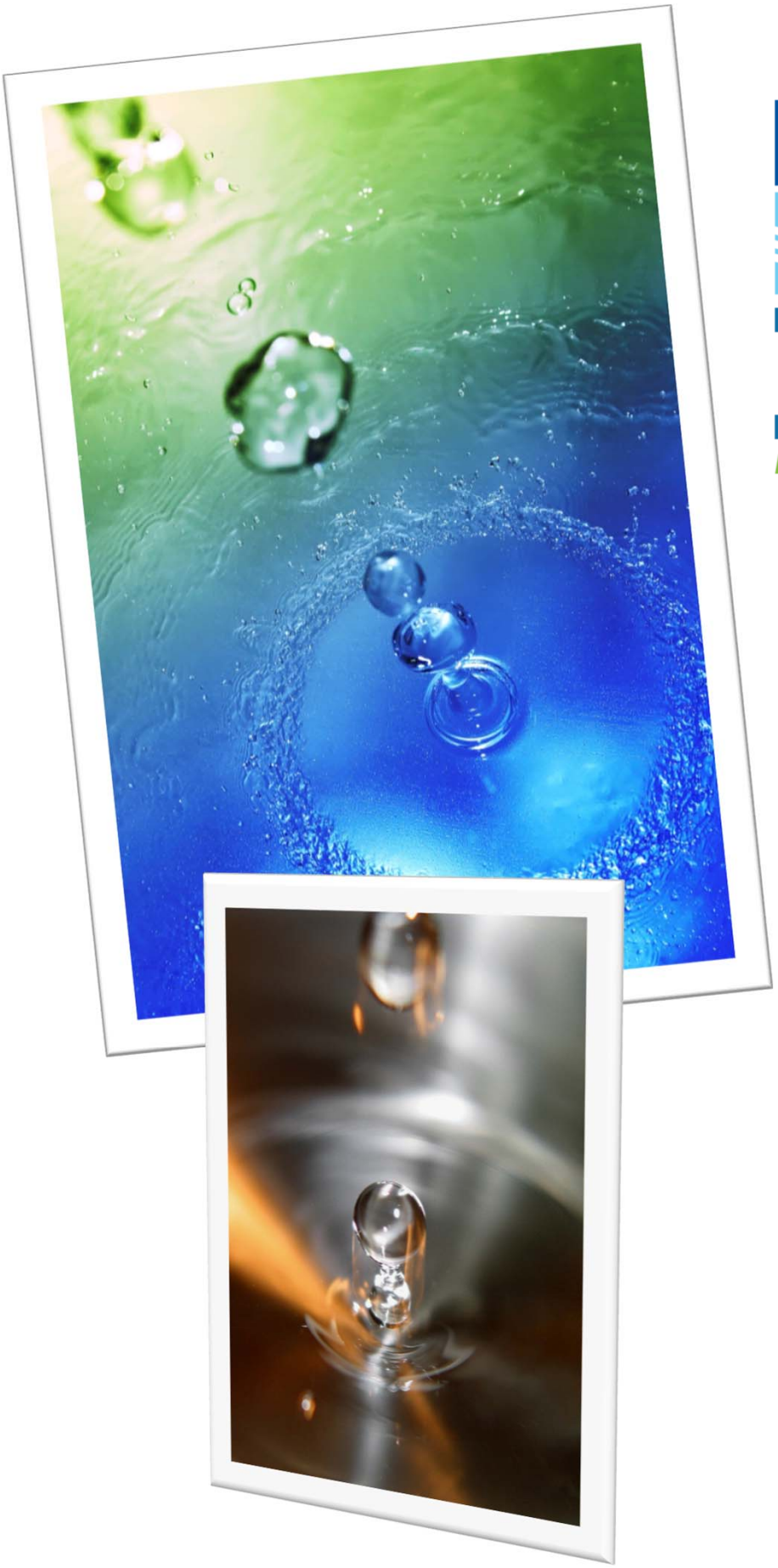

CITY OF STOCKTON

MUD

MUNICIPAL UTILITIES DEPARTMENT

Monthly Operations and Maintenance Report

August 2016

Stockton All-America City 2015 2004 1999

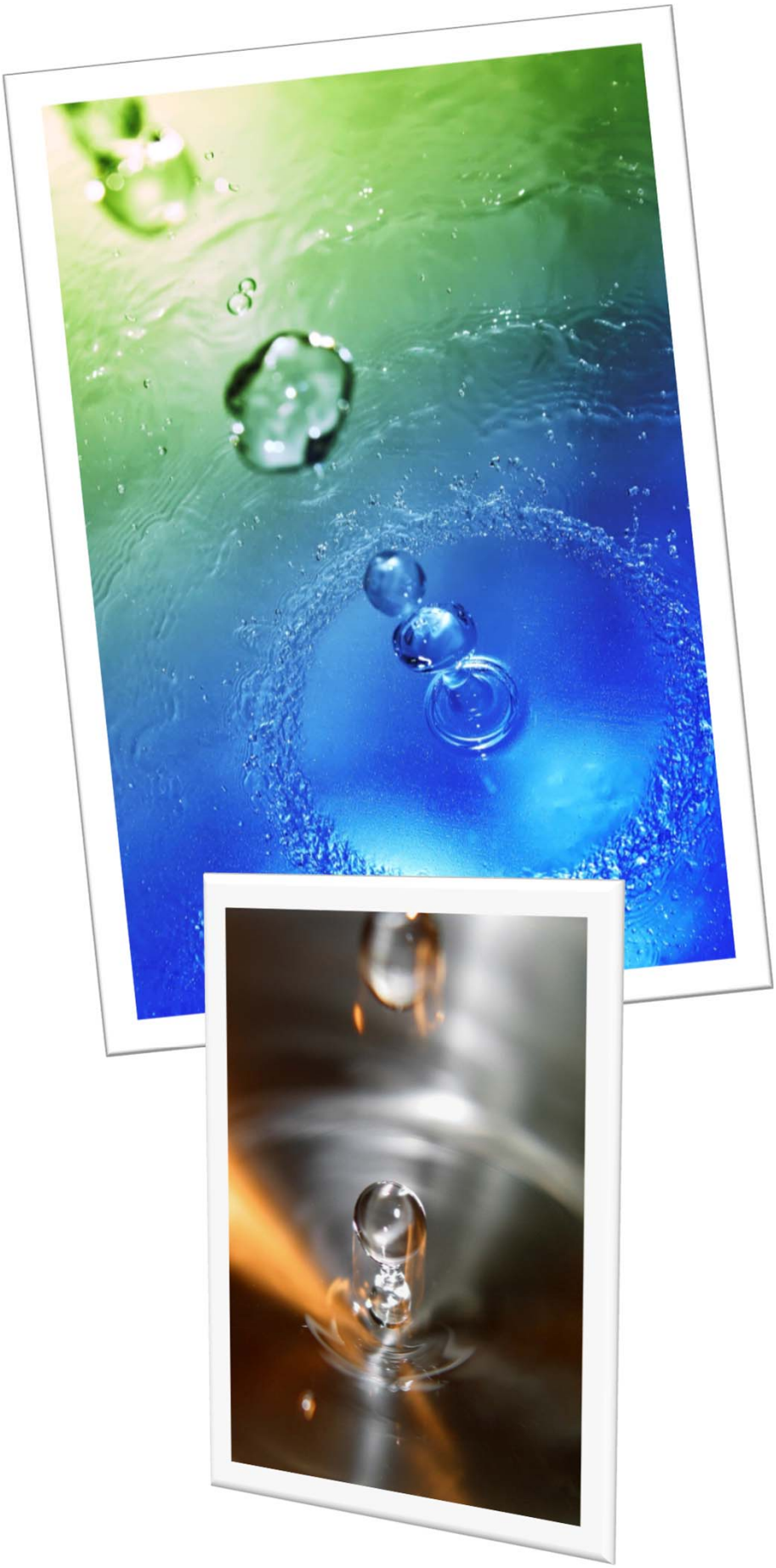

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Table of Contents

Section Page

Acronyms and Abbreviations

ACRONYM	DEFINITION
- A -	
ABS	Acrylonitrile Butadiene Styrene
AED	Automated External Defibrillator
AF	Acre Feet
AICPA	American Institute of Certified Public Accountants
AL	Action Levels
ANSI	American National Standards Institute
APCD	Air Pollution Control District
APN	Assessor Parcel Number
APs	Action Plans
APSA	Aboveground Petroleum Storage Act
AQMD	Air Quality Management District
ARB	Air Resources Board
ARV	Air Relief Valve
ASDWA	Association of State Drinking Water Administrators
ATSDR	Agency for Toxic Substances and Disease Registry
AWWA	American Water Works Association
- B -	
BACC	Bay Area Chemical Consortium
BACM	Best Available Control Measure
BCP	Business Continuity Plan
BFP	Belt Filter Press
BMP	Best Management Practice
BOD	Biochemical Oxygen Demand
BOD_5	Standard Biochemical Oxygen Demand – 5 day
BOO	Build-Own-Operate
BOT	Build-Own-Transfer
BPMS	Backflow Prevention Management System
BTU	British Thermal Unit
- C -	
CAC	California Administrative Code
CAFR	Comprehensive Annual Financial Report
CalARP	California Accidental Release Prevention
Cal-EMA	California Emergency Management Association

ACRONYM	DEFINITION
Cal-EPA	California Environmental Protection Agency
Cal/OSHA	California Division of Occupational Safety and Health
CAMAL Net	California Mutual Aid Laboratory Network
CASA	California Association of Sanitation Agencies
c/b or cb	Catch Basin
CBOD	Carbonaceous Biochemical Oxygen Demand
CCC	Criterion Continuous Concentration
CCO	Contract Change Order
CCR	California Code of Regulations
CCTV	Closed Circuit Television
CDC	Centers for Disease Control and Prevention
CDPH	California Department of Public Health
CEQA	California Environmental Quality Act
CERS	California Environmental Reporting System
CFE	Combined Filter Effluent
CFR	Code of Federal Regulations
cfs	Cubic Feet per Second
CH_4	Methane
CIEMP	Capital Improvement and Energy Management Plan
C.I.I.	Commercial, Institutional, Industrial
CIP	Capital Improvement Project
CIWMB	California Integrated Waste Management Board
CM	Construction Manager
CMC	Criterion Maximum Concentration
CO	Carbon Monoxide
CO	Correction Order
COD	Chemical Oxygen Demand
COP	Certificate of Participation
CoS	City of Stockton
CCB	Chlorine Contact Basin
CIP	Capital Improvement Projects

ACRONYM	DEFINITION
CMMS	Computerized Maintenance Management Systems
CPFF	Cost Plus Fixed Fee
CPIF	Cost Plus Incentive Fee
CPPC	Cost Plus Percentage
CPR	Cardiopulmonary Resuscitation
CQA	Construction Quality Assurance
CQC	Construction Quality Control
CSO	Combined Sewer Overflow
CSPA	California Sportfishing Protection Alliance
CSR	Customer Service Request
CTG	Control Techniques Guidelines
CUWCC	California Urban Water Conservation Council
CVFPB	Central Valley Flood Protection Board
CWEA	California Water Environment Association
- D -	
DO	Dissolved Oxygen
DAF	Dissolved Air Flotation
DAFT	Dissolved Air Flotation Thickener
DAT	Damage Assessment Team
dBA	Decibels (A weighted)
DBP	Disinfection Byproducts
DPH	Department of Public Health
DOT	Department of Transportation
DWSP	Delta Water Supply Project
DWTP	Delta Water Treatment Plant
- E -	
EC	Environmental Control Division
EC	Effective Concentration
ECTDS	Electrical Conductivity and Total Dissolved Solids
EDU	Equivalent Dwelling Unit
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ELAP	Environmental Laboratory Accreditation Program
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
EPA	Environmental Protection Agency
EPC	Engineer, Procure, Construct
EPT	Enhanced Primary Treatment
ERAP	Emergency Response Action Plan
ERP	Emergency Response Plan

ACRONYM	DEFINITION
- F -	
FA	First Aid
FBI	Federal Bureau of Investigation
FEMA	Federal Emergency Management Agency
FFY	Federal Fiscal Year
FFP	Firm Fixed Price
FIP	Federal Implementation Plan
FOG	Fats, Oils, and Grease
FY	Fiscal Year
- G -	
GAAP	Generally Accepted Accounting Principles
GAAS	Generally Accepted Auditing Standards
GAO	General Accounting Office
GAS	Government Auditing Standards
GASB	Governmental Accounting Standards Board
GBT	Gravity Belt Thickener
GIS	Geographic Information System
GO	General Obligation (bonds)
gpcd	gallons per capita-day
gpd	gallons per day
gpm	gallons per minute
- H -	
H_2S	Hydrogen Sulfide
HAA or HAA5	Halo Acetic Acids
HAP	Hazardous Air Pollutant
HAZMAT	Hazardous Material Response Team
HCFC	Hydrogenated Chlorofluorocarbon
HET	High Efficiency Toilet
HHS	Health and Human Services
HOA	Home Owners' Association
HS	Homeland Security
HSAS	Homeland Security Advisory System
- I -	
I&C	Instrumentation and Control
IC	Inhibition Concentration
IC	Incident Commander
ICS	Incident Command System
I/I	Infiltration/Inflow
IPP	Industrial Pretreatment Program

ACRONYM	DEFINITION
IO	Information Officer
IPM	Integrated Pest Management
IT	Information Technology
- J – K -	
JPA	Joint (exercise of) Powers Authority
- L -	
LCR	Environmental Protection Agency's Lead Copper Rule
LEPC	Local Emergency Planning Commission
LGRS 80	State Controller's Report
LO	Liaison Officer
LPoC	Laboratory Point of Contact
LRAA	Locational Running Annual Average
LRN	Laboratory Response Network
LRO	Legally Responsible Official
- M -	
MACT	Maximum Achievable Control Technology
MBAS	Methylene Blue Active Substances (foaming agents)
MCE	Maximum Credible Earthquake
MCL	Maximum Contaminant Level
MFE	Mixed Final Effluent
MG	Million Gallons
mgd	million gallons per day
mg/L	milligrams per liter
MIL	Million
MMF	Multi Media Filters
MOU	Memorandum of Understanding
MPE	Maximum Probable Earthquake
MPF	Maximum Probable Flood
MPN	Most Probable Number
MRP	Monitoring and Reporting Program
MSDS	Material Safety Data Sheets
MUD	Municipal Utilities Department
- N -	
NaOCl	Sodium Hypochlorite
NaOH	Sodium Hydroxide
NBT	Nitrifying Biotower
NH_3-N	Ammonia Nitrogen
NIMS	National Incident Management Systems

ACRONYM	DEFINITION
NIPC	National Infrastructure Protection Center
NIOSH	National Institute for Occupational Safety and Health
NOD	Nitrogenous Oxygen Demand
NOEC	No Observed Effect Concentration
NOEL	No Observed Effect Level
NOI	Notice of Intent
NOT	Notice of Termination
NOV	Notice of Violation
NOX	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NRC	National Response Center
NRR	Noise Reduction Ranking
NRWA	National Rural Water Association
NSPAF	North Stockton Pipeline Ammonia Feed
NTC	Notice To Clean
NTU	Nephelometric Turbidity Units
NWS	National Weather Service
- O -	
O_3	Ozone
O&M	Operations & Maintenance
OMB	Office of Management and Budget
OSHA	Occupational Safety and Health Administration
OCT	Operator Certification Training, Inc.
- P -	
PACP	Pipeline Assessment Certification Program
PAH	Polynuclear Aromatic Hydrocarbon
PCB	Polychlorinated biphenyl
PERL	Pacific EcoRisk Lab
PFRP	Processes to Further Reduce Pathogens
PG&E	Pacific, Gas, and Electric
PIDS	Primary Influent Distribution Structure
PLC	Programmable Logic Controllers
PLSD	Private Lateral Sewage Discharge
PM	Preventive Maintenance

ACRONYM	DEFINITION
PM-10	Particulate Matter <10 microns
PMP	Probable Maximum Precipitation
PMSD	Percent Minimum Statistical Difference
POC	Pollutants of Concern
POL	Petroleum, Oil, and Lubricant
POSM	Pipeline Observation System Management.
POTW	Publicly Owned Treatment Works
PPE	Personal Protective Equipment
ppm	parts per million
PSMP	Process Safety Management Plan
PSRP	Processes to Significantly Reduce Pathogens
PVC	Polyvinyl Chloride
- Q -	
QA	Quality Assurance
QC	Quality Control
- R -	
RACM	Reasonably Available Control Measures
RACT	Reasonably Available Control Technologies
RE	Resident Engineer
REACON	Recycling Energy Air Conservation
RFP	Request for Proposal
RFQ	Request for Qualifications
RMP	Risk Management Plan
RMP	Regional Monitoring Program
RO	Reverse Osmosis
ROW	Right of Way
ROWD	Report of Waste Discharge
RPR	Resident Project Representative
RQ	Reportable Quantity
RSP	Raw Sewage Pump
RST	RS Technical - The name of a company that makes television inspection equipment for sewer lines, and the TV equipment used by MUD.
RTU	Remote Terminal Units
RWCF	Regional Wastewater Control Facility

ACRONYM	DEFINITION
RWQCB	Regional Water Quality Control Board
- S -	
SAR	Sodium Adsorption Ratio
SAWS	Stockton Area Water Suppliers
SCADA	Supervisory Control and Data Acquisition
SCBA	Self-contained Breathing Apparatus
SEMS	Security and Emergency Management System
SEWD	Stockton East Water District
SIP	State Implementation Plan
SJCEHD	San Joaquin County Environmental Health Department
SJVAPCD	San Joaquin Valley Air Pollution Control District
SMARTS	Storm Water Multiple Application and Report Tracking System
SO_2	Sulfur Dioxide
SOP	Standard Operating Procedure
SPCC Plan	Spill Prevention, Control, and Countermeasures Plan
SS	Settleable Solids
SSES	Sewer System Evaluation Survey
SSMP	Sewer System Management Plan
SSO	Sanitary Sewer Overflow
SSORP	Sanitary Sewer Overflow Response Plan
STEP	Septic Tank Effluent Pumping
STP	Sewage Treatment Plant
SUA	Stockton Urbanized Area
SWMP	Stormwater Management Plan
SWQCCP	Stormwater Quality Control Criteria Plan
SWRCB	State Water Resources Control Board
- T -	
T&M	Time & Materials (contract)
TC	Total Carbon
TDH	Total Dynamic Head
TDS	Total Dissolved Solids
TTHM	Total Trihalomethanes
TIE	Toxicity Identification Evaluation

ACRONYM	DEFINITION
Title V	Federal Clean Air Standards
TKN	Total Kjeldahl Nitrogen
TMDL	Total Maximum Daily Load
TOC	Total Organic Carbon
TOD	Total Oxygen Demand
TSS	Total Suspended Solids
TU_c	Chronic Toxicity Unit
- U – V -	
UDRW	Urban Discharge Receiving Water
UERM	Utility Emergency Response Manager
UEOCM	Utility Emergency Operations Center Manager
U.S. EPA	United States Environmental Protection Agency
USA	Underground Service Alert
VA	Vulnerability Assessment
VAR	Vector Attraction Reduction
VCP	Vitrified Clay Pipe
VE	Value Engineering
VFD	Variable Frequency Drive
VOC	Volatile Organic Compound
VSS	Volatile Suspended Solids
VWN	Verbal Warning Notice
- W – X – Y – Z -	
WaterISAC	Water Information and Security Analysis Center
WDR	Waste Discharge Requirements
WERF	Water Environment Research Foundation
WFO	Water Field Office
WID	Woodbridge Irrigation District
WLA	Waste Load Allocation
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant

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Executive Summary

Summary

This report is a summary of the information management records of the Water Resources; Water Distribution, Treatment & Production; Wastewater Treatment; Wastewater Collections; Environmental Control; Laboratory, Engineering; Stormwater; and Administration Division activities within the City of Stockton, Municipal Utilities Department (MUD) for August 2016. It includes statistical data and narrative descriptions of reportable activities, events, and issues.

