

Napa Sanitation District

General Manager's Report

for

December, 2017

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NAPA SANITATION DISTRICT

General Manager's Report

Dedicated to Preserving the Napa River for Generations to Come

DATE: February 7, 2018

FROM: Timothy B. Healy, General Manager

SUBJECT: General Manager's Report for December, 2017

REGULATORY COMPLIANCE:

Collection System Compliance: 0 Category 1 SSO's, 0 Category 2 SSO's, and 10

Category 3 SSO's

NPDES Permit (WWTP) Compliance:

Air Quality Compliance:

Recycled Water Compliance:

Biosolids Compliance:

Full compliance with all regulations
Full compliance with all regulations
Full compliance with all regulations

Significant Comments: None

FISCAL STATUS:

Period Covered: July 1, 2017 – December 31, 2017

Percent Fiscal Year: 50.0% Operating Expenditures to date: 56.7% Historical Expenditures to date: 52.9%

Significant Comments: Sewer service charges were received from the first

installment payments of the property taxes in

December. The second installment will be due in April

2018.

PERSONNEL:

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

New Hires: Nolan Weathers and Jorge Hernandez, Collection System

Workers-in-Training; Nate Fua, Operator-in-Training; Simon Kobayashi, Associate Engineer; and Valentina Kravchuk, Lab

Analyst I.

Separations: None

Promotions: Kevin Webster, promoted to Collection System Worker I

Recruitment Activities: Finalizing and onboarding new hires above. Injuries: Kevin Webster, medical only – no lost time.

Summaries of Operational Highlights are on following pages.

COLLECTIONS:

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

- The District had 0 Category 1 Sanitary Sewer Overflows (SSO's), 0 Category 2 SSO's and 10 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 8 cleanouts, repaired 1 cleanout, replaced 1 lateral and repaired 2 laterals. Additionally, the service response/programs crew completed 68 work orders in support of the grease and odor control program, responded to 53 customer requests for service (19 were NSD problem) and closed out 231 mark and locate request tickets.
- The preventative maintenance crews ran work orders on 102 laterals, cleaned approximately 42,254 feet of main line, power rodded 1,250 of main line and CCTV inspected 37 laterals. Also, the CCTV truck televised 12,705 feet of mainline.
- The repair crew also replaced 68' of mainline at the Lincoln apartments. This was a difficult excavation due to the depth (7') as well as dealing with the other utilities that were in conflict.

TREATMENT PLANT:

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

Plant Operations:

- For December 2017, the plant's influent flow was 186 MG as compared to last year flow for December 2016 of 346 MG
- Flow to the Napa River for December 2017 was 169 MG compared to last year's flow of 370 MG.
- The production of recycle quality occurred for 7 days during December 2017 with a total distributed flow of 5.31 MG.
- There was 0.04" rain fall for December 2017 as compared to 4.0" rain fall for December 2016.
- Pond 4 end of the month recorded level reading was 36.81" as compared to December 2016 of 33.61". Total remaining pond capacity for December 2017 was 52% as compared to December 2016 remaining capacity of 46.1%.

Power Consumption and Production:

- This December power consumption purchased from PG&E was 287 MWH in comparison to December 2016 purchase of 630 MWH (The cogeneration unit was offline last year during December for overhaul).
- Cogeneration unit ran 744 of 744 hours for the month 100% uptime, averaging 354.38Kw
- Solar generation in December was 98 MWH, compared to 87 MWH in November.

Maintenance:

Significant events for the month of December, 2017:

Process Maintenance

- Cogeneration unit monthly emission test in compliance with BAAQMD permit.
- Replaced motor in Headworks exhaust fan 102
- Replaced Headworks sump pump 062
- Replaced six plug valves at FOG receiving station

Projects

- Installed air flow switches on Primary exhaust fans
- Completed CIP 18728/ roof replacement of Solids Handling and Digester Tower
- Completed annual Boiler Service

Standby Power

- Plant generators operational testing only
- Riverpark, West Napa operational testing only
- Stonecrest ran for 4.5 hours under emergency use

Influent Pumps

• All pumps operational

Laboratory:

- There were no violations of Effluent limits during the month of December, 2017. All parameters were monitored at the required frequencies. The following were notable sampling events:
 - o December 5, 2017: Metals, Cyanide, Mercury, Nutrients
 - o December 4-8 2017: Acute Toxicity Bioassay
 - o December 12, 2017: Nutrients

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- Monthly Influent monitoring of all parameters occurred at the required frequencies. The following were notable sampling events:
 - o December 5, 2017: Metals, Cyanide, Mercury, VOC, BNA
- Monthly Recycle Effluent monitoring was conducted on December 7, 2017.

