

Napa Sanitation District

General Manager's Report

for

November, 2016

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
- 1. 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 11, 2017

FROM: Timothy B. Healy, General Manager

SUBJECT: General Manager's Report for November, 2016

REGULATORY COMPLIANCE:

Collection System Compliance: 2 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, 2016 – November 30, 2016

Percent Fiscal Year: 41.6%
Operating Expenditures to date: 41.2%
Historical Expenditures to date: 45.6%
Significant Comments: None.

PERSONNEL:

Significant events for the month of November, 2016 in the Human Resources Department:

New Hires: None Separations: None Promotions: None

Recruitment Activities: Held oral board interviews for Collection System Worker

recruitment; held second interviews for Junior/Assistant/Associate

engineer recruitment.

Injuries: None

Summaries of Operational Highlights are on following pages.

General Manager's Report January 11, 2017 Page 2

COLLECTIONS:

Significant events for the month of November 2016 in Collection System Maintenance include:

- The District had 2 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 category 1 overflows were both results of problems in residential laterals. At a house on Patricia Drive, we experienced an overflow of approximately 16 gallons with 5.25 gallons lost to the storm drain. The other was at a condo unit on Old Soscol Way. The overflow was estimated at 213 gallons with 197 gallons lost to the storm drain. Both laterals are now in our preventative maintenance program.
- The repair crew installed 6 cleanouts, repaired/rehabilitated 5 sewer laterals and repaired 3 cleanouts. Additionally, the service response programs crew completed 130 work orders in support of the grease and odor control program, responded to 72 customer requests for service (28 were NSD problem) and closed out 216 mark and locate request tickets.
- The preventative maintenance crews ran work orders on 97 laterals, cleaned approximately 33,557 feet of main line and CCTV inspected approximately 6,826 feet of main line and 20 laterals.

TREATMENT PLANT:

Significant events for the month of November 2016 in the Treatment Plant Department:

Plant Operations

- For November 2016, the plant's influent flow was 226.4 MG as compared to last year flow for November 2015 of 174.4 MG
- Total flow to the Napa River for November 2016 was 426.1 MG as compared to November 2015 flow of 341.1 MG.
- The production of recycle quality occurred for 7 days during November 2016 with a total flow of 16.0 MG.
- This November power consumption purchased from PG&E was 655 MWH in comparison to November 2015 purchase of 479 MWH.
- There was 1.95" rain fall for November 2016 as compared to 1.00" rain fall for November 2015.
- Pond 4 end of the month recorded level reading was 35.10" as compared to November 2015 of 39.24". Total remaining pond capacity for November 2016 was 49.7% as compared to November 2015 remaining capacity of 48.2%.

Maintenance:

Significant events for the month of November, 2016:

Cogeneration Performance

Cogeneration unit ran 24 of 720 hours for the month – 3.33% uptime, averaging 296.45
 Kw

Unit was removed for complete over haul

Process Maintenance

- Replaced shaft and bearings, belt press #1 exhaust fan
- Replaced digital read out on Ferric Pump #1
- Rebuilt wind speed sensor
- Connected west PH temperature reading into SCADA
- Replaced chemical PLC #5 UPS
- Aeration Basin #3, replaced WAS pump
- Primary Clarifier #1, replaced motor and coupling
- Changed out two DAFT Clarifier wheels

Projects

- Procured and installed pallet racking in Solids Handling Building
- Shut down Cogen, isolated for removal and rebuild
- Procured and installed Flow Meter at P-4 for Polymer delivery
- Removed electrical and re-installed on recycle office trailer.
- Integrated into SCADA new belt press polymer dilution units

Standby Power

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

Influent Pumps

• Pumps are all operational

General Manager's Report January 11, 2017 Page 4

<u>Laboratory:</u>

Monthly River Discharge Effluent (EFF-001) monitoring was conducted on November 10th, 2016. Sample results received indicated constituent concentrations within the District NPDES Permit limit.

Monthly Recycle Effluent (REC-001) monitoring was conducted on November 5th, 2016. Sample results received indicated constituent concentrations within the District maximum agronomic ranges. Chloride concentrations substantially decreased to an average of 189.2 mg/L

Monthly Influent (INF-001) monitoring was conducted on November 10th, 2016. All Influent sample results received indicated no unusual results and were within local limits, except those indicated below.

• The Influent (INF-001) sample collected on November 10th indicated an Ammonia result of 40.7 mg/L which exceeds the Napa Sanitation District Local Limit of 36.0 mg/L.

RECYCLING:

Significant events in the Recycling Department for November 2016 include:

- Recycled water delivered for the month of November 2016 (13.403 million gallons), as compared to November 2015 (17.872 million gallons) is lower due to vineyard demand. Delivered recycled water volume represents the sum of all use site flow meter consumption values.
- Staff provided LCWD recycled water customer's use site supervisor training.
- Staff met with Napa County Public Works Staff regarding the conversion of the Sheriff's Office and Greenwood Fire Station irrigation systems to use recycled water.
- Staff continued the land application of biosolids on the Jameson Reuse Site.

POLLUTION PREVENTION:

Significant events in the Pollution Prevention Department for November 2016 include:

- The Napa Safe Medication Collection Program collected 291 pounds of unneeded medications. The total amount of unneeded medications collected since program inception in September 2010 is 19,140 pounds.
- There were 8 tours of the Soscol Water Recycling Facility this month.
- Three presentations were given at Browns Valley Elementary School.
- The District issued 8 Toilet Rebates at \$100 each for a total of \$800.
- The District issued 20 ESME Washer Rebates at \$12.50 each for a total of \$250.