Water Resources

The Water Conservation Program continued to promote water saving programs and incentives in accordance to best management practices and State-mandated water use reductions. Recent State legislation allowed for urban water suppliers to self-certify water conservation goals. The City submitted the required forms on June 22, 2016, and the resulting self-certified water conservation goal was 0%.

The City Council declared a Stage 1 Water Shortage Emergency on September 23, 2014, requiring a mandatory 10% reduction in water use. Since current City Council policy requires mandatory reductions in water use, the City continues to promote water conservation to its urban water customers, and meet water conservation goals. In August, an 11% reduction in water use was achieved from the City's water customers, when compared to August 2013.

Water Distribution, Treatment, and Production

Drinking water treated at the Delta Water Treatment Plant (DWTP), produced from groundwater wells and delivered from Stockton East Water District to the City's North, South and Walnut Plant distribution systems totaled approximately 1,158 million gallons and averaged 37 million gallons per day for August. The DWTP started river diversions from the Delta on July 13, 2016, and discontinued surface water deliveries from the Woodbridge Irrigation District on August 31.

Monthly bacteriological sampling was completed for 221 sites in the City's North, South and Walnut Plant distribution systems, and all the results were absent of bacteria.

Lead and copper sampling, as part of the U.S. Environmental Protection Agency Lead and Copper Rule, were taken in 50 residential homes in August. Lead and copper sample results are pending from the private laboratory.

Wastewater Treatment

Wastewater Operations continues to meet the treatment and discharge requirements of the National Pollutant Discharge Elimination System (NPDES) permit while treating 28.6 mgd of influent sewage. Work continues to transition off the use of chloramination as part of the wastewater treatment process. Special Trihalomethanes testing continues to improve the chemical dosing. Cleaning has been completed on Digester 4. Once Digester 4 is back in service, cleaning will begin on Digester 5.

Wastewater Collections

Nine Sanitary Sewer Overflows (SSOs) occurred. Seven were Category 3 SSOs, one was a Category 1 and one a Category 2. All pipes and areas affected were cleaned to ensure capture and return of the pollutants to the sanitary sewer system with the exception of the one Category 1 spill that was directly discharged into a waterway.

Environmental Control

The Fats, Oils, and Grease (FOG) Program is in its seventh year of restaurant inspections. AS400 data entries are made on a daily basis as officers complete their inspections. The Division is initiating the implementation of a commercial FOG software database system for use in 2016.

Laboratory

The lab analyzed 906 samples for 3,734 analyses. Contract labs analyzed 111 samples for 401 analyses. Figures 6.A and 6.B display the results of the samples and analyses. Figure 6.C shows the number of samples processed for permit compliance, process control (plant performance), and drinking water regulatory compliance. There were 167 samples for NPDES permit compliance, 231 samples for process control, and 506 samples for drinking water compliance.

California Environmental Laboratory Accreditation Program (ELAP) is proposing a change of standard to improve the quality of the data produced and announced a 25% increase in yearly fees effective sometime this year.

The lab continues to provide on-going support for additional sampling and analyses to consultants working on wastewater and water permit compliance items.

Engineering

There were 20 development reviews received and 9 completed and returned during the month of August. SCADA – Outfall Control Improvements (M14010) has a tentative project award on the September 27, 2016, Council agenda. Swenson Park Access Road Rehabilitation (M16015) Plans, Specifications, and Estimates (PS&E) documents are being finalized. Tentative project bid advertisement is mid-September 2016.

Stormwater

On August 5, staff released a request for sealed bids for the routine inspection and maintenance of the eight storm drainage basins operated under the City's storm drainage maintenance assessment districts. A mandatory job tour/walk was hosted by staff on August 18, for all perspective bidders. Bids are to be submitted by and opened by the Clerk's Office on September 8, 2016. Maintenance activities include mowing of weeds, pest control, compaction of siding, discing of basin bottoms, and trash removal and disposal.

The Central Valley region wide Municipal Separate Storm Sewer Systems (MS4s) General Permit will be effective on October 1, 2016, pending Federal Environmental Protection Agency approval. All Phase I (more than 100,000 in population) communities in the California Central Valley will be required to seek permit coverage under this permit with the submission of a Notice of Intent (NOI) to enroll. The NOI will need to be filed by November 1, 2016. The City's "interim" permit and its terms remain in effect until the Central Valley Regional Water Quality Control Board (RWQCB) issues a Notice of Applicability and the City is approved to discharge stormwater/urban discharge to waters of the State under the new region-wide permit.

Once approved for coverage, the City will be required to conduct a Reasonable Assurance Analysis (RAA) and update its Stormwater Management Plan (SWMP). The RAA is a new permit requirement and is referred to as a "recipe for compliance." Through the RAA process, the City will need to evaluate and prioritize the nonstructural and structural control measures that it will be implementing to yield/ensure compliance under the permit, reduce water pollution, and improve overall water quality. It is anticipated to take approximately 2-3 years to complete the RAA and revisions to the SWMP.

As required under the terms of the current permit, staff submitted its annual report to the RWQCB on August 31, 2016.

Inspections of construction sites continue to be a priority for the City. There were 25 stormwater inspections conducted at active construction sites. There were eight Verbal Warnings, eight Correction Orders, five Notices to Clean, and one Notice of Violation. The RWQCB received no referrals by the City of Stockton during this period.

Inspections of industrial, commercial facilities and residential complaints and field observation resulted in three Administrative Citations. One inspection was forwarded to the RWQCB during this period.

Administration

There were three unsafe conditions, zero vehicle accidents, and two work related injuries. A total of 97.50 safety-training hours were provided to staff this month through tailgate sessions and specialized training. Recruiting efforts have been active to fill openings due to resignations and retirements. Finding and retaining qualified candidates continues to be difficult. Current staff totals 195 of the approved 218 positions. Overtime decreased from last month.

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Water Resources

Operational Activities

The Water Resources Division is responsible for overall water supply planning for the Water Utility. Those duties include contracting for purchased water, water conservation, utility planning and reporting, regional water resources planning, budgeting, capital improvement planning, regulatory compliance, and supporting the Community and Economic Development Departments.

Water Resources staff supports the Delta Water Treatment Plant and Water Distribution by employee recruitments and safety training; preparing budgets; capital improvements; procuring materials, chemicals, vehicles and supplies; and negotiating various maintenance and service contracts.

Chloramines were introduced into the North distribution system on January 13, 2016 in order to comply with State and Federal disinfection byproduct regulations. Disinfection byproduct monitoring is conducted quarterly. The U.S. Environmental Protection Agency Triennial Lead and Copper sampling was completed in August. The South and Walnut Plant service areas continue using free chlorine as a disinfectant in the distribution systems.

Treated surface water from the Delta Water Treatment Plant (DWTP) provides the majority of the City's water service areas' drinking water. Water purchased from the Stockton East Water District and the City's groundwater wells supplement DWTP's surface water.

The Stockton East Water District (SEWD) was informed by the Bureau of Reclamation that they would be receiving 0% of their annual allocation from the New Melones Reservoir, but 20,000 acre-feet of water from New Hogan Reservoir and five groundwater wells within SEWD's property are available to the Stockton Area Water Suppliers, which is comprised of the City of Stockton, California Water Service Company and San Joaquin County.

The Governor's Proclamation declaring a State of Emergency in the State of California due to severe drought conditions has led staff to plan for extended drought conditions and increased water conservation messaging for this year. The City water utility's conservation target was mandated at 28% by the State Water Resources Control Board, using 2013 as a baseline. On May 19, 2015, an emergency ordinance was passed by the City Council for additional water conservation measures to ensure compliance with the State Water Resources Control Board's emergency water conservation measures. On April 1, 2016, the State Water Resources Control Board lowered the City water utility's water conservation savings to 26%, down from 28%. Recent State legislation allowed for urban water suppliers to self-certify water conservation goals. The City submitted the required forms on June 22, 2016, and the resulting self-certified water conservation goal was 0%.

The City Council declared a Stage 1 Water Shortage Emergency on September 23, 2014, requiring a mandatory 10% reduction in water use. Since current City Council policy requires mandatory reductions in water use, the City continues to promote water conservation to its urban water customers. For the month of August, the City achieved an 11% reduction in water consumption when compared to the same month in 2013.

In the following sections, a summary of water conservation programs and incentives are presented.

Outreach and Education

As part of the City's efforts to educate the community, customers are encouraged to notify the City when they witness water waste. This allows members of the community and staff to identify potential water leaks, excessive watering, and/or misuse of water supplies. This is done in an effort to work cooperatively toward a solution. There were 48 complaints received for the month of August, and staff was able to respond to and resolve 48 complaints. Table 1.1 provides a summary of these activities.

Outreach and education was achieved through monthly utility bill inserts, print and web-based publications. Table 1.2 illustrates the number of impressions made as part of these outreach efforts.

The San Joaquin County Master Gardener Program met in August. This group typically meets monthly at the DWTP on the second Saturday of each month.

School Programs

Through participation in the Stockton Area Water Suppliers (SAWS), local area schools are offered onsite assemblies, in-class presentations and after-school programs. The City receives an annual report on the SAWS Water Education Program that summarizes the programs and information provided, the number of students that were reached, and feedback from teaching professionals. For the 2015/2016 school year, the SAWS Water Education Program reached a total of 30,086 students and participants; 24,350 through in-class event and after-school programs, and 5,736 through the Zun Zun assembly program.

Water Use Surveys

In May 2009, in-home water use surveys became available to Stockton residents when staffing resources are available. This offered residents the opportunity to review one-on-one with Water Conservation staff their current water use practices and methods by which residents can save both water and money. In August 2011, self-certification water use surveys became available during times when staffing resources are limited. Through both surveys, customers are able to evaluate their water use and calculate estimated savings with the use of water efficient devices. Currently, only the self-certification water use surveys are available for customers due to limited staffing.

Table 1.3 identifies the number of surveys requested and completed. At the end of each residential survey, water efficient devices are provided to respective customers. A summary of water saving devices distributed is provided in Table 1.4.

Incentives and Rebates

The High Efficiency Toilet (HET) Direct Install Program was approved by City Council to reduce water use by commercial, industrial, and institutional customers, and ultimately, assist in reducing their cost of doing business. The program covers the material and installation cost of replacing older, inefficient toilets with EPA WaterSense labeled devices through local plumbing contractors. The program has exhausted its funding; and staff will be recommending to the City Council the addition of funding to the program in the near future.

Table 1.5 identifies the current number of installations for this program to-date, including estimated water savings.

Landscape Programs

Program development continues to assist large landscape customers in identifying ways to reduce water use. Upon request, water conservation staff will meet with homeowners' associations and other large landscape users to evaluate water use and provide recommendations for improvement.

Water conservation staff continued the pilot program, which calculates and distributes ongoing water use reports to large landscape sites. These reports compare actual water use to a budget benchmark based on site-specific characteristics and real-time weather from approximately 120 sites. To date, three field surveys have been completed. Survey customers were provided with a comprehensive report of findings and recommendations. The ultimate goal of the program is to improve water efficiency among large landscape customers.

There is an internet resource, www.stockton.watersavingplants.com, made available free of charge through the Water Conservation Program. This website provides information on water efficient gardens, resources, and watering tips. The site also allows users to plan their own water efficient garden online.

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Water Treatment, Production, and Distribution

Operational Activities

The City's Delta Water Treatment and Water Distribution Divisions are responsible for the treatment, production, operation, and maintenance of the City of Stockton's Water Treatment Plant and Distribution Systems. The distribution systems use a combination of surface water - treated and delivered by the City's water treatment plant from the Sacramento/San Joaquin Delta and the Mokelumne River, groundwater wells, and surface water treated and delivered by a water wholesaler - Stockton East Water District (SEWD) - from the New Hogan and New Melones Reservoirs.

Staff is responsible for treating and distributing potable drinking water to more than 48,000 service connections. This is done through a networked, looped system of wells, reservoirs (above-ground storage tanks), pipelines, valves, and meters. The system is monitored and maintained 24/7 through electronic equipment, telemetry and manual operation. Adequate water pressure must be maintained throughout the system at all times for water quality, firefighting, industrial, commercial, and residential use. Leaks are a high priority and are usually investigated within an hour of the report. Water quality complaints, such as pressure, odor, taste, or color issues, are handled on a same-day basis.

Additional responsibilities include enforcement of the water conservation program, collecting water samples for regulatory compliance, implementation and monitoring of the City's Cross-Connection Prevention Program, reading more than 48,000 water meters for billing each month, investigating high bill complaints, performing fire flow tests, and the maintenance and repair of over 7,000 fire hydrants.

Regulatory

There were zero bacteriological water quality violations for the month.

For the month of August, 50 lead and copper samples, as part of the U.S. EPA Lead and Copper Rule, were collected from household taps in Stockton's water service area. Results for these lead and copper samples are pending from a private laboratory.

All sampling and monitoring pursuant to the Title 22 regulations was completed. A copy of the Title 22 monitoring results is included in Appendix A. The monthly coliform monitoring report was submitted to the State Water Resources Control Board Division of Drinking Water, Stockton Office on August 9. Table 2.1 presents a summary of the Coliform Monitoring results in the distribution system.

Water Treatment

The Delta Water Treatment Plant (DWTP) started taking water from the Delta on July 13, 2016, and continued to accept surface water deliveries from the Woodbridge Irrigation District and deliveries stopped on August 31. In August, DWTP treated and produced 752 million gallons for the North water system, and SEWD delivered 198 million gallons to the South distribution system. The plant met regulatory limits for Combined Filter Effluent (CFE), maintained at 0.1 Nephelometric Turbidity Units (NTU) at all times.

Water Production

Personnel met with a San Joaquin County inspector to inspect several well sites for compliance with the Hazardous Materials Management Plan (HMMP). There were no corrective action items noted during the site visits. Title 22 sampling was completed this month at wells through-out the north and south systems. Staff continued daily well/reservoir checks and maintenance throughout the month. Operational status for existing wells is shown on Table 2.2.

Water Production Summary

Table 2.3 and Figure 2.A illustrate water production in million gallons (MG) pumped from the City's two well production systems, DWTP, and purchased water delivered to the North, Walnut Plant, and South systems from SEWD. The SEWD North system total includes water purchased by San Joaquin County and wheeled through the City's system. Table 2.3A shows total influent for the Delta Water Treatment Plant by water source. The detail of the production report is included in Appendix A-2. The corresponding table from fiscal year 2015-2016 is presented for comparison.

Production/Consumption Summary

Table 2.4 and 2.5 present the overall summary of water production and consumption for the previous month, current month, and fiscal year-to-date. The corresponding table from fiscal year 2015-2016 is presented for comparison. The metered consumption figures are not available until after all billing is completed in the City's billing system and are not included in the current month column.

Stockton East Water District City/County North System total includes water purchased by San Joaquin County from SEWD and wheeled through the City's System. This sum also includes City water wholesaled to the County.

The unmetered water consumption quantities are based upon estimates made from observations and documentation provided by other City departments.

Chemical/Utility Consumption Summary

Table 2.6 presents a summary of chemical consumption in connection with operation of the production system, including the DWTP. Electricity totals for the wells, reservoirs, and booster station are now being reported separately. These totals are not available for the previous months. The corresponding table from fiscal year 2015-2016 is presented for comparison.

Table 2.7 presents a summary of utility consumption and outages in connection with operation of the production system, including the DWTP. Table 2.7 also shows power generated by the DWTP solar energy system. The corresponding table from fiscal year 2015-2016 is presented for comparison.

Water Distribution

Construction

Construction crews replaced seven 1-inch and three 1.5-inch service lines. Staff repaired a 6-inch and 8-inch main line. Construction staff continued to assist other crews replacing meters and repairing minor leaks when time permitted. Outside contractors were used once during the month on emergency breaks.