RECYCLING:

Significant events in the Recycling Department for December 2017 include:

- Staff continued with annual Recycled Water Use Site inspections.
- Recycled water delivered for the month of December 2017 (7.916 million gallons), as compared to December 2016 (0.988 million gallons) is higher due to golf course and commercial landscape demand. Delivered recycled water volume represents the sum of all use site flow meter consumption values.
- Staff approved three connections to the recycled water system. Two customers in the LCWD area and one in the MST area.
- Staff continued land application of biosolids at the Jameson Reuse Site for a portion of the month and ceased land application due to wet weather. Staff initiated biosolids encapsulating operations for the remainder of the month.

POLLUTION PREVENTION:

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

- There were no tours or presentations given in December.
- 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. 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 December 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 completed design and issued Notice Inviting Bids for the 2018 Collection System Rehabilitation Project.
- Consultant continued design of the Browns Valley Trunk Project.
- Consultant continued design of the Pond 1 Dredge Project.

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- 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 continued construction of the 2017 Collection System Rehabilitation Project.
- Contractor completed construction of the Basin H Manhole Rehabilitation Project.
- Contractor completed construction of the Earthquake Repair Project.
- During the month of November, staff reviewed 27 sets of development plans and deemed 12 sets of plans complete. The approved plans consisted of three commercial buildings, six tenant improvements, one public laterals, one public lateral and one recycled water laterals.
- During the month of December, staff reviewed 28 sets of development plans and deemed 17 sets of plans complete. The approved plans consisted of three commercial buildings, four residential buildings, eight tenant improvements, and two recycled water laterals.

Budget Status & Cash Summary - July 1, 2017 - December 31, 2017 (50.0% of the year)

Expenditures	FY 17-18 Budget	Encumbrances	Expenditures to date	Committed to date	Remaining Balance	Percent Committed
Operating						
Salaries & Benefits	\$9,581,300	\$2,148	\$4,312,051	\$4,314,199	\$5,267,101	45.0%
Services & Supplies	6,054,300	1,297,964	2,439,479	3,737,443	2,316,857	61.7%
Taxes	28,650	-	14,355	14,355	14,295	50.1%
Debt Service	4,777,450	-	4,116,803	4,116,803	660,647 (86.2%
Intrafund Transfers	8,900,000	-	4,450,000	4,450,000	4,450,000	50.0%
Total Operating:	\$29,341,700	\$1,300,113	\$15,332,687	\$16,632,800	\$12,708,900	56.7%
<u>Capital</u>					_	
Bldgs/Improvements & Equip	\$33,210,500	\$5,345,816	\$6,931,617	\$12,277,433	\$20,933,067 (37.0%
Intrafund Transfers	3,630,000	-	3,630,000	3,630,000	-	100.0%
Total Capital :	\$36,840,500	\$5,345,816	\$10,561,617	\$15,907,433	\$20,933,067	43.2%
Grand Total Expenditures:	\$66,182,200	\$6,645,929	\$25,894,304	\$32,540,233	\$33,641,967	49.2%
	FY 17-18		Collected	Received to	Uncollected	Percent
Revenues	Budget	Encumbrances	to date	Date	Revenue	Collected
Operating						
Use of Money/Property	\$896,000		\$438,068	\$438,068	\$457,932	48.9%
Intergovernmental	\$15,000		\$0	=	15,000	N/A
Charges for Services	27,429,100		15,191,963	15,191,963	12,237,137	55.4%
Miscellaneous Revenues	61,000		386,114	386,114	(325,114)	633.0%
Donations/Contributions (Capital Labor)	-		415,278	415,278	(415,278)	N/A
Total Operating:	\$28,401,100		\$16,431,423	\$16,431,423	\$11,969,677	57.9%
<u>Capital</u>						
Use of Money/Property	\$0		\$1,721	\$1,721	(\$1,721)	N/A
Capacity Charges	3,630,000		3,769,552	3,769,552	(139,552)	103.8%
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		8,080,000	8,080,000	4,450,000	64.5%
Total Capital:	\$30,398,000		\$13,148,101	\$13,148,101	\$17,249,899	43.3%
Grand Total Revenue:	\$58,799,100		\$29,579,525	\$29,579,525	\$29,219,575	50.3%

