

Napa Sanitation District

General Manager's Report

for

October, 2019

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NAPA SANITATION DISTRICT

General Manager's Report

DATE: December 4, 2019

FROM: Timothy B. Healy, General Manager

SUBJECT: General Manager's Report for October 2019

REGULATORY COMPLIANCE:

Collection System Compliance: 0 Category 1 SSO's, 0 Category 2 SSO's, and 7

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, 2019 – October 31, 2019

Percent Fiscal Year: 33.3%
Operating Expenditures to date: 32.0%
Historical Expenditures to date: 39.2%
Significant Comments: None.

PERSONNEL:

Significant events for the month of October 2019 in the Human Resources Department:

New Hires: None Separations: None Promotions: None

Recruitment Activities: Continued recruitment for Collection System Worker position

Injuries: None

Summaries of Operational Highlights are on following pages.

COLLECTIONS:

Significant events for the month of October 2019 in Collection System Maintenance include:

- The District had 0 Category 1 Sanitary Sewer Overflows (SSO's), 0 Category 2 SSO's and 7 Category 3 SSO's during the month. (A Category 1 is defined as an SSO that reached a drainage channel and/or surface water or; an SSO that reached a storm drainpipe that was not fully recovered and returned to the sanitary sewer system. A Category 2 is defined as an SSO that is equal to or greater than 1,000 gallons that did not reach a surface water. A Category 3 is defined as an SSO that is less than 1,000 gallons that did not reach a surface water. These are usually minor overflows of less than 10 gallons from cleanouts on District laterals that can be cleaned up by the crews.)
- The repair crew installed 19 cleanouts and repaired 1. They also repaired 1 lateral and lined 10 laterals. Additionally, the service response/programs crew completed 175 work orders in support of the grease and odor control program, responded to 73 customer requests for service (22 were NSD problem) and closed out 353 mark and locate request tickets.
- The preventative maintenance crews ran work orders on 111 laterals, cleaned approximately 78,473 feet of main line and CCTV inspected 22 laterals. In addition, the CCTV truck televised 17,404 feet of mainline.

TREATMENT PLANT:

Significant events for the month of October 2019 in the Treatment Plant Department:

Plant Operations:

- For October 2019, the plant's influent flow was 181.6 MG as compared to last year flow for October 2018 of 180.0 MG
- No river discharge occurred during October.
- There was 0.00" rainfall for October 2019 (Carneros Rainfall Center) as compared to 0.56" rainfall for October 2018.
- Pond 4 end of the month recorded level reading was 49.44".
- The treatment plant and pumping stations utility power was interrupted by PG&E Public Safety Power Shutoff events on October 9&10. Stonecrest pumping station was interrupted again on October 26 & 27. During the PSPS events service levels were maintained using standby power generators.

Power Consumption and Production:

- October power purchased from PG&E was 423 MWH in comparison to September 2019 purchase of 431 MWH.
- Cogeneration unit ran 730 of 744 hours for the month 98.12% uptime, averaging 294.35, producing 214 MWH of energy.
- Solar generation in October was 141 MWH, compared to 171 MWH in September.

Maintenance:

Significant events for the month of October 2019:

Process Maintenance

- Cogeneration unit monthly emission test in compliance with BAAQMD permit
- Replaced rubber on DAF Clarifier scraper arms
- Installed new level transducer in DAF Clarifier Scum Trough
- Replaced 24 VDC Power Supply in MCC 5
- Installed new level transducer in Belt Press Bulk Polymer Tank

Projects

- SCADA Historian back-up upgrade
- Rotork Actuator replacement/Plant Effluent, Filter Cells Influent, Recycle, ISO and Marsh (CIP 18716 & 17819)
- Installed air filtration on Headworks Huber electrical cabinets

Standby Power

- Plant generators ran in standby mode for 42.2 hours
- Riverpark ran in standby mode for 40.3 hours, Stonecrest ran in standby mode for 72.8 hours, West Napa ran in standby mode for 39.2 hours

Influent Pumps

• All pumps operational

Laboratory:

Effluent (EFF-001) Summary

• There was no EFF-001 discharge during the month.

Influent (INF-001) Summary

- Monthly Influent monitoring of all parameters occurred at the required frequencies. The following were notable sampling events:
- October 1, 2019: Metals, Mercury, Cyanide

RECYCLING:

Significant events in the Recycling Department for October 2019 include:

• Recycled water delivered for the month of October 2019 was (72.800 million gallons), as compared to October 2018 (69.709 million gallons) is higher from the previous year due

to golf course and vineyard demand. Delivered recycled water volume represents the sum of all use site flow meter consumption values.

• Staff continued the land application of biosolids at the Jameson Reuse site.

POLLUTION PREVENTION:

Significant events in the Pollution Prevention and Outreach Division October 2019 include:

- There were two tours and four presentations given this month. The two tours were given to participants in NapaSan's second Citizens Academy. Three of the presentations were given during the evening sessions of the Citizens Academy, and the fourth was given to Napa County's Sustainability Council regarding resource recovery at NapaSan.
- In October, 77 pounds of medication were collected at Family Drug as part of NapaSan's drug takeback program. The total amount of unneeded medications collected since the drug takeback program began in September 2010 is 22,074.2 pounds. In addition to the medication collected in the year-round takeback bin, NapaSan helped to sponsor and promote the yearly DEA drug takeback event at which 1,558 pounds of medications and 263 pounds of sharps were collected.
- There were no ESME Washer Rebates issued this month.
- Staff facilitated the second NapaSan Citizens Academy. A dozen community members took part in the Academy and got an in-depth look at NapaSan's operations during the tour and three evening sessions.
- Staff aided in planning and facilitating the October 16th screening of Straws at the Napa Library and the EECNC film event- a screening of WASTED! The Story of Food Waste-on November 1st.

ENGINEERING / CAPITAL PROJECTS / DEVELOPMENT:

Significant events occurring in the Engineering Division for October 2019 include:

- Consultant continued work on the SCADA Master Plan.
- Consultants and staff continued work on the CMMS implementation.
- Consultant continued work on the Pond 1 Dredge Project design.
- Contractor continued construction of the Headworks Equipment Replacement Project.
- Contractor continued construction of the Southeast Napa Sewer and Roadway Rehabilitation Project.
- Staff completed design of the 2020 Collection System Rehabilitation Project and released Notice Inviting Bids.
- Consultant continued design of the 66-inch Trunk Sewer Rehabilitation Project.
- The construction contract was awarded for the 2019 Manhole Rehabilitation Project.