ENGINEERING / CAPITAL PROJECTS / DEVELOPMENT:

General Manager's Report January 11, 2017 Page 5

Significant events occurring in the Engineering Department for November 2016 include:

- Consultant continued design of the Browns Valley Trunk Project.
- Consultant continued developing a hydraulic model for the District's recycled water distribution system.
- Consultant continued design work for the MST Recycled Water Pipeline Expansion Project.
- Consultant continued design for the Soscol/Sousa Trunk Rehabilitation Project.
- Staff continued design of the 2017 Collection System Rehabilitation Project.
- Staff issued a Notice of Availability for the Recycled Water Reservoir Improvements Project Initial Study/Mitigated Negative Declaration
- Staff continued design of the Homewood/Westwood I/I Reduction Project.
- Staff continued investigating the collection system for sources of chloride.
- Consultant continued design work for the Headworks Equipment Rehabilitation Project.
- Staff awarded the task order for the Asset Management Plan.
- Staff continued design of the LED Pole/Arm Fixture Replacement project.
- The contractors continued construction of the following projects:
 - a. Sarco Creek Pipeline Replacement Project
 - b. Aeration Basin Diffusers, Instrumentation and Controls Project
 - c. Recycled Water Valve on Kirkland Line Project
 - d. Manhole Adjustment Project, Phase IV
 - e. Manhole Rehabilitation Nipak Project.
 - f. Stationary Gas Detectors Phase II Project
- Staff issued the Notice of Completion for the Milliken Creek Sewer Rehabilitation Project Phase 2.
- Staff reviewed 23 sets of development plans and deemed 10 sets of plans complete. The approved plans consisted of one residential lateral, one residential mainline extension, four demolitions, three tenant improvements and one commercial building.

Budget Status & Cash Summary - July 1, 2016 - November 30, 2016 (41.6% of the year)

Expenditures	FY 16/17 Budget	Expenditures to date	Encumbrances	Committed to date	Remaining Balance	Percent Committed
Operating						
Salaries & Benefits	Services & Benefits \$9,382,370 \$3,130,812 \$2,073 \$3,132,885 \$6,249,485 \$1,000 \$1,962,077 \$1,000 \$1,962,077 \$1,000 \$1,962,077 \$1,000 \$1,962,077 \$1,000 \$1,962,077 \$1,000 \$1,962,077 \$1,000 \$1,962,077 \$1,000 \$1,962,077 \$1,000 \$1,962,077 \$1,000 \$1,962,077 \$1,000 \$1,962,099 \$1,000	33.4%				
Services & Supplies	6,046,110	1,962,077	905,452	2,867,529	3,178,581	47.4%
Taxes	28,250	14,115	-	14,115	14,135	50.0%
Debt Service	4,773,050	3,747,751	-	3,747,751	1,025,299	1 78.5%
Intrafund Transfers	8,900,000	2,225,000	-	2,225,000	6,675,000	25.0%
•	\$29,129,780	\$11,079,755	\$907,525	\$11,987,280	\$17,142,500	41.2%
Capital	ć10 202 0E0	ć2 002 404	ć2 7 44 424	ć 7 (02 012	Ć11 F00 020 /	20.0%
			\$3,711,421			4) 39.9% 65.6%
			- 62 711 421			
Total Capital :	\$24,795,950	\$7,000,759	\$5,711,421	\$11,512,160	\$13,463,770	45.6%
Grand Total Expenditures:	\$53,925,730	\$18,680,514	\$4,618,946	\$23,299,460	\$30,626,270	43.2%
	FY 16/17	Collected		Received to	Uncollected	Percent
Revenues	-		Encumbrances	Date	Revenue	Collected
Operating						
Use of Money/Property	\$794,000	\$389,050		\$389,050	\$404,950	49.0%
Intergovernmental	\$0	\$11,471		11,471	(11,471)	N/A
Charges for Services	23,828,500	3,431,848		3,431,848	20,396,652	14.4%
Miscellaneous Revenues	69,000	19,036		19,036	49,964	27.6%
Donations/Contributions (Capital Labor)	-	213,896		213,896	(213,896) ⁽	5 N/A
Total Operating:	\$24,691,500	\$4,065,300		\$4,065,300	\$20,626,200	16.5%
<u>Capital</u>						
Use of Money/Property	\$34,000	\$1,221		\$1,221	\$32,779	3.6%
Capacity Charges	5,512,000	3,144,962		3,144,962	2,367,038	57.1%
Intergovernmental	2,250,000	1,361,107		1,361,107	888,893	60.5%
Bond Proceeds	4,550,000	-		-	4,550,000	0.0%
Sale of Assets	-	18,700		18,700	(18,700)	N/A
Miscellaneous Revenues	-	-		-	-	N/A
Intrafund Transfers	14,412,000	5,843,268		5,843,268	8,568,732	2 40.5%
Total Capital:	\$26,758,000	\$10,369,257		\$10,369,257	\$16,388,743	38.8%
Grand Total Revenue:	\$51,449,500	\$14,434,558		\$14,434,558	\$37,014,942	28.1%