Cash on Hand as of 12/31/17 \$23,065,754

^{**}excluding Debt Service restricted funds 12/31/17 -Effective Rate of Return = 1.30%

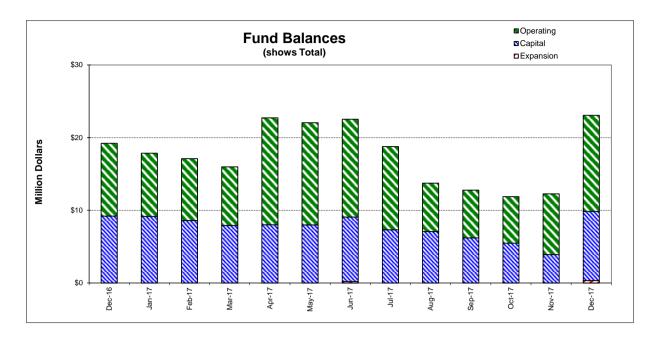
Series 2009B's and 2012A's principal/interest payments are made in Aug & Feb

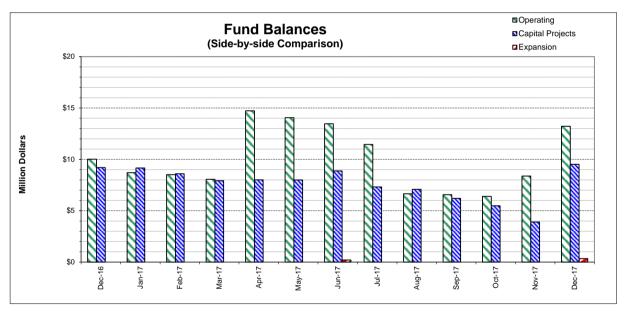
[.] Includes Debt Service and Intrafund Transfers; otherwise is 51.5%

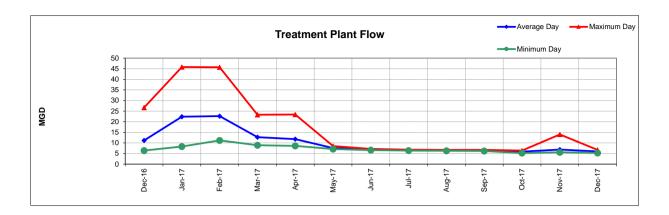
^{3.} See Capital Project Status report for details

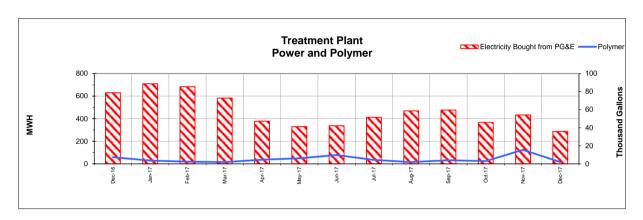
^{4.} Includes reimbursement from NBWRA from FY 16-17

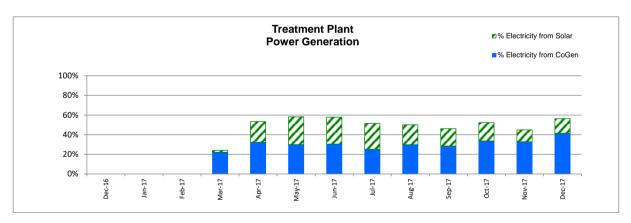
^{5.} In-house Labor for Capital Projects (Contra acct for Salaries)