- The construction contract was awarded for the Sanitary Sewer Manhole Adjustment Project, Phase IX.
- Contractor continued construction of the Upper Lateral Rehabilitation Pilot Project #4.
- Consultant completed design and staff issued Notice Inviting Bids for the Primary Clarifier Rehabilitation Project.
- Consultant continued work on the SWRF Buried Metallic Piping Condition Assessment Project.
- Consultant conducted smoke testing in northwest Napa.
- Consultant continued design of the West Napa Pump Station Project.
- Contractor continued construction of the 2019 Treatment Plant Improvements Project.
- Consultant continued working on the Collection System Master Plan.
- Staff reviewed 39 sets of development plans and deemed 13 sets of plans complete. The approved plans consisted of 4 tenant improvements, 5 residential dwellings, 1 residential lateral, 1 residential demolition, 1 commercial building, and 1 commercial subdivision.

Budget Status & Cash Summary - July 1, 2019 - October 31, 2019 (33.3% of the year)

	FY 19/20		Expenditures	Committed	Remaining	Percent
Expenditures	Budget	Encumbrances	to date	to date	Balance	Committed
Operating						
Salaries & Benefits	\$10,258,600	\$4,128	\$2,931,901	\$2,936,029	\$7,322,571	28.6%
Services & Supplies	6,281,650	1,375,582	1,635,969	3,011,551	3,270,099	47.9%
Taxes	41,800	-	-	-	41,800	0.0%
Debt Service	4,593,900	_	3,673,488	3,673,488	920,413 📵	80.0%
Intrafund Transfers	8,900,000	-	-	-	8,900,000	0.0%
Total Operating:	\$30,075,950	\$1,379,710	\$8,241,358	\$9,621,067	\$20,454,883	32.0%
<u>Capital</u>						
Bldgs/Improvements & Equip	\$39,047,000	\$3,843,433	\$4,487,403	\$8,330,835	\$30,716,165	21.3%
Intrafund Transfers	5,178,000	-	1,918,789	1,918,789	3,259,211	37.1%
Total Capital :	\$44,225,000	\$3,843,433	\$6,406,191	\$10,249,624	\$33,975,376	23.2%
Grand Total Expenditures:	\$74,300,950	\$5,223,142	\$14,647,549	\$19,870,691	\$54,430,259	26.7%
	FY 19/20		Revenues	Revenues	Unposted	Percent
Revenues	Budget	Encumbrances	to date	posted to date	Revenue	Posted
Operating						_
Use of Money/Property	\$578,000		\$503,921	\$503,921	\$74,079	87.2%
Charges for Services	31,213,500		2,072,815	2,072,815	29,140,685	6.6%
Miscellaneous Revenues	60,000		10,286	10,286	49,714	17.1%
Donations/Contributions (Capital Labor)	-		279,397	279,397	(279,397) () N/A
Total Operating:	\$31,851,500		\$2,866,419	\$2,866,419	\$28,985,081	9.0%
<u>Capital</u>						
Use of Money/Property	\$0		\$1,741	\$1,741	(\$1,741)	N/A
Capacity Charges	5,178,000		1,569,199	1,569,199	3,608,801	30.3%
Bond/Loan Proceeds	15,416,600		-	-	15,416,600 (0.0%
Sale of Assets	25,000		1,104	1,104	23,896	4.4%
Miscellaneous Revenues	5,000		-	-	5,000	0.0%
Intrafund Transfers	14,078,000		1,918,789	1,918,789	12,159,211	13.6%
Total Capital:	\$34,702,600		\$3,715,684	\$3,715,684	\$30,986,916	10.7%
Grand Total Revenue:	\$66,554,100		\$6,582,102	\$6,582,102	\$59,971,998	9.9%

Cash on Hand as of 10/31/19	\$15,152,985
**avaluding Daht Comica restricted funds	

^{**}excluding Debt Service restricted funds 10/31/19 -Effective Rate of Return = 2.40%

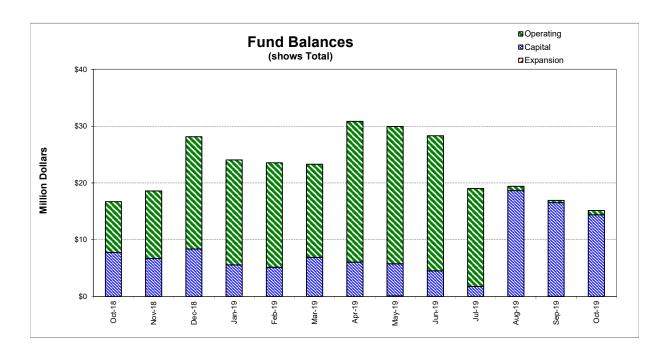
^{1.} Series 2012A's and 2017's principal/interest payments are made in Jul & Feb

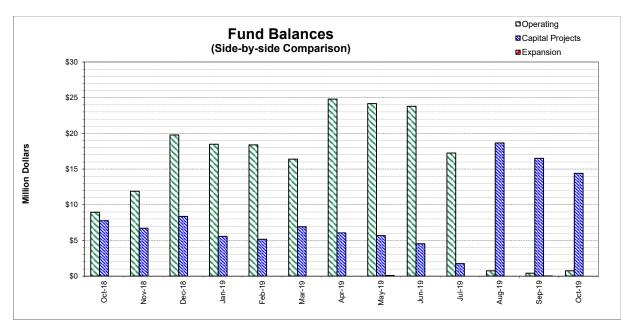
^{2.} Includes Debt Service and Intrafund Transfers; otherwise is 35.9%

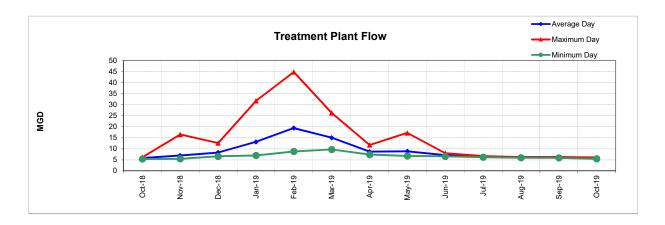
^{3.} See Capital Project Status report for details