Hydrant

Crews repaired 11 hydrants. Repairs consisted of cap, O-ring, valve gasket, chain, and coupler repair/replacement. Table 2.8 presents a summary of the hydrant maintenance and other duties performed by the crew. Personnel replaced two hydrants due to vehicle accidents. Staff performed four fire flow tests and responded to three two-alarm fires. With help from water operators, the move from the hydrant shop, which was located at a former fire station, to the Water Field Office, was completed. In addition, routine maintenance consisting of marker replacement, valve location and weed control continued.

Customer Service

There were 48,900 water meters read for monthly billing. There were 894 meters turned-on or locked-off for account openings or closings. Crews responded to 51 high bill complaints. Staff continued to replace broken registers, repair damaged touch-read wires, and respond to various customer inquiries.

Maintenance

Crews responded to 103 service calls consisting of small meter leaks, emergency customer water shut offs, and answering customer water-related questions. Staff replaced 48 meters ranging from 5/8” to 2” in size. Personnel replaced 81 registers and installed seven new meters for new construction. Crews completed 110 miscellaneous work orders for meter, valve and meter box issues. Staff continued to assist customer service with monthly meter reading and construction crews on emergency service line repairs when needed.

Distribution

Staff performed monthly backflow tests/surveys, valve exercising, and air relief valve maintenance. Table 2.9 presents a summary of the valve maintenance program. Requests for hydrant meters for new construction continued to increase during the month. Personnel completed numerous underground service alert tickets with emphasis on the Thornton Road widening project. Staff assisted customer service with monthly meter reading when needed. Weekly bacteriological sampling continued throughout the month.

System Connections

Table 2.10 presents a summary of new meter installations applied to the reading routes. There may be a delay in applying the meter to the route once it has been installed, causing a difference from the actual number of new meter installations. The total number of active meter connections by size is presented in Table 2.11.

Water Quality Inquiries

Table 2.12 presents a summary of water quality inquiries and the corrective measures that were taken to resolve those inquiries.

Customer Services Operations

Table 2.13 presents a summary of the meters read during the month, and the account openings and closings.

Cross Connection Control Program

Table 2.14 presents the number of backflow devices in Stockton's service area and statistics for the number tested, installed, reactivated, and inactivated.

Staff continued cross connection survey efforts to identify and follow-up with water customers who are required to install backflow prevention devices on their water system. As the potential hazards are located, notices are sent to the locations with staff following-up and working to bring them into compliance. Table 2.15 presents the total number of cross connection surveys conducted for the fiscal year-to-date.

Wastewater Treatment

Operational Activities

The Wastewater Treatment Division is responsible for operating and maintaining the RWCF. The Deputy Director of Wastewater manages the division. The Assistant Director has been providing interim oversight since the position became vacant in June 2015. There are 28 Operations employees with three current vacancies. Recruitment for the vacant positions has begun and interviews will be scheduled soon. Operations staff works 24-hours a day, 7-days a week, treating more than 23 million gallons of sewage per day prior to discharge into the Delta.

Discharge Permit

All permit treatment limits were met. Table 3.1 presents a summary of influent and effluent discharge averages as compared with the National Pollutant Discharge Elimination System (NPDES) permit limits. The RWCF treated an average flow of 28.6 million gallons per day (mgd). Figures 3.A, 3.B, and 3.C are graphical representations of the year-to-date actual values for the flow and loading parameters. Prior year data is also shown for comparison.

Residuals Management

Table 3.2 presents a summary of the biosolids processed and disposed for the current month and year-to-date. Cleaning of Digester 4 has been completed, below the original estimated cost, due to the efforts of Operations staff de-watering the residual sludge prior to removal by contractors. Valve maintenance work has also been completed. Digester 4 will be recommissioned after the structural engineer completes the inspection report on the condition of the center stem. Once Digester 4 is back in service, crews will begin to dewater Digester 5 for cleaning.

Cake Solids

The Belt Filter Press is the wastewater treatment dewatering process that produces sludge cake solids. The sludge cake solids are collected, removed offsite, and applied to agricultural land. Figure 3.D presents actual values for the total percentage of cake solids produced.

Odor Control Practices

Bioscrubber air emissions are monitored routinely to ensure compliance with emission standards set by the San Joaquin Valley Air Pollution Control District under the Title V permit. Staff coordinates with Evoqua Water Technologies to determine dosage rates for the hydrogen peroxide addition on a weekly basis. Depending on the weather conditions, dosage rates could be determined twice per week. The proper dosage reduces the hydrogen sulfide and corrosion production in the plant influent wastewater, reducing the odors.

Oxidation Pond Levels

Table 3.3 presents a summary of the Tertiary Pond operating levels. This advanced secondary treatment process provides for increased metal removal from the effluent water, along with operational flexibility and storage capacity. The minimum level of freeboard in the tertiary treatment ponds is a requirement of the plant's NPDES permit and is monitored daily.

Chemical and Utility Consumption

Various chemicals are used in the treatment process. Chlorine and aqueous ammonia are used for disinfection. Polymer is used for coagulation to increase the removal of solids in various processes throughout the plant. A new polymer blending system was installed and put in service this month. The improved mixing should reduce polymer use, and subsequently reduce costs.

Sulfur dioxide is used to neutralize the chlorine used to disinfect the effluent prior to discharge to the river thus protecting water quality and wildlife. Staff has coordinated the installation of new holding tanks and pumps for the use of sodium bisulfite (SBS) in place of sulfur dioxide. The pumps are expected to arrive within five weeks. It is anticipated treatment can switch permanently to SBS from sulfur dioxide once the new pumps are installed and start-up testing protocols are passed. The current pumps are unreliable and cannot meet the dosing quantities required for treatment.

Efforts to improve the chloramination process continue with coordination between Operations, Maintenance, and Engineering staff. New holding tanks and dosing pumps for sodium hypochlorite have arrived and crews are currently installing the pipe.

Additional testing for Trihalomethanes is ongoing to provide data to adjust chemical dosing in the treatment process. Table 3.4 presents a summary of the chemical consumption for the wastewater treatment facilities.

The cogeneration engines burned digester gas this month. Efforts to return all three engines to operating condition continue. Table 3.5 summarizes the utility consumption at the RWCF.

Wastewater Collection Systems

Operational Activities

The primary responsibilities of the Wastewater Collection Systems Division are the maintenance, repair, and response to community concerns as they relate to the sanitary sewer systems within the City of Stockton.

Work orders are generated daily to address routine maintenance issues and public concerns. Each work order is categorized and addressed according to its priority.

Sanitary line maintenance work is primarily driven by preventive maintenance activities. The main focus of the daily activities are systematic cleaning of the sanitary system, followed by closed circuit television (CCTV) inspections, and responding to customer issues with the lower laterals.

Sanitary pump station maintenance is focused on repair and rehabilitation of the deteriorating infrastructure and implementing preventive maintenance measures. The current emphasis is on the testing, maintenance, repair, and replacement of air relief valves (ARV).

Regional Water Quality Control Board (RWQCB)

Nine Sanitary Sewer Overflows (SSOs) occurred. Seven were Category 3 SSOs, one was a Category 1 and one a Category 2. All pipes and areas affected were cleaned to ensure capture and return of the pollutants to the sanitary sewer system.

Details of the immediately reportable SSOs are listed in Table 4.1, with annual trend comparisons in Figures 4.A through 4.C.

Sanitary Sewer Overflows are categorized as follows:

Category 1 SSO – Discharges of untreated or partially treated wastewater of any volume resulting from a City's sewer system failure or flow condition that:

- Reach surface water and/or reach a drainage channel tributary to a surface water, or
- Reach a Municipal Separate Storm Sewer System (MS4); are not fully captured and returned to the sanitary sewer system; or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water, unless the storm drain system discharges to a dedicated stormwater or groundwater infiltration basin (e.g., infiltration pit, percolation pond).

Category 2 SSO – Discharges of untreated or partially treated wastewater greater than or equal to 1,000 gallons resulting from a City sanitary sewer system failure or flow condition that does not reach surface water, a drainage channel, or the MS4 unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.

Category 3 SSO – Category 3 SSOs are all other discharges of untreated or partially treated wastewater resulting from a City sanitary sewer system failure or flow condition.

Activities Summary

Collection System

Collections work includes line cleaning, CCTV inspection, main line and lower lateral repair, and preventive maintenance. SSO records indicate continued problems with lower lateral sections of the City's pipes. Staff has initiated a program to address maintenance issues with the lower laterals. The summary of maintenance work performed is shown in Table 4.2 and a comparative table of prior year activities is presented for comparison.

Customer Service

Table 4.3 presents a summary of the customer services activities performed. A table of prior year activities is also presented for comparison.

Residuals Management

Table 4.4 presents a summary of spoils activities (material taken to a dumpsite) in the repair and maintenance of the stormwater and wastewater pumping stations, and the RWCF. Data is gathered on how many loads of spoils are removed from the plant site, and the tonnage of all the loads hauled.

Odor Control Program

The City is continuing the odor and corrosion control pilot project on sanitary systems 7 & 8. There were two odor complaints this month; however, it was not in system 7 & 8. In the event there is an odor complaint, staff investigates to confirm if the odor complaint is associated with the City's sanitary sewer system and identify specific pipeline segments where the odors are coming from.

Pumping Facilities

Preventive maintenance on the sanitary stations continued. Pump impeller inspection and pump housing de-ragging continued at various sanitary sewer stations on a daily basis to keep the stations operating efficiently. Table 4.5 and 4.6 summarizes collection systems pump station maintenance activities.

In addition, the following work was performed:

- North Pump Sanitary Station – Rebuilt and installed the #2 sewage pump.
- North Pump Sanitary Station – Rebuilt and installed the #4 emergency sewage pump.
- Kelley Drive Sanitary Station – Removed #1 sewage pump motor for emergency repair.
- 14 Mile Sanitary Station – Removed #5 sewage pump for emergency repair.

Wastewater Facility

Preventive maintenance work continued at the Main Plant and Tertiary facility to ensure all treatment processes are checked regularly and run properly. Part of those activities is to maintain the cogeneration engines to offset the amount of power purchased for operations. Table 4.7 provides a breakdown of preventive and corrective maintenance activities at the Main Plant and Tertiary Plant. Maintenance and repair activities are ongoing, with highlights of recent activities including:

- Main Plant Belt Press – Removed, rebuilt, and installed #2 sludge pump.
- Main Plant Headworks – Replaced 15 broken paddles on grit channel #1.
- T-Plant Wetlands – Removed and replaced valve.

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Environmental Control

Operational Activities

The Environmental Control Division (EC) is tasked with the responsibility of protecting the City's wastewater collection system, treatment plant, and biological treatment processes from interference, pass-through, and sludge contamination. This is accomplished through a system of permitting, monitoring, and enforcement of regulated sewer dischargers. Permitted users include significant industrial dischargers, categorical industrial users, groundwater remediation project discharges, and hauled waste discharges.

Staff conducts inspections, takes samples of wastewater, reviews self-monitoring reports, writes permits, and enforces permit requirements as specified in Stockton Municipal Code, Chapter 13.08 (Pretreatment Ordinance).

Staff is also tasked with implementing the Fats, Oils, and Grease (FOG) Control Program. This program involves inspecting all food service establishments in the City's sewer service area to ensure compliance with Stockton Municipal Code Chapter 13.40 (FOG Control Ordinance).

Staff responds to stormwater illicit discharge complaints and hazardous material spills, which potentially threaten the City's stormwater collection system and receiving waters. These responses are required to ensure public safety, environmental protection, and compliance with Stockton Municipal Code Chapter 13.16 (Stormwater Ordinance).

Reports/Statistics

Table 5.1 represents statistics of all pretreatment, waste hauler, stormwater, and FOG Program activities on a monthly basis. Some items reflect the previous month’s data due to the timing of when the data is received.

There was one pretreatment enforcement action, no stormwater complaints, and no stormwater enforcement actions.

There was a slight increase to FOG initial inspections and an increase to FOG follow-up inspections in comparison to last month.

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Laboratory

Operational Activities

The Laboratory Division collects and analyzes samples for National Pollutant Discharge Elimination System (NPDES) permit compliance for the Wastewater Division, and analyzes and oversees contract lab analyses for Title 22 compliance for the Water Division.

The Regional Wastewater Control Facility (RWCF) Laboratory located on 2500 Navy Drive is certified under the California State Water Resources Control Board (CA_SWRCB) Environmental Laboratory Accreditation Program (ELAP) Certificate # 2693 in the following fields of testing:

Field of Testing 101: Microbiology of Drinking Water

Field of Testing 102: Inorganic Chemistry of Drinking water

Field of Testing 107: Microbiology of Waste Water

Field of Testing 108: Inorganic Chemistry of Waste Water

Field of Testing 113: Whole Effluent Toxicity of Wastewater

The Delta Water Treatment Plant (DWTP) Laboratory located on 11373 N. Lower Sacramento Road in Lodi is certified under the CA_SWRCB ELAP Certificate #2988 in the Field of Testing 101: Microbiology of Drinking Water.

Wastewater Sampling and Analyses

Effluent Monthly Acute Static-renewal Toxicity Testing with Rainbow Trout

The monthly test had 100% survival of Rainbow Trout. Results are shown in Table 6.1. Analyses were done by Pacific EcoRisk Laboratory (PERL).

Effluent Quarterly Chronic 3-Species Toxicity Testing – Accelerated Testing

Aqua Science did routine quarterly testing in August. Results of the testing are shown in Tables 6.2, 6.3, and 6.4. Final results will be reported in September, the EFF-001 sample produced significant reproductive toxicity in Ceriodaphnia dubia (>1.0 TUc; 100/NOEC). This triggered the accelerated monitoring for September 2016.

The next quarterly monitoring is scheduled for November 2016.

Effluent Ammonia Testing

The Waste Discharge Requirements (WDR) contains a requirement to monitor the treatment plant effluent three times a week. The permit contains limits of monthly average (2.4 mg/L) and daily maximum (9.6 mg/L) requirements. There were no daily maximum limit exceedances as shown on Table 6.5. The monthly average was 0.60 mg/L, the monthly maximum was 0.52 mg/L.

Drinking Water Sampling and Analysis

Routine domestic water quality for finished water and raw water wells was completed. All samples have reported absence for Total Coliform and/or E.coli indicating that the regulatory limits have been met.

Laboratory Operations

The lab analyzed 906 samples for 3,734 analyses. Contract labs analyzed 111 samples for 401 analyses. Figures 6.A and 6.B display the results of the samples and analyses. Figure 6.C shows the number of samples processed for permit compliance, process control (plant performance), and drinking water regulatory compliance. There were 167 samples for NPDES permit compliance, 231 samples for process control, and 506 samples for drinking water compliance.

The lab continues to provide on-going support for additional sampling and analyses to a consultant working on wastewater and water permit compliance items.

Engineering

Operational Activities

The primary responsibilities of the Engineering Division are management and execution of the Department's Capital Improvement Program (CIP) and Development Services.

Development-related submittals are received daily from Public Works, Community Development, other City Departments, and government agencies. The submittals, collectively called "development reviews," encompass environmental documents, fiscal impact analysis reports, feasibility analyses, utility master plans, engineering reports, improvement plans, permit applications, tentative subdivision maps, and parcel maps. Development reviews are assigned to individual engineers within the Engineering Division with specific completion dates.

The Department's CIP consists of the master planning, budgeting, design, competitive bidding, and construction management of capital improvement projects involving water, sanitary sewer, storm drainage, and non-potable water. Engineering offers the full array of CIP services, including computer-aided design and drafting, modeling, and construction administration and inspections.

Figure 7.A represents the number of development submittals received and completed on a weekly basis. The amount of development reviews received in a particular week may not coincide with the number completed in the same week because of differing complexities and review times required for the submittals. There were 20 development reviews received and nine completed and returned. In fiscal year 2015-2016, 260 development reviews were completed.

Development Review Projects

Short descriptions of the development reviews received this month are as follows:

- Application Referral – 222 N Sutter Street
- Application Referral – Morada Rehabilitation Facility
- Application Referral – Solari Ranch
- General Plan Update – Administrative Draft infill Opportunities Report
- Improvement Plan - Traffic Signal Modifications at Pacific & Castle
- Improvement Plan – Traffic Signal Modifications at Pacific & Hammer
- Master Plan – Tra Vigne
- Request for Utility Service – 2717 W Washington Street
- Request for Utility Service – Stockton Metropolitan Airport Proposed Hotel, Sanitary Sewer, Storm Drain, and Water System

- Request for Utility Service – Stockton Metropolitan Airport Proposed Hotel – 2nd submittal
- Storm Water Quality Control Plan – Gill Grove North – 1717 N California
- Use Permit – 203 W Mayfair Avenue
- Utility Verification – 2185 E Fremont Street
- Utility Verification – 2620 Lincoln Street
- Utility Verification Request – 1787 N Marshall Avenue
- Utility Verification Request – 3515 Navy Drive
- Utility Verification Request – 3711 Producers Drive
- Utility Verification Request – 630 Ponce De Leon
- Utility Verification Request – Sewer Crossing San Joaquin River at Navy Drive
- Utility Verification Request – 630 E Weber Avenue

Figure 7.B represents the number of development reviews received and completed since the start of the 2016-2017 fiscal year.

Capital Improvement Project Milestones

The Engineering Division has 42 budgeted CIPs in fiscal year 2016-2017. Table 7.1 is a graphic summary of the most active, current CIPs.

Upcoming and completed milestones for a few, select CIP projects are listed below with an updated status for each project.

Capital Improvement and Energy Management Plan EIR (M12019)

Robertson Bryan, Inc. is in the process of including Nitrate permit requirements into the Environmental Impact Report (EIR). The preparation of the EIR is temporarily on hold pending procurement efforts for the Design-Build firm to perform the work contained in the 2011 Capital Improvement and Energy Management Plan (CIEMP).