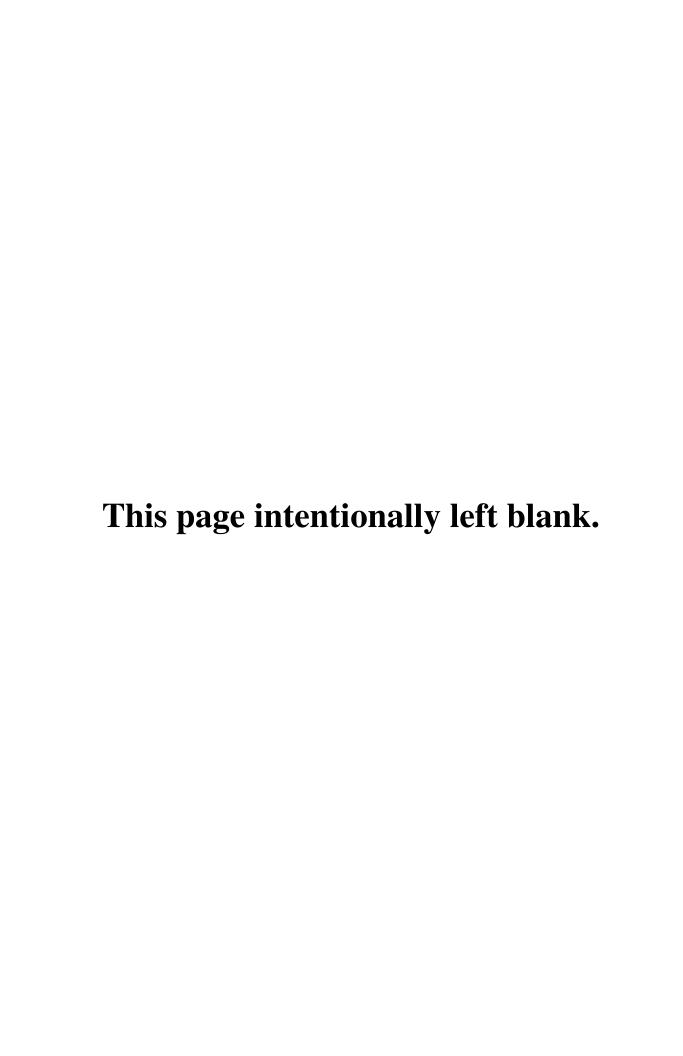
Cash on Hand as of 11/30/16

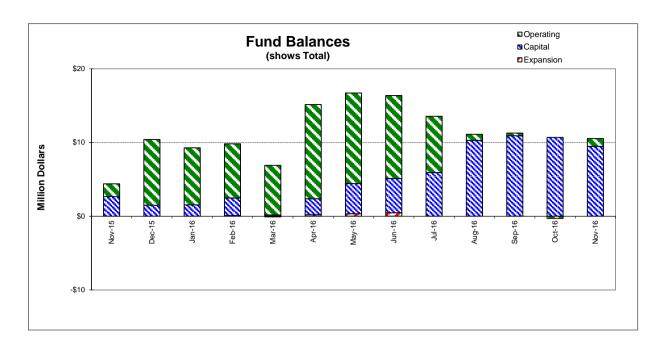
\$10,532,194.89

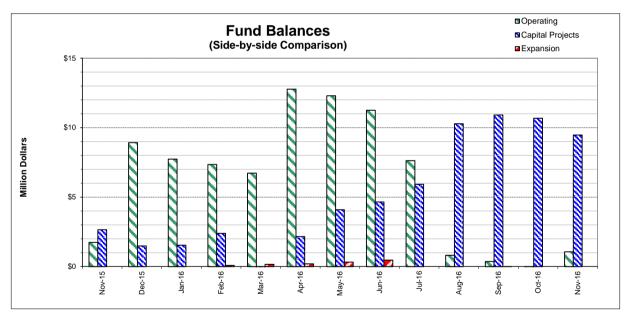
**excluding Debt Service restricted funds 10/31/16 -Effective Rate of Return = 0.76%

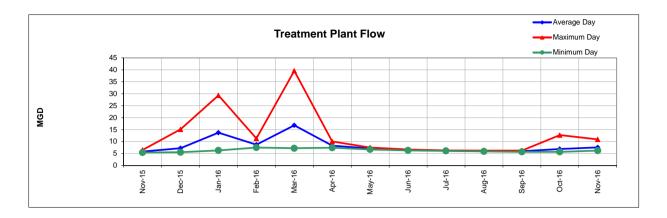
Note: November 2016 Effective rate of return not available at the time of this report.

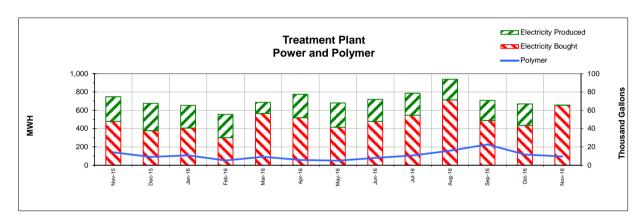
- 1. Series 2009B's and 2012A's principal/interest payments made in Aug & Feb
- 2. Processed 25% of intrafund transfer budget from Operating to Capital in July
- 3. Includes Debt Service and Intrafund Transfers; otherwise is 38.9%
- 4. See Capital Project Status report for details
- 5. In-house Labor for Capital Projects (Contra acct for Salaries)