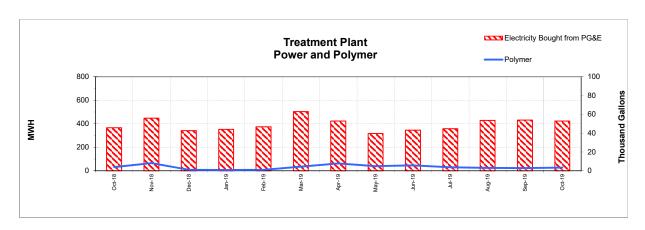
^{4.} In-house Labor for Capital Projects (Contra acct for Salaries)

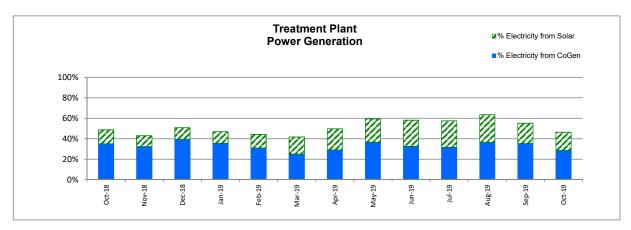
^{5.} Waiting for approval of SRF Loan for BVT and WNPS Projects

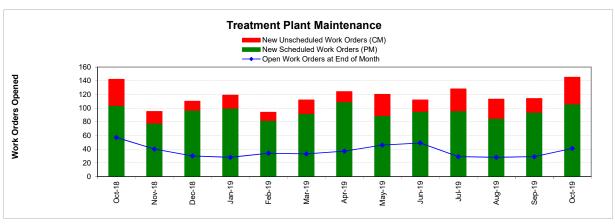


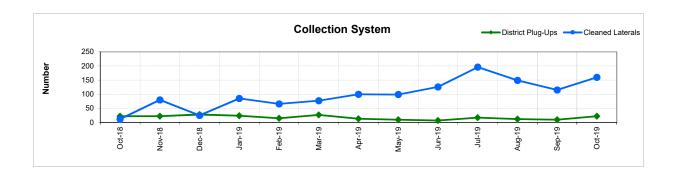


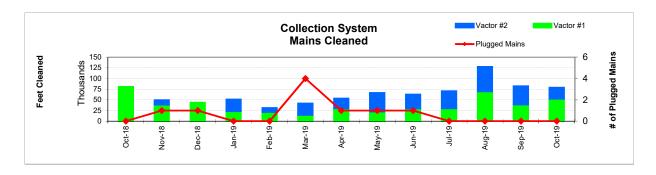


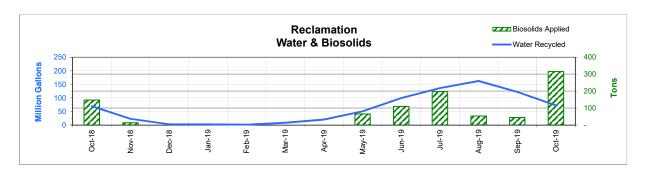


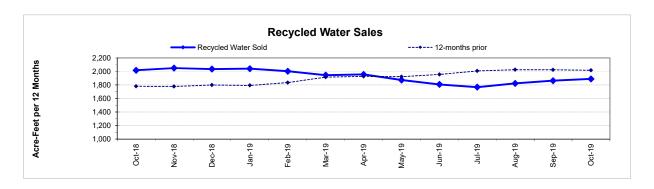












FUND BALANCES - MONTHLY

CATEGORY	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19
(Thousand Dollars)													
7800 7850	8,951 -	11,888 -	19,772 -	18,473 -	18,394 -	16,405 -	24,793 -	24,164 -	23,784	17,246 -	748 -	415 -	753 -
Subtotal Operating	8,951	11,888	19,772	18,473	18,394	16,405	24,793	24,164	23,784	17,246	748	415	753
Capital Improvement Projects Debt Proceeds	7,755 -	6,698	8,363 -	5,567	5153 -	6,899 -	6,058	5,671 -	4,525 -	1,764 -	18,655 -	16,516 -	14,400 -
Subtotal Capital	7,755	6,698	8,363	5,567	5,153	6,899	6,058	5,671	4,525	1,764	18,655	16,516	14,400
Total Discretionary Funds	16,706	18,586	28,135	24,040	23,547	23,304	30,851	29,835	28,309	19,010	19,403	16,931	15,153
Expansion Fund (Restricted)	_	-	-	-	-	-	-	93	-	-	-	2	
Total Restricted Funds	-	-	-	-	-	-	-	93	-	-	-	2	-
TOTAL ALL FUNDS	16,706	18,586	28,135	24,040	23,547	23,304	30,851	29,928	28,309	19,010	19,403	16,933	15,153

DEVELOPMENT WORKLOAD - MONTHLY

CATEGORY	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19
Phone Requests													
Maps/Drawings	3	1	2	6	2	4	-	17	8	1	-	4	-
Lateral Permits	-	-	-	-	-	-	-	-	-	-	-	0	-
Policy Questions	6	3	6	8	7		5		6	8	1	4	2
Development Questions	70	41		40	35		53		64	43			32
Miscellaneous	20	18		27	18	25	29		18	25	16	18	29
TOTAL	99	63	77	81	62	82	87	135	96	77	46	64	63
Counter Requests													
Maps/Drawings	1	-	1	-	-	-	1	-	-	1	-	-	1
Lateral Permits	9	5	10	12	8	11	7	11	7	8	12	13	7
Policy Questions	2	-	1	-	-	3	4		-	-	-	-	-
Development Questions	6	6	5	10	9	13	10		10	3	4	13	4
Miscellaneous	0	-	1	1	-	-	0	2	0	0	1	0	-
TOTAL	18	11	18	23	17	27	22	20	17	12	17	26	12
Initial Request (Referrals)	21	20	15	18	14	16	24	20	9	14	16	13	13
Connection Permits Issued													
Residential Permits	1	1	2	-	4	5	2	6	3	2	14	2	5
Commercial Permits	-	2	-	1	-	1	2	3	1	6	1	2	1
Industrial Permits	-	-	-	-	-	-	-	-	-	-	-	-	
TOTAL PERMITS	1	3	2	1	4	6	4	9	4	8	15	4	6
Residential Units	1	1	2	-	4	36	2	6	3	6	14	2	22
Commercial Units	-	2	-	1	-	1	2	3	1	2	1	2	1
TOTAL UNITS	1	3	2	1	4	37	4	9	4	8	15	4	23
<u>Annexations</u>													
Submitted	-	1	-	1	-	-	-	1	-	1	-	-	1
Acreage	-	158.20	-	4.90	-	-	-	0.50	-	16.04	-	-	44.84
Plans Reviewed													
Subdivisions/Sites													
First Submittal	10	10	9	2	5	6	5	14	8	7	8	8	5
Second Submittal	5	2	5	7	5	6	3	8	6	5	5	2	2
Third Submittal	2	1	1	1	5	3	4	10	5	5	1	3	7
Building/Tenant Improvements													
First Submittal	11	8	11	5	8	7	15	3	9	12	6	6	13
Second Submittal	5	6	-	4	2	5	2	3	4	4	1	4	5
Third Submittal	1	3	1	1	2	3	7	-	7	6	4	3	7
Miscellaneous Plan Reviews	-	-	-	-	-	-	-	-	-	-	-	-	
TOTAL PLANS REVIEWED	34	30	27	20	27	30	36	38	39	39	25	26	39

