

Monthly Operating Report

Richmond WWTP and Collection System

June, 2017

Executive Summary

- There were no permit violations in the month of June 2017
- The monthly acute aquatic bioassay test passed with 100% survival of the fathead minnows.
- Key Veolia staff attended and supported a presentation to SP Global in San Francisco on the health of the City's general financial condition and wastewater enterprise. The meeting was held on June 22 in advance of, and in preparation for, the recent wastewater revenue bond issuance to raise funds for wastewater related capital construction projects.
- Met with NCE for site walk in support of treatment plant hillside stability/landslide evaluation
- Met with consultant (Larry Walker & Associates) and City staff for the NPDES permit renewal kickoff meeting

Wastewater Treatment Plant

- There were two odor complaints during the month of June. The first was on June 5th from the area of East Scenic Drive at 1930 hours. Staff responded and no source of the odors or H2S was detected. The 2nd complaint was from 1035 Ventura Street at 1142 hours on June 24. It was called in as an odor and determined to be a sewer issue. The collection crew cleared a blockage that caused 4 line segments to surcharge and cause the odor.
- There were no H2S alerts from the fence line monitors
- ZAPS influent monitoring system was completed and is going through the start-up process
- Evaluating relocating the street sweeping fleet away from the treatment plant site
- There were no blending events in June

Table 1	Parameter	Monthly Performance Indicators	Limit/Target
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Treatment Plant Operations:		
Influent Flow, daily average (MGD)	**6.78	N/A
Effluent Flow, daily average (MGD)	4.90	N/A
Influent BOD ₅ , avg. mg/L	366	N/A
Influent TSS, avg. mg/L	364	N/A
Effluent TSS, monthly average mg/L	14.9	30 or less
Effluent BOD, monthly average mg/L	16.9	30 or less
% BOD Removal	95.3	> 85
% TSS Removal	95.4	> 85
NPDES Effluent Limit Violations	0	0
Blending events	0	0
Total volume blended, MG	0	0
Odor complaints	2	0
Digested sludge pumped to drying beds, MG	1.015	N/A
Leachate received, GAL	520,583	N/A
Leachate received YTD, MG	2.77	N/A

**** Flow meter malfunction during the month skewed the average flow value high. The actual value should be closer to 5 mgd.**

Maintenance

Staff completed 278 total maintenance work orders during the month; preventative; 105 at sewer lift stations, 79 for storm water pump stations and 72 work orders at the treatment plant. 22 corrective work orders were also completed.

Completed Projects; June

- Continue work in support of plant electrical upgrade project. Requires Veolia's Instrumentation, Automation and Control technician to spend significant time assisting electrical contractor with identifying and establishing control connections and inputs/outputs to existing equipment
- Executed contract with Bay Alarm to redo existing plant security and smoke/fire alarm monitoring
- Completed rebuild of primary clarifier skimmers #1 & #2

Look Ahead; July - August

- The cog rake electrical panel upgrade is scheduled for installation in July
- New Ferry Point lift station pump and check valve replacement project began in May and is still ongoing. A fractured suction pipe on one of the pumps was discovered in June and Overaa Construction has provided an \$11,000.00 price quote for the repair.

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- Evaluating landscape maintenance providers and contract
- Install aerator blade on 2B. Remove floating aerators
- Have Synagro tentatively scheduled for influent wet well and grit/storm basin cleaning in August
- Ordered replacement grinders for digester sludge recirculation system

Collection Systems

Sanitary Sewer System Highlights

Entered into contract with RedZone Robotics for MSI assessment of sewers. The objective is to pilot newer technology for sewer evaluation on about a mile of large diameter (greater than 36 inch) sewer pipe. MSI technology is Multi-Sensor Inspection Scanning of Digital CCTV/Sonar/Laser. The objective is to evaluate reliability of this technology whose software automatically evaluates and grades the pipelines.

During the month of June we had 1 dry weather overflow events.

- 550 4th St., Richmond CA

There were a total of seventeen sanitary sewer service calls in June, ten of which were private lateral issues. (See table 2).

