

# **Napa Sanitation District**

# **General Manager's Report**

## for

# December, 2016

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### NAPA SANITATION DISTRICT

### **General Manager's Report**

### Dedicated to Preserving the Napa River for Generations to Come

**DATE:** February 1, 2017

**FROM:** Timothy B. Healy, General Manager

**SUBJECT:** General Manager's Report for December, 2016

**REGULATORY COMPLIANCE:** 

Collection System Compliance: 1 Category 1 SSO's, 0 Category 2 SSO's and 12

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 – December 31, 2016

Percent Fiscal Year: 50.0% Operating Expenditures to date: 46.9% Historical Expenditures to date: 53.3%

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

2017.

### **PERSONNEL:**

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

New Hires: None Separations: None

Promotions: Kyle Broughton promoted to Senior Civil Engineer

Recruitment Activities: Job offers were made to Jill Hughes, Associate Engineer; and two

Collection System Workers-in-Training, Kevin Webster and Ben

Cullison.

Injuries: None

Summaries of Operational Highlights are on following pages.

### **COLLECTIONS:**

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

- The District had 1 Category 1 Sanitary Sewer Overflows (SSO's), 0 Category 2 SSO's and 12 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 overflow occurred during a severe rain event on December 15<sup>th</sup>. This was a 940 gallon overflow due to high water levels in our collection system. However, using vacuum and bypass equipment, crews prevented 108,000 gallons from overflowing
- The repair crew installed 1 cleanouts, repaired/rehabilitated 1 sewer laterals and repaired 3 cleanouts. Additionally, the service response programs crew completed 68 work orders in support of the grease and odor control program, responded to 80 customer requests for service (25 were NSD problem) and closed out 167 mark and locate request tickets.
- The preventative maintenance crews ran work orders on 73 laterals, cleaned approximately 36,280 feet of main line and CCTV inspected approximately 18,154 feet of main line and 46 laterals.
- Collection crews also responded to an emergency at the River Park pump station. Due to a pipe failure, a bypass was needed to route flows until a repair could be made. This repair was completed at approximately 12:45am.

### TREATMENT PLANT:

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

### **Plant Operations**

- For December 2016, the plant's influent flow was 346.3 MG as compared to last year flow for December 2015 of 223.4 MG
- Total flow to the Napa River for December 2016 was 357.6 MG as compared to December 2015 flow of 333.2 MG.
- The production of recycle quality occurred for 6 days during December 2016 with a total flow of 12.2 MG.
- This December power consumption purchased from PG&E was 630 MWH in comparison to December 2015 purchase of 378 MWH.
- There was 3.91" rain fall for December 2016 as compared to 2.00" rain fall for December 2015.
- Pond 4 end of the month recorded level reading was 33.61" as compared to December 2015 of 33.72". Total remaining pond capacity for December 2016 was 46.1% as compared to December 2015 remaining capacity of 53.1%.

### Maintenance:

Significant events for the month of December, 2016:

### Cogeneration Performance

• Cogeneration Unit was removed for complete over haul

### Process Maintenance

- West Napa, replaced PLC UPS batteries
- Rewired supply fan in Solids Handling
- Rescaled flow sensors on belt press polymer dilution units
- Replaced AB scum pump

### Projects

- Up-graded P-4 polymer pump and controller with Cole Palmer Peristaltic system
- Procured and installed Flow Tube and Transmitter for plant 3W service water

### Standby Power

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

### Influent Pumps

• Pumps are all operational

### Laboratory:

Permit, Semiannual, Quarterly and Monthly River Discharge Effluent (EFF-001) monitoring was conducted on December 8<sup>th</sup>, 2016. Sample results received indicated constituent concentrations were within the District NPDES Permit limit and water quality objectives.

Monthly Recycle Effluent (REC-001) monitoring was conducted on December 20<sup>th</sup>, 2016. Sample results received indicated constituent concentrations were within the District maximum agronomic range.

Semiannual & Monthly Influent (INF-001) monitoring was conducted on December 8<sup>th</sup>, 2016. All Influent sample results received indicated no unusual results and were within local limits.

Semiannual & Quarterly Biosolid (BIO-001) monitoring was conducted during the week of December 4<sup>th</sup>, 2016 during normal operational conditions. All biosolid sample results received

indicated no unusual results and were within EPA 503 Table 1 & Table 3 ceiling concentration limits.

