6	2	3
<u>Pollution Prevention</u>													
Clothes Washer Rebates	-	28	21	1	1	19	-	-	-	25	14	21	-
Toilet Retrofit Rebates	1	2	7	16	6	3	-	-	-	-	-	-	-
Pharmaceuticals Diverted (in lbs)	185	302	368	-	-	-	59	63	-	35	-	82	66

RECYCLED WATER DELIVERIES - MONTHLY

	Acres	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18
MONTHLY (MG)														
Water Sold														
Golf Courses	405.0	2.513	53.481	66.261	73.994	58.595	53.035	26.903	5.504	6.253	-	6.152	2.748	3.320
Cemeteries	57.1	-	0.705	0.754	0.834	1.116	0.634	0.833	0.193	0.003	-	0.005	0.154	0.385
Parks	18.5	0.001	0.624	1.020	0.902	0.866	0.650	0.333	0.020	-	-	-	-	-
Schools	21.0	0.013	1.396	2.604	2.250	2.178	1.613	1.485	0.195	0.019	-	0.255	0.198	0.242
Commerical	167.6	2.493	15.246	17.491	17.468	17.399	15.227	13.665	4.387	1.402	-	1.835	1.765	3.169
Vineyards	564.0	7.119	4.868	10.709	19.143	30.814	18.019	16.506	1.766	0.225	-	5.695	21.988	8.001
Trucked Water	175.0	0.018	0.027	0.051	0.474	0.602	0.274	0.197	0.030	0.014	-	0.017	0.029	0.880
Subtotal Sales	1,408.2	12.156	76.347	98.891	115.065	111.571	89.451	59.922	12.095	7.916	-	13.960	26.881	15.996
District Use														
Jameson	330.0	0.032	-	-	7.298	18.483	20.751	-	-	-	-	0.077	-	-
Somky	213.0	-	6.256	11.738	11.488	13.426	19.372	10.364	-	-	-	-	-	-
Fagundes/Airport	50.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal District	593.5	0.032	6.256	11.738	18.786	31.910	40.122	10.364	-	-	-	0.077	-	-
TOTAL DELIVERED	2,001.7	12.188	82.603	110.628	133.851	143.481	129.574	70.286	12.095	7.916	-	14.037	26.881	15.996
ANNUAL (AF)														
Water Sold														
Golf Courses	405.0	936	985	1,013	1,047	1,033	1,044	1,048	1,045	1,064		1,083	1,091	1,093
Cemeteries	57.1	14	14	14	14	15	13	15	16	16		16	16	17
Parks	18.5	16	16	16	14	13	13	13	14	14		14	14	14
Schools	21.0	33	32	32	32	33	33	36	36	36		37	37	38
Commerical	167.6	287	300	301	309	309	310	322	325	328		329	333	335
Vineyards	564.0	270	279	270	281	308	310	342	336	336		353	420	423
Trucked Water	175.0	4	4	4	5	5	5	6	6	5		5	5	8
Subtotal Sales	1,408.2	1,559	1,630	1,650	1,702	1,717	1,728	1,782	1,778	1,799	-	1,835	1,916	1,928
District Use														
Jameson	330.0	163	163	158	164	183	182	143	143	143		143	143	143
Somky	213.0	222	241	268	254	230	222	223	223	223		223	223	223
Fagundes/Airport	50.5	-	-	-	-	-	-	-	-	-		-	-	-
Subtotal District	593.5	385	404	427	419	413	404	366	366	366	-	366	366	366
TOTAL DELIVERED	2,001.7	1,945	2,034	2,077	2,121	2,130	2,132	2,148	2,144	2,165	-	2,202	2,282	2,294

BIOSOLIDS HANDLING - MONTHLY

Site	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18
<u>Land Applied by NSD</u>													
Somky													
Airport/Fagundes													
Jameson Canyon	-	-	370	442	153	184	65	68	11	8	-	-	-
Subtotal by NSD	-	-	370	442	153	184	65	68	11	8	-	-	-
<u>Land Applied by Contractor</u>													
Somky													
Airport/Fagundes													
Jameson Canyon													
Subtotal by Contractor	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Land Applied	-	-	370	442	153	184	65	68	11	8	-	-	-
Off Site (Contractor)													
<hr/>													
Total (tons)	-	-	370	442	153	184	65	68	11	8	-	-	-