Request for Qualifications were issued for Progressive Design-Build Services for the RWCF project on January 20, 2015. This was the first step in the procurement process leading to a contract in 2016 for the design and construction of projects identified in the CIEMP. Statements of Qualifications were received on March 5, 2015; a Request for Proposals was issued on May 8, 2015, to four firms who submitted proposals on July 23, 2015. The preferred firm has been selected and negotiations regarding the contract and scope are currently in process.

Water Well 25 & 26 Engine Conversion (M14020)

Electric motors for Water Well 25 are currently being installed. PG&E has notified individuals affected by the removal of existing transformer at Well 25. The transformer switch at Water Well 25 was successfully completed on March 30, 2015. PG&E negotiations with East Bay MUD for right-of-way has been completed; PG&E's plans to provide electrical service to Well 26 is currently being revised to incorporate needed change.

Crown and Pershing Avenues Sewer Crossing at the Calaveras River (M13005)

Recent findings show that the design plan of inverted siphon is not viable. The design firm, Siegfried Engineering, Inc. is preparing a memo of alternatives. A discussion meeting will be scheduled subsequent to the memo.

Highway 99 at Farmington Fresh Sewer Replacement (M14034)

Staff is reviewing the two bids that were received on August 11. Staff recommendation to City Council for the project award is tentatively scheduled for the October 18, 2016, agenda.

2014 Sanitary Sewer Maintenance Hole Rehabilitation Project (M15004)

The construction of the project is complete. The balancing change order is being processed.

Eighth Street Storm Water Pump Station (M14019) and Weston Ranch Storm Water Pump Station (M13014)

The construction repair of trash racks is underway for both pump stations. No-cost contract change orders to add 50 calendar days for construction on both projects were prepared. Time extensions were needed due to the lead times required by the sub-contractors for fabricating and galvanizing the new supporting beams.

Rehabilitation/Replacement of Distributor Arms - Biotower No. 4 (M14027)

Council approved the project award on June 21, 2016 to the lowest bidder, Martech of Lodi, California for $355,750. The contract for the project is routing for signatures. The project completion is anticipated in late fall of this year.

Rehabilitate Don Avenue (M13010) and Thornton Road (M13009) Sanitary Pump Stations

The design of the pump stations is being updated to enhance worker safety by moving the electrical and mechanical pumping equipment above ground so that confined space entries can be eliminated for maintenance and repairs. A contract change order for the redesign is being processed administratively. The schedule for the project is also being updated.

Rehabilitate Harding Way Subway (M15010) and Wilson Way Subway (M15011) Storm Drain Pump Stations Design

Both projects are in the design phase, which is being done in-house except the electrical part. Staff is reviewing the electrical plans that were submitted by the consultant, HCS Engineering Inc. The funds for the construction phase will be budgeted in FY 2016-2017.

Rehabilitate Charter Way & Walnut Plant (M16002) and Charter Way Subway (M16001) Storm Drain Pump Stations Design

Both projects are in design phase, which is being done in-house except the electrical part. The purchase orders for the electrical design will need to be issued. The funds for the construction phase will be budgeted in FY 2016-2017.

SCADA Master Plan – Outfall Controls Improvements (Task 8.5, - M14010)

The SCADA Master Plan – Outfall Controls Improvements project was advertised on June 7, 2016, and three bids were received on July 14, 2016. The apparent low bidder was Schrader Mechanical, Inc. of Lodi, for $259,639.18. The tentative project award date is on September 27, 2016.

Swenson Park Access Road Rehabilitation (M16015)

The plans, specifications, and estimates documents for the project are being finalized. Tentative project bid advertisement is mid-September 2016.

Stormwater

Operational Activities

The Stormwater Division is responsible for ensuring compliance with the City's municipal Stormwater National Pollutant Discharge Elimination System (NPDES) permit. The NPDES program is mandated by the Federal Clean Water Act, and administered in California by the State Water Resources Control Board and the Regional Water Quality Control Boards (RWQCB) on behalf of the U.S. Environmental Protection Agency (USEPA). The primary goals of the program are water quality protection and to improve local water quality to the maximum extent practical.

Activities of the Stormwater Division include permit mandated programs and activities; collection system inspection, maintenance and repair; catch basin inspection and cleaning; pump station repair, maintenance and rehabilitation; and response to community concerns as they relate to the stormwater systems within the City of Stockton. On average, 50% of stormwater pump station's wet wells are cleaned annually. Preventive maintenance measures are used to identify the most urgent areas. Closed Circuit Television (CCTV) inspection of the discharge lines from each station has commenced and will continue at the request of San Joaquin County Flood Control.

The City's storm drain system collects water from numerous nonpoint sources (i.e., water pollution that cannot be attributed to a discernible source; and excess fertilizers, oils, grease, and other pollutants on the ground that are transported by stormwater) that discharge into local waterways and into the Delta. The City complies with the requirements of its NPDES permit by implementing various stormwater pollution prevention activities, including:

- Ensuring pollutants stay out of the storm drain system, creeks, and the Delta
- Managing and enforcing the City's Municipal Code to minimize stormwater impacts
- Requiring new development projects mitigate any impacts to the stormwater system
- Requiring development projects incorporate various structural and non-structural control measures, commonly referred to as Low Impact Development features, where feasible to restore the natural hydrological watershed processes (i.e., infiltration), such as treatment of stormwater prior to discharge offsite and/or detain stormwater prior to discharge to protect waterways from increased flows throughout the anticipated life span of the developed site.
- Promoting pollution prevention awareness
- Education Programs and outreach to the public
- Supporting local nonprofit creek groups
- Inspecting businesses to ensure responsible stormwater-related practices
- Investigating and responding to illicit discharges

Stormwater System

The downtown business area is being inspected monthly and cleaning of the areas surrounding the catch basins completed on as-needed basis to minimize trash and debris entering the storm system.

Table 8.1 presents a summary of the stormwater system maintenance and repair activities. A table of prior year activities is also presented for comparison.

Pumping Facilities

In addition to the regular preventive maintenance activities at the storm stations, the following repairs were made.

- Water Reservoir site and 14 Mile Storm Station – Pulled and refurbished both pumps as part of the station upgrade.
- Legion Park Storm Station – Pulled the #3 pump for repairs.
- Legion Park Storm Station – Pulled and repaired the gear box for the #3 pump.
- Sanguinetti & Calaveras Storm Station - Repaired emergency generator.

Storm Drainage Maintenance Districts

Staff released a request for sealed bids on August 5, for the routine inspection and maintenance of the eight storm drainage basins operated under the City's storm drainage maintenance assessment districts. A mandatory job tour/walk was hosted by staff on August 18, for all perspective bidders. Bids are to be submitted to and opened by the Clerk's Office on September 8, 2016. Maintenance activities include mowing of weeds, pest control, compaction of siding, discing of basin bottoms, and trash removal and disposal.

Permit Compliance

The Central Valley region wide Municipal Separate Storm Sewer Systems (MS4s) General Permit will be effective on October 1, 2016, pending Federal Environmental Protection Agency approval. All Phase I communities in the California Central Valley will be required to seek permit coverage under this permit with the submission of a Notice of Intent (NOI) to enroll. The NOI must be filed by November 1, 2016. The City's "interim" permit and its terms remain in effect until RWQCB issues a Notice of Applicability and the City is approved to discharge stormwater/urban discharge to waters of the State under the new permit.

Once approved for coverage, the City will be required to conduct a Reasonable Assurance Analysis (RAA) and update its Stormwater Management Plan (SWMP). The RAA is a new permit requirement and is referred to as a "recipe for compliance." Through the RAA process, the City will need to evaluate and prioritize the nonstructural and structural control measures that it will be implementing to yield/ensure compliance under the permit, reduce water pollution, and improve overall water quality. It is anticipated to take approximately 2-3 years to complete the RAA and revisions to the SWMP.

As required under the terms of the current permit, staff submitted its annual report to the Central Valley Regional Water Quality Control Board on August 31.

Stormwater Inspections

Inspections of construction sites continue to be a priority for the City of Stockton. There were 25 stormwater inspections conducted at active construction sites. There were eight Verbal Warnings, eight Correction Orders, and five Notices to Clean and one Notice of Violation. There were no referrals to the RWQCB by the City of Stockton during this period.

Inspections of industrial, commercial facilities and residential complaints and field observation resulted in three Administrative Citations. One inspection was forwarded during this period to the RWQCB.

Table 8.2 presents a summary of the stormwater inspections. A table of prior year inspections is also presented for comparison.

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Administration

Operational Activities

The Administration division is responsible for the overall operation of the Municipal Utilities Department, including personnel, purchasing, public outreach, health and safety, regulatory compliance, finance, budgeting, and accounts payable.

Health and Safety

The Health and Safety program monitors the training and safety activities of the Department. Unsafe conditions, unsafe activities by staff or contractors, and accidents are tracked and reported according to Cal/OSHA guidelines. Table 9.1 provides a summary of unsafe conditions or acts that occurred during the month, along with a running total for the year. Table 9.2 provides information on work-related injuries and illnesses. This continuously evolving program responds to the needs of staff to work in a safe and accident free environment. It is important to note that Cal/OSHA requires reporting on a calendar year. All statistics and data noted for the Health and Safety program are from January through December.

To promote safe work habits and to comply with Cal/OSHA requirements, regular tailgate safety meetings are held in all divisions. Topics vary depending on the needs and work requirements of each division. Specialized training is also provided to ensure that proper work habits and techniques are used in all work situations. Table 9.3 provides a summary of the tailgate and specialized training provided.

Safety Activities

The following safety activities occurred during the month: three unsafe conditions, zero vehicle accidents reported, and two work-related injuries.

A total of 97.50 safety-training hours were provided to staff through tailgate sessions and specialized training.

Human Resources

Staffing Activities

Recruitment activities continue on an ongoing basis to fill vacated and recently approved positions. MUD is currently staffed at 195 of the approved 218 positions. Table 9.4 presents the staffing changes by division.

The status of various positions to be filled is shown below.

Positions in Active Recruitment / Background Check / Civil Service Commission

- Deputy MUD Director/Wastewater (active recruitment)
- Senior Plant Operator/Water (pre-employment process)
- Senior Plant Operator/Wastewater (pre-employment process)
- Laboratory Technician (pre-employment process)
- Office Assistant II (pre-employment process)
- Plant Maintenance Mechanic (pre-employment process)
- Collection Systems Operator (pre-employment process)
- Plant Maintenance Machinist (pre-employment process)

Positions Filled / Department Transfer

- None

Resignations / Separations / Retirements

- Water Systems Operator
- Office Technician
- Assistant Civil Engineer
- Plant Maintenance Mechanic

Overtime Tracking

Overtime hours are tracked as part of the Department's internal monitoring. This information helps determine if the Department is at appropriate staffing levels, and where and when work demand is spiking. Because of the 24-hour shift work at the RWCF, overtime is expected to spike during holidays, closed days, and vacations to maintain adequate staffing for operations. Overtime increased from the previous month.

Table 9.5 details the overtime hours for each division to-date. For comparison, overtime hours for fiscal year 2015-2016 are also shown in Table 9.5.

Regulatory Compliance

The Regulatory Compliance Officer (RCO) is responsible for assisting all Municipal Utilities Department divisions in achieving general compliance with local, state, and federal regulations originating from the Federal Clean Water Act, the Federal Safe Drinking Water Act, the Federal Clean Air Act, the Federal Resource Conservation and Recovery Act, and associated environmental laws. The RCO coordinates with all local, state, and federal regulators, and MUD divisions, as well as other City departments to accomplish environmental compliance across the wastewater, drinking water, and stormwater utilities.

Industrial Railways Company performed the monthly inspection at the Tertiary Facility rail spur on August 22. There were no deficiencies identified.

The San Joaquin County Environmental Health Department conducted hazardous materials inspections at eight sites, including DWTP.

The San Joaquin Valley Air Pollution Control District Emission Control Plan was submitted August 26.

There were no tours of the RWCF, or bird watching area.

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Reference

Tables and Figures

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Water Resources

Table 1.1 – Water Waste Complaints

Water Conservation	*Month-to-Date*			*Fiscal Year-to-Date*
	New	*Open*	*Closed*	*Completed*
Complaints				
Broken Sprinklers / Irrigation Leaks/ Other Leaks	6	0	6	7
Over-irrigation / Water Run-off	24	0	24	32
Watering during Restricted Hours	4	0	4	7
Watering on a Restricted Day	14	0	14	37
Invalid/Unable to Verify	0	0	0	0
Other Conservation Calls	0	0	0	4
Totals	48	0	48	87
Pool Filling or Drain and Refill	2	0	2	11
Totals	50	0	50	98

Table 1.2 – Water Conservation Outreach

Description	Type	Date(s)	Impressions
Stockton.watersavingplants.com	Website	August	311
Utility Bill Insert	Print Media	August	0

Table 1.3 – Water Conservation Surveys

Survey Type	*Requested / Pending*	*Completed*
In-Home Single Family	0	0
In-Home Multi-Family	0	0
REACON Business	0	0
Self-Certified Surveys	0	0
Other	0	0
TOTAL	0	0
FY-to-Date	0	0

Table 1.4 – Water Saving Devices

Device Description	*Quantity Distributed*	*Fiscal Year-to-Date*
Low Flow Showerhead	0	0
Low Flow Faucet Aerators	0	0
Toilet Flapper	0	0
Leak Detection Tablet Packets	0	0
Positive Shut-off Hose Nozzles	0	0
Water-efficient Plant Seed Packets	0	0
TOTAL	0	0

Table 1.5 – HET Direct Install Program

Device Description	*Devices Installed*	*Water Savings (in Acre Feet)*
High Efficiency Toilet (Commercial)	0	0
TOTAL	0	0
FY-to-Date	0	0
Program-to-Date (since February 2010)	411	364.167

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Water Treatment, Production, and Distribution

Table 2.1 - Summary Coliform Monitoring

Routine Samples	*# Required*	*# Taken*	*Total Coliform Positive*	*E. Coli Positive*
North System	180	180	0	0
Walnut Plant	1	1	0	0
South System	30	30	0	0

Table 2.2 – Well Operational Status

Well #	*Well Station Location*	*DPH In Service Status*			*Well Status if Limited Use or Not Available for Operation*				*Emergency Use Only*
		Active	*Stand-by*	*Inactive*	*Exceeds Sec MCL*	*Arsenic*	*Bacti*	*Mechanical*	
NORTH WELL SYSTEM									
1	Parkwoods		X		X		X		
4	Villa Dorado		X		X				
7	Galloway	X					X		
9	Don Carlos			X			X		
10R	Valverde Park	X							
11	Inglewood		X		X				
15	Glasgow		X		X				
16	Royal Oaks		X		X				
18	Hickock	X							
19	Morada/West Ln	X							
20	West Ln/Mosher	X							
21	Cortez Park	X							
24	Saffron	X			X				
25	Panella Park	X							
26	Auto Center		X				X	X	
27	Horse Park	X							
28	Blossom Ranch	X					X		
29	Baxter Park	X							
30	Grider	X							
31	Ivano Ln	X							
32	Hwy 99 Frontage	X							
33 (3-R)	West Ln @ WFO	X							
NWR	Northwest Reservoir	X							
14 Mile	14 Mile Reservoir	X							
SOUTH WELL SYSTEM									
SS1	Qantas	X							
SS2	N Arch Frontage	X							
SS3	Frontier	X							
SS4	Airport South			X		X			
SS5	Airport North			X	X				
SS8	Shropshire Park	X							
SS9	B St & Littlejohn	X							
WSTN	Weston Ranch Res	X							
SSA	South Sys Aqueduct	X							
INTERCONNECTIONS									
Cal Wtr	Airport Wy/Industrial	X							X
Cal Wtr	Airport/Sperry	X							X
Cal Wtr	El Dorado (S of March)	X							X
Cal Wtr	Filbert/Marsh	X							X
Cal Wtr	Filbert/Miner	X							
Cal Wtr	Diamond/Charter	X							
Cal Wtr	El Dorado (March/Pardee)	X							X
Cal Wtr	Pershing/Longview	X							X
Cal Wtr	Zephyr (Future/not connected)			X					-
Lathrop	Roth/Harlan	X							X
SJ Cty	Balboa	X							
SJ Cty	Greeley Wy/Lincoln	X							
SJ Cty	Swain/Grigsby Pl	X							X
SJ Cty	Pershing/Lincoln Rd	X							X
SJ Cty	Hammer / Misty Ln	X							X
SJ Cty	Pershing Av (S of Ben Holt)	X							
SJ Cty	Plymouth Rd/Rutledge	X							
SJ Cty	Portola Av	X							
SJ Cty	Thornton Rd	X							

Table 2.3 – Production Summary (in Million Gallons)

System	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Year to Date
No. Sys	194.10	198.87											392.97
So. Sys	4.54	0.00											4.54
DWTP	760.97	752.29											1,513.26
SEWD WP	7.50												7.50
SEWD/North	0.00	0.00											0.00
SEWD/South	197.31	198.23											395.54
Total	**1,164.42**	**1,149.39**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**2,313.81**

Production Summary Comparison Year 2015-2016 (in Million Gallons)

System	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Year to Date
No. Sys	188.57	221.80	172.46	225.32	77.90	45.72	64.90	89.45	65.77	40.33	92.23	163.12	1,447.57
So. Sys	60.17	0.52	4.38	27.36	1.25	0.00	20.26	2.63	1.67	4.62	12.85	2.46	138.17
DWTP	654.19	526.24	532.05	412.57	169.81	123.07	251.21	272.99	342.63	483.40	585.59	697.46	5,051.21
SEWD WP	5.69	5.41	6.13	5.76	5.26	4.50	3.95	3.80	4.50	4.83	4.88	6.63	61.34
SEWD/North	9.70	43.50	31.57	12.82	189.45	226.84	38.95	6.17	0.00	0.00	0.00	0.00	559.00
SEWD/South	57.13	168.45	159.15	113.33	109.50	99.63	74.61	87.61	102.66	113.67	128.12	177.59	1,391.45
Total	**975.45**	**965.92**	**905.74**	**797.16**	**553.17**	**499.76**	**453.88**	**462.65**	**517.23**	**646.85**	**823.67**	**1,047.26**	**8,648.74**