Semiannual monitoring of the District's only categorical discharger Advanced Pressure Technology was conducted on December 8<sup>th</sup>, 2016. Results of this monitoring event indicated elevated concentrations of Boron (580 ug/L) and Zinc (200 ug/L). These results exceed the discharger's permit limits for Boron (140 ug/L) and Zinc (188 ug/L). Per the Napa Sanitation District Enforcement Response Plan, a verbal notice of violation was provided to the discharger which requires continued monitoring of this facility's discharge constituent concentrations. A follow-up sampling event is tentatively scheduled for the week of February 13<sup>th</sup>, 2017.

### **RECYCLING:**

Significant events in the Recycling Department for December 2016 include:

- Recycled water delivered for the month of December 2016 (0.988 million gallons), as compared to December 2015 (1.556 million gallons) is lower due to golfcourse demand. Delivered recycled water volume represents the sum of all use site flow meter consumption values.
- Staff provided LCWD and MST recycled water customer's use site supervisor training.
- Staff ceased land application of biosolids on the Jameson Reuse Site due to wet weather.

### **POLLUTION PREVENTION:**

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

- The Napa Safe Medication Collection Program collected 63 pounds of unneeded medications. The total amount of unneeded medications collected since program inception in September 2010 is 19,140 pounds.
- The District issued 12 Toilet Rebates at \$100 each for a total of \$1,200.
- The District issued 26 ESME Washer Rebates at \$12.50 each for a total of \$325.

### **ENGINEERING / CAPITAL PROJECTS / DEVELOPMENT:**

Significant events occurring in the Engineering Department for December 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.
- Consultant continued work on the Asset Management Plan.

- Staff continued design of the 2017 Collection System Rehabilitation Project.
- Staff continued design of the Homewood/Westwood I/I Reduction Project.
- Consultant continued design work for the Headworks Equipment Rehabilitation Project.
- Staff continued design of the LED Pole/Arm Fixture Replacement project.
- The contractors continued construction of the following projects:
  - a. Aeration Basin Diffusers, Instrumentation and Controls Project
  - b. Recycled Water Valve on Kirkland Line Project
  - c. Stationary Gas Detectors Phase II Project
- The contractors completed construction of the following projects:
  - a. Sarco Creek Pipeline Replacement Project
  - b. Manhole Adjustment Project, Phase IV
  - c. Manhole Rehabilitation Nipak Project.
- Staff reviewed 21 sets of development plans and deemed 5 sets of plans complete. The approved plans consisted of one residential lateral, one residential mainline extension, one commercial building, one tenant improvement, and one recycled water lateral.

### Budget Status & Cash Summary - July 1, 2016 - December 31, 2016 (50.0% of the year)

Expenditures	FY 16/17 Budget	Expenditures to date	Encumbrances	Committed to date	Remaining Balance	Percent Committed
Operating						
Expenditures   Budget   to date   Encumbrances   to date   Balance	44.4%					
ExpendituresBudgetOperating\$9,371,370Salaries & Benefits\$9,371,370Services & Supplies6,057,110Taxes28,250Debt Service4,773,050Intrafund Transfers8,900,000Total Operating: \$29,129,780Capital\$19,283,950Intrafund Transfers5,512,000Total Capital: \$24,795,950Grand Total Expenditures: \$53,925,730FY 16/17RevenuesDeratingUse of Money/Property\$794,000Intergovernmental\$0Charges for Services23,828,500Miscellaneous Revenues69,000Donations/Contributions (Capital Labor)-Total Operating: \$24,691,500CapitalUse of Money/Property\$34,000Capacity Charges5,512,000Intergovernmental2,250,000	2,459,347	1,055,212	3,514,558	2,542,552	58.0%	
Taxes	28,250	14,115	-	14,115	14,135	50.0%
Debt Service	4,773,050	3,748,301	-	3,748,301	1,024,749	1 78.5%
Intrafund Transfers	8,900,000	2,225,000	-	2,225,000	6,675,000	25.0%
Total Operating:	\$29,129,780	\$12,606,549	\$1,057,284	\$13,663,833	\$15,465,947	<b>3</b> 46.9%
<u>Capital</u>					•	
Bldgs/Improvements & Equip	\$19,283,950	\$4,875,942	\$3,302,133	\$8,178,075	\$11,105,875	42.4%
Intrafund Transfers	5,512,000	3,618,268	-	3,618,268	1,893,732	65.6%
Total Capital :	\$24,795,950	\$8,494,210	\$3,302,133	\$11,796,343	\$12,999,607	47.6%
Grand Total Expenditures:	\$53,925,730	\$21,100,759	\$4,359,417	\$25,460,176	\$28,465,554	47.2%
	FY 16/17	Collected		Received to	Uncollected	Percent
Revenues	•		Encumbrances			Collected
Operating						
	\$794,000	\$409,822		\$409,822	\$384,178	51.6%
						N/A
	23,828,500			-		56.9%
_						36.3%
Donations/Contributions (Capital Labor)	-	253,120		253,120	(253,120)	5 N/A
Total Operating:	\$24,691,500	\$14,256,679		\$14,256,679		57.7%
<u>Capital</u>				'		
Use of Money/Property	\$34,000	\$1,327		\$1,327	\$32,673	3.9%
Capacity Charges	5,512,000	3,166,800		3,166,800	2,345,200	57.5%
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	\$10,391,201		\$10,391,201	\$16,366,799	38.8%
Grand Total Revenue:	\$51,449,500	\$24,647,880		\$24,647,880	\$26,801,620	47.9%