COLLECTION SYSTEM MAINTENANCE - MONTHLY

CATEGORY	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18
<u>Plugups</u>													
Total Calls	39	37	44	43	36	42	54	63	48	62	49	67	40
Business Hours	25	21	25	25	27	26	33	38	27	40	35	53	23
After Hours	14	16	19	18	9	16	21	25	21	22	14	16	17
District's	10	10	12	16	10	17	25	20	19	22	16	15	10
Property Owner's	29	27	32	27	26	25	29	43	29	40	33	40	30
Plugged Main Lines												1	1
Run Lateral w/Eel	116	188	85	139	191	87	103	70	101	86	98	190	120
<u>Cleaning (feet of sewer)</u>													
Vactor #1	10,888	56,860	35,077	18,053	17,179	38,849	7,417	21,500	33,612	55,782	33,391	51,027	36,507
Vactor #2	53,959	7,819	44,357	41,749	58,712	35,140	50,621	17,254	8,642	50,441	41,842	51,666	40,119
Hydro									1,251				
Rodder										765			
Total (feet)	64,846	64,679	79,433	59,802	75,891	73,989	58,038	38,754	43,505	106,988	75,233	102,693	76,625
<u>Cleaning Days</u>													
Vactor #1	5	16	12	8	8	14	3	10	14	18	11	15	14
Vactor #2	17	4	16	13	23	11	18	10	5	14	13	18	13
Hydro													
Rodder										1			
Feet/day	2,950	3,250	2,850	2,850	2,450	2,950	2,750	1,950	2,300	3,250	3,150	3,100	2,850
Vactor #1	2,200	3,550	2,900	2,250	2,150	2,750	2,450	2,150	2,400	3,100	3,050	3,400	2,600
Vactor #2	3,150	1,950	2,750	3,200	2,550	3,200	2,800	1,750	1,750	3,600	3,200	2,850	3,100
Hydro													
Rodder										750			
<u>Video Inspections</u>													
Mains (feet)	15,580	25,066	24,881	15,731	15,789			10,767	6,320	17,644	12,878	21,714	2,021
Laterals (each)	249	251	205	265	246	170	184	172	186	114	122	211	179
<u>Construction (each)</u>													
Cleanouts	4	16	7	31	17	7	4	6	11	15	16	8	6
Laterals	3	4	15		9	1	1	1	1	1	4	1	10
Mains									1		1		
Manholes													1
Other		50			2		57	79					3
<u>USA Markings</u>													
Regular (w/in 2 days)	305	297	258	215	264	233	252	363	210	281	277	266	280
Emergency (w/in 2 hours)	8	3	6	5	3	7	33	9	13	15	3	18	31