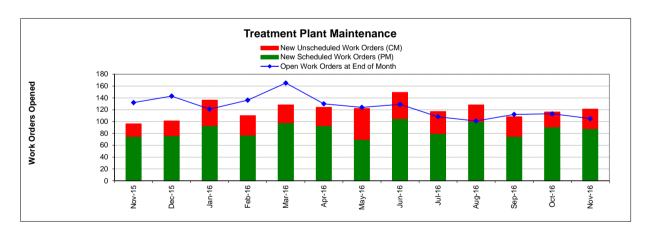


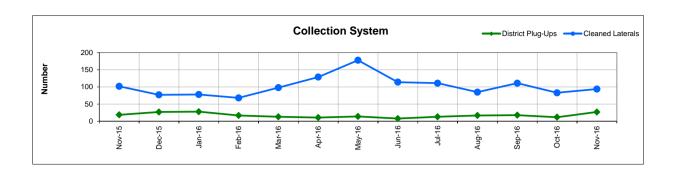


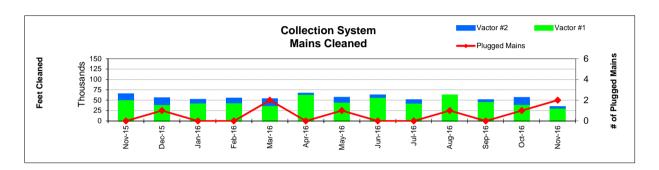


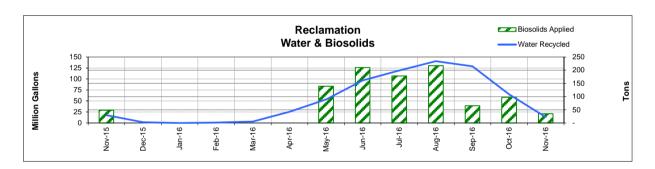


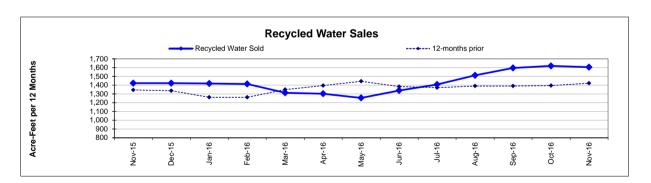












FUND BALANCES - MONTHLY

CATEGORY	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16
(Thousand Dollars)													
7800 7850	1,739 -	8,920 -	7,737 -	7,347 -	6,726 -	12,775 -	12,297 -	11,251 -	7,626 -	819 -	362 -	(293)	1,062 -
Subtotal Operating	1,739	8,920	7,737	7,347	6,726	12,775	12,297	11,251	7,626	819	362	(293)	1,062
Capital Improvement Projects Debt Proceeds	2,653 -	1,484 -	1,541 -	2,389	(96) -	2,163	4,096 -	4,649 -	5,924 -	10,284 -	10,912	10,685 -	9,470
Subtotal Capital	2,653	1,484	1,541	2,389	(96)	2,163	4,096	4,649	5,924	10,284	10,912	10,685	9,470
Total Discretionary Funds	4,392	10,404	9,278	9,736	6,630	14,938	16,393	15,900	13,550	11,103	11,274	10,392	10,532
Expansion Fund (Restricted)	_	-	-	85	168	200	326	467	-	-	1	-	_
Total Restricted Funds	-	-	-	85	168	200	326	467	-	-	1	-	-
TOTAL ALL FUNDS	4,392	10,404	9,278	9,821	6,798	15,138	16,719	16,367	13,550	11,103	11,275	10,392	10,532

DEVELOPMENT WORKLOAD - MONTHLY

CATEGORY	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16
Phone Requests													
Maps/Drawings	14	5	9	9	9	8	9	5	5	9	5	8	7
Lateral Permits	-	-	-	-	-	-	-	-	-	-	-	-	-
Policy Questions	4	3	8	12	9	6	9	10	7	11	7	3	8
Development Questions	65	56	89	77	66	105	58	75	99	126	56	61	48
Miscellaneous	5	6	1	6	8	7	14	14	14	15	7	4	6
TOTAL	88	70	107	104	92	126	90	104	125	161	75	76	69
Counter Requests													
Maps/Drawings	2	1	3	3	2	5	-	-	3	7	5	1	-
Lateral Permits	10	14	15	11	8	10	13	12	9	19	19	13	14
Policy Questions	-	2	-	-	1	2	-	2	-	2	2	2	1
Development Questions	10	9	8	17	12	23	2	10	17	30	17	10	8
Miscellaneous	-	1	1	-	-	2	-	3	5	6	4	2	1
TOTAL	22	27	27	31	23	42	15	27	34	64	47	28	24
Initial Request (Referrals)	15	9	15	14	16	11	17	14	12	22	10	7	21
Connection Permits Issued													
Residential Permits	2	8	5	3	4	2	6	9	-	1	1	21	-
Commercial Permits	2	3	-	1	2	1	3	2	1	1	2	6	4
Industrial Permits		1	-	-	-	-		-	-	-	-		-
TOTAL PERMITS	4	12	5	4	6	3	9	11	1	2	3	27	4
Residential Units	2	8	12	4	11	2	6	9	-	1	1	21	-
Commercial Units	183	3	-	1	2	1	3	2	1	1	146	14	4
TOTAL UNITS	185	11	12	5	13	3	9	11	1	2	147	35	4
<u>Annexations</u>													
Submitted	2	1	-	-	-	-	-	1	-	-	1	-	1
Acreage	1.60	0.12	-	-	-	-	-	1.50	-	-	1.10	-	27.11
Plans Reviewed													
Subdivisions/Sites													
First Submittal	5	1	3	4	3	8	1	5	1	8	4	3	5
Second Submittal	3	-	-	1	4	3	-	1	1	6	4	3	-
Third Submittal	2	2	1	2	1	1	1	1	3	1	7	-	1
Building/Tenant Improvements													
First Submittal	19	13	9	2	16	21	12	10	3	12	4	8	5
Second Submittal	4	8	8	1	7	8	7	4	6	4	9	3	4
Third Submittal	9	5	4	1	3	1	6	3	5	1	5	3	8
Miscellaneous Plan Reviews	-	-	-	-	-	-			-		-	-	
TOTAL PLANS REVIEWED	42	29	25	11	34	42	27	24	19	32	33	20	23