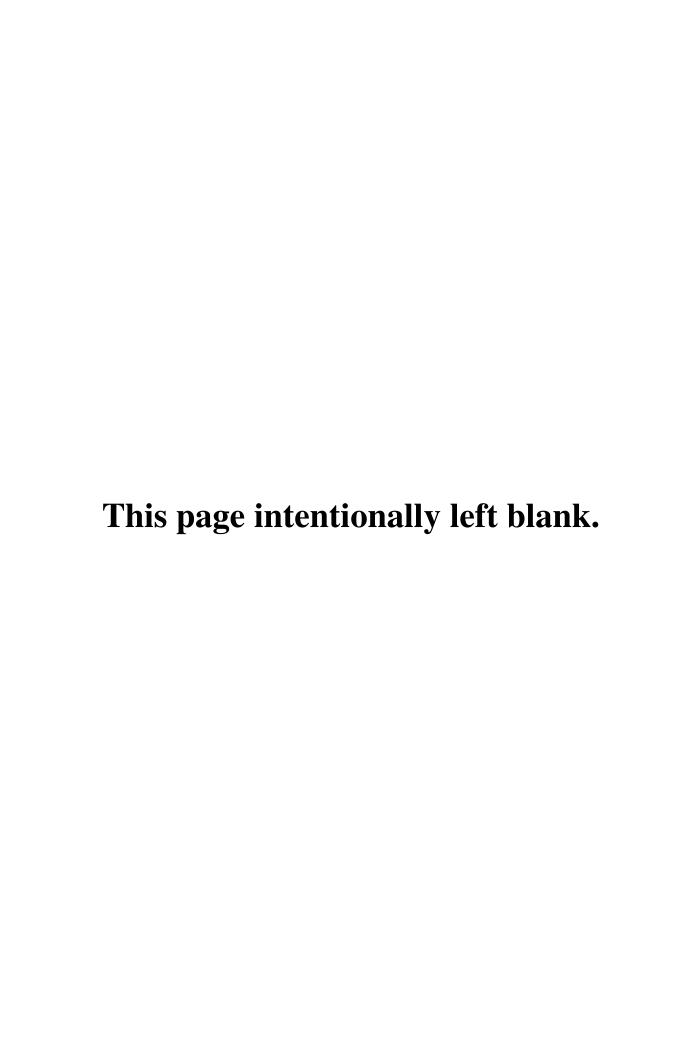
### Cash on Hand as of 12/31/16

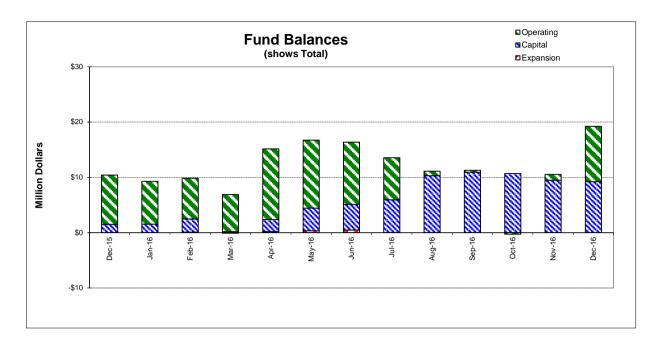
\$19,215,681.28

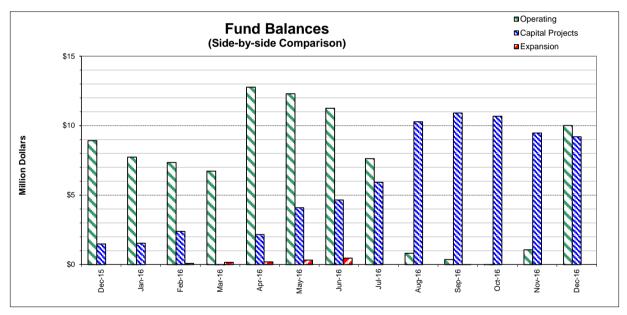
\*\*excluding Debt Service restricted funds 11/30/16 -Effective Rate of Return = 0.77%

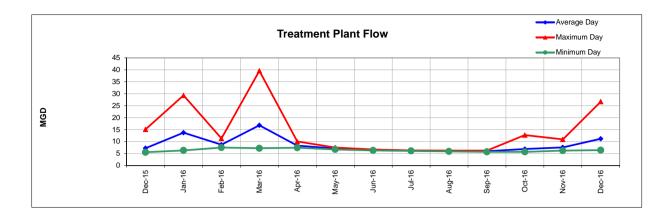
Note: December 2016 Effective rate of return not available at the time of this report.