INSPECTION WORKLOAD - MONTHLY

CATEGORY	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19
CONSTRUCTION													
Locating Sewers	_	1	2	4	-	-	-	_	-	_	-	_	_
Permit Processing	_	-	-	-	-	-	-	-	-	_	_	-	_
Preconstruction Meetings	_	1	3	-	-	3	5	7	2	5	11	4	6
Inspections - Mains	1	-	1	-	1	1	_	-	1	5	1	11	_
Inspections - Manholes	76	21	30	49	75	19	18	6	7	13	12	77	1
Inspections - Laterals	8	3	28	18	23	31	21	8	27	40	15	5	12
Inspections - Cleanouts	6	8	37	31	39	39	46	43	24	59	43	7	54
Inspections - Review Video	-	1	2	-	2	2	1	1	1	_	-	2	_
Demo - Septic Tanks	-	-	-	-	-	-	-	-	-	-	-	-	-
Demo - Buildings	_	-	-	-	2	-	-	-	-	_	_	-	_
Update Record Drawings	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	91	35	103	102	142	95	91	65	62	122	82	106	73
MISCELLANEOUS													
Meter Readings	_	1	10	26	4	-	4	14	-	-	-	_	_
Washdown Facility Inspections	_	_	-	_	-	-	-	_	-	-	-	_	_
General Customer Assistance	50	25	30	34	41	13	20	16	-	-	32	31	12
City of Napa Water Discharge	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	50	26	40	60	45	13	24	30	-	-	32	31	12
SPECIAL PROJECTS	36	19	0	7	7	21	20	21	40	25	22	35	23

POLLUTION PREVENTION WORKLOAD - MONTHLY

CATEGORY	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19
Outreach Activities													
Plant Tours Conducted	4	1	1	2	6	1	10	1	6	1	0	0	2
Presentations Made	10	0	0	1	0	2	3	1	2	0	0	0	4
Total Outreach Activities	14	1	1	3	6	3	13	2	8	1	-	-	6
Inspections Conducted													
Food Service Facilities	-	-	1	22	41	26	47	21	-	-	1	-	-
Auto Body & Car Wash	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	1	-	-	-	-	-	-	-	-	-	-	
Total Inspections	-	1	1	22	41	26	47	21	-	-	1	-	-
Compliance Issues													
NOVs Issued	2	1	-	1	1	1	1	2	1	-	1	1	1
NOEs Issued	1	1	-	-	1	-	-	-	-	-	-	-	_
Non-Compliant-FOG	-	-	-	1	-	-	-	-	-	-	-	-	
Total Compliance Issues	3	2	-	2	2	1	1	2	1	-	1	1	1
Pollution Prevention													
Clothes Washer Rebates Toilet Retrofit Rebates	-	29	23	6	8	-	19	-	2	-	-	-	-
Pharmaceuticals Diverted (in lbs)	68	- 56	-	- 124	-	102	-	- 45	73	132	-	-	- 77

RECYCLED WATER DELIVERIES - MONTHLY

	Acres	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19
MONTHLY (MG)														
Water Sold														
Golf Courses	405.0	23.612	3.322	0.008	0.002	_	0.014	9.555	25.976	58.629	69.590	65.339	49.784	31.724
Cemeteries	57.1	3.239	2.872	0.690	0.380	-	0.273	1.494	3.671	3.658	5.515	5.659	4.822	4.061
Parks	18.5	0.050	0.611	-	0.002	_	-	0.020	0.263	0.843	0.939	1.219	1.111	0.615
Schools	21.0	1.231	0.745	0.060	0.098	0.043	0.041	0.251	0.988	1.655	2.196	1.712	1.635	1.312
Commerical	167.6	19.637	7.652	1.891	1.379	0.557	0.648	4.974	10.516	12.142	18.578	17.787	15.775	13.443
Vineyards	564.0	9.649	7.015	0.239	0.380	0.513	7.149	3.250	6.107	10.475	20.951	42.981	27.367	13.852
Trucked Water	175.0	0.289	0.403	0.033	0.007	0.020	0.017	0.110	0.421	0.533	1.293	1.374	1.425	1.401
Subtotal Sales	1,408.2	57.707	22.620	2.921	2.248	1.133	8.142	19.654	47.943	87.935	119.063	136.071	101.920	66.409
District Use														
Jameson	330.0	-	-	-	-	-	-	-	-	-	-	0.470	-	-
Somky	213.0	12.002	0.008	-	-	-	-	-	2.504	11.985	17.012	25.944	20.394	6.391
Fagundes/Airport	50.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal District	593.5	12.002	0.008	-	-	-	-	-	2.504	11.985	17.012	26.413	20.394	6.391
TOTAL DELIVERED	2,001.7	69.709	22.628	2.921	2.248	1.133	8.142	19.654	50.447	99.920	136.074	162.484	122.314	72.800
ANNUAL (AF)														
Water Sold Golf Courses	405.0	1,025	1.019	1.000	1.000	981	972	991	909	880	897	921	939	963
Cemeteries	57.1	76	1,019	86	88	88	88	991	93	93	95	92 1	939	102
Parks	18.5	13	15	15	15	15	15	15	13	13	13	14	16	102
Schools	21.0	36	38	38	38	38	37	37	35	33	34	33	33	33
Commerical	167.6	327	337	338	343	339	335	341	343	342	350	346	342	323
Vineyards	564.0	529	545	545	546	531	485	470	470	436	367	399	418	431
Trucked Water	175.0	12	13	13	13	13	13	11	11	11	13	15	18	22
Subtotal Sales	1,408.2	2,018	2,051	2,035	2,042	2,003	1,945	1,956	1,874	1,808	1,768	1,824	1,864	1,891
District Use														
Jameson	330.0	15	15	15	15	15	15	15	15	15	15	16	1	1
Somky	213.0	171	171	171	171	171	171	171	143	139	191	261	276	259
Fagundes/Airport	50.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal District	593.5	187	187	187	187	187	187	187	158	154	206	277	277	260
TOTAL DELIVERED	2,001.7	2,205	2,237	2,222	2,229	2,189	2,132	2,143	2,032	1,962	1,974	2,101	2,141	2,151