INSPECTION WORKLOAD - MONTHLY

CATEGORY	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16
CONSTRUCTION													
Locating Sewers	-	-	3	-	-	-	-	-	-	-	-	-	-
Permit Processing	-	-	-	-	-	-	-	-	-	-	-	-	-
Preconstruction Meetings	1	2	4	6	6	8	9	7	3	9	-	5	6
Inspections - Mains	-	-	-	6	3	3	2	-	2	1	-	-	10
Inspections - Manholes	13	-	10	91	49	15	8	13	3	-	-	81	27
Inspections - Laterals	9	14	10	15	16	45	29	22	20	20	9	7	37
Inspections - Cleanouts	51	43	17	48	41	42	60	51	28	25	4	29	71
Inspections - Review Video	2	1	4	2	1	4	-	4	-	3	-	2	2
Demo - Septic Tanks	-	-	-	-	-	-	-	-	-	-	-	-	-
Demo - Buildings	-	-	-	1	3	-	-	2	-	1	-	-	-
Update Record Drawings	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	76	60	48	169	119	117	108	99	56	59	13	124	153
MISCELLANEOUS													
Meter Readings	15	33	-	-	10	-	9	9	10	9	-	9	-
Washdown Facility Inspections	-	-	-	-	-	-	-	-	-	-	-	-	19
General Customer Assistance	4	3	7	36	37	16	10	1	4	4	9	13	-
City of Napa Water Discharge	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	19	36	7	36	47	16	19	10	14	13	9	22	19
SPECIAL PROJECTS	5	6	_	3	_	15	21	22	31	22	7	9	32

POLLUTION PREVENTION WORKLOAD - MONTHLY

CATEGORY	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16
Outreach Activities													
Plant Tours Conducted	2	1	3	2	1	4	4	2	0	0	0	7	8
Presentations Made	0	0	0		1	5	2		0	1	0	0	3
Total Outreach Activities	2	1	3	3	2	9	6	2	-	1	-	7	11
Inspections Conducted													
Food Service Facilities	-	10	24	30	31	19	12	-	-	-	1	-	-
Auto Body & Car Wash	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	1	1	-	-	-	-	-	-	-
Total Inspections	-	10	24	30	32	20	12	-	-	-	1	-	-
Compliance Issues													
NOVs Issued	3	1	2	-	1	2	-	2	1	-	-	-	-
NOEs Issued	1	1	-	-	-	1	2	-	-	-	1	-	1
Non-Compliant-FOG	-	-	-	1	-	-	-	-	-	-	-	-	
Total Compliance Issues	4	2	2	1	1	3	2	2	1	-	1	-	1
Pollution Prevention													
Clothes Washer Rebates	8	27	12	10	-	18	14	45	-	-	-	-	20
Toilet Retrofit Rebates	19	21	1	6	22	19	6	10	-	11	4	12	8
Pharmaceuticals Diverted (in lbs)	199	166	556	341	341	322	240	243	362	303	386	391	291

RECYCLED WATER DELIVERIES - MONTHLY

	Acres	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16
MONTHLY (MG)														
Water Sold														
Golf Courses	405.0	2.744	0.795	_	0.027	0.070	13.197	37.578	57.273	62,709	63.227	49.600	25.538	6.308
Cemeteries	5.0	0.082	-	_	0.145	0.000	0.015	0.447	0.709	0.931	0.754	1.225	0.328	0.010
Parks	18.5	0.086	_	-	-	-	0.036	0.725	1.078	1.299	1.172	0.741	0.205	-
Schools	21.0	0.382	0.088	-	0.040	0.075	0.360	1.528	2.675	2.181	2.120	1.497	0.630	0.014
Commerical	167.6	4.335	0.609	-	0.346	2.430	6.404	11.038	17.061	14.878	17.259	15.070	9.563	3.457
Vineyards	564.0	10.205	0.045	-	0.446	0.365	5.268	2.034	13.413	15.693	21.832	17.609	6.065	3.528
Trucked Water	175.0	0.039	0.020	-	0.010	0.018	0.098	0.064	0.135	0.232	0.458	0.135	0.124	0.008
Subtotal Sales	1,356.1	17.872	1.556	-	1.012	2.958	25.378	53.413	92.343	97.923	106.821	85.877	42.454	13.326
District Use														
Jameson	330.0	-	-	-	-	0.084	-	-	1.481	5.414	12.456	20.935	12.608	-
Somky	213.0	-	-	-	-	-	-	-	2.950	16.037	21.318	22.108	10.000	0.001
Fagundes/Airport	50.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal District	593.5	-	-	-	-	0.084	-	-	4.431	21.451	33.774	43.043	22.609	0.001
TOTAL DELIVERED	1,949.6	17.872	1.556	-	1.012	3.042	25.378	53.413	96.773	119.374	140.594	128.920	65.062	13.327
ANNUAL (AF)														
<u>Water Sold</u> Golf Courses	405.0	997	1,000	999	999	915	899	840	869	891	920	946	960	971
Cemeteries	4 05.0	15	1,000	999 15	999 15	15	13	13	13	13	13	940 15	14	14
Parks	18.5	17	17	17	17	17	16	16	17	17	17	17	16	16
Schools	21.0	40	40	40	40	37	35	35	37	38	38	37	36	34
Commerical	167.6	295	294	292	286	275	270	276	294	293	302	308	304	301
Vineyards	564.0	51	49	49	50	49	64	68	103	149	215	268	285	265
Trucked Water	175.0	8	7	6	6	6	6	6	5	5	6	5	4	4
Subtotal Sales	1,356.1	1,423	1,422	1,419	1,414	1,313	1,303	1,254	1,339	1,407	1,512	1,596	1,619	1,605
<u>District Use</u>														
Jameson	330.0	103	103	103	103	103	103	103	107	124	153	167	163	163
Somky	213.0	291	291	291	291	291	291	221	195	208	230	223	222	222
Fagundes/Airport	50.5	-	-		-	-	-	-	-	-	-	-	-	-
Subtotal District	593.5	394	394	394	394	394	394	324	302	332	383	390	385	385
TOTAL DELIVERED	1,949.6	1,816	1,816	1,812	1,807	1,707	1,697	1,578	1,641	1,739	1,894	1,986	2,004	1,990