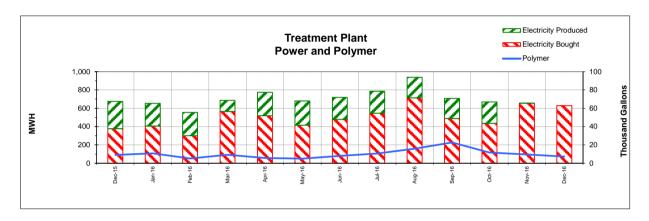
- 1. Series 2009B's and 2012A's principal/interest payments made in Aug & Feb
- 2. Processed 25% of intrafund transfer budget from Operating to Capital in July
- 3. Includes Debt Service and Intrafund Transfers; otherwise is 49.8%
- 4. See Capital Project Status report for details
- 5. In-house Labor for Capital Projects (Contra acct for Salaries)

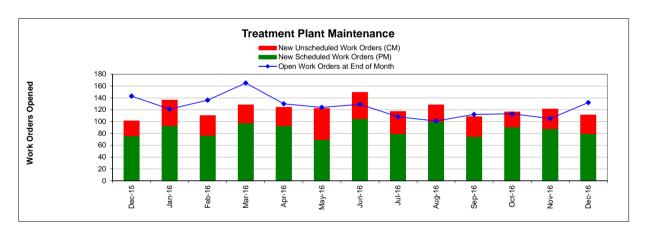


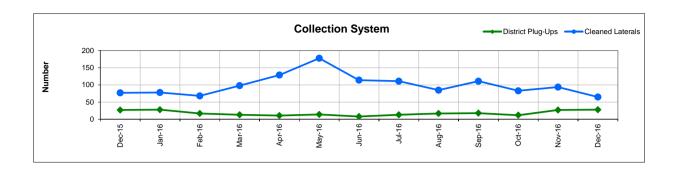


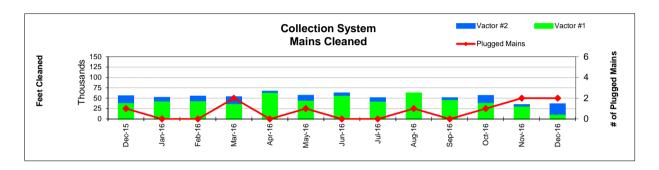


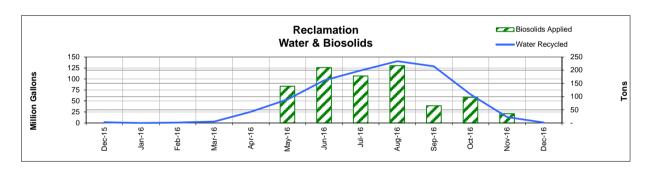


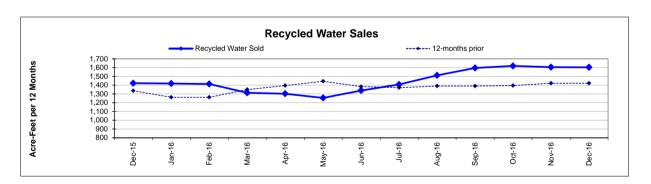












### **FUND BALANCES - MONTHLY**

CATEGORY	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
(Thousand Dollars)													
7800 7850	8,920	7,737 -	7,347 -	6,726 -	12,775 -	12,297 -	11,251 -	7,626 -	819 -	362 -	(293)	1,062 -	10,012
Subtotal Operating	8,920	7,737	7,347	6,726	12,775	12,297	11,251	7,626	819	362	(293)	1,062	10,012
Capital Improvement Projects Debt Proceeds	1,484 -	1,541 -	2,389	(96) -	2,163	4,096 -	4,649 -	5,924 -	10,284 -	10,912 -	10,685 -	9,470	9,204
Subtotal Capital	1,484	1,541	2,389	(96)	2,163	4,096	4,649	5,924	10,284	10,912	10,685	9,470	9,204
Total Discretionary Funds	10,404	9,278	9,736	6,630	14,938	16,393	15,900	13,550	11,103	11,274	10,392	10,532	19,216
Expansion Fund (Restricted)	-	-	85	168	200	326	467	-	-	1	_	_	-
Total Restricted Funds	-	-	85	168	200	326	467	-	-	1	-	-	-
TOTAL ALL FUNDS	10,404	9,278	9,821	6,798	15,138	16,719	16,367	13,550	11,103	11,275	10,392	10,532	19,216