Sanitary Sewer Point Repair:

There were two sanitary sewer repairs performed during the month of June 2017.

- 4th St and Turpin St.
- 920 Wilson Ave.

Storm Water System

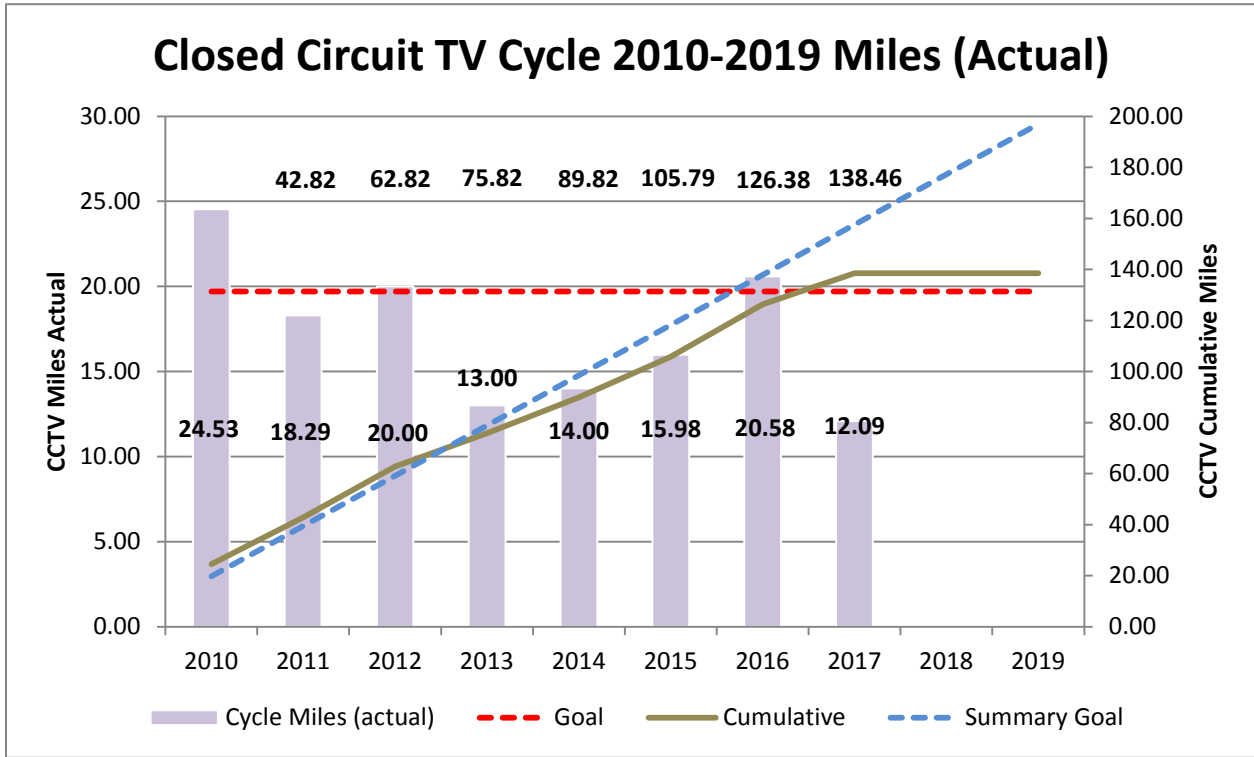
There were four storm-water related service calls in June (see table 3).