	City North System Wells
	City South System Wells
	Delta Water Treatment Plant (DWTP)
	MLK Diamond & Filbert Interconnect (SEWD) City Walnut System
	Stockton East Water District (SEWD) City / County North System
	Stockton East Water District (SEWD) City South System

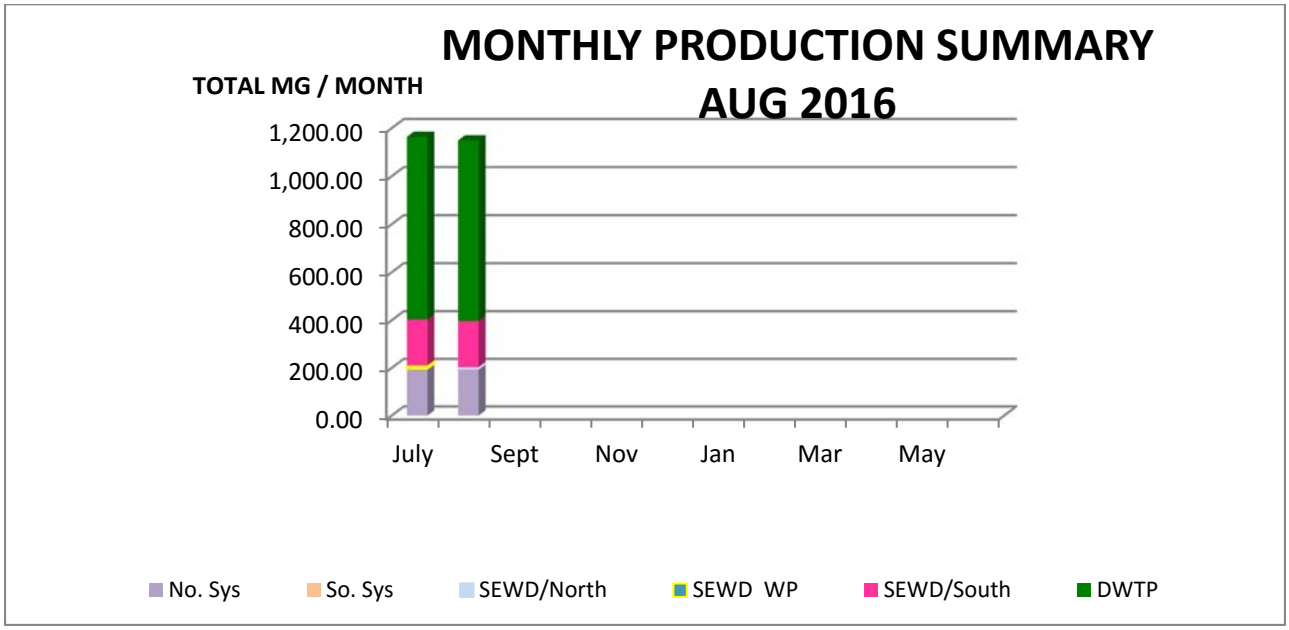
Table 2.3A--DWTP Influent by Water Source 2016-2017 (in Million Gallons)

DWTP Influent by Source	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	YTD
San Joaquin River/Delta	182.40	515.23											697.63
Mokelumne River/WID	569.72	239.23											808.95
Total Influent (DWTP)	752.12	754.46	-	-	-	-	-	-	-	-	-	-	1,506.58

DWTP Influent by Water Source Year 2015-2016 (in Million Gallons)

DWTP Influent by Source	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	YTD
San Joaquin River/Delta	322.42	426.26	423.81	312.42	123.83	85.92	251.86	270.94	50.06	4.35	4.29	-	2,276.16
Mokelumne River/WID	214.01	-	0.00	-	0.01	-	-	-	282.46	476.34	574.44	687.10	2,234.37
Total Influent (DWTP)	536.43	426.26	423.81	312.42	123.85	85.92	251.86	270.94	332.52	480.69	578.73	687.10	4,510.53

Figure 2.A – Production Summary



Production Summary Comparison Year 2015-2016

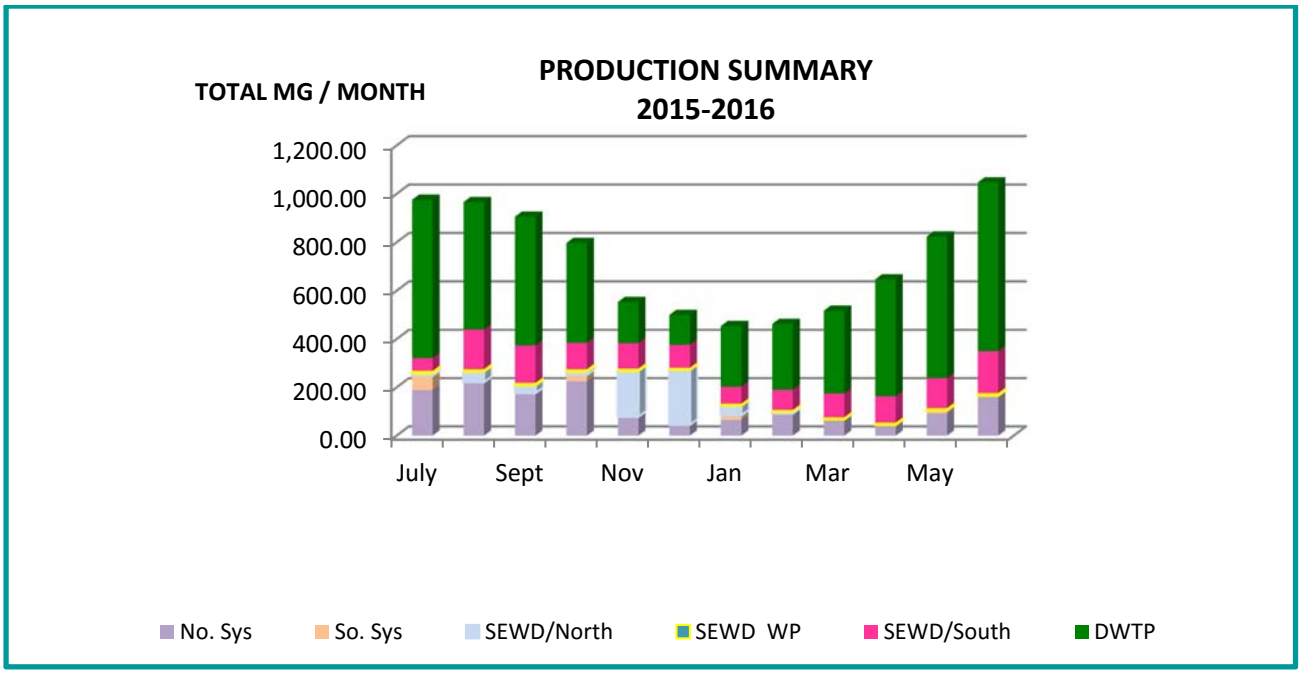


Table 2.4 – City of Stockton Water Systems – Production Summaries

Table 2.4 – City of Stockton Water Systems –Production Summaries													
PRODUCTION (Million Gallons)	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	YTD
City System Potable Water Production													
City North System Wells	194.10	198.87											392.97
City South System Wells	4.54	-											4.54
Delta Water Treatment Plant	760.97	752.29											1,513.26
MLK Diamond & Filbert Interconnect (SEWD) City Walnut System	7.50												7.50
Stockton East Water District (SEWD) City/County North System	-	-											-
Stockton East Water District (SEWD) City South System	197.31	198.23											395.54
Total City System	1,164.42	1,149.39	-	-	-	-	-	-	-	-	-	-	2,313.81
System - Nonpotable Water Production													
Recycle Water (Reclaimed WW)	-												-
Total Production	1,164.42	1,149.39	-	-	-	-	-	-	-	-	-	-	2,313.81

2015-2016 –Production Summaries

PRODUCTION (Million Gallons)	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	YTD
City System Potable Water Production													
City North System Wells	188.57	221.80	172.46	225.32	77.90	45.72	64.90	89.45	65.77	40.33	92.23	163.12	1,447.57
City South System Wells	60.17	0.52	4.38	27.36	1.25	-	20.26	2.63	1.67	4.62	12.85	2.46	138.17
Delta Water Treatment Plant	654.19	526.24	532.05	412.57	169.81	123.07	251.21	272.99	342.63	483.40	585.59	697.46	5,051.21
MLK Diamond & Filbert Interconnect (SEWD) City Walnut System	5.69	5.41	6.13	5.76	5.26	4.50	3.95	3.80	4.50	4.83	4.88	6.63	61.34
Stockton East Water District (SEWD) City/County North System	9.70	43.50	31.57	12.82	189.45	226.84	38.95	6.17	-	-	-	-	559.00
Stockton East Water District (SEWD) City South System	57.13	168.45	159.15	113.33	109.50	99.63	74.61	87.61	102.66	113.67	128.12	177.59	1,391.45
Total City System	975.45	965.92	905.74	797.16	553.17	499.76	453.88	462.65	517.23	646.85	823.67	1,047.26	8,648.74
System - Nonpotable Water Production													
Recycle Water (Reclaimed WW)	-												-
Total Production	975.45	965.92	905.74	797.16	553.17	499.76	453.88	462.65	517.23	646.85	823.67	1,047.26	8,648.74

Table 2.5 – City of Stockton Water Systems –Consumption Summaries

Table 2.5 – City of Stockton Water Systems –Consumption Summaries													
(Million Gallons)	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	YTD
City System - Metered Consumption													
Single Family Residential	N/A	N/A											-
Multi-family Residential	N/A	N/A											-
Commercial/Institutional	N/A	N/A											-
Irrigation	N/A	N/A											-
Non-potable Water	N/A	N/A											-
Const/Hydrant/Jumpers/Load Counts	1.50	3.16											4.66
Other (Industrial)	N/A	N/A											-
Subtotal Metered	1.50	3.16	-	-	-	-	-	-	-	-	-	-	4.66
City System - Unmetered Consumption													-
Main Line / Service Repair Losses	0.04	0.25											0.29
Commercial/Residential Construction Usage	0.01	0.01											0.02
City Trucks/Parks Trucks/Street Sweepers	1.10	0.06											1.16
Hydrant / Blow-off Flushing	0.15	0.03											0.18
System Flushing	0.40	0.05											0.45
City Fire Dept. Fire Flow	0.01	0.04											0.05
City Fire Dept. Training/Equip Testing	0.01	0.01											0.02
Subtotal Unmetered	1.72	0.45	-	-	-	-	-	-	-	-	-	-	2.17
Total City System	3.22	3.61	-	-	-	-	-	-	-	-	-	-	6.83
Water Wheeled & Wholesaled (S J County Interconnects)													
Metered to San Joaquin County	65.22	64.97											130.19
Total Wheeled & Wholesaled	65.22	64.97	-	-	-	-	-	-	-	-	-	-	130.19

2015-2016–Consumption Summaries

(Million Gallons)	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	YTD
City System - Metered Consumption													
Single Family Residential	521.55	501.91	451.90	443.00	353.84	273.55	243.38	221.63	251.29	300.70	350.19	N/A	3,912.94
Multi-family Residential	85.38	84.67	79.40	75.87	68.86	60.02	66.64	50.85	62.57	65.64	67.21	N/A	767.11
Commercial/Institutional	135.22	130.94	113.43	118.68	91.54	71.09	69.02	51.57	63.12	80.88	95.25	N/A	1,020.74
Irrigation	93.91	94.08	91.70	89.91	51.98	16.38	8.76	6.10	10.89	33.35	61.71	N/A	558.77
Non-potable Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Const/Hydrant/Jumpers/Load Counts	0.75	1.61	0.38	0.20	0.17	0.32	0.58	0.38	0.58	0.39	1.83	1.52	8.71
Other (Industrial)	23.48	19.91	20.89	20.52	17.30	19.25	17.89	17.70	20.87	22.02	21.32	N/A	221.15
Subtotal Metered	860.29	833.12	757.70	748.18	583.69	440.61	406.27	348.23	409.32	502.98	597.51	1.52	6,489.42
City System - Unmetered Consumption													-
Main Line / Service Repair Losses	0.76	0.21	1.30	0.22	0.38	0.36	0.60	0.46	0.54	0.04	0.40	1.45	6.72
Commercial/Residential Construction Usage	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.12
City Trucks/Parks Trucks/Street Sweepers	0.06	0.07	0.09	0.06	0.06	0.08	0.09	0.10	0.22	0.19	0.20	0.16	1.38
Hydrant / Blow-off Flushing	0.01	0.02	0.04	0.01	0.02	0.02	0.03	0.04	0.02	0.03	0.03	0.02	0.29
System Flushing	0.14	0.10	0.01	0.30	0.80	0.03	0.34	0.10	0.01	0.27	0.02	0.01	2.13
City Fire Dept. Fire Flow	0.01	0.01	0.01	0.01	0.01	0.04	0.02	0.01	0.01	0.01	0.01	0.01	0.16
City Fire Dept. Training/Equip Testing	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.12
Subtotal Unmetered	1.00	0.43	1.47	0.62	1.29	0.55	1.10	0.73	0.82	0.56	0.68	1.67	10.92
Total City System	861.29	833.55	759.17	748.80	584.98	441.16	407.37	348.96	410.14	503.54	598.19	3.19	6,500.34
Water Wheeled & Wholesaled (S J County Interconnects)													
Metered to San Joaquin County	66.78	43.97	51.77	46.03	27.18	24.38	24.91	22.91	28.08	34.94	43.38	59.69	474.02
Total Wheeled & Wholesaled	66.78	43.97	51.77	46.03	27.18	24.38	24.91	22.91	28.08	34.94	43.38	59.69	474.02

Table 2.6 – Chemical Consumption Summary

Table 2.6 – Chemical Consumption Summary													
Water Production System	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	YTD
North Wells													
Chlorine Gas, Lbs.	1,918.00	1,605.00											3,523.00
South Wells													-
Chlorine Gas, Lbs.	173.00	59.00											232.00
Delta Water Treatment Plant													-
Ammonia Gal	2,546.74	1,574.14											
Liquid Oxygen, Gal.	6,566.02	106.29											6,672.31
Sodium Hypochlorite, Gal.	19,521.74	15,013.67											34,535.41
Sodium Hydroxide (Caustic Soda), Gal.	1,118.86	542.81											1,661.67
Aluminum Chlorohydrate (ACH), Gal.	8,643.12	9,195.64											17,838.76
Corrosion Inhibitor, Gal	2,408.96	2,377.21											4,786.17
Citric Acid, Gal.	84.47	70.93											155.40
Sulfuric Acid, Gal.	159.03	78.37											237.40
Sodium Bisulfite, Gal.	50.58	3.20											53.78

2015-2016 – Chemical Consumption

Water Production System	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	YTD
North Wells													
Chlorine Gas, Lbs.	835.00	1,197.00	1,181.00	1,138.00	555.00	409.00	512.00	767.00	497.00	418.00	576.00	1,333.00	9,418.00
South Wells													-
Chlorine Gas, Lbs.	206.00	40.00	131.00	141.00	62.00	59.00	191.00	92.00	48.00	70.00	67.00	75.00	1,182.00
Delta Water Treatment Plant													-
Ammonia Gal	-	-	-	-	-	-	736.02	887.48	1,032.18		1,933.56	2,408.28	
Liquid Oxygen, Gal.	367.20	356.40	388.80	306.00	165.60	640.80	5,536.80	-	-				7,761.60
Sodium Hypochlorite, Gal.	10,731.38	21,804.16	14,480.76	9,713.92	4,280.94	35,912.12	8,427.56	10,455.02	8,923.44	11,837.63	13,721.44	16,080.88	166,369.25
Sodium Hydroxide (Caustic Soda), Gal.	5,133.80	8,546.89	6,047.50	4,649.21	1,599.66	-	482.22	3,070.44	893.46	1,252.19	477.03	1,357.24	33,509.64
Aluminum Chlorohydrate (ACH), Gal.	13,755.95	8,468.46	8,815.32	6,082.74	3,942.36	2,918.70	5,803.56	7,821.99	5,480.73	4,082.96	5,371.44	6,444.96	78,989.17
Corrosion Inhibitor, Gal	29.61	-	-	1,059.62	406.08	8.46	63.45	1,104.99	1,312.44	1,712.52	1,951.73	2,493.64	10,142.54
Citric Acid, Gal.	105.60	92.00	112.00	88.00	41.60	107.20	88.00	94.05	183.34	93.08	214.94	179.05	1,398.86
Sulfuric Acid, Gal.	164.00	139.20	120.00	72.00	32.00	28.80	60.80	57.51	66.53	67.24	123.70	214.70	1,146.48
Sodium Bisulfite, Gal.	17.60	17.60	26.40	19.20	8.00	21.60	37.60	31.41	30.92	109.86	39.91	49.80	409.90

Table 2.7 – Utility Consumption Summary

Table 2.7 – Utility Consumption Summary													
CONSUMPTION	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	YTD
North													
N. Well Electricity, KWH	261,207	264,626											525,833
N. Reservoir Electricity, KWH	52,040	38,200											90,240
Electricity, KWH	313,247	302,826											616,073
Natural Gas, 1,000 Ft	-	-											-
South													
S. Well Electricity, KWH	9,368	4,084											13,452
S. Reservoir Electricity, KWH	5,760	13,600											19,360
S. Cl2 Booster Station, KWH	37	36											73
Electricity, KWH	15,165	17,720											32,885
Natural Gas, 1,000 Ft	-	-											-
Delta Water Treat Plant													
Electricity Used, KWH (Intake)	122,400	154,880											277,280
Electricity Used, KWH (Treatment Plant)	196,000	988,000											1,184,000
Electricity Generated, KWH (Solar)	10,680	8,590											19,270
DWTP Total Electricity Used													-