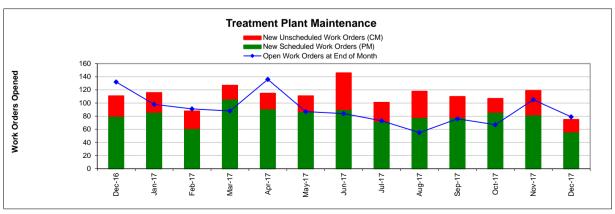


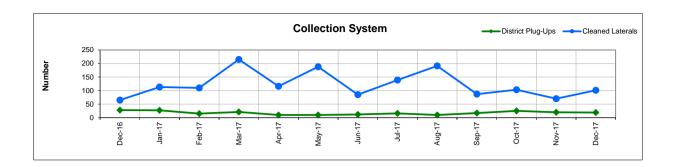


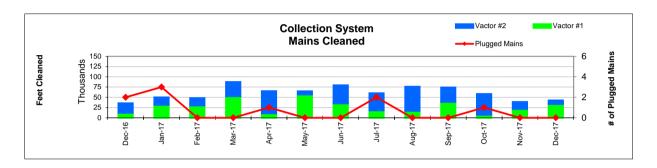


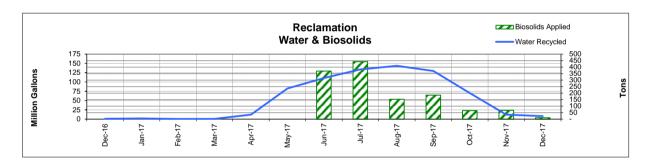


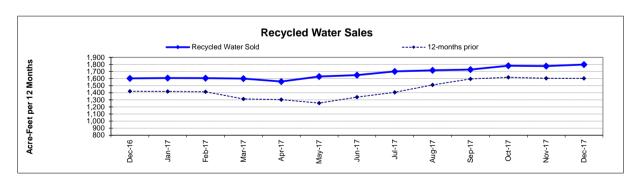












FUND BALANCES - MONTHLY

CATEGORY	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
(Thousand Dollars)													
7800 7850	10,012	8,701 -	8,506	8,055 -	14,722	14,059 -	13,463 -	11,450 -	6,645 -	6,560 -	6,395 -	8,372	13,220
Subtotal Operating	10,012	8,701	8,506	8,055	14,722	14,059	13,463	11,450	6,645	6,560	6,395	8,372	13,220
Capital Improvement Projects Debt Proceeds	9,204	9,154 -	8,598 -	7,921 -	8,001	7,995 -	8,867 -	7,312 -	7,083	6,205 -	5,480 -	3,897	9,514 -
Subtotal Capital	9,204	9,154	8,598	7,921	8,001	7,995	8,867	7,312	7,083	6,205	5,480	3,897	9,514
Total Discretionary Funds	19,216	17,855	17,104	15,976	22,723	22,054	22,330	18,762	13,728	12,765	11,875	12,269	22,734
Expansion Fund (Restricted)	_	-	-	-	-	-	202	-	-	-	-	-	332
Total Restricted Funds	-	-	-	-	-	-	202	-	-	-	-	-	332
TOTAL ALL FUNDS	19,216	17,855	17,104	15,976	22,723	22,054	22,532	18,762	13,728	12,765	11,875	12,269	23,066