### **DEVELOPMENT WORKLOAD - MONTHLY**

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

### **INSPECTION WORKLOAD - MONTHLY**

CATEGORY	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
CONSTRUCTION													
Locating Sewers	-	3	-	-	-	-	-	-	-	-	-	-	-
Permit Processing	-	-	-	-	-	-	-	-	-	-	-	-	-
Preconstruction Meetings	2	4	6	6	8	9	7	3	9	-	5	6	5
Inspections - Mains	-	-	6	3	3	2	-	2	1	-	-	10	1
Inspections - Manholes	-	10	91	49	15	8	13	3	-	-	81	27	89
Inspections - Laterals	14	10	15	16	45	29	22	20	20	9	7	37	11
Inspections - Cleanouts	43	17	48	41	42	60	51	28	25	4	29	71	20
Inspections - Review Video	1	4	2	1	4	-	4	-	3	-	2	2	4
Demo - Septic Tanks	-	-	-	-	-	-	-	-	-	-	-	-	-
Demo - Buildings	-	-	1	3	-	-	2	-	1	-	-	-	-
Update Record Drawings	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	60	48	169	119	117	108	99	56	59	13	124	153	130
MISCELLANEOUS													
Meter Readings	33	-	-	10	-	9	9	10	9	-	9	-	18
Washdown Facility Inspections	-	-	-	-	-	-	-	-	-	-	-	19	-
General Customer Assistance	3	7	36	37	16	10	1	4	4	9	13	-	6
City of Napa Water Discharge	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	36	7	36	47	16	19	10	14	13	9	22	19	24
SPECIAL PROJECTS	6	-	3	-	15	21	22	31	22	7	9	32	2

### **POLLUTION PREVENTION WORKLOAD - MONTHLY**

CATEGORY	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
Outreach Activities													
Plant Tours Conducted	1	3	2	1	4	4	2	0	0	0	7	8	0
Presentations Made	0	0		1	5				1	0	0	3	0
Total Outreach Activities	1	3	3	2	9	6	2	-	1	-	7	11	-
Inspections Conducted													
Food Service Facilities	10	24	30	31	19	12	-	-	-	1	-	-	37
Auto Body & Car Wash	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	1	1	-	-	-	-	-	-	-	-
Total Inspections	10	24	30	32	20	12	-	-	-	1	-	-	37
Compliance Issues													
NOVs Issued	1	2	-	1	2	-	2	1	-	-	-	-	2
NOEs Issued	1	-	-	-	1	2	-	-	-	1	-	1	2
Non-Compliant-FOG	-	-	1	-	-	-	-	-	-	-	-	-	-
Total Compliance Issues	2	2	1	1	3	2	2	1	-	1	-	1	4
Pollution Prevention													
Clothes Washer Rebates	27	12	10	-	18	14	45	-	-	-	-	20	26
Toilet Retrofit Rebates	21	1	6	22	19	6	10	-	11	4	12	8	12
Pharmaceuticals Diverted (in lbs)	166	556	341	341	322	240	243	362	303	386	391	291	63