BIOSOLIDS HANDLING - MONTHLY

Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19
							65	109				
											44	
147	13	-	-	-	-	-	-	-	197	52		316
147	13	-	-	-	-	-	65	109	197	52	44	316
-	-	-	-	-	-	-	-	-	-	-	-	-
147	13	-	-	-	-	-	65	109	197	52	44	316
	147 147	147 13 147 13	147 13 - 147 13 -	147 13 147 13	147 13 147 13	147 13 147 13	147 13 147 13	65 147	65 109 147 13	65 109 147 13 197 147 13 65 109 197	65 109 147 13 197 52 147 13 65 109 197 52	147 13 - - - - - - 197 52 147 13 - - - - 65 109 197 52 44

COLLECTION SYSTEM MAINTENANCE - MONTHLY

CATEGORY	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19
Plugups													
Total Calls	57	64	77	70	43	46	43	46	40	45	46	45	68
Business Hours	36	34	44	47	39	21	23	28	31	33	30	36	51
After Hours	21	30	33	23	4	25	20	18	9	12	16	9	17
District's	22	22	28	24	15	27	13	10	7	17	12	10	22
Property Owner's	35	41	49	46	28	20	30	35	32	26	34	32	43
Plugged Main Lines	-	1	1	-	-	4	1	1	1	-	-	-	
Run Lateral w/Eel	12	80	25	85	66	77	100	99	126	196	149	115	160
Cleaning (feet of sewer)													
Vactor #1	80,207	38,882	43,194	23,544	21,454	14,808	30,224	22,498	30,232	30,283	69,780	38,969	52,711
Vactor #2	-	10,373	-	27,335	9,420	26,687	22,691	43,466	32,180	39,800	57,405	43,059	25,762
Hydro Rodder													
Total (feet)	80,207	49,254	43,194	50,879	30,875	41,495	52,916	65,964	62,412	70,083	127,185	82,028	78,473
Cleaning Days	22	20	19	20	16	21	21	29	27	28	39	33	28
Vactor #1	22	17	19	13	10	6	13	10	12	12	18	18	20
Vactor #2	-	3		7	6	15	8	19	15	16	21	15	8
Hydro													
Rodder													
Feet/day	3,650	2,450	2,250	2,550	1,950	2,000	2,500	2,250	2,300	2,500	3,250	2,500	2,800
Vactor #1	3,650	2,300	2,250	1,800	2,150	2,450	2,300	2,250	2,500	2,500	3,900	2,150	2,650
Vactor #2		3,450		3,900	1,550	1,800	2,850	2,300	2,150	2,500	2,750	2,850	3,200
Hydro													
Rodder													
Video Inspections													
Mains (feet)	31,889	17,526	12,509	14,335	5,812	13,050	15,089	24,716	23,914	32,551	40,819	22,837	17,404
Laterals (each)	297	201	138	175	133	144	204	173	177	254	214	190	247
Construction (each)	_			4.0				40					
Cleanouts	5	50 4	1	18	3	17	15	12	24	15 14	17	15	20
Laterals Mains	4 1	4	15	6	3	3 1	4	13	12	14	16	16	10
Manholes	1		-	-		1				-	2		2
Other											_		_
USA Markings													
Regular (w/in 2 days)	378	159	159	171	224	338	327	338	292	378	363	331	332
Emergency (w/in 2 hours)	15	32	12	24	15	22	20	20	24	21	28	23	21