DEVELOPMENT WORKLOAD - MONTHLY

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

INSPECTION WORKLOAD - MONTHLY

CATEGORY	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
CONSTRUCTION													
Locating Sewers	-	-	-	-	-	-	-	-	-	-	1	-	-
Permit Processing	-	-	-	-	-	-	1	-	-	-	-	-	-
Preconstruction Meetings	5	9	6	6	4	1	2	3	2	-	-	1	1
Inspections - Mains	1	-	-	6	1	-	4	-	-	2	-	-	5
Inspections - Manholes	89	46	16	15	61	1	9	3	3	40	72	45	62
Inspections - Laterals	11	24	17	50	14	3	8	11	8	6	2	7	15
Inspections - Cleanouts	20	42	38	74	25	-	2	4	3	4	4	11	10
Inspections - Review Video	4	1	-	-	-	2	-	3	-	-	-	-	-
Demo - Septic Tanks	-	-	-	-	-	-	-	-	-	-	-	-	-
Demo - Buildings	-	2	-	1	2	-	-	-	-	-	-	-	-
Update Record Drawings	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	130	124	77	152	107	7	26	24	16	52	79	64	93
MISCELLANEOUS													
Meter Readings	18	100	-	13	24	-	-	-	-	-	-	-	-
Washdown Facility Inspections	-	-	-	-	-	-	-	-	-	-	-	-	-
General Customer Assistance	6	11	11	10	12	11	30	-	28	30	31	30	25
City of Napa Water Discharge	-	-	-	-	-	-	-	34	-	-	-	-	-
TOTAL	24	111	11	23	36	11	30	34	28	30	31	30	25
SPECIAL PROJECTS	2	0	6	16	0	0	22	21	23	36	24	6	1

POLLUTION PREVENTION WORKLOAD - MONTHLY

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

RECYCLED WATER DELIVERIES - MONTHLY

-	Acres	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
MONTHLY (MG)														
Water Sold														
Golf Courses	405.0	0.002	0.245	_	0.081	2.513	53.481	66.261	73.994	58.595	53.035	26.903	5.504	6.253
Cemeteries	5.0	0.002	-	_	-	-	0.705	0.754	0.834	1.116	0.634	0.833	0.193	0.003
Parks	18.5	-	_	_	0.002	0.001	0.624	1.020	0.902	0.866	0.650	0.333	0.020	-
Schools	21.0	0.006	0.005	-	0.005	0.013	1.396	2.604	2.250	2.178	1.613	1.485	0.195	0.019
Commerical	167.6	0.490	1.191	0.404	0.501	2.493	15.246	17.491	17.468	17.399	15.227	13.665	4.387	1.402
Vineyards	564.0	0.302	0.194	0.063	0.101	7.119	4.868	10.709	19.143	30.814	18.019	16.506	1.766	0.225
Trucked Water	175.0	0.188	0.009	0.002	0.015	0.018	0.027	0.051	0.474	0.602	0.274	0.197	0.030	0.014
Subtotal Sales	1,356.1	0.988	1.644	0.469	0.705	12.156	76.347	98.891	115.065	111.571	89.451	59.922	12.095	7.916
District Use														
Jameson	330.0	_	0.089	_	0.087	0.032	_	_	7.298	18.483	20.751	_	_	_
Somky	213.0	-	-	-	0.002	-	6.256	11.738	11.488	13.426	19.372	10.364	-	-
Fagundes/Airport	50.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal District	593.5	-	0.089	-	0.089	0.032	6.256	11.738	18.786	31.910	40.122	10.364	-	-
TOTAL DELIVERED	1,949.6	0.988	1.733	0.469	0.794	12.188	82.603	110.628	133.851	143.481	129.574	70.286	12.095	7.916
	,													
ANNUAL (AF)														
Water Sold														
Golf Courses	405.0	968	969	969	969	936	985	1,013	1,047	1,033	1,044	1,048	1,045	1,064
Cemeteries	5.0	14	14	14	14	14	14	14	14	15	13	15	16	16
Parks	18.5	16	16	16	16	16	16	16	14	13	13	13	14	14
Schools	21.0	34	34	34	34	33	32	32	32	33	33	36	36	36
Commerical	167.6	301	304	305	299	287	300	301	309	309	310	322	325	328
Vineyards	564.0	266	266	265	264	270	279	270	281	308	310	342	336	336
Trucked Water	175.0	5	5	5	5	4	4	4	5	5	5	6	6	5
Subtotal Sales	1,356.1	1,603	1,609	1,607	1,600	1,559	1,630	1,650	1,702	1,717	1,728	1,782	1,778	1,799
District Use														
Jameson	330.0	163	163	163	163	163	163	158	164	183	182	143	143	143
Somky	213.0	222	222	222	222	222	241	268	254	230	222	223	223	223
Fagundes/Airport	50.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal District	593.5	385	385	385	385	385	404	427	419	413	404	366	366	366
TOTAL DELIVERED	1,949.6	1,988	1,994	1,992	1,985	1,945	2,034	2,077	2,121	2,130	2,132	2,148	2,144	2,165