### **RECYCLED WATER DELIVERIES - MONTHLY**

-	Acres	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
MONTHLY (MC)														
MONTHLY (MG) Water Sold														
Golf Courses	405.0	0.795	_	0.027	0.070	13.197	37.578	57.273	62.709	63.227	49.600	25.538	6.308	0.002
Cemeteries	5.0	0.733	-	0.027	0.000	0.015	0.447	0.709	0.931	0.754	1.225	0.328	0.010	0.002
Parks	18.5	-	-	-	-	0.013	0.725	1.078	1.299	1.172	0.741	0.326	-	0.000
Schools	21.0	0.088	_	0.040	0.075	0.360	1.528	2.675	2.181	2.120	1.497	0.630	0.014	0.006
Commerical	167.6	0.609	_	0.346	2.430	6.404	11.038	17.061	14.878	17.259	15.070	9.563	3.457	0.490
Vineyards	564.0	0.045	_	0.446	0.365	5.268	2.034	13.413	15.693	21.832	17.609	6.065	3.528	0.302
Trucked Water	175.0	0.020	_	0.010	0.018	0.098	0.064	0.135	0.232	0.458	0.135	0.124	0.028	0.188
Subtotal Sales	1,356.1	1.556	-	1.012	2.958	25.378	53.413	92.343	97.923	106.821	85.877	42.454	13.326	0.988
District Han														
District Use	330.0				0.084			4 404	E 444	10.450	20.025	10.000		
Jameson	213.0	-	-	-	0.084	-	-	1.481	5.414	12.456 21.318	20.935	12.608 10.000	0.004	-
Somky Fagundes/Airport	213.0 50.5	-	-	-	-	-	-	2.950	16.037	21.318	22.108	10.000	0.001	-
					- 0.004			4 404	- 04 454		42.042		- 0.004	
Subtotal District	593.5	-	-	-	0.084	-	-	4.431	21.451	33.774	43.043	22.609	0.001	-
TOTAL DELIVERED	1,949.6	1.556	-	1.012	3.042	25.378	53.413	96.773	119.374	140.594	128.920	65.062	13.327	0.988
ANNUAL (AF)														
Water Sold														
Golf Courses	405.0	1,000	999	999	915	899	840	869	891	920	946	960	971	968
Cemeteries	5.0	15	15	15	15	13	13	13	13	13	15	14	14	14
Parks	18.5	17	17	17	17	16	16	17	17	17	17	16	16	16
Schools	21.0	40	40	40	37	35	35	37	38	38	37	36	34	34
Commerical	167.6	294	292	286	275	270	276	294	293	302	308	304	301	301
Vineyards	564.0 175.0	49 7	<i>4</i> 9 6	50 6	<i>4</i> 9 6	64 6	68	103 5	149 5	215 6	268 5	285 4	265 4	266
Trucked Water							6							5
Subtotal Sales	1,356.1	1,422	1,419	1,414	1,313	1,303	1,254	1,339	1,407	1,512	1,596	1,619	1,605	1,603
District Use														
Jameson	330.0	103	103	103	103	103	103	107	124	153	167	163	163	163
Somky	213.0	291	291	291	291	291	221	195	208	230	223	222	222	222
Fagundes/Airport	50.5	-		-	-	-	-	-	-	-	-	-	-	-
Subtotal District	593.5	394	394	394	394	394	324	302	332	383	390	385	385	385
TOTAL DELIVERED	1,949.6	1,816	1,812	1,807	1,707	1,697	1,578	1,641	1,739	1,894	1,986	2,004	1,990	1,988

### **BIOSOLIDS HANDLING - MONTHLY**

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

### **COLLECTION SYSTEM MAINTENANCE - MONTHLY**

CATEGORY	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
<u>Plugups</u>													
Total Calls	69	78	58	43	41	45	33	48	52	48	56	68	84
Business Hours	40	40	42	22	31	30	22	27	35	35	34	38	54
After Hours	29	38	16	21	10	15	11	21	17	13	22	30	30
District's	27	28	17	13	11	14	8	13	17	18	12	27	28
Property Owner's	42	50	39	30	30	31	25	35	35	30	44	41	56
Plugged Main Lines	1			2		1			1		1	2	2
Run Lateral w/Eel	77	78	68	98	129	178	114	111	85	111	83	94	65
Cleaning (feet of sewer)													
Vactor #1	40,292	44,407	44,811	38,201	65,231	46,352	57,690	43,988	61,502	47,869	40,711	32,046	12,220
Vactor #2	14,325	6,329	9,199	14,073	325	9,687	4,002	6,288		2,184	14,730	1,512	23,277
Hydro													
Rodder			650										
Total (feet)	54,617	50,736	54,660	52,274	65,556	56,039	61,692	50,277	61,502	50,053	55,442	33,557	35,497
Cleaning Days	23	18	21	17	19	19	19	18	19	16	17	16	15
Vactor #1	18	16	13	14	18	17	17	15	19	15	13	15	7
Vactor #2	5	2	7	3	1	2	2	3		1	4	1	8
Hydro			4										
Rodder			1										
Feet/day	2,350	2,800	2,600	3,050	3,450	2,950	3,250	2,800	3,250	3,150	3,250	2,100	2,350
Vactor #1	2,250	2,800	3,450	2,750	3,600	2,750	3,400	2,950	3,250	3,200	3,150	2,150	1,750
Vactor #2	2,850	3,150	1,300	4,700	350	4,850	2,000	2,100		2,200	3,700	1,500	2,900
Hydro Rodder			650	222									
			650	222									
<u>Video Inspections</u>													
Mains (feet)	7,248	6,583	9,718	12,343	8,670	17,352	15,115	3,878	15,885	6,453	10,131	6,826	13,141
Laterals (each)	173	175	131	154	181	225	152	183	140	161	174	182	191
Construction (each)													
Cleanouts	23	22	20	13	17	7	10	7	3	16	8	10	6
Laterals	2	5	8		4	3	5	4			10	5	
Mains		1			2						3		
Manholes						00					1		
Other						39							
USA Markings													
Regular (w/in 2 days)	178	222	281	247	270	319	225	244	326	252	215	214	160
Emergency (w/in 2 hours)	16	21	8	13	5	-	6	14	8	10	6	4	18