WASTEWATER PLANT OPERATIONS DATA - MONTHLY

CATEGORY	Units	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18
FLOWES		30	31	30	31	31	30	31	30	31	31	28	31	30
Influent	MG	353.8	234.9	206.4	201.5	199.7	191.6	183.0	205.5	186.3	254.0	189.3	347.0	321.5
Average Day	MGD	11.8	7.6	6.9	6.5	6.4	6.4	5.9	6.9	6.0	8.2	6.8	11.2	10.7
Maximum Day	Date	9-Apr	1-May	11-Jun	4-Jul	21-Aug	18-Sep	11-Oct	17-Nov	1-Dec	10-Jan	1-Feb	23-Mar	8-Apr
Maximum Day Flow	MG	23.4	8.5	7.2	6.8	6.7	6.7	6.4	14.0	6.7	16.7	7.6	22.2	29.7
Minimum Day	Date	30-Apr	24-May	30-Jun	31-Jul	30-Aug	4-Sep	1-Oct	1-Nov	26-Dec	2-Jan	24-Feb	1-Mar	30-Apr
Minimum Day Flow	MG	8.6	7.1	6.6	6.4	6.3	6.2	5.2	5.6	5.3	5.7	6.3	6.4	7.7
Effluent	MG	480.3	98.9	117.1	146.3	158.0	142.9	80.0	314.7	169.1	302.3	176.2	415.7	342.1
River Discharge	MG	463.4	-	-	-	-	-	-	305.8	163.8	302.0	164.6	398.9	319.8
Recycled Flow	MG	16.8	98.9	123.3	134.0	158.0	142.9	73.0	8.9	5.3	0.3	14.4	23.0	20.2
BIOSOLIDS	Tons	568	507	639	521	952	703	612	731	617	713	770	836	605
Wet Tons Generated from Pond	Tons													
Wet Tons Generated from Plant	Tons	568	507	639	521	952	703	612	731	617	713	770	836	605
% Solids Liquid	%													
% Solids Cake	%													
% Solids Land Application	%													
Wet Tons Hauled Offsite	Tons													
POLYMER USE	Gallons	4,644	6,112	9,760	4,352	1,987	3,927	3,051	15,506	1,939	3,839	3,931	3,764	2,365
Pond Pre-Flocculators	Gallons	2,676	-	-	-	-	-	-	11,711		2,460	-	-	282
Flocculator Polymer 1	Gallons													
Flocculator Polymer 2	Gallons	720	-	-	-	-	115	-	-	250	589	253	1,033	452
Filter Polymer 1	Gallons	746	5,662	8,984	3,739	914	3,077	2,358	830	728		3,019	1,963	1,015
Filter Polymer 2	Gallons									151	790			-
Belt Presses	Gallons	502	450	776	613	1,073	735	693	784	810	13	659	769	617
ENERGY														
Total Electricity Used	MWH	759	713	739	807	849	870	747	719	658	673	684	759	777
Purchased from PGE	MWH	378	330	338	412	469	476	367	433	287	311	270	350	357
Produced from Co-Gen	MWH	245	213	225	203	253	248	251	236	273	288	286	269	245
Percent Produced	%	32%	30%	30%	25%	30%	29%	34%	33%	41%	43%	42%	36%	32%
Purchased from Solar	MWH	159	202	203	213	172	153	140	87	98	74	128	140	175
Percent Produced		21%	28%	27%	26%	20%	18%	19%	12%	15%	11%	19%	18%	22%
Purchased Natural Gas	Therms	50	21	51	858	56	60	19	99	91	2,404	1,214	166	24
Methane Flared Off	KSCF	56	15	225	127	156	164	5	82	192	523	733	79	43
Stand By Calls	#	42	55	86	48	44	78	36	47	66	23	43	40	36
Violations	#	-	-	-	-	-	-	-	-	-	-	-	-	-

WASTEWATER PLANT MAINTENANCE and LABORATORY DATA - MONTHLY

CATEGORY	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18
<u>Scheduled</u>													
Old	40	75	41	37	28	17	33	33	61	39	27	39	12
New	91	87	90	72	78	78	86	82	56	117	59	82	95
Completed	56	121	94	81	89	62	86	54	78	129	41	109	101
New Balance	75	41	37	28	17	33	33	61	39	27	39	12	6
<u>Unscheduled</u>													
Old	48	61	46	47	45	38	43	34	44	40	35	38	30
New	24	24	56	29	40	32	21	37	19	18	16	24	25
Completed	11	39	55	31	47	27	30	27	23	23	13	32	20
New Balance	61	46	47	45	38	43	34	44	40	35	38	30	35
<u>Total Work Orders</u>													
Old	88	136	87	84	73	55	76	66	105	79	62	77	42
New	115	111	146	101	118	110	107	119	75	135	75	106	120
Completed	67	161	149	112	132	89	117	81	101	152	60	141	121
New Balance	136	87	84	73	55	76	67	105	79	62	77	42	41
<u>LAB ANALYSES</u>													
Sample Type													
Regulatory	218	177	230	173	193	194	156	178	163	123	190	208	200
Process Control	1,167	820	1,107	1,024	1,104	1,091	1,137	1,220	1,139	1,071	1,080	1,103	1,103
Special Request	-	6	200	-	-	7	8	4	6	4	2	4	1
Quality Control/Assurance	497	523	574	464	549	428	420	1,110	874	692	794	741	936
TOTAL	1,882	1,526	2,111	1,661	1,846	1,720	1,721	2,512	2,182	1,890	2,066	2,056	2,240