BIOSOLIDS HANDLING - MONTHLY

Site	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
Land Applied by NSD Somky Airport/Fagundes													
Jameson Canyon	-	-	-	-	-	-	370	442	153	184	65	68	11
Subtotal by NSD	-	-	-	-	-	-	370	442	153	184	65	68	11
Land Applied by Contractor Somky Airport/Fagundes Jameson Canyon													
Subtotal by Contractor	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Land Applied	-	-	-	-	-	-	370	442	153	184	65	68	11
Off Site (Contractor)													
Total (tons)	-	-	-	-	-	-	370	442	153	184	65	68	11

COLLECTION SYSTEM MAINTENANCE - MONTHLY

CATEGORY	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
Plugups Total Calls Business Hours After Hours	84 54 30	75 49 26	51 30 21	61 43 18	39 25 14	37 21 16	44 25 19	43 25 18	36 27 9	42 26 16	54 33 21	63 38 25	48 27 21
District's Property Owner's	28 56	27 48	15 36	21 40	10 29	10 27	12 32	16 27	10 26	17 25	25 29	20 43	19 29
Plugged Main Lines	2	3											
Run Lateral w/Eel	65	113	110	215	116	188	85	139	191	87	103	70	101
Cleaning (feet of sewer) Vactor #1 Vactor #2 Hydro Rodder	12,220 23,277	31,694 18,222	30,016 18,062	52,800 34,405	10,888 53,959	56,860 7,819	35,077 44,357	18,053 41,749	17,179 58,712	38,849 35,140	7,417 50,621	21,500 17,254	33,612 8,642 1,251
Total (feet)	35,497	49,915	48,077	87,205	64,846	64,679	79,433	59,802	75,891	73,989	58,038	38,754	43,505
Cleaning Days Vactor #1 Vactor #2 Hydro Rodder	15 7 8	16 9 7	18 11 7	25 14 11	22 5 17	20 16 4	28 12 16	21 8 13	31 8 23	25 14 11	21 3 18	20 10 10	19 14 5
Feet/day Vactor #1 Vactor #2 Hydro Rodder	2,350 1,750 2,900	3,100 3,500 2,600	2,650 2,750 2,600	3,500 3,750 3,150	2,950 2,200 3,150	3,250 3,550 1,950	2,850 2,900 2,750	2,850 2,250 3,200	2,450 2,150 2,550	2,950 2,750 3,200	2,750 2,450 2,800	1,950 2,150 1,750	2,300 2,400 1,750
<u>Video Inspections</u> Mains (feet) Laterals (each)	13,141 191	5,981 203	6,398 175	17,209 324	15,580 249	25,066 251	24,881 205	15,731 265	15,789 246	170	184	172	186
Construction (each) Cleanouts Laterals Mains Manholes Other	6	4 1	10	16 4 1	4 3	16 4 50	7 15	31	17 9 2	7 1	4 1 57	6 1 79	11 1 1
USA Markings Regular (w/in 2 days) Emergency (w/in 2 hours)	160 18	151 7	186 7	254 13	305 8	297 3	258 6	215 5	264 3	233 7	252 33	363 9	210 13