BIOSOLIDS HANDLING - MONTHLY

Site	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16
Land Applied by NSD Somky Airport/Fagundes Jameson Canyon	49	_	_	_	_	_	139	210	178	217	65	97	35
Subtotal by NSD	49	-	-	-	-	-	139	210	178	217	65	97	35
Land Applied by Contractor Somky Airport/Fagundes Jameson Canyon													
Subtotal by Contractor	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Land Applied	49	-	-	-	-	-	139	210	178	217	65	97	35
Off Site (Contractor)													
Total (tons)	49	-	-		-	-	139	210	178	217	65	97	35

COLLECTION SYSTEM MAINTENANCE - MONTHLY

CATEGORY	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16
<u>Plugups</u> Total Calls	53	69	78	58	43	41	45	33	48	52	48	56	68
Business Hours	29	40	40	42	22	31	30	22	27	35	35	34	38
After Hours	24	29	38	16	21	10	15	11	21	17	13	22	30
District's	19	27	28	17	13	11	14	8	13	17	18	12	27
Property Owner's	34	42	50	39	30	30	31	25	35	35	30	44	41
Plugged Main Lines	01	1	00	00	2	00	1	20	00	1	00	1	2
Run Lateral w/Eel	102	77	78	68	98	129	178	114	111	85	111	83	94
Cleaning (feet of sewer)													
Vactor #1	51,959	40,292	44,407	44,811	38,201	65,231	46,352	57,690	43,988	61,502	47,869	40,711	32,046
Vactor #2	12,224	14,325	6,329	9,199	14,073	325	9,687	4,002	6,288		2,184	14,730	1,512
Hydro													
Rodder				650									
Total (feet)	64,183	54,617	50,736	54,660	52,274	65,556	56,039	61,692	50,277	61,502	50,053	55,442	33,557
Cleaning Days	22	23	18	21	17	19	19	19	18	19	16	17	16
Vactor #1	16	18	16	13	14	18	17	17	15	19	15	13	15
Vactor #2	6	5	2	7	3	1	2	2	3		1	4	1
Hydro				4									
Rodder				1									
Feet/day	2,900	2,350	2,800	2,600	3,050	3,450	2,950	3,250	2,800	3,250	3,150	3,250	2,100
Vactor #1	3,250	2,250	2,800	3,450	2,750	3,600	2,750	3,400	2,950	3,250	3,200	3,150	2,150
Vactor #2 Hydro	2,050	2,850	3,150	1,300	4,700	350	4,850	2,000	2,100		2,200	3,700	1,500
Rodder				650	222								
				030	222								
Video Inspections	0.407	7.040	0.500	0.740	40.040	0.070	47.050	45 445	0.070	45.005	0.450	40.404	0.000
Mains (feet)	8,137 159	7,248 173	6,583 175	9,718 131	12,343 154	8,670 181	17,352 225	15,115 152	3,878 183	15,885 140	6,453 161	10,131 174	6,826 182
Laterals (each)	159	173	175	131	134	101	223	132	103	140	101	174	102
Construction (each)	40	00	00	00	40	47	7	40	7	0	40	0	40
Cleanouts	10 2	23 2	22 5	20 8	13	17 4	7 3	10 5	7 4	3	16	8 10	10 5
Laterals Mains	2	2	ე 1	0		2	3	5	4			3	5
Manholes			ı			۷						1	
Other							39						
USA Markings							30						
Regular (w/in 2 days)	218	178	222	281	247	270	319	225	244	326	252	215	214
Emergency (w/in 2 hours)	8	16	21	8	13	5	-	6	14	8	10	6	4
	•			J	.5	J		J		•	. 5	J	•

WASTEWATER PLANT OPERATIONS DATA - MONTHLY

CATEGORY	Units	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16
<u>FLOWS</u>		30	31	31	29	31	30	31	30	31	31	30	31	30
Influent	MG	174.5	223.4	424.7	252.6	520.1	249.2	218.9	193.5	191.0	186.6	178.1	212.3	226.4
Average Day	MGD	5.8	7.2	13.7	8.7	16.8	8.3	7.1	6.5	6.2	6.0	5.9	6.8	7.5
Maximum Day	Date	15-Nov	21-Dec	19-Jan	1-Feb	11-Mar	10-Apr	7-May	1-Jun	7-Jul	27-Aug	5-Sep	28-Oct	20-Nov
Maximum Day Flow	MG	6.5	15.1	29.3	11.3	39.6	10.0	7.5	6.7	6.3	6.2	6.2	12.7	10.9
Minimum Day	Date	27-Nov	1-Dec	1-Jan	29-Feb	3-Mar	29-Apr	31-May	30-Jun	24-Jul	23-Aug	27-Sep	11-Oct	8-Nov
Minimum Day Flow	MG	5.4	5.5	6.3	7.5	7.2	7.4	6.7	6.3	6.1	5.9	5.7	5.7	6.2
Effluent	MG	360.0	337.2	457.8	306.2	478.6	313.0	63.3	109.4	131.8	155.7	132.2	83.5	442.0
River Discharge	MG	341.1	333.2	457.8	306.2	474.4	282.4	-	-	-				426.1
Recycled Flow	MG	18.9	4.0	-	-	4.2	30.5	63.3	109.4	131.8	155.7	132.2	83.5	16.0
BIOSOLIDS	Tons	665	958	737	532	689	496	637	621	464	361	397	499	591
Wet Tons Generated from Pond	Tons													
Wet Tons Generated from Plant	Tons	665	958	737	532	689	496	637	621	464	361	397	499	591
Wet Tons Hauled Offsite	Tons													
POLYMER USE	Gallons	14,087	9,039	10,859	5,281	9,284	5,700	5,031	8,095	10,556	15,943	22,716	11,710	9,676
Pond Pre-Flocculators	Gallons	9,900	7,476	9,284	4,296	7,555	3,958	325	1,723	4,500	7,184	9,409	4,594	6,988
Flocculator Polymer 1	Gallons													
Flocculator Polymer 2	Gallons	1,586	835	939	392	1,008	598	18	158	355	586	610	110	1,150
Filter Polymer 1	Gallons	1,941				84	587	4,075	5,299	5,143	7,388	12,023	6,282	766
Filter Polymer 2	Gallons													
Belt Presses	Gallons	661	729	637	593	637	557	613	916	558	785	674	724	772
ENERGY														
Total Electricity Used	MWH	748	675	653	555	686	774	680	719	785	939	708	668	657
Purchased from PGE	MWH	479	378	407	300	566	519	415	479	546	714	489	436	655
Produced from Co-Gen	MWH	269	297	247	255	120	255	265	240	240	225	219	233	3
Percent Produced	%	36%	44%	38%	46%	17%	33%	39%	33%	31%	24%	31%	35%	0%
Purchased Natural Gas	Therms	257	53	130	1,327	1,730	492	321	164	501	780	1,653	745	36
Methane Flared Off	KSCF	654	264	56	508	1,674	260	268	147	145	42	135	67	4,051
Stand By Calls	#	52	59	50	55	70	41	14	10	37	22	61	41	52
Violations	#	-	-	-	-	-	-	-	-	-	-	-	-	-