#### **WASTEWATER PLANT OPERATIONS DATA - MONTHLY**

CATEGORY	Units	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
<u>FLOWS</u>		31	31	29	31	30	31	30	31	31	30	31	30	31
Influent	MG	223.4	424.7	252.6	520.1	249.2	218.9	193.5	191.0	186.6	178.1	212.3	226.4	346.3
Average Day	MGD	7.2	13.7	8.7	16.8	8.3	7.1	6.5	6.2	6.0	5.9	6.8	7.5	11.2
Maximum Day	Date	21-Dec	19-Jan	1-Feb	11-Mar	10-Apr	7-May	1-Jun	7-Jul	27-Aug	5-Sep	28-Oct	20-Nov	16-Dec
Maximum Day Flow	MG	15.1	29.3	11.3	39.6	10.0	7.5	6.7	6.3	6.2	6.2	12.7	10.9	26.7
Minimum Day	Date	1-Dec	1-Jan	29-Feb	3-Mar	29-Apr	31-May	30-Jun	24-Jul	23-Aug	27-Sep	11-Oct	8-Nov	7-Dec
Minimum Day Flow	MG	5.5	6.3	7.5	7.2	7.4	6.7	6.3	6.1	5.9	5.7	5.7	6.2	6.4
Effluent	MG	337.2	457.8	306.2	478.6	313.0	63.3	109.4	131.8	155.7	132.2	83.5	442.0	369.9
River Discharge	MG	333.2	457.8	306.2	474.4	282.4	-	-	-				426.1	357.6
Recycled Flow	MG	4.0	-	-	4.2	30.5	63.3	109.4	131.8	155.7	132.2	83.5	16.0	12.2
BIOSOLIDS	Tons	958	737	532	689	496	637	621	464	361	397	499	591	658
Wet Tons Generated from Pond	Tons													
Wet Tons Generated from Plant	Tons	958	737	532	689	496	637	621	464	361	397	499	591	658
Wet Tons Hauled Offsite	Tons													
POLYMER USE	Gallons	9,039	10,859	5,281	9,284	5,700	5,031	8,095	10,556	15,943	22,716	11,710	9,676	7,306
Pond Pre-Flocculators	Gallons	7,476	9,284	4,296	7,555	3,958	325	1,723	4,500	7,184	9,409	4,594	6,988	3,966
Flocculator Polymer 1	Gallons													
Flocculator Polymer 2	Gallons	835	939	392	1,008	598	18	158	355	586	610	110	1,150	913
Filter Polymer 1	Gallons				84	587	4,075	5,299	5,143	7,388	12,023	6,282	766	1,697
Filter Polymer 2	Gallons													
Belt Presses	Gallons	729	637	593	637	557	613	916	558	785	674	724	772	730
ENERGY														
Total Electricity Used	MWH	675	653	555	686	774	680	719	785	939	708	668	657	630
Purchased from PGE	MWH	378	407	300	566	519	415	479	546	714	489	436	655	630
Produced from Co-Gen	MWH	297	247	255	120	255	265	240	240	225	219	233	3	-
Percent Produced	%	44%	38%	46%	17%	33%	39%	33%	31%	24%	31%	35%	0%	0%
Purchased Natural Gas	Therms	53	130	1,327	1,730	492	321	164	501	780	1,653	745	36	4
Methane Flared Off	KSCF	264	56	508	1,674	260	268	147	145	42	135	67	4,051	4
Stand By Calls	#	59	50	55	70	41	14	10	37	22	61	41	52	50
Violations	#	-	-	-	-	-	-	-	-	-	-	-	-	-