Storm Water Highlights

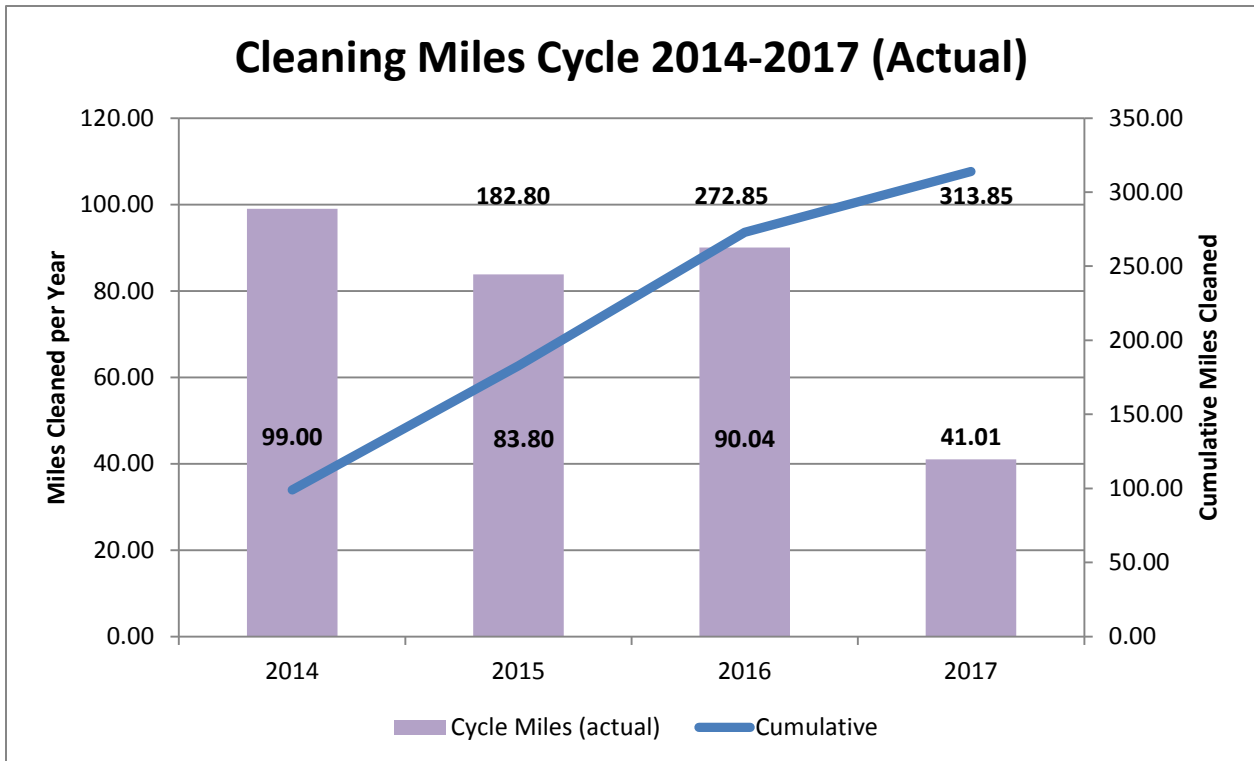
- We, with contractors and City efforts, started the installation project for 2 new trash capture devices at 8th st near Potrero Ave and at 27th st and Pierson Ave near the Moody Underpass. The estimated completion of this project is September 2017.
- We are currently working on connectivity gaps #8 project for the City of Richmond in an effort to know where the pipes are coming from or where they lead to.

Collection Systems Monthly Performance Indicators

Veolia is in the 8th year of a 10-year CCTV cycle. Cycle start date was January 1, 2010.



Veolia is in the final year of a 4-year sewer cleaning cycle. Cycle start date was January 1, 2014. Cumulative footage exceeds the goal to-date.