2015-2016– Utility Consumption Summary

CONSUMPTION	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	YTD
North													
N. Well Electricity, KWH	255,136	368,313	233,644	304,697	108,343	86,136	306,533	134,408	99,553	63,098	123,273	216,611	2,299,745
N. Reservoir Electricity, KWH	69,080	73,300	75,080	65,800	46,440	60,120	52,880	47,440	48,860	49,320	59,740	59,040	707,100
Electricity, KWH	324,216	295,013	308,724	370,497	154,783	146,256	359,413	181,848	148,413	112,418	183,013	275,651	2,860,245
Natural Gas, 1,000 Ft	-	316	7	-	1	-	-	294	110	-	-	-	728
South													
S. Well Electricity, KWH	74,176	3,147	6,789	35,154	3,684	2,525	26,820	5,858	4,827	6,723	18,231	3,934	191,868
S. Reservoir Electricity, KWH	13,600	15,360	15,360	9,600	8,640	14,880	14,240	9,280	9,600	8,160	10,400	12,640	141,760
S. Cl2 Booster Station, KWH	30	34	38	51	108	141	112	94	94	68	53	37	860
Electricity, KWH	87,806	18,541	22,187	44,805	12,332	17,546	41,172	15,232	14,521	14,951	28,684	16,611	334,388
Natural Gas, 1,000 Ft	-	-	-	-	-	-	-	-	-	-	-	-	-
Delta Water Treat Plant													
Electricity Used, KWH (Intake)	114,240	154,880	174,880	114,880		14,720	68,320	65,920	45,440	10,560	6,560		770,400
Electricity Used, KWH (Treatment Plant)	712,000	552,000	518,000	410,000	346,000	112,000	318,000	380,000	366,000	526,000	584,000		4,824,000
Electricity Generated, KWH (Solar)	20,030	16,290	10,950	10,690	8,120	5,820	5,610	10,060	7,060	9,400	10,520	11,280	125,830
DWTP Total Electricity Used													-

Table 2.8 – Hydrant Maintenance

Hydrant Repairs	*Current Month*	*Fiscal YTD*
Leaks	4	2
Vehicle Accidents	4	4
Routine Maintenance Repair	11	7
Painted Hydrant	0	0
Installed New/Replaced Hydrant	1	0
Assist Fire Department	3	0
Emergency Fire Response	0	3
Fire Flow Test	0	4
Removed Hydrant/Spool	0	0
Relocated Hydrant	0	0
Gate Valve Maintenance	0	0

Table 2.9 – Valve Maintenance Program

	Current Month	*Fiscal YTD*	*# of Valves in System*
Air Relief Valves Inspected	1	8	198
Distribution Valves Located	7	7	10,491
Distribution Valves Exercised	2	11	10,491
Distribution Valves Installed (New)	0	0	10,491
Blow-off Valves Flushed	2	2	1,282
Valves Repaired (all types)	4	5	11,971

Table 2.10 – Service Connections

Meters Applied to Routes- Current Month	
Meters Applied to Routes - Fiscal Year-to-Date	6
Total Number of Service Meters in Water System (Active + Inactive)	48,900

Table 2.11 – Number of Active Service Meters in Water System - By Size

Meter Size (in inches)	Residential	Industrial	Commercial / Institutional	Irrigation
5/8	1,797	0	16	15
3/4	25,302	14	215	74
1	18,506	0	246	150
1½	259	0	233	161
2	257	2	608	436
3	12	0	69	25
4	7	3	46	20
6	5	1	18	2
8	0	0	5	0
10	0	0	2	0
12	0	0	2	0
Totals	46,165	20	2,343	883

Table 2.12 – Water Quality Inquiry Summary

Inquiry	Quantity	Follow-up Action
Taste / Odor	2	-1- Complaint of salty taste in water. Operator spoke to customer and determined water softener was cause of problem. -1- Complaint of metallic taste in water and brownish color. Operator spoke to customer and advised flushing lines.
Color	2	-1- Complaint of greyish water. Operator spoke to customer and determined water softener was cause of problem. Customer to have softener serviced. -1- Complaint of brownish water. Operator spoke to customer and customer reported problem had cleared.
Turbidity	(none)	
Suspended Solids	(none)	
Pressure	2	-1- Complaint of low water pressure. Operator reported normal pressure at high flows. Operator spoke to customer. -1- Complaint of low irrigation pressure. Operator observed normal pressure. Customer to call back if problem persists.
Sediment	(none)	
Air	(none)	
Sand	(none)	
Miscellaneous Inquiry	(none)	

Table 2.13 – Customer Services Summary

Customer Service Operations	*Current Month*
Residential Meter Routes	90
Commercial Meter Routes	13
Estimated Meter Reads by Utility Billing	0
Total Meters Read	48,900
Number of Check Reads (All Routes)	345
Number of Service Turn-on/Turn-offs	894

Table 2.14 – Cross Connection Control Program (based on a calendar year)

2017	Beginning of Year	This Month	Year to Date
Total Devices in COS System	2,801		2,844
Due for Testing to Date			2232
Tested to Date			2048
Outstanding			184
Installed/Added			59
Reactivated			0
Inactivated from Cos System			16

Table 2.15 – Cross Connection Control Program Surveys

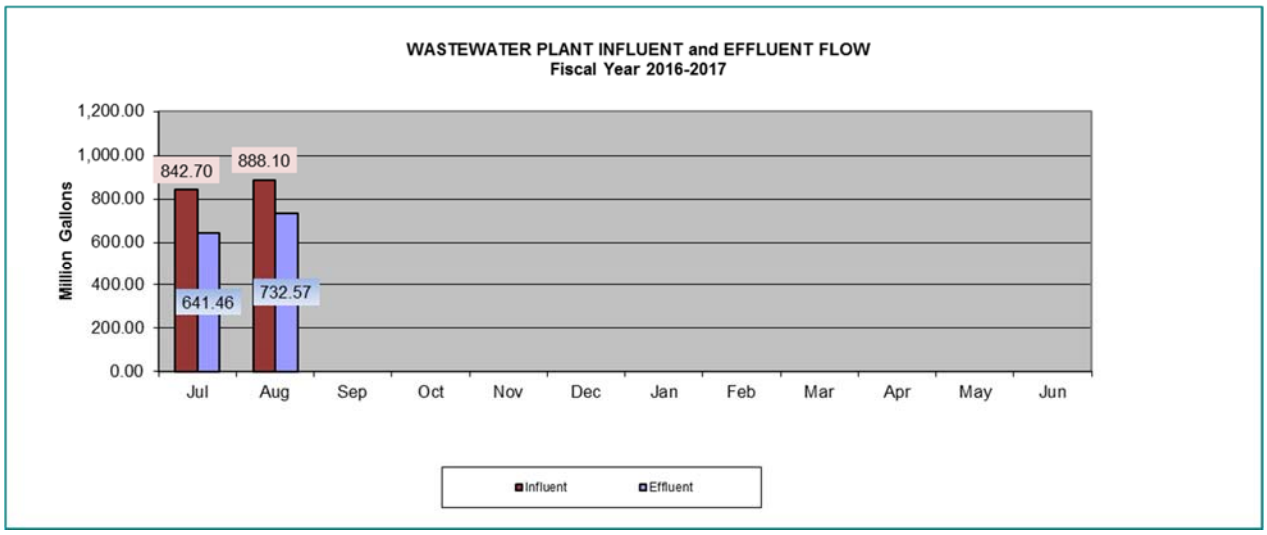
	Surveyed	*Surveyed Fiscal Year-to-Date*
Customer Connections Surveyed	7	13

Wastewater Treatment

Table 3.1 – Summary of Influent and Effluent Parameters

Influent Parameters	*Actual Month Average*	
Flow, MGD	28.6	
cBOD, mg/L	360	
TSS, mg/L	320	
Effluent Parameters	**Actual Month Average**	**NPDES Permit Limit Monthly Average**
Flow, MGD	23.6	55 Average Dry Weather Flow
cBOD, mg/L	<2.0	10
cBOD Removal, %	>99.5	85
TSS, mg/L	<3.2	10
TSS Removal, %	>99.2	85
Ammonia, mg/L	0.7	1.2 AMEL/4.0 MDEL - April 1 October 31 2.3 AMEL/9.9 MDEL - November 1 – November 30 2.4 AMEL/9.6 MDEL - December 1 – March 31
Turbidity (NTU) Daily minimum-daily maximum	1.7 1.0 – 3.0	2 (daily average) Daily maximum limit > 5 NTU no more than 3 mins/hr or 72 mins/24 hr run time
pH, standard units (Min/Max)	6.7 - 7.7	6.5 – 8.5
DO, mg/L (Min. Daily Average)	7.6	6.0 01-Dec. thru 31- Aug.
Ponds, Free Board, feet (Daily Average)	1.94– 2.62	>= 2 feet (Daily Avg) No less than 1.0 ft (Daily Max)

Figure 3.A – Wastewater Plant Influent and Effluent Flow



Wastewater Plant Influent and Effluent Flow Comparison Year 2015-2016

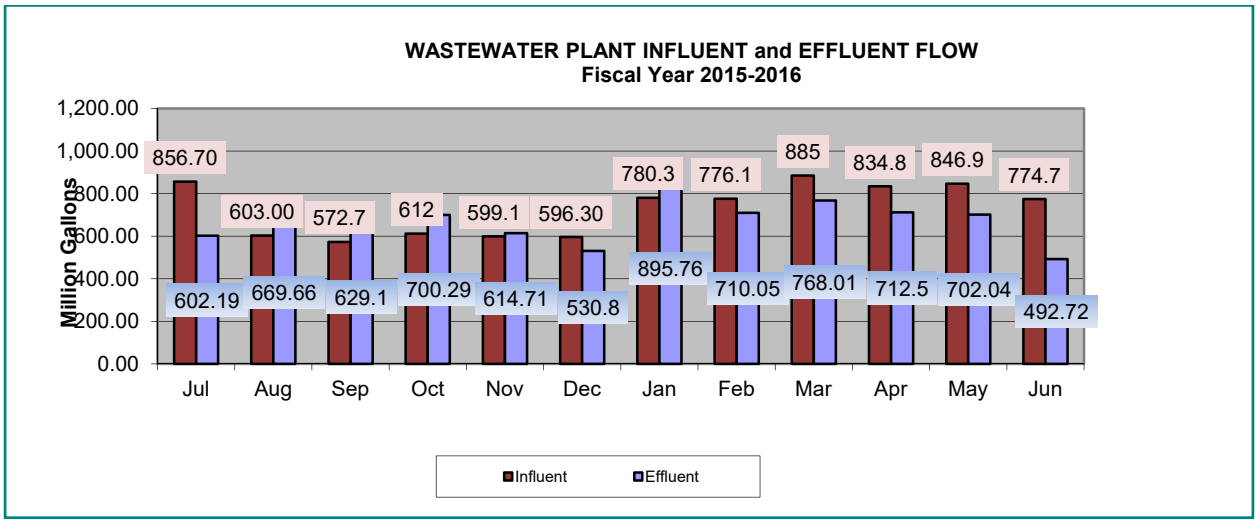
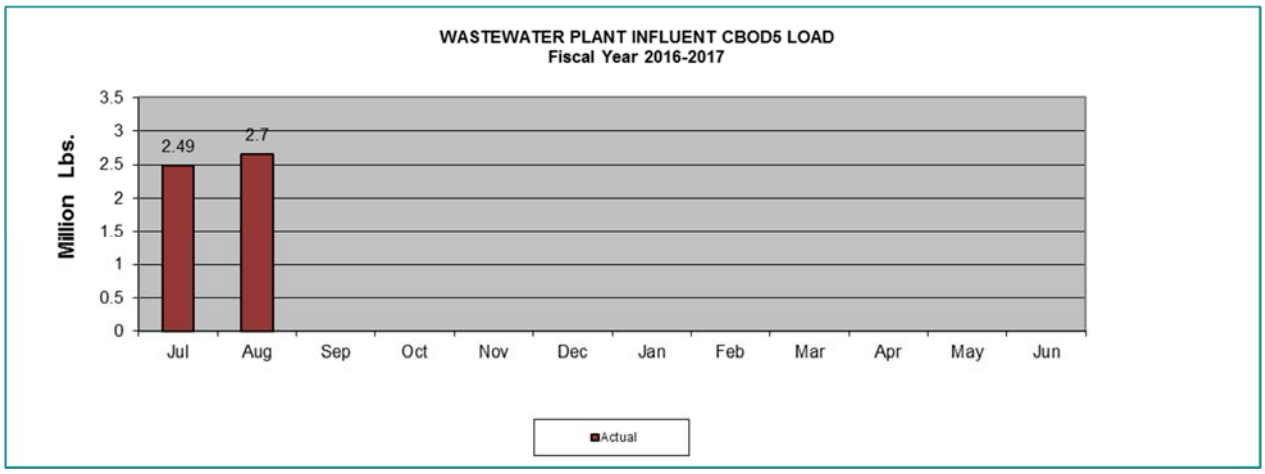


Figure 3.B – Wastewater Plant Influent CBOD5 Load



Wastewater Plant Influent CBOD5 Load Comparison Year 2015-2016

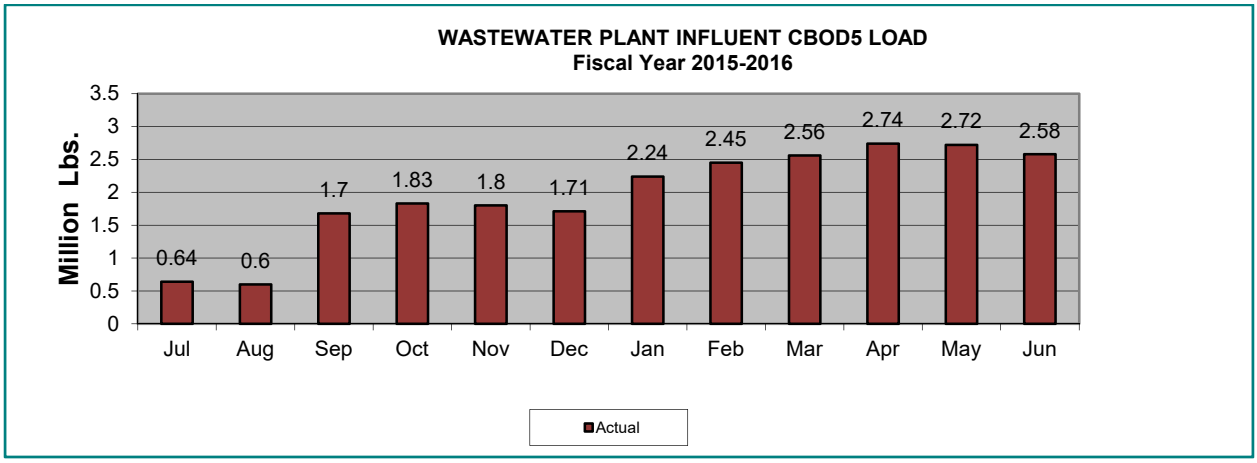
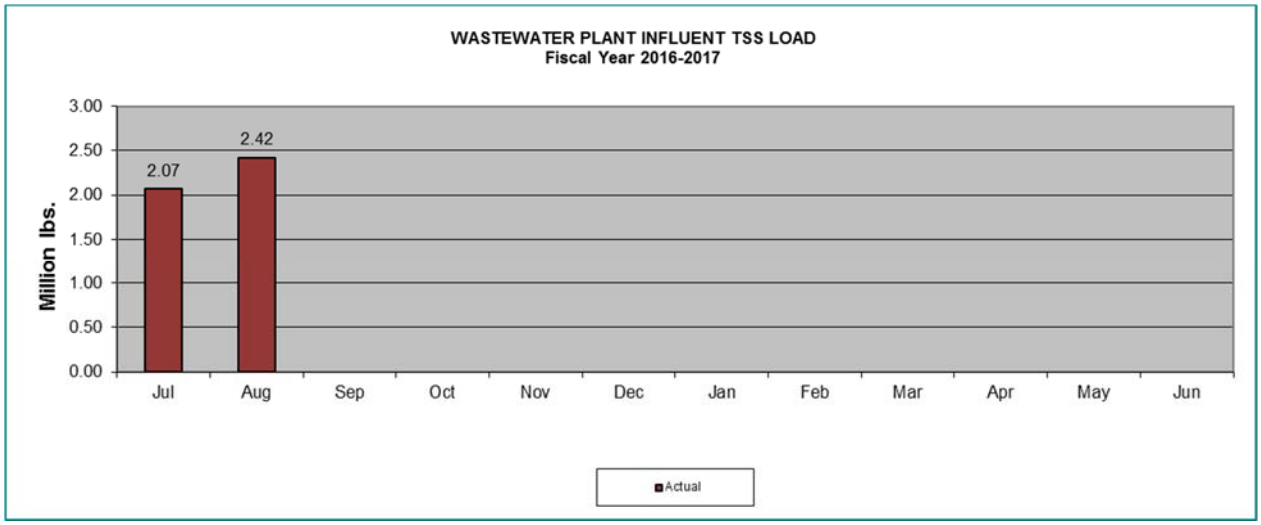