WASTEWATER PLANT MAINTENANCE and LABORATORY DATA - MONTHLY

CATEGORY	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16
Scheduled													
Old	74	66	78	39	55	77	66	53	55	37	39	50	57
New	75	76	93	77	98	93	70	105	80	100	75	91	88
Completed	83	64	132	61	76	104	83	103	98	98	64	84	97
New Balance	66	78	39	55	77	66	53	55	37	39	50	57	48
Unscheduled													
Old	80	66	65	82	81	88	64	71	74	71	62	62	56
New	21	25	43	33	30	31	52	44	37	28	33	25	33
Completed	35	26	26	34	23	55	45	41	40	37	33	31	32
New Balance	66	65	82	81	88	64	71	74	71	62	62	56	57
Total Work Orders													
Old	154	132	143	121	136	165	130	124	129	108	101	112	113
New	96	101	136	110	128	124	122	149	116	128	108	116	121
Completed	118	90	158	95	99	160	128	144	138	136	96	115	129
New Balance	132	143	121	136	165	130	124	129	108	101	112	113	105
LAB ANALYSES													
Sample Type													
Regulatory	408	408	315	281	325	392	130	158	193	179	193	204	168
Process Control	1,310	1,258	1,288	1,157	1,276	1,235	778	729	744	907	739	766	1,315
Special Request	299	235	60	17	1	5	320	11	207	93	-	19	39
Quality Control/Assurance	302	302	372	500	306	349	209	5	32	5	5	50	302
TOTAL	2,319	2,203	2,035	1,955	1,908	1,981	1,437	903	1,176	1,184	937	1,039	1,824

Summary of NSD Capital Project Status through 11-30-2016

Proj		FY 16-17	FY 15-16		Final FY 16-17		Costs Paid	Budget	% Budget
#	Description	Budget	Carryovers	Adj.	Budget	Encumbrance	to Date	Remaining	Expended
	COLLECTION SYSTEM								
13701	Main Line Sewer Rehab	88,700			88,700	-	4,280	84,420	5%
13702	Manhole Raising/Rehab	198,900			198,900	181,885	7,611	9,404	4%
13703	Lateral Replacement/Rehab	72,000			72,000	9,473	22,683	39,844	32%
13704	Cleanouts Installation/Rehab	87,000			87,000	-	20,260	66,740	23%
13705	I&I Reduction Program	200,000			200,000	56,714	9,170	134,115	5%
14703	Browns Valley Rd & First St	2,800,000	813,800		3,613,800	477,784	281,336	2,854,680	8%
15703	Sarco Crk PL Rplcmnt/CalTRANS	1,050,000	(34,250)		1,015,750	265,883	681,196	68,671	67%
15721	ACP CIPP Lining Project #1	-	330,000		330,000	1,659	296,757	31,584	90%
16701	Basin L - I&I Reduction #5	1,400,000	(490,400)	(150,000)	759,600	25,359	689,381	44,860	91%
16718	NN Siphon Vault Cover Replacement	-	5,000		5,000	-	1	4,999	0%
16723	Milliken Creek Sewer Repair	-	150,000	150,000	300,000	4,880	109,355	185,765	36%
17701	ACP CIPP Lining Project #2	350,000		(350,000)	-	-	-	-	-
17702	Upper Lateral Rehab - Basin L (Pilot #2)	5,000			5,000	-	-	5,000	-
	Manhole Rehab - Nipak	90,000			90,000	83,680	247	6,073	0%
17704	Infltrtn Rehab - SSMH/PL (CI-)	400,000		(300,000)	100,000	4,400	11,268	84,332	11%
17705	Soscol Ave (8th to Oil Co Rd)	500,000			500,000	66,199	7,772	426,029	2%
17706	Rehab - Ranch De Los Robles	400,000		(400,000)	-	-	-	-	-
17707	66-inch Trunk CCTV Inspection	150,000			150,000	-	-	150,000	-
17708	Basin G - I&I Reduction #1	1,200,000		1,180,000	2,380,000	-	-	2,380,000	-
17734	Homewood/Westwood I/I Reduction	-		200,000	200,000	-	-	200,000	-
	COLLECTION SYSTEM - EQUIPMENT								
17709	Eel Replacment 1	5,400		100	5,500	5,454	5,454	(5,409)	99%
17710	Vehicle 510 - Water Truck	207,900		(18,100)	189,800	-	186,160	3,640	98%
	<u>LIFT STATIONS</u>								
17711	West Napa PS - Rehab	1,750,000			1,750,000	-	-	1,750,000	-
	TREATMENT								
16708	Algae to Digester with Thermal Study	-	50,450		50,450	22,913	3,542	23,995	7%
17712	Headworks/Primary - Odor Ctrl	20,000		5,000	25,000	20,737	1,619	2,644	6%
	TREATMENT - EQUIPMENT								
13741	Secondary PS Pump Rebuild (3)	37,500	7,200		44,700	49,100	-	(4,400)	-
13743	Risidual Analyzers (Deox) Replacements	-		20,000	20,000	100	8,079	11,821	40%
14720	Belt Press Polymer Skid Replacement	-	55,700		55,700	-	47,724	7,976	86%
15711	Rotork Actuator Replacement	-	52,750	88,700	141,450	126,660	6,200	8,590	4%
15712	Rehab Pond 1 Storage Structure	25,000	5,000		30,000	-	-	30,000	-
15713	Aeration Basin Instrmntn/Ctrl	1,200,000	(126,000)	500,000	1,574,000	445,098	964,903	163,999	61%
16713	Buried Metallic Piping (eval/rehab)	40,000	10,000	(8,200)	41,800	-	-	41,800	-
16714	High Voltage System Repairs	-	30,000	20,000	50,000	12,855	3,145	34,000	6%
	Cogen Bottom End Overhaul	75,000	150,000		225,000	218,378	-	6,622	-
17713	Secondary PS VFD Rplcmnt (3)	53,600			53,600	-	-	53,600	-