WASTEWATER PLANT OPERATIONS DATA - MONTHLY

CATEGORY	Units	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
<u>FLOWS</u>		31	31	28	31	30	31	30	31	31	30	31	30	31
Influent	MG	346.3	693.3	634.5	394.1	353.8	234.9	206.4	201.5	199.7	191.6	183.0	205.5	186.3
Average Day	MGD	11.2	22.4	22.7	12.7	11.8	7.6	6.9	6.5	6.4	6.4	5.9	6.9	6.0
Maximum Day	Date	16-Dec	10-Jan	7-Feb	23-Mar	9-Apr	1-May	11-Jun	4-Jul	21-Aug	18-Sep	11-Oct	17-Nov	1-Dec
Maximum Day Flow	MG	26.7	45.8	45.7	23.3	23.4	8.5	7.2	6.8	6.7	6.7	6.4	14.0	6.7
Minimum Day	Date	7-Dec	1-Jan	1-Feb	20-Mar	30-Apr	24-May	30-Jun	31-Jul	30-Aug	4-Sep	1-Oct	1-Nov	26-Dec
Minimum Day Flow	MG	6.4	8.3	11.2	8.9	8.6	7.1	6.6	6.4	6.3	6.2	5.2	5.6	5.3
Effluent	MG	369.9	529.2	718.6	730.8	480.3	98.9	117.1	146.3	158.0	142.9	80.0	314.7	169.1
River Discharge	MG	357.6	529.2	718.6	725.8	463.4	-	-	-	-	-	-	305.8	163.8
Recycled Flow	MG	12.2	-	-	5.0	16.8	98.9	123.3	134.0	158.0	142.9	73.0	8.9	5.3
BIOSOLIDS	Tons	658	439	355	488	568	507	639	521	952	703	612	731	617
Wet Tons Generated from Pond	Tons													
Wet Tons Generated from Plant	Tons	658	439	355	488	568	507	639	521	952	703	612	731	617
Wet Tons Hauled Offsite	Tons													
POLYMER USE	Gallons	7,306	3,670	2,394	1,979	4,644	6,112	9,760	4,352	1,987	3,927	3,051	15,506	1,939
Pond Pre-Flocculators	Gallons	3,966	2,003	-	-	2,676	-	-	-	-	-	-	11,711	
Flocculator Polymer 1	Gallons													
Flocculator Polymer 2	Gallons	913	1,148	1,927	1,325	720	-	-	-	-	115	-	-	250
Filter Polymer 1	Gallons	1,697	-		47	746	5,662	8,984	3,739	914	3,077	2,358	830	728
Filter Polymer 2	Gallons													151
Belt Presses	Gallons	730	519	467	607	502	450	776	613	1,073	735	693	784	810
ENERGY														
Total Electricity Used	MWH	630	709	683	749	759	713	739	807	849	870	747	719	658
Purchased from PGE	MWH	630	709	683	583	378	330	338	412	469	476	367	433	287
Produced from Co-Gen	MWH	-	-	-	166	245	213	225	203	253	248	251	236	273
Percent Produced	%				22%	32%	30%	30%	25%	30%	29%	34%	33%	41%
Purchased from Solar	MWH	-	-	-	14	159	202	203	213	172	153	140	87	98
Percent Produced					2%	21%	28%	27%	26%	20%	18%	19%	12%	15%
Purchased Natural Gas	Therms	4	-	13	205	50	21	51	858	56	60	19	99	91
Methane Flared Off	KSCF	4,407	3,225	2,722	986	56	15	225	127	156	164	5	82	192
Stand By Calls	#	50	24	41	63	42	55	86	48	44	78	36	47	66
Violations	#	-	-	-+ I	-	-	-	-	40	-	-	-	-+ <i>1</i>	-
	"													

WASTEWATER PLANT MAINTENANCE and LABORATORY DATA - MONTHLY

CATEGORY	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
Scheduled													
Old	48	75	49	43	40	75	41	37	28	17	33	33	61
New	80	86	61	106	91	87	90	72	78	78	86	82	56
Completed	53	112	67	109	56	121	94	81	89	62	86	54	78
New Balance	75	49	43	40	75	41	37	28	17	33	33	61	39
<u>Unscheduled</u>													
Old	57	57	49	48	48	61	46	47	45	38	43	34	44
New	31	30	27	21	24	24	56	29	40	32	21	37	19
Completed	31	38	28	21	11	39	55	31	47	27	30	27	23
New Balance	57	49	48	48	61	46	47	45	38	43	34	44	40
Total Work Orders													
Old	105	132	98	91	88	136	87	84	73	55	76	66	105
New	111	116	88	127	115	111	146	101	118	110	107	119	75
Completed	84	151	95	130	67	161	149	112	132	89	117	81	101
New Balance	132	98	91	88	136	87	84	73	55	76	67	105	79
LAB ANALYSES													
Sample Type													
Regulatory	175	192	214	210	218	177	230	173	193	194	156	178	163
Process Control	1,209	1,189	1,051	1,370	1,167	820	1,107	1,024	1,104	1,091	1,137	1,220	1,139
Special Request	40	3	1	1	-	6	200	-	-	7	8	4	6
Quality Control/Assurance	299	303	272	301	497	523	574	464	549	428	420	1,110	874
TOTAL	1,723	1,687	1,538	1,882	1,882	1,526	2,111	1,661	1,846	1,720	1,721	2,512	2,182