June, 2017

Sanitary System Performance Indicators

Table 2

Performance Indicator	Monthly Actual	Target/Limit
Service Calls (Public Facilities/Assets)	17	N/A
Service Call Response Time (minutes)	<30	<30
Private Lateral Service Calls; Regular/After Hours	8/2	N/A
Regular/OT Hours Spent on Private Lateral Calls	16/4	N/A
Point Repairs Completed	2	N/A
Manhole Inspections	0	N/A
Manhole Repairs	0	N/A
CCTV (Closed Circuit TV) (ft.)	7,874	7,000
GPS Surveys	0	As needed
Cleaning (ft.)	31,254	25,000
Cleaning QA/QC Events	2	4
SSOs for current month – Mainline	1	10/yr
Total Mainline SSO Volume (gallons)	50	0
Total Mainline SSO Volume Recovered (gallons)	40	100%
% Mainline SSO Volume Recovered	80%	100%
# SSOs – Wet Weather (localized capacity issue)	0	0
# SSOs – Engineered Overflow Structure	0	0
Total SSO Volume from Engineered Overflow Structure	0	N/A
SSOs – Private Laterals	0	N/A
General Maintenance	5	N/A
Sewer Lift Station PMs	105	N/A
Potential SSOs Eliminated due to SmartCover Monitors	0	N/A
SSOs – Mainline – Resulting in Property Damage	0	0
Total Wet Weather SSOs Year to Date	35	0
Total Dry Weather SSOs Year to Date	3	10 - Baykeeper
Number and Percentage of SSOs During 2017 with Discharge Reaching Storm Water Conveyance	37 of 38 - 97%	N/A

Storm Water System Performance Indicators

Table 3

Performance Indicator	Monthly Actual	Target/Limit
Storm Point Repairs	0	N/A
Storm Manhole Repairs	0	N/A
Storm Manhole Inspections	0	N/A
Storm Service Calls	4	N/A
Storm CCTV (ft)	0	N/A
Storm GPS Surveys	0	N/A
Storm Pipe Cleaning (ft)	227	N/A
Storm General Maintenance Cleaning (Linear feet of V-Ditches, Culverts or Creeks)	0	N/A
Pump Stations/Inlet/Outlet Channels Cleaned	0	N/A
Cash Basins/inlets/storm drains Cleaned	23	N/A
Storm Vaults Cleaned/Inspected	0	N/A
GSRD (trash capture device) Cleaning/Inspections	1	4/year
Flap Gate/Duck Bill Inspections	0	4/year
Storm Water Pump Station PMS	79	N/A

Capital Improvement Program

Electrical Upgrade Project Construction

- Central Sierra continued work on Site Security Lighting Foundations
- Continued working with PG&E in preparation for new site pole installation

13th Street & Dunn and 23rd Street Rehabilitation Projects

- The 13th Street & Dunn project has been combined with the 23rd Street Sewer Replacement and was re-bid in June 2017. Six bids were received on June 23, 2017. The engineer's estimate was \$10.1M; apparent low bidder is W.R. Forde at \$8.1M. Currently working on contract award and start up. Start of construction is anticipated in late July or early August 2017.

Cutting, Carlson, and Hoffman Boulevard Project Designs

- This project replaces pipelines with NASSCO PACP Structural Grade 4 and 5 defects in the sewersheds that flows to Cutting Boulevard. Reduction of inflow and infiltration will reduce the need to upsize the Cutting Boulevard interceptor, thereby reducing overall cost and construction impact to the City.
- 90 percent design documents (VWHA) for Cutting/Carlson Boulevard are in progress and require completion of the remainder of CCTV inspections; Hoffman is 100% complete. Bidding for both projects will occur after the City receives approval for SRF funding.

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Richmond Trash Capture Devices Project (Design)

- This project involves installing two below-ground, flow-through treatment devices that use multiple treatment processes to screen, separate and trap trash, debris, sediment, hydrocarbons and other pollutants from stormwater runoff
- Contech Engineered Solutions and designer engineers BKF met with Veolia and City staff to review two specific locations targeted for these devices
- The project is expected to go out to bid in late July/early August with construction projected for September 2017

Sludge Leachate Line Condition Assessment

- Consultant V&A completed field reconnaissance
- V&A is finalizing their work plan
- Consultant is working to resolve issues re: spoils and groundwater from the excavations

WWTP Facility Plan Project

- Carollo provided as-needed support for the CWSRF loan applications

WWTP Critical Improvements Project Design

- Carollo continued preparation of the 100% design deliverable.
- Analyzed results of process sampling effort conducted by plant staff in March 2017

WWTP Perimeter Site Evaluation and Topo Survey

- Consultant NCE completed topographic survey
- Data collection – ongoing
- Began discussions to add hillside slide protection to Project scope – including initial site walk to define basic project area