**Summary of NSD Capital Project Status
through 04-30-18**

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	-	27,816	63,984	30%
13702	Manhole Raising/Rehab	206,000			206,000	-	148,422	57,578	72%
13703	Lateral Replacement/Rehab	74,500			74,500	-	92,041	(17,541)	124%
13704	Cleanouts Installation/Rehab	90,000			90,000	457	71,732	17,811	80%
13705	I&I Reduction Program	207,000	29,000		236,000	189,561	20,665	25,775	9%
14703	Browns Valley Rd & First St	9,237,000	3,004,750	(1,000,000)	11,241,750	211,883	170,738	10,859,129	2%
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	25,437	1,323,535	16,478	97%
17707	66-inch Trunk CCTV Inspection	-	149,350	90,000	239,350	18,392	214,459	6,499	90%
17708	Basin G - I&I Reduction #1	2,942,000	1,504,100		4,446,100	6,111	3,717,061	722,929	84%
17734	Homewood/Westwood I/I Reduction	-	60,300		60,300	-	17,537	42,763	29%
18701	I&I Smoke Testing	100,000			100,000	-	263	99,737	0%
18702	Collection System Asset Management Software	350,000			350,000	-	174	349,826	0%
18703	Upper Lateral Rehab - Pilot #4	5,000			5,000	-	33	4,968	1%
18704	Manhole Rehab - Nipak - Basin H	284,600		(5,000)	279,600	-	182,766	96,834	65%
18705	Sewer System Inflow/Infiltration 2018	1,650,000		834,000	2,484,000	2,014,300	107,527	362,173	4%
18706	Sewer System Inflow/Infiltration 2019	20,000			20,000	-	2,079	17,921	10%
	<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	-	2,398	22,602	10%
18709	Vehicle 504 - TV Truck	270,000			270,000	-	225,970	44,030	84%
18735	Permaliner Picote	-		20,000	20,000	-	15,476	4,524	77%
18738	Combination Truck Veh #529B	-		575,000	575,000	563,239	-	11,761	-
	<u>LIFT STATIONS</u>					-			
17711	West Napa PS - Rehab	-	1,746,365		1,746,365	901,209	59,967	785,189	3%
	<u>TREATMENT</u>								
13745	Pond 1 Dredge	400,000			400,000	16,638	11,134	372,229	3%
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 04-30-18**

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	-	31,797	7,003	82%
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	-	3,280	6,720	33%
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	Ener 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	4,745	2,650	2,605	26%
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	-	24,616	67,184	27%
18717	Septage Card Reader Replacement	21,400			21,400	-	1,390	20,010	6%
18718	Secondary Clarifier Mech/Struct Rehabilitation	50,000			50,000	-	50,000	-	100%
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	-	7,407	2,593	74%
18739	Pond 1 Transformer Repair	-		25,000	25,000	-	16,463	8,537	66%
18740	Chemical Storage Building Piping Replacement	-		-	-	-	-	-	-
	TREATMENT - STRUCTURES								
17726	Headworks Equipment Rehab/Replacment	250,000	42,100		292,100	55,307	234,225	2,569	80%
18726	Building HVAC and Lab Ventilation	500,000		(500,000)	-	-	-	-	-
18727	Earthquake - Structural Repair	300,000		350,000	650,000	-	580,603	69,397	89%

**Summary of NSD Capital Project Status
through 04-30-18**

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
18728	Roof Rplcmnt - Solids Handling/Digester Tower	232,900		(65,000)	167,900	2,000	164,935	965	98%
18736	Treatment Plant Project 2018	-		1,500,250	1,500,250	26,878	308,034	1,165,338	21%
18737	Flash Mixer Replacement	-		45,000	45,000	36,428	50	8,522	0%
	SCADA								
18729	SCADA MP Project #1 - Network Monitoring	50,000			50,000	-	163	49,838	0%
	RECYCLING - DISTRICT								
16716	Line Recycled Water Reservoir	1,800,000	169,550	650,000	2,619,550	305,858	1,900,840	412,852	73%
18730	Jameson 24" Flow Meter Rehab	6,200			6,200	-	-	6,200	-
18731	Coombsville Truck Fill Station	100,000			100,000	94	32,711	67,195	33%
	RECYCLING - EXPANSION								
13727	North Bay Wate Reuse Project	150,000			150,000	4,980	80,485	64,535	54%
14726	MST RW Pipeline Construction	-	5,000		5,000	-	2,573	2,427	51%
16722	MST RW Pipeline Extension	2,800,000	(158,465)		2,641,535	116,669	2,090,356	434,510	79%
	OTHER								
13729	Development Technical Support	239,900			239,900	-	233,135	6,765	97%
18732	Box Culvert - Fugundes Emergency Access	5,000			5,000	747	3,971	282	79%
18733	GPS Handheld	15,000			15,000	-	7,958	7,042	53%
GRAND TOTAL ALL PROJECTS		\$25,018,300	\$7,333,200	\$1,434,000	\$33,785,500	\$4,542,183	\$12,286,250	\$16,957,070	36%