Summary of NSD Capital Project Status through 12-31-17

Proj		FY 17-18	FY 16-17		Final FY 17-18		Costs Paid	Budget	% Budget
#	Description	Budget	Carryovers	Adj.	Budget	Encumbrance	to Date	Remaining	Expended
	COLLECTION SYSTEM								
13701	Main Line Sewer Rehab	91,800			91,800	-	7,889	83,911	9%
13702	Manhole Raising/Rehab	206,000			206,000	-	142,625	63,375	69%
13703	Lateral Replacement/Rehab	74,500			74,500	580	53,718	20,202	72%
13704	Cleanouts Installation/Rehab	90,000			90,000	4,029	41,843	44,128	46%
13705	I&I Reduction Program	207,000	29,000		236,000	191,774	16,735	27,491	7%
14703	Browns Valley Rd & First St	9,237,000	3,004,750	(1,000,000)	11,241,750	125,813	126,130	10,989,808	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	1,311,222	19,743	96%
17707	66-inch Trunk CCTV Inspection	-	149,350	90,000	239,350	52,779	67,422	119,149	28%
17708	Basin G - I&I Reduction #1	2,942,000	1,504,100		4,446,100	1,858,333	2,161,387	426,380	49%
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 - Pilot #4	5,000			5,000	-	-	5,000	-
18704	Manhole Rehab - Nipak - Basin H	284,600			284,600	171,640	10,358	102,602	4%
18705	Sewer System Inflow/Infiltration 2018	1,650,000		834,000	2,484,000	8,291	91,331	2,384,378	4%
18706	Sewer System Inflow/Infiltration 2019	20,000			20,000	-	-	20,000	-
	COLLECTION SYSTEM - EQUIPMENT								
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	23,412	1,681,877	1%
	TREATMENT								
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%

Source: GLS7505 POC5010

Summary of NSD Capital Project Status through 12-31-17

Proj		FY 17-18	FY 16-17		Final FY 17-18		Costs Paid	Budget	% Budget
#	Description	Budget	Carryovers	Adj.	Budget	Encumbrance	to Date	Remaining	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	-	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	Enery 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	3,060	46,940	-	94%
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	25,836	492,898	131,266	76%
18728	Roof Rplcmnt - Solids Handling/Digester Tower	232,900			232,900	84,850	82,085	65,965	35%

Source: GLS7505 POC5010

Summary of NSD Capital Project Status through 12-31-17

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	305,801	19,738	1,174,710	1%
18737	Flash Mixer Replacement	-		-	-	-	-	-	-
	<u>SCADA</u>								
18729	SCADA MP Project #1 - Network Monitoring	50,000			50,000	-	33	49,968	0%
	RECYCLING - DISTRICT								
16716	Line Recycled Water Reservoir	1,800,000	169,550	650,000	2,619,550	1,413,802	166,544	1,039,204	6%
18730	Jameson 24" Flow Meter Rehab	6,200			6,200	-	-	6,200	-
18731	Coombsville Truck Fill Station	100,000			100,000	23,057	617	76,326	1%
	RECYCLING - EXPANSION								
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	806,323	1,352,280	482,932	51%
	<u>OTHER</u>								
13729	Development Technical Support	239,900			239,900	-	132,157	107,743	55%
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	\$5,345,816	\$6,931,617	\$20,933,069	21%

Source: GLS7505 POC5010