### **WASTEWATER PLANT MAINTENANCE and LABORATORY DATA - MONTHLY**

CATEGORY	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
Scheduled													
Old	66	78	39	55	77	66	53	55	37	39	50	57	48
New	76	93	77	98	93	70	105	80	100	75	91	88	80
Completed	64	132	61	76	104	83	103	98	98	64	84	97	53
New Balance	78	39	55	77	66	53	55	37	39	50	57	48	75
Unscheduled													
Old	66	65	82	81	88	64	71	74	71	62	62	56	57
New	25	43	33	30	31	52	44	37	28	33	25	33	31
Completed	26	26	34	23	55	45	41	40	37	33	31	32	31
New Balance	65	82	81	88	64	71	74	71	62	62	56	57	57
Total Work Orders													
Old	132	143	121	136	165	130	124	129	108	101	112	113	105
New	101	136	110	128	124	122	149	116	128	108	116	121	111
Completed	90	158	95	99	160	128	144	138	136	96	115	129	84
New Balance	143	121	136	165	130	124	129	108	101	112	113	105	132
LAB ANALYSES													
Sample Type													
Regulatory	408	315	281	325	392	130	158	193	179	193	204	168	175
Process Control	1,258	1,288	1,157	1,276	1,235	778	729	744	907	739	766	1,315	1,209
Special Request	235	60	17	1	5	320	11	207	93	-	19	39	40
Quality Control/Assurance	302	372	500	306	349	209	5	32	5	5	50	302	299
TOTAL	2,203	2,035	1,955	1,908	1,981	1,437	903	1,176	1,184	937	1,039	1,824	1,723

# Summary of NSD Capital Project Status through 12-31-16

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		(60,000)	28,700	-	4,704	23,997	16%
13702	Manhole Raising/Rehab	198,900		60,000	258,900	-	192,928	65,972	75%
13703	Lateral Replacement/Rehab	72,000			72,000	-	36,616	35,384	51%
13704	Cleanouts Installation/Rehab	87,000			87,000	-	30,763	56,237	35%
13705	I&I Reduction Program	200,000			200,000	100,000	11,857	88,143	6%
14703	Browns Valley Rd & First St	2,800,000	813,800		3,613,800	491,831	293,396	2,828,573	8%
15703	Sarco Crk PL Rplcmnt/CalTRANS	1,050,000	(34,250)		1,015,750	431,743	682,249	(98,242)	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)	(160,000)	749,600	25,359	693,740	30,500	93%
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	207,447	87,673	69%
17701	ACP CIPP Lining Project #2	350,000		(350,000)	-	-	-	-	-
17702	Upper Lateral Rehab - Basin L (Pilot #2)	5,000			5,000	-	-	5,000	-
17703	Manhole Rehab - Nipak	90,000			90,000	87,460	247	2,293	0%
17704	Infltrtn Rehab - SSMH/PL (CI-)	400,000		(300,000)	100,000	-	25,805	74,195	26%
17705	Soscol Ave (8th to Oil Co Rd)	500,000			500,000	66,199	11,005	422,796	2%
17706	Rehab - Ranch De Los Robles	400,000		(400,000)	-	-	-	-	-
17707	66-inch Trunk CCTV Inspection	150,000			150,000	-	315	149,685	0%
17708	Basin G - I&I Reduction #1	1,200,000		1,180,000	2,380,000	-	23,151	2,356,849	1%
17734	Homewood/Westwood I/I Reduction	-		200,000	200,000	-	7,928	192,072	4%
	COLLECTION SYSTEM - EQUIPMENT								
17709	Eel Replacment 1	5,400		100	5,500	-	5,454	46	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	21,961	1,619	1,420	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	-	8,079	11,921	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	280,637	1,130,499	162,864	72%
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	3,330	33,815	7%
16715	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 12-31-16

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	-	497	59,503	1%
17715	Turbidimeters (7) Tertiary Rplcmnts	11,800		11,200	23,000	18,106	3,510	1,384	15%
17716	FOG - Strain Press	200,000			200,000	-	-	200,000	-
17717	Energy Audit - Odor Control VFD	51,700			51,700	4,624	-	47,076	-
17718	Enery Audit - LED Pole/Arm Mounted Fixtures	78,100		50,000	128,100	-	803	127,297	1%
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	1,452	17,625	1%
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	2,585	38,034	2%
17727	Roof Replacement - Digester 2nd Floor	125,000		(5,000)	120,000	-	110,713	9,287	92%
17728	Roof Replacement - AB/Blower Building	40,000		5,000	45,000	-	43,162	1,838	96%
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	10,000	73,600	65,401	1,107	7,092	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	98%
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	36,797	142,583	7%
16722	MST RW Pipeline Extension	1,200,000	(700)		1,199,300	330,056	51,900	817,344	4%
	OTHER								
13729	Development Technical Support	231,800			231,800	-	115,559	116,241	50%
16717	Admin/Engineering Bldg - Acoustic Improvements	-	10,000		10,000	-	-	10,000	-
GRAND	TOTAL ALL PROJECTS	\$17,180,700	\$2,103,250	-	\$19,283,950	\$3,302,133	\$4,875,942	\$11,105,876	25%