WASTEWATER PLANT OPERATIONS DATA - MONTHLY

Page	CATEGORY	Units	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19
Maximum Day	FLOWS		31	30	31	31	28	31	30	31	30	31	31	30	31
Maximum Day Date 2-Oct 28-Nov 1-Dec 17-Jan 14-Feb 6-Mar 1-Apr 19-May 1-Jun 2-Jul 2-9-Aug 2-Sep 29-Oct Maximum Day Date 31-Oct 1-Nov 13-Dec 3-Jan 1-Feb 19-Mar 30-Apr 14-May 2-Jun 2-Jun 6-Jan 24-Sep 10-Oct Minimum Day Date 31-Oct 1-Nov 13-Dec 3-Jan 1-Feb 19-Mar 30-Apr 14-May 27-Jun 2-Jun 6-Jan 24-Jun 6-Jan 24-Sep 10-Oct Minimum Day Date 31-Oct 1-Nov 13-Dec 3-Jan 1-Feb 19-Mar 30-Apr 14-May 27-Jun 2-Jun 6-Jan 24-Sep 10-Oct Minimum Day MG 6-1 2-8-89 348-2 497-1 507-1 618-1 42-4 5- 1- 1- 1- 1- 1- 1- 1-	Influent	MG	180.0	208.8	257.6	407.2	542.7	465.3	261.4	275.4	213.6	199.3	192.5	182.1	181.6
Maximum Day Flow MG 6.2 16.5 12.6 31.7 44.8 26.3 11.7 17.2 8.0 6.7 6.3 6.3 6.1	Average Day	MGD	5.8	7.0	8.3	13.1	19.4	15.0	8.7	8.9	7.1	6.4	6.2	6.3	5.9
Minimum Day Flow MG	Maximum Day	Date	2-Oct	29-Nov	1-Dec	17-Jan	14-Feb	6-Mar	1-Apr	19-May	1-Jun	2-Jul	29-Aug	2-Sep	29-Oct
Minimum Day Flow MG 5.4 5.5 6.6 7.0 8.8 9.7 7.4 6.8 6.6 6.2 6.0 5.9 5.5	Maximum Day Flow	MG								17.2			6.3		
Filtrent	Minimum Day									,					
River Discharge MG MG 68.1 26.1 5.2 5.5 5.5 5.7 618.1 424.4 -5 -5 -5 -5 -5 -5 -5 -	Minimum Day Flow														
Recycled Flow MG 68.1 26.1 5.2 5.5 5.5 5.5 25.4 55.5 108.7 128.8 167.8 123.5 78.4			68.1							55.5	108.7	128.8	167.8	123.5	78.4
BIOSOLIDS Tons 745 572 767 700 451 413 575 493 506 624 830 714 750							507.1								-
Wet Tons Generated from Plant Tons Ton	Recycled Flow	MG	68.1	26.1	5.2	5.5	-	8.5	25.4	55.5	108.7	128.8	167.8	123.5	78.4
Wet Tons Generated from Plant Tons 745 572 767 700 451 413 575 493 506 624 830 714 750 % Solids Liquid %	BIOSOLIDS	Tons	745	572	767	700	451	413	575	493	506	624	830	714	750
% Solids Liquid % % % % Solids Land Application %															
% Solids Cake % Solids Land Application Wet Tons Hauled Offsite % % Solids Land Application Tons POLYMER USE Pond Pre-Flocculators Flocculator Polymer 1 Gallons Flocculator Polymer 1 Gallons Gal			745	572	767	700	451	413	575	493	506	624	830	714	750
Wet Tons Hauled Offsite Tons Wet Tons Hauled Offsite Tons Solids Land Application Wet Tons Hauled Offsite Tons															
POLYMER USE Gallons 4,044 8,169 1,155 868 1,046 4,557 7,851 5,053 5,921 3,745 3,153 3,038 3,499															
POLYMER USE Gallons 4,044 8,169 1,155 868 1,046 4,557 7,851 5,053 5,921 3,745 3,153 3,038 3,499															
Pond Pre-Flocculators Gallons 59 2,293 - - - 2,668 4,704 288 224 494 326 257 540	Wet Tons Hauled Offsite	Tons													
Flocculator Polymer 1 Flocculator Polymer 2 Flocculator Polymer 3 Fliter Polymer 1 Fliter Polymer 1 Fliter Polymer 2 Gallons Gallons Callons C	POLYMER USE	Gallons	4,044	8,169	1,155	868	1,046	4,557				3,745	3,153	3,038	3,499
Flocculator Polymer 2 Gallons 34 784 294 974 755 79 - 119 61 86 203 Filter Polymer 1 Gallons 2,944 4,503 178 404 460 1,584 4,100 5,102 2,499 1,963 1,832 1,841 Filter Polymer 2 Gallons			59	2,293	-	-	-	2,668	4,704	288	224	494	326	257	540
Filter Polymer 1 Gallons 2,944 4,503 178 404 460 1,584 4,100 5,102 2,499 1,963 1,832 1,841 Filter Polymer 2 Gallons	•					-	-				-				-
Filter Polymer 2 Belt Presses Gallons 1,007 589 788 690 642 455 808 586 595 633 803 863 915 ENERGY Total Electricity Used MWH 714 785 684 663 670 864 840 779 827 842 739 859 789 Purchased from PGE MWH 366 448 342 353 374 504 423 317 346 358 429 431 423 Produced from Co-Gen MWH 249 254 265 235 207 215 244 284 270 267 269 257 225 Percent Produced % 35% 32% 39% 35% 31% 25% 29% 36% 33% 32% 36% 35% 29% Purchased from Solar MWH 99 83 77 75 89 145 173 178 211 217 200 171 141 Percent Produced 14% 11% 11% 11% 11% 11% 11% 13% 17% 21% 23% 25% 26% 27% 20% 18% Purchased Natural Gas Therms 1,461 1,912 1,560 2,147 1,789 2,299 1,558 1,475 1,448 1,727 1,979 1,563 1,471 Methane Flared Off KSCF 507 192 266 34 7 14 75 52 26 80 67 64 50 50 50 59	•				294										
Belt Presses Gallons 1,007 589 788 690 642 455 808 586 595 633 803 863 915 ENERGY Total Electricity Used MWH 714 785 684 663 670 864 840 779 827 842 739 859 789 Purchased from PGE MWH 366 448 342 353 374 504 423 317 346 358 429 431 423 Produced from Co-Gen MWH 249 254 265 235 207 215 244 284 270 267 269 257 225 Percent Produced % 35% 32% 39% 35% 31% 25% 29% 36% 33% 32% 36% 35% 29% Purchased from Solar MWH 99 83 77 75 89 145 173 178 211 217			2,944	4,503		178	404	460	1,584	4,100	5,102	2,499	1,963	1,832	1,841
ENERGY Total Electricity Used															-
Total Electricity Used MWH 714 785 684 663 670 864 840 779 827 842 739 859 789 Purchased from PGE MWH 366 448 342 353 374 504 423 317 346 358 429 431 423 Produced from Co-Gen MWH 249 254 265 235 207 215 244 284 270 267 269 257 225 Percent Produced % 35% 32% 39% 35% 31% 25% 29% 36% 33% 32% 36% 35% 29% Purchased from Solar MWH 99 83 77 75 89 145 173 178 211 217 200 171 141 Percent Produced 14% 11% 11% 11% 11% 11% 13% 17% 21% 23% 25% 26%	Belt Presses	Gallons	1,007	589	788	690	642	455	808	586	595	633	803	863	915
Purchased from PGE MWH 366 448 342 353 374 504 423 317 346 358 429 431 423 Produced from Co-Gen MWH 249 254 265 235 207 215 244 284 270 267 269 257 225 Percent Produced % 35% 32% 39% 35% 31% 25% 29% 36% 33% 32% 36% 35% 29% Purchased from Solar MWH 99 83 77 75 89 145 173 178 211 217 200 171 141 Percent Produced 14% 11% 11% 11% 13% 17% 21% 23% 25% 26% 27% 20% 18% Purchased Natural Gas Therms 1,461 1,912 1,560 2,147 1,789 2,299 1,558 1,475 1,448 1,727 1,979															
Produced from Co-Gen MWH 249 254 265 235 207 215 244 284 270 267 269 257 225 Percent Produced % 35% 32% 39% 35% 31% 25% 29% 36% 33% 32% 36% 35% 29% Purchased from Solar MWH 99 83 77 75 89 145 173 178 211 217 200 171 141 Percent Produced 14% 11% 11% 11% 13% 17% 21% 23% 25% 26% 27% 20% 18% Purchased Natural Gas Therms 1,461 1,912 1,560 2,147 1,789 2,299 1,558 1,475 1,448 1,727 1,979 1,563 1,471 Methane Flared Off KSCF 507 192 266 34 7 14 130 164 324 282 251															
Percent Produced % 35% 32% 39% 35% 31% 25% 29% 36% 33% 32% 36% 35% 29% Purchased from Solar MWH 99 83 77 75 89 145 173 178 211 217 200 171 141 Percent Produced 14% 11% 11% 11% 13% 17% 21% 23% 25% 26% 27% 20% 18% Purchased Natural Gas Therms 1,461 1,912 1,560 2,147 1,789 2,299 1,558 1,475 1,448 1,727 1,979 1,563 1,471 Methane Flared Off KSCF 507 192 266 34 7 14 130 164 324 282 251 126 220 Stand By Calls # 75 133 55 71 75 52 26 80 67 64 50															
Purchased from Solar MWH 99 83 77 75 89 145 173 178 211 217 200 171 141 Percent Produced 14% 11% 11% 11% 13% 17% 21% 23% 25% 26% 27% 20% 18% Purchased Natural Gas Therms 1,461 1,912 1,560 2,147 1,789 2,299 1,558 1,475 1,448 1,727 1,979 1,563 1,471 Methane Flared Off KSCF 507 192 266 34 7 14 130 164 324 282 251 126 220 Stand By Calls # 75 133 55 71 75 52 26 80 67 64 50 50 59															
Percent Produced 14% 11% 11% 11% 13% 17% 21% 23% 25% 26% 27% 20% 18% Purchased Natural Gas Therms 1,461 1,912 1,560 2,147 1,789 2,299 1,558 1,475 1,448 1,727 1,979 1,563 1,471 Methane Flared Off KSCF 507 192 266 34 7 14 130 164 324 282 251 126 220 Stand By Calls # 75 133 55 71 75 52 26 80 67 64 50 50 59															
Purchased Natural Gas Therms 1,461 1,912 1,560 2,147 1,789 2,299 1,558 1,475 1,448 1,727 1,979 1,563 1,471 Methane Flared Off KSCF 507 192 266 34 7 14 130 164 324 282 251 126 220 Stand By Calls # 75 133 55 71 75 52 26 80 67 64 50 50 59		MWH													
Methane Flared Off KSCF 507 192 266 34 7 14 130 164 324 282 251 126 220 Stand By Calls # 75 133 55 71 75 52 26 80 67 64 50 50 59															
Stand By Calls # 75 133 55 71 75 52 26 80 67 64 50 50 59							,							,	
	Methane Flared Off	KSCF	507	192	266	34	7	14	130	164	324	282	251	126	220
	Stand By Calls	#	75	133	55	71	75	52	26	80	67	64	50	50	59
	_				-				-						-