Figure 3.C – Wastewater Plant Influent TSS Load



Wastewater Plant Influent TSS Load Comparison Year 2015-2016

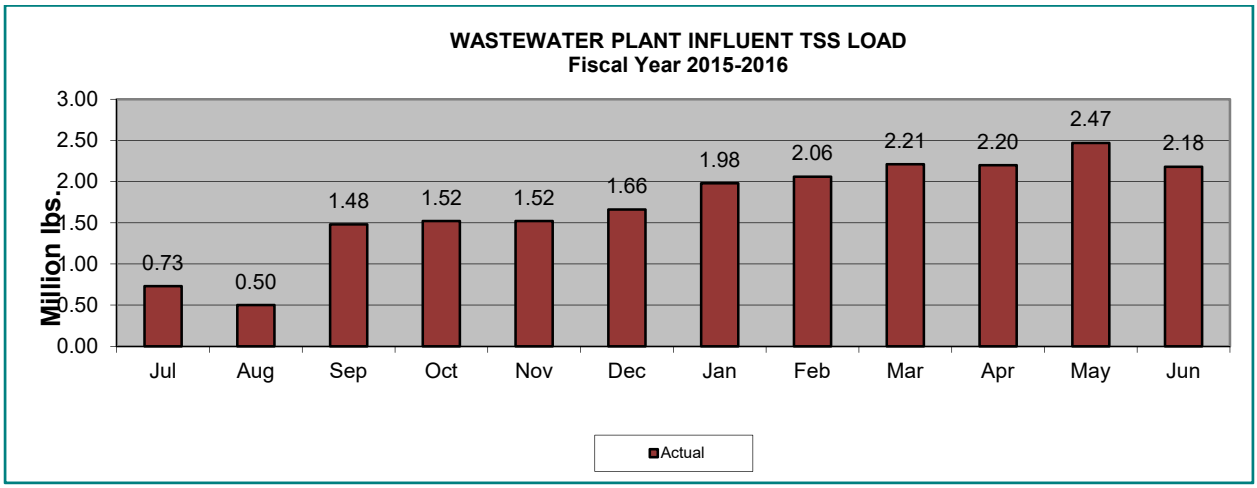
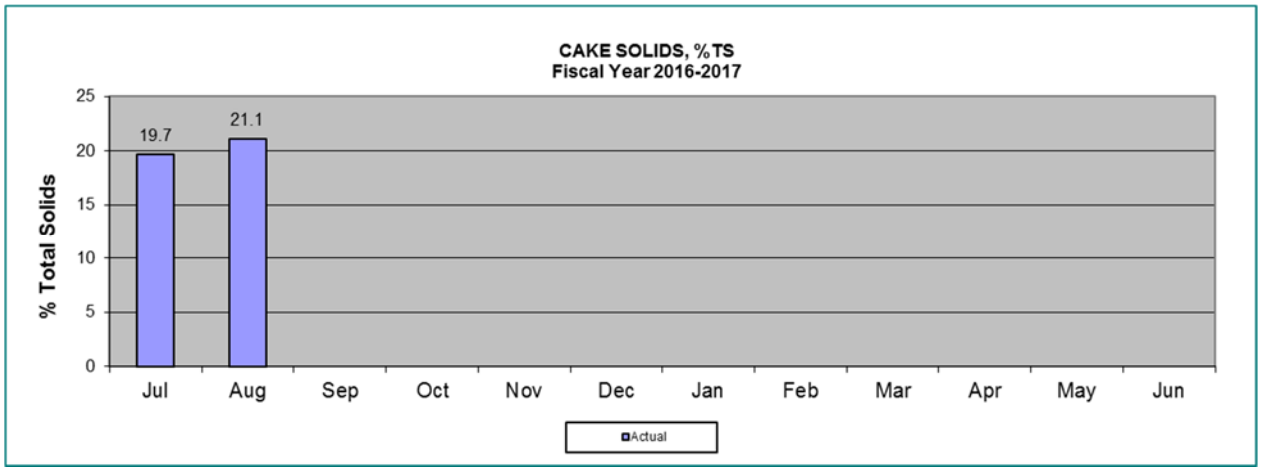


Table 3.2 – Residuals and Chemical Management Summary for Biosolids

Digester Biosolids	Current Month	Fiscal Year-to-Date
Total Feed, gals.	5,000,400	9,673,700
Total Gas Production, CuFt.	16,733,400	32,886,000
Sludge Lagoon, gals.	0	0
Ferric Chloride, gal.	7,425	13,746
Ferric Chloride (EPT), lbs.	0	0
Dewatered Biosolids		0
Total Feed, gals.	4,966,395	7,415,042
Polymer, lbs.	81,528	209,852
Cake, Wet Tons	2,509	3,175
Biosolids Truck Loads Hauled	101	153

Figure 3.D – Cake Solids



Cake Solids Comparison Year 2015-2016

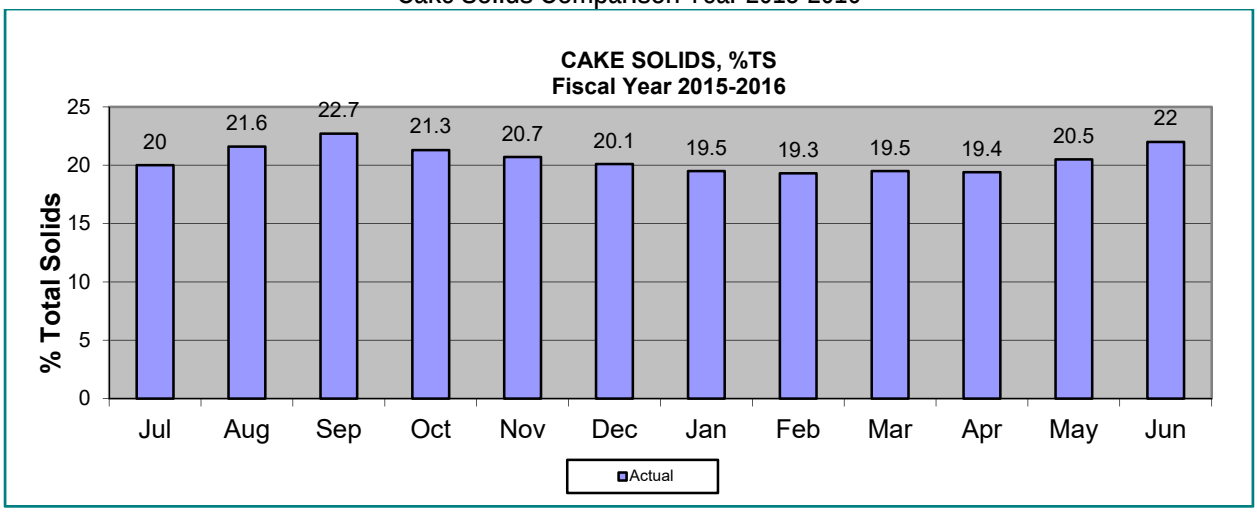


Table 3.3 – Summary of Tertiary Pond Operating Levels

Tertiary Pond	Start Freeboard	End Freeboard	Reserve Capacity (Million Gallons)
Pond #1 (190 ac.)	1.81	1.85	114.54
Pond #2 (135 ac.)	2.47	3.01	122.60
Pond #3 (125 ac.)	2.15	2.7	118.77
		Total	355.91
		Total Reserve Days	18.25

Table 3.4 – Chemical Consumption Summary – Tertiary Facility

Chemical Used	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Fiscal Year-to-Date
Chlorine Gas, lbs.	40,981	46,200											87,181
Sulfur Dioxide, lbs.	23,400	9,300											32,700
Caustic Soda, gals	0	0											0
Aqueous Ammonia, gals.	4,118	5,047											9,165
Polymer, lbs	337,008	337,447											674,455

Comparison Year 2015-2016- Chemical Consumption Summary – Tertiary Facility

Chemical Used	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Fiscal Year-to-Date
Chlorine Gas, lbs.	39,357	43,980	41,666	48,734	43,393	29,760	49,573	40,600	43,532	42,942	41,955	31,967	497,459
Sulfur Dioxide, lbs.	31,820	38,058	33,200	33,600	33,200	972,228	36,200	30,100	36,200	32,400	7,000	20,100	1,304,106
Caustic Soda, gals	0	0	0	350	2,113	0	3,828	919	2,188	315	0	216	9,929
Aqueous Ammonia, gals.	4,322	5,609	5,870	5,691	1,501	486	2,854	3,278	4,104	3,566	3,574	3,337	44,192
Polymer, lbs	226,517	415,617	430,019	454,602	317,845	317,026	470,551	408,160	456,239	498,113	503,167	296,610	4,794,466

Table 3.5 – Utility Consumption

	Current Month	Fiscal Year-to-Date
Electricity		
Main Facility Total Usage, KW	1,533,731	3,028,140
Tertiary Facility Total Usage, KW	717,754	1,342,717
Total Facility Usage, KW	2,251,485	4,370,857
PG&E, Purchased KW	1,663,091	228,271
Co-Generation Production, KW	588,394	1,272,946
Total Facility Prod./Purch. KW	2,251,485	4,370,857
Natural Gas		
Co-Generation Fuel, Therms	8,640	91,960
Building Fuel, Therms	1.27	3
Methane Gas, Digester Production, CuFt.	16,733,400	32,886,000
Methane Gas, Digester Production, Therms	102,047	199,531
Water		
Wastewater Facilities Total Usage, gals.	1,218,300	2,415,000

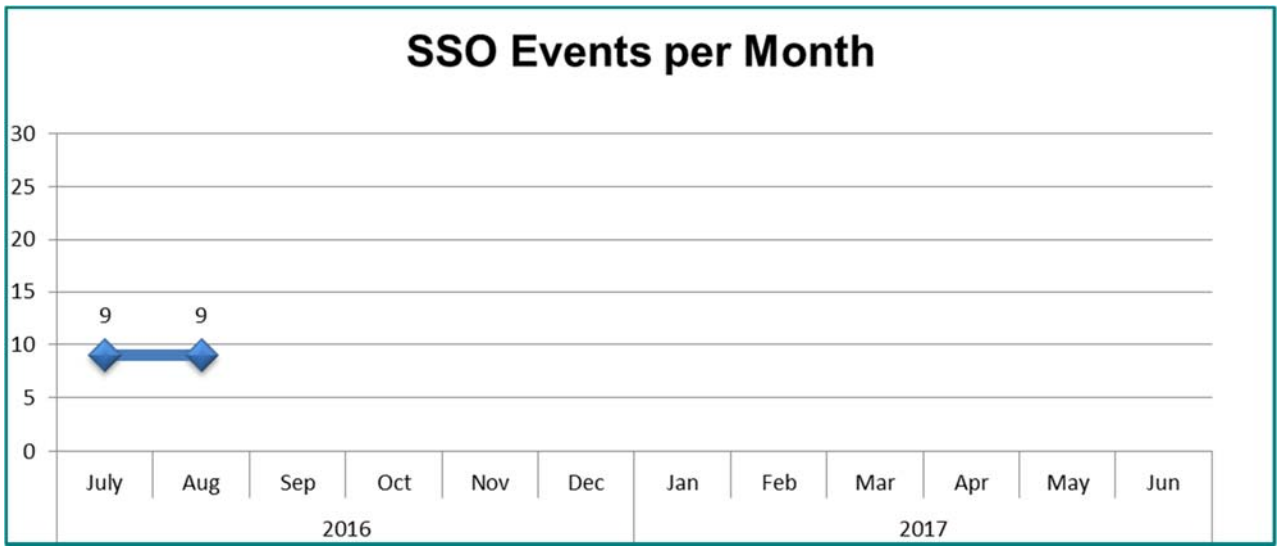
Wastewater Collection Systems

Table 4.1 – Summary of SSOs and Private Sewage Spills

Date	Address	Spill Gallons	Gallons Recovered	Gal to Surf Water	Cause	Receiving Water or Containment	Line Type	Pipe Size
CATEGORY 1								
8/23/2016	West of Hatchers Ci.	11780	0	11191	Pipe Failure	14 Mile Slough	Main	20"
CATEGORY 2								
8/13/2016	S. San Joaquin St.	7185	7185	0	Pipe Failure	On Premisis	Lateral	4"
CATEGORY 3								
8/2/2016	N. Sutter St.	14	14	0	Debris	Gutter	Lateral	4"
8/14/2016	E. Washington St.	60	60	0	Debris	Gutter	Lateral	4"
8/15/2016	E. Twelth St.	8	8	0	Debris	Gutter	Lateral	4"
8/18/2016	S. Airport Way	2	2	0	Roots	Gutter	Lateral	4"
8/24/2016	Raymond Ave.	8	8	0	Roots	Gutter	Lateral	4"
8/30/2016	E. Weber Ave.	81	81	0	Debris	Gutter	Lateral	4"
8/31/2016	N. Madison	12	12	0	Grease	Gutter	Main	6"
PRIVATE								
8/5/2016	N. Wilson Way	39	39	0	Inside Trouble	Storm Drain	Lateral	4"
8/8/2016	Village Green	5	5	0	Debris	Gutter	Lateral	4"
8/13/2016	Royal Oak Dr.	1	1	0	Debris	Gutter	Lateral	4"
8/14/2016	St. Croix Ct.	3	3	0	Debris	Gutter	Lateral	4"
8/22/2016	N. California St.	3	0	0	Inside Trouble	Premises	Lateral	4"
8/25/2016	William Moss Bl.	7	7	0	Inside Trouble	Gutter	Lateral	4"
8/29/2016	W. Ponce DeLeon	25	25	0	Debris	Gutter	Lateral	4"

Total Public SSO Events	9	Total Gallons	19,150
Total Private Spills	7	Total Gallons	83
Total Public & Private Spill Events	16	Total Gallons	19,233

Figure 4.A – Public Sanitary Sewer Overflow Events



Public Sanitary Sewer Overflow Events - Comparison Year 2015-2016

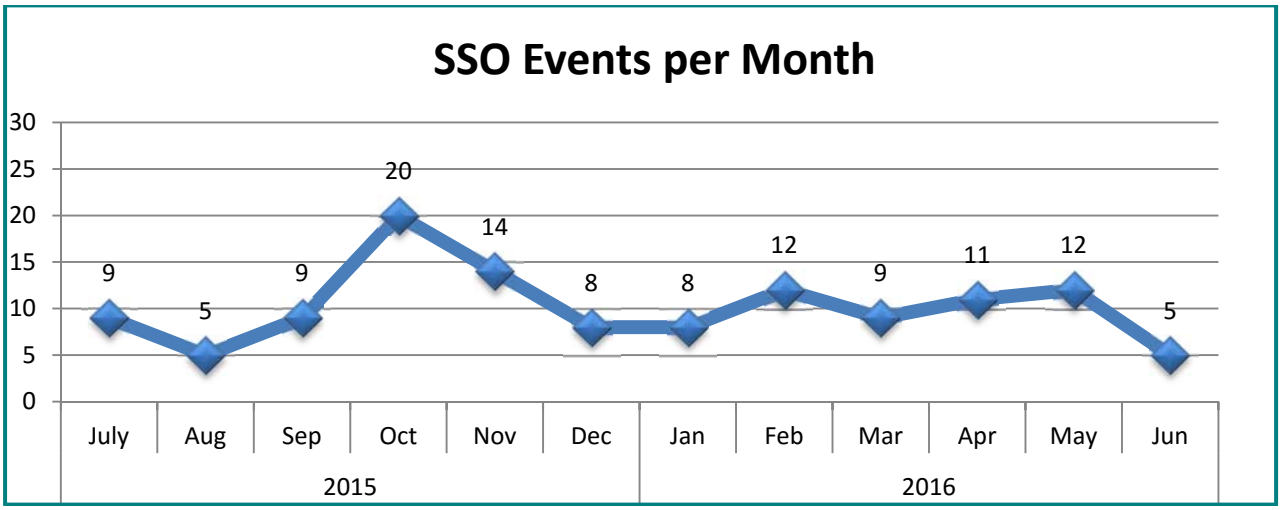
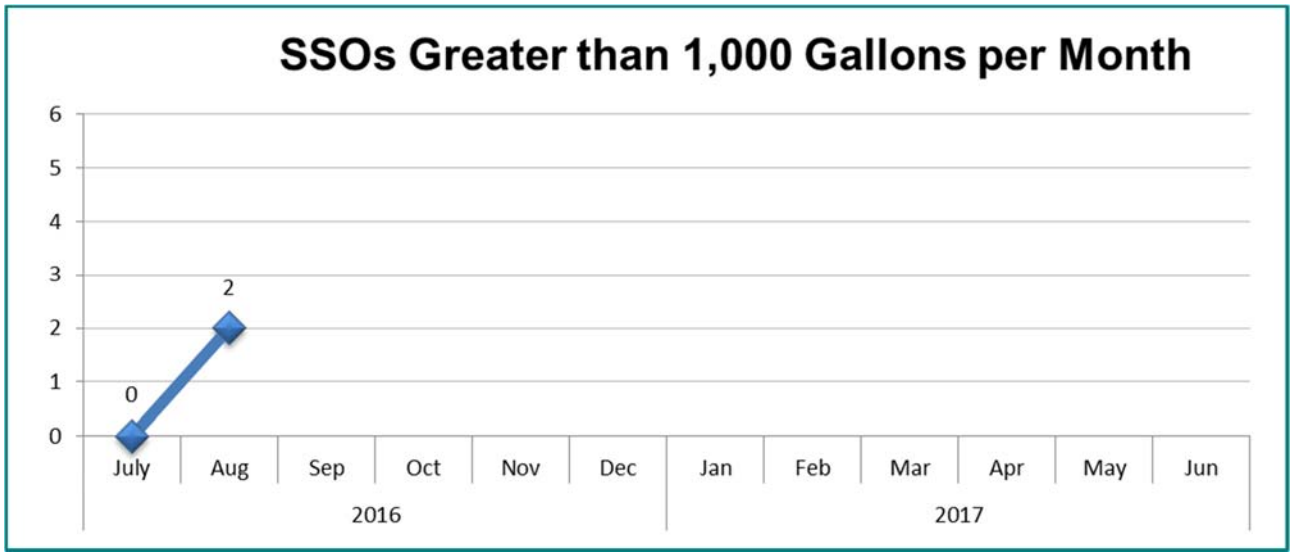