Summary of NSD Capital Project Status through 11-30-2016

Proj		FY 16-17	FY 15-16		Final FY 16-17		Costs Paid	Budget	% Budget
#	Description	Budget	Carryovers	Adj.	Budget	Encumbrance	to Date	Remaining	Expended
17714	WWTP MP - 3W Sys Imprvmnts	60,000			60,000	-	-	60,000	-
17715	Turbidimeters (7) Tertiary Rplcmnts	11,800		11,200	23,000	18,006	3,510	1,484	15%
17716	FOG - Strain Press	200,000			200,000	165,078	-	34,922	-
17717	Energy Audit - Odor Control VFD	51,700			51,700	-	-	51,700	-
17718	Enery Audit - LED Pole/Arm Mounted Fixtures	78,100		50,000	128,100	-	53	128,048	0%
17719	Lab - Smpler 4700 - Pretreatment	7,500		(800)	6,700	-	-	6,700	-
17720	Lab - Smpler 4700 - Pretreatment	7,500			7,500	-	-	7,500	-
17721	Lab - Chlorophyll A Analyzer - Pond Water	5,400		800	6,200	6,105	-	95	-
17722	Main - Stationary Gas Detector Replacment Ph 2	140,000		35,000	175,000	155,924	-	19,076	-
17723	Main - Rotork Actuator Replacment	88,700		(88,700)	-	-	-	-	-
17724	Main - Primary Clarifier Exhaust Fan Replacment	5,000		(5,000)	-	-	-	-	-
17725	Main - Sump #3 Modification	10,000			10,000	-	-	10,000	-
	TREATMENT - STRUCTURES								
13724	IPS Expansion	-	38,700		38,700	9,570	1	29,129	0%
17726	Headworks Equipment Rehab/Replacment	10,000		100,000	110,000	69,381	-	40,619	-
		125,000			125,000	-	-	125,000	-
17728	Roof Replacement - AB/Blower Building	40,000			40,000	-	-	40,000	-
17729	DAF Access Opening	20,000			20,000	-	-	20,000	-
	SCADA								
	RECYCLING - DISTRICT								
15717	Isolation Valve on Kirkland Line (Devlin Rd)	49,200	14,400		63,600	65,401	990	(2,791)	2%
16716	Line Recycled Water Reservoir	1,320,000	(18,400)	(1,000,000)	301,600	27,098	98,116	176,386	33%
17730	Jameson Solids Pad Dump Bay	15,000		(15,000)	-	-	-	-	-
17731	Jameson Office Trailer Replacment	25,000			25,000	18,860	-	6,140	-
17732	Vehicle 710 - 8830 Tractor	200,000		(30,000)	170,000	165,932	-	4,068	-
17733	Vehicle 172 - Ford F150	28,000		5,000	33,000	-	30,900	2,100	94%
	RECYCLING - EXPANSION								
13727	North Bay Wate Reuse Project	845,000			845,000	-	283,881	561,119	34%
14726	MST RW Pipeline Construction	-	500,000		500,000	318,839	3,304	177,857	1%
14727	Split N/S Lines, surge protection	-	50,000		50,000	15,913	14,208	19,879	28%
15718	LCWD Recycled Water Pipeline - Construction	-	500,000		500,000	320,619	36,194	143,187	7%
16722	MST RW Pipeline Extension	1,200,000	(700)		1,199,300	330,056	45,512	823,732	4%
	OTHER								
13729	Development Technical Support	231,800			231,800	-	97,680	134,120	42%
	Admin/Engineering Bldg - Acoustic Improvements	-	10,000		10,000	-	-	10,000	-
GRAND	TOTAL ALL PROJECTS	\$17,180,700	\$2,103,250		\$19,283,950	\$3,765,995	\$3,982,491	\$11,535,464	21%
		. ,,	. ,,		,,	, -,,	, -,,	. ,,	