WASTEWATER PLANT MAINTENANCE and LABORATORY DATA - MONTHLY

CATEGORY	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19
Scheduled													
Old	20	21	10	6	5	11	10	15	25	31	7	7	8
New	104	78	97	100	82	92	109	89	95	96	85	94	106
Completed	103	89	101	101	76	93	104	79	89	120	85	93	97
New Balance	21	10	6	5	11	10	15	25	31	7	7	8	17
Unscheduled													
Old	32	36	30	24	23	23	23	22	21	18	22	21	21
New	38	17	13	19	12	20	15	31	17	32	28	20	39
Completed	34	23	19	20	12	20	16	32	20	28	29	20	36
New Balance	36	30	24	23	23	23	22	21	18	22	21	21	24
Total Work Orders													
Old	52	57	40	30	28	34	33	120	46	49	29	28	29
New	142	95	110	119	94	112	124	11	112	128	113	114	145
Completed	137	112	120	120	88	112	120	46	109	150	113	113	133
New Balance	57	40	30	28	34	33	37	46	49	29	28	29	41
LAB ANALYSES													
Sample Type													
Regulatory	129	195	175	169	117	164	155	190	138	129	149	142	147
Process Control	486	1,154	1,087	1,155	1,111	1,199	1,195	760	770	869	838	818	893
Special Request	13	-	2	-	8	2	-	1	15	1	22	26	46
Quality Control/Assurance	328	1,128	705	776	639	754	1,447	812	539	632	600	607	774
TOTAL	956	2,477	1,969	2,100	1,875	2,119	2,797	1,763	1,462	1,631	1,609	1,593	1,860

Summary of NSD Capital Project Status through 10-31-19

Proj		FY 19/20	FY 18/19		Final FY 19/20		Costs Paid	Budget	% Budget
#	Description	Budget	Carryovers	Adj.	Budget	Encumbrance	to Date	Remaining	Expended
	COLLECTION SYSTEM - PROJECTS								
13701	Main Line Sewer Rehabilitation	60,000			60,000	-	2,519	57,481	4%
13702	Manhole Raising/Rehabilitation	332,600			332,600	-	4,892	327,708	1%
13703	Lateral Replacement/Rehabilitation	110,000			110,000	194	61,152	48,654	56%
13704	Cleanouts Installation/Rehabilitation	107,000			107,000	-	19,635	87,365	18%
13705	Inflow & Infiltration (I&I) Reduction Program	221,700			221,700	54,350	10,940	156,410	5%
14703	Browns Valley Rd & First St	7,000,000			7,000,000	-	2,265	6,997,735	0%
17704	Infltrtn Rehab - SSMH/PL (CI-)	-	25,500		25,500	-	-	25,500	-
18701	I&I Smoke Testing	150,000			150,000	40,939	1,812	107,249	1%
18702	Collection System Asset Management Software	-	443,550		443,550	318,430	74,796	50,325	17%
18703	Upper Lateral Rehab - Basin L (Pilot) #3	166,300	3,200		169,500	66,653	17,047	85,800	10%
18706	Sewer System Inflow/Infiltration 2019	3,538,100	313,850		3,851,950	431,194	2,119,462	1,301,294	55%
19701	66-inch Trunk Rehabilitation (Kaiser to IPS)	4,000,000	450,000		4,450,000	439,233	6,041	4,004,727	0%
19703	2020 Collection System Rehabilitation	3,169,600	9,800		3,179,400	-	26,286	3,153,114	1%
19727	Collection System Master Plan	1,071,200	632,350		1,703,550	424,171	97,025	1,182,354	6%
20701	Upper Lateral Rehab - Pilot #5	5,000			5,000	-	50	4,950	1%
20702	Manhole Rehabilitation	250,000			250,000	-	2,015	247,985	1%
20703	2021 Collection System Rehabilitation	20,000			20,000	-	-	20,000	-
	COLLECTION SYSTEM - EQUIPMENT								
20704	Locatable Mini-Camera #3 Replacement	11,900		(200)	11,700	-	9,382	2,318	80%
20705	Eel Replacement #2	5,900		200	6,100	-	5,688	412	93%
	COLLECTION SYSTEM - LIFT STATIONS								
17711	West Napa PS - Rehab	5,500,000			5,500,000	111,435	125,429	5,263,136	2%
19705	Stonecrest PS Pump Rebuild	-	40,100		40,100	9,840	15,266	14,994	38%
	TREATMENT - PROJECTS								
13745	Pond 1 Dredge	2,100,000	237,150		2,337,150	27,276	13,136	2,296,739	1%
18736	Treatment Plant Project 2018	-	15,000		15,000	10,901	139	3,961	1%
18740	Treatment Plant Project 2019	600,000	672,700		1,272,700	708,637	532,037	32,026	42%
19717	WWTP MP - Pond Transfer Structures 2 to 3	-	259,700		259,700	-	12,800	246,900	5%
20706	WWTP Master Plan	5,000			5,000	-	-	5,000	-
20707	Pond Levee Repair	100,000			100,000	-	-	100,000	-
20708	2020 Treatment Plant Improvements Project	1,500,000			1,500,000	93,995	6,430	1,399,575	0%

Source: GLS7505 POC5010

Summary of NSD Capital Project Status through 10-31-19

Proj #	Description	FY 19/20 Budget	FY 18/19 Carryovers	Adj.	Final FY 19/20 Budget	Encumbrance	Costs Paid to Date	Budget Remaining	% Budget Expended
13735	Dual Fuel Boiler Burner	-	121,550		121,550	98,723	-	22,828	-
15707	Main - DAFT Overflow Pumps (2) Cornell	11,900			11,900	-	-	11,900	-
15711	Rotork Actuator Replacement	-	7,600		7,600	-	-	7,600	-
16712	Main - Primary Clarifier Mech/Struct Rehabilitation	814,000	152,300		966,300	117,170	35,528	813,602	4%
17715	Turbidimeters (7) Tertiary Rplcmnts	-	16,000		16,000	-	-	16,000	-
17726	Headworks Equipment Rehab/Replacment	1,000,000	667,600		1,667,600	697,672	863,668	106,260	52%
18711	3W Strainer	-	24,350		24,350	-	-	24,350	-
18715	Muffle Furnace - Replacement	-	5,000		5,000	-	-	5,000	-
18716	Rotork Actuator Replacement	-	6,400		6,400	-	-	6,400	-
18719	Filter Flow Control - Rotork Valves	-	9,900		9,900	-	-	9,900	-
18720	Neuros Blowers Rebuild	-	64,300		64,300	-	-	64,300	-
18722	FOG Station Water Heater	20,000	5,000		25,000	-	-	25,000	-
19706	WWTP MP - 3W System Improvements Phase 2	-	295,600		295,600	-	110	295,490	0%
19708	Main - Rotork Actuator Replacement	-	95,000		95,000	-	-	95,000	-
19709	Main - Polymer Tank (3) Replacement	-	10,000		10,000	-	-	10,000	-
19710	Main - 12kV Redundant Line	-	119,150		119,150	-	72	119,078	0%
19712	Main - Utility Generator Power Transition	-	35,000		35,000	-	-	35,000	-
19713	Main - Cogen Hot Water to FOG Pad	-	50,000		50,000	-	-	50,000	-
19715	Main - ARV Replacement	31,100			31,100	-	-	31,100	-
20709	Main - AB Caustic Pumps & Enclosure	85,700			85,700	18,533	8,996	58,171	10%
20710	Main - Septage Pump & Motor Replacement	28,700			28,700	-	-	28,700	-
20711	Main - Marsh-to-Pond Pump Station Upgrade	88,700			88,700	-	-	88,700	-
20712	Main - Grit Pump Rebuild	60,000			60,000	20,356	-	39,644	-
20713	Main - Elevator Control Update	400,000			400,000	-	-	400,000	-
20714	Main - Flare Rebuild	50,000			50,000	-	-	50,000	-
20715	Main - Concrete Pipe Chase Covers	80,000			80,000	-	-	80,000	-
20716	Plant Door Replacement - Phase 1	22,200			22,200	-	-	22,200	-
20717	Vehicle 163 - Ford Ranger (Replace w/ F-150)	33,300			33,300	30,502	-	2,798	-
20718	Vehicle 162 - Ford F-250 Diesel	43,600			43,600	41,122	-	2,478	-
20719	Vehicle 206 - Forklift TH103 (Telehandler)	103,100			103,100	-	-	103,100	-
	LAB - EQUIPMENT								
20720	Lab - Sampler 4700 Replacement (2)	20,000			20,000	14,596	-	5,404	-
	SCADA								

Summary of NSD Capital Project Status through 10-31-19

Proj		FY 19/20	FY 18/19		FY 19/20		Costs Paid	Budget	% Budget
#	Description	Budget	Carryovers	Adj. Bu	udget	Encumbrance	to Date	Remaining	Expended
18729	SCADA MP Project #1 - Network Monitoring	-	46,200		46,200	-	-	46,200	-
19718	SCADA MP Phase 5 Security Study	-	88,250		88,250	10,027	28,272	49,951	32%
	RECYCLING - PROJECTS								
13727	North Bay Wate Reuse Project	150,000		1	150,000	-	-	150,000	-
18730	Jameson 24" Flow Meter Rehab	-	6,200		6,200	-	-	6,200	-
18731	Coombsville Truck Fill Station	300,000	144,400	4	144,400	57,487	290,184	96,730	65%
19719	24-inch Valve Replacement - Kirkland Line	-	5,000		5,000	-	-	5,000	-
19720	Jameson PS VFD	-	68,900		68,900	-	-	68,900	-
20721	Kirkland Recycled Water Pipeline Rehabilitaton	60,000			60,000	-	1,020	58,980	2%
	RECYCLING - EQUIPMENT								
19722	Vehicle 723/720 - Attachments/Implements	29,700		(29,700)	-	-	-	-	-
20722	Badger Meter Replacement	80,000			80,000	-	-	80,000	-
20723	CT-5 Composter (Ag-Bag)	-	-	29,700	29,700	-	-	29,700	-
	OTHER							-	-
13729	Development Technical Support	337,000		3	337,000	-	89,508	247,492	27%
19723	AV System Replacement - Conference Rooms	-	20,000		20,000	-	-	20,000	-
19725	Vehicle 011 - CSET Trailer	-	7,100		7,100	-	3,800	3,300	54%
		\$33,873,300	\$5,173,700	- \$39,0	047,000	\$3,843,433	\$4,487,403	\$30,716,168	11%

Source: GLS7505 POC5010