Figure 4.B – Public SSOs Greater than 1,000 gallons – Events



Public SSOs Greater than 1,000 gallons Events – Comparison Year 2015-2016

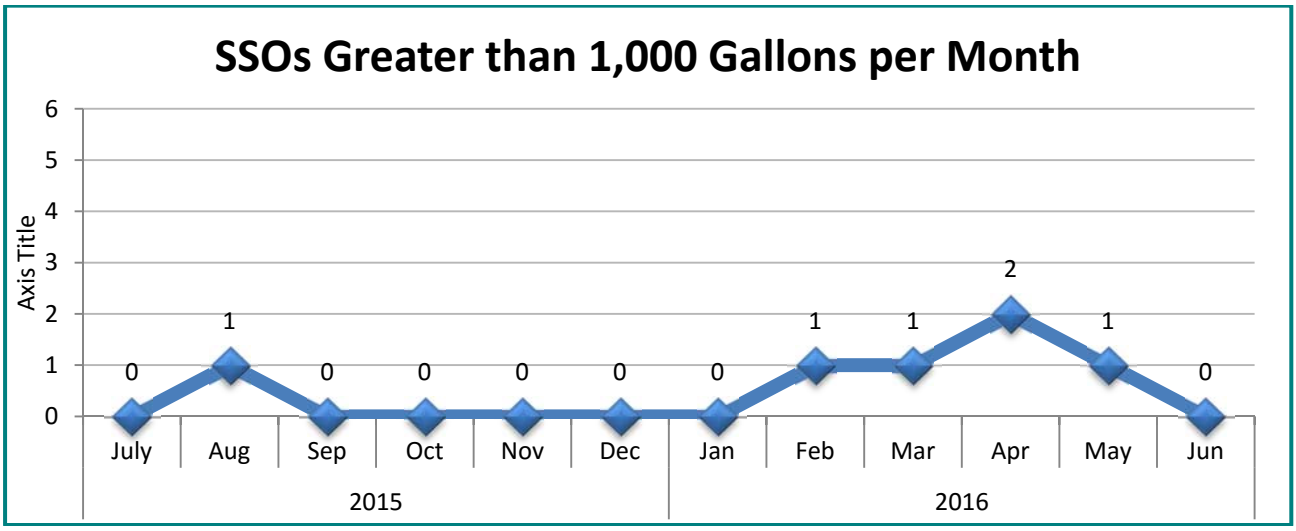
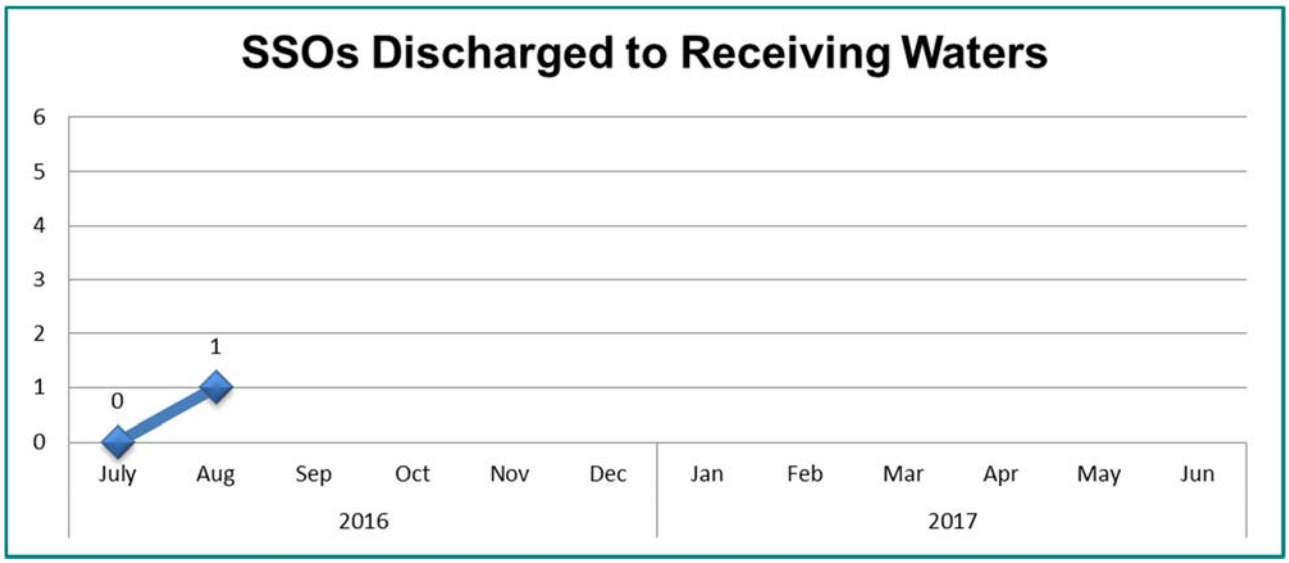


Figure 4.C – Public Sanitary Sewer Overflows Discharged to Receiving Water



Public Sanitary Sewer Overflows Discharged to Receiving Water – Comparison Year 2015-2016

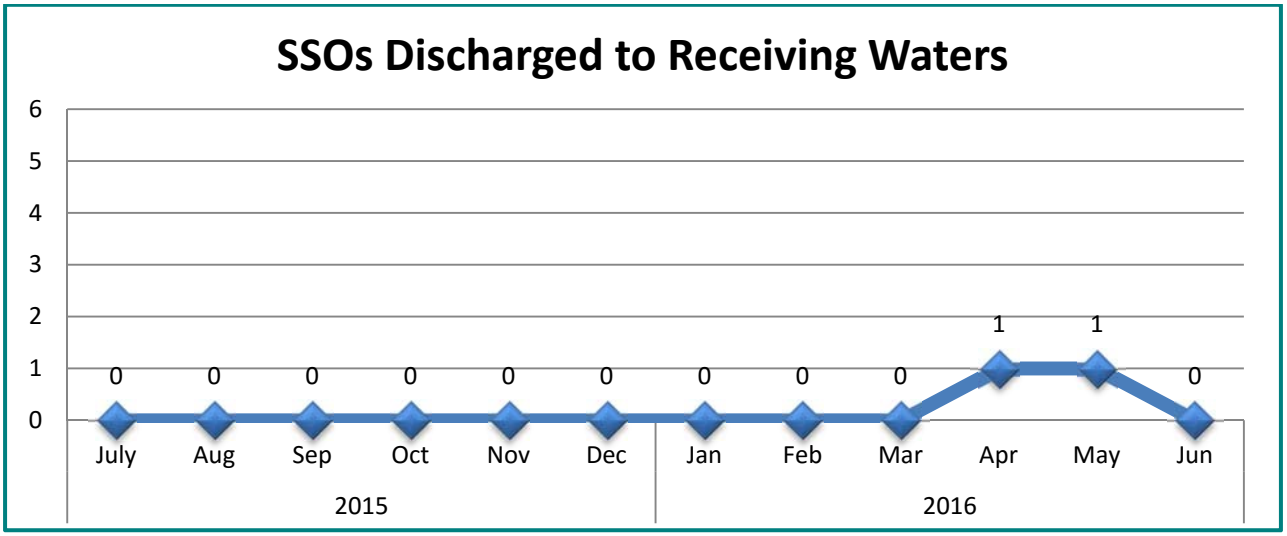


Table 4.2 – Sewer Maintenance Activity Summary

	JUL	*AUG*	*SEP*	*OCT*	*NOV*	*DEC*	*JAN*	*FEB*	*MAR*	*APR*	*MAY*	*JUN*	*FISCAL YTD*
Repairs – Sewer													
# of Lateral Repairs	14	14											28
Lateral Repairs, Linear Feet	78	109											187
# of Main Line Repairs	7	10											17
Main Line Repairs, Linear Feet	37	46											83
Maintenance Hole Repair/New	2	4											6
Sewer Taps	0	0											0
Maintenance – Sewer													
# of Main Line Segments Jetted	400	475											875
Main Line Linear Feet Jetted	143,361	139,331											282,692
# of Main Line Segments Rodded	16	30											46
Main Line Linear Feet Rodded	6,602	9,040											15,642
Laterals Foamed	49	84											133
Laterals Foamed, Linear Feet	1,470	2,520											3,990

(Chart totals do not include work done by contractors.)

Comparison Year 2015-2016 – Sewer Maintenance Activity Summary

	JUL	*AUG*	*SEP*	*OCT*	*NOV*	*DEC*	*JAN*	*FEB*	*MAR*	*APR*	*MAY*	*JUN*	*FISCAL YTD*
Repairs – Sewer													
# of Lateral Repairs	7	12	2	1	7	14	5	11	11	19	8	12	109
Lateral Repairs, Linear Feet	71	111	16	5	32	20	103	74	94	77	36	109	748
# of Main Line Repairs	13	6	3	3	3	3	0	4	14	14	15	13	91
Main Line Repairs, Linear Feet	63	21	27	15	14	18	0	23	75	87	75	50	468
Maintenance Hole Repair/New	1	2	6	10	9	2	2	2	2	7	0	0	43
Sewer Taps	1	0	0	0	0	0	0	0	0	0	1	0	2
Maintenance – Sewer													
# of Main Line Segments Jetted	612	620	465	495	257	394	363	506	554	561	597	545	5,969
Main Line Linear Feet Jetted	185,379	185,771	138,293	159,933	88,760	132,467	127,096	159,544	143,615	164,396	163,591	144,535	1,793,380
# of Main Line Segments Rodded	57	16	17	33	17	19	12	17	24	1	0	0	213
Main Line Linear Feet Rodded	17,098	1,519	7,339	10,910	6,418	5,064	4,016	4,753	8,366	225	0	0	65,708
Laterals Foamed	106	144	165	33	85	128	99	160	138	92	108	187	1,445
Laterals Foamed, Linear Feet	3,180	4,320	4,950	990	2,550	3,840	2,940	4,800	4,140	2,760	3,240	5,610	43,320

(Chart totals do not include work done by contractors.)

Table 4.3 – Customer Service and CCTV Activity Summary

CUSTOMER SERVICE	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	FISCAL YTD
Service Calls	250	338											588
USA Requests	1,076	1362											2,438
TV Sanitary Line Segment Inspections	106	162											268
TV Sanitary Line Segment Inspections, Linear Feet	16,397	30,897											47,294
TV Sanitary Lateral Inspections	28	38											66
TV Sanitary Lateral Inspections, Linear Feet	675	723											1,398

(Chart totals do not include work done by contractors.)

Comparison Year 2015-2016 – Customer Service and CCTV Activity Summary

CUSTOMER SERVICE	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	FISCAL YTD
Service Calls	254	260	392	327	396	462	467	413	321	354	271	314	4,231
USA Requests	828	720	839	662	451	812	881	630	848	1,023	1,117	1,259	10,070
TV Sanitary Line Segment Inspections	61	121	144	81	22	50	73	86	62	85	103	36	924
TV Sanitary Line Segment Inspections, Linear Feet	11,946	17,249	18,227	13,217	5,423	12,047	13,574	14,580	6,808	11,538	8,485	6,368	139,462
TV Sanitary Lateral Inspections	32	258	92	24	107	88	39	116	59	33	33	23	893
TV Sanitary Lateral Inspections, Linear Feet	872	8,230	3,982	729	1,697	1,799	875	2,851	1,570	1,027	756	438	24,826

(Chart totals do not include work done by contractors.)

Table 4.4 – Spoils Activity Summary

SPOILS ACTIVITY SUMMARY	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	FISCAL YTD
Operations / Grit Hauling - # of Loads	0	0											0
Operations / Grit Hauling - Tonnage	0	0											0
Sanitary Lines / Pump Stations - # of Loads	0	4											4
Sanitary Lines / Pump Stations - Tonnage	0	31.02											31.02
Construction Hauling – # of Loads	3	8											11
Construction Hauling – Tonnage	39.84	92.97											132.81
Total Loads	3	12											15
Total Tonnage	39.84	123.99											163.83

Comparison Year 2015-2016 – Spoils Activity Summary

SPOILS ACTIVITY SUMMARY	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	FISCAL YTD
Operations / Grit Hauling - # of Loads	1	0	0	0	1	3	0	1	1	4	0	0	11
Operations / Grit Hauling - Tonnage	6.63	0	0	0	6.73	20.86	0	11.69	7.08	67.31	0	0	120.30
Sanitary Lines / Pump Stations - # of Loads	8	0	6	11	5	10	9	0	14	12	5	6	86
Sanitary Lines / Pump Stations - Tonnage	126.19	0	73.01	128.00	65.48	86.12	138.83	0	156.44	105.17	36.29	69.89	985.42
Construction Hauling – # of Loads	17	0	15	5	6	5	9	6	3	2	4	15	87
Construction Hauling – Tonnage	224.97	0	195.59	55.24	67.62	60.32	96.98	70.58	13.72	17.28	13.54	53.72	869.56
Total Loads	26	0	21	16	12	18	18	7	18	18	9	21	184
Total Tonnage	357.79	0	268.60	183.24	139.83	167.30	235.81	82.27	177.24	189.76	49.83	123.61	1,975.28

Table 4.5 – Graffiti Removal

Name / Location of Pump Stations Painted
NONE

Table 4.6 – Pump Station Maintenance Work Order Summary

Maintenance Work Orders	*Corrective Maintenance*	*Corrective Maintenance % Completed*	*Corrective Maintenance %Backlog*	*Preventive Maintenance % Backlog*
Sanitary Pumping Facilities				
Pump Station Mechanical			16.2	11.8
Pump Station Electrical			6.2	12.0

Table 4.7 – Plant Maintenance Work Order Summary

Maintenance Work Orders	*Corrective Maintenance WOs Issued*	*Corrective Maintenance % Completed*	*Preventative Maintenance WOs Issued*	*Preventive Maintenance % Complete*
RWCF Treatment Plant				
Main Plant				
Tertiary Plant				
Main Plant				
Main Plant Electrical				
Tertiary Plant				
Tertiary Plant Electrical				

Due to a backlog in data entry, percent complete numbers are not yet available.

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Environmental Control

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Table 5.1 – Operational Activity Summary

Activity/Indicator	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Pretreatment Program												
Industrial Inspections	26	38										
Industrial Sampling	23	31										
Discharge Permits (new) *	0	0										
Discharge Permits (renewal) **	2	0										
Industrial Flow, MG	143.66											
Industrial BOD, lbs.	943,600											
Industrial TSS, lbs.	459,440											
Industrial Revenue	$ 578,950											
Pretreatment Enforcement Actions***	1											
Waste Hauler Program												
Trucked-in Waste Loads	241											
Trucked-in Waste Gallons	749,656											
Trucked-in Waste Revenue	$ 25,866											
Stormwater Program												
Hazardous Materials Spills ****	0	0										
Stormwater Complaints *****	2	0										
Stormwater Enforcement Actions******	1	0										
FOG Program												
FOG Initial Inspections	66	76										
FOG Enforcement Actions	55	80										
FOG Follow-up Inspections	25	45										

* Discharge Permits (New) - NONE

** Discharge Permits (Renewal) – NONE

*** Pretreatment Enforcement Actions – One (1)
7/29/2016 – NOV/CO: Failure to Monitor & Missed Sample Violations

**** Hazardous Materials Spills – NONE

***** Stormwater Complaints – NONE

****** Stormwater Enforcement Actions – NONE

Comparison Year 2015-2016 – Operational Activities Summary

Activity/Indicator	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Pretreatment Program												
Industrial Inspections	66	46	47	52	44	34	35	43	42	36	30	58
Industrial Sampling	54	43	37	31	26	28	32	31	33	34	20	52
Discharge Permits (new) *	0	0	0	1	2	0	0	1	0	0	0	1
Discharge Permits (renewal) **	1	3	0	0	0	1	0	0	1	1	2	2
Industrial Flow, MG	148.91	158.98	132.07	89.74	68.45	65.34	82.45	73	86.64	80.59	76.03	
Industrial BOD, lbs.	1,061,940	1,229,740	782,150	551,210	555,450	440,340	696,450	578,230	511,490	577,360	561,200	
Industrial TSS, lbs.	462,480	742,990	430,130	160,590	102,090	89,380	175,370	216,290	111,140	141,730	108,790	
Industrial Revenue	$ 587,542	$ 621,344	$ 564,162	$ 521,795	$ 504,939	$ 506,690	$ 558,483	$510,424	$520,585	$515,186	$504,237	
Pretreatment Enforcement Actions***	8	7	10	7	6	7	9	6	7	8	2	5
Waste Hauler Program												
Trucked-in Waste Loads	227	239	247	225	224	240	231	240	248	304	270	
Trucked-in Waste Gallons	691,998	722,084	742,659	665,496	676,153	703,905	692,313	715,513	739,717	868,697	772,044	
Trucked-in Waste Revenue	$ 24,225	$ 25,443	$ 26,259	$ 23,813	$ 23,840	$ 25,343	$ 24,537	$ 25,456	$ 26,308	$ 31,877	$ 28,317	
Stormwater Program												
Hazardous Materials Spills ****	0	0	0	0	1	0	0	0	2	0	1	0
Stormwater Complaints *****	1	3	3	2	3	0	0	4	4	3	2	0
Stormwater Enforcement Actions******	2	1	1	0	2	0	0	1	3	0	0	0
FOG Program												
FOG Initial Inspections	74	62	73	42	3	7	95	105	100	80	103	75
FOG Enforcement Actions	37	23	0	0	0	0	0	0	0	0	0	0
FOG Follow-up Inspections	41	42	71	44	17	17	23	31	37	31	46	31

Laboratory

Table 6.1 – Acute Toxicity Testing Summary

Date of EFF-001 Sample (composite)	Percent survival	Lab
01-03-16	100	PERL
02-02-16	100	PERL
03-07-16	100	PERL
04-03-16	100	PERL
05-02-16	100	PERL
06-05-16	100	PERL
07-11-16	100	PERL
08-14-16	100	PERL

Chronic Toxicity – Performed by Aqua Science

Table 6.2 – Algae (Selenastrum capricornutum)

Sample Date	NOEC	TUc (100/NOEC)	Comments
03-07-16	100%	1.0	Lab water control
05-15-16	100%	1.0	Lab water control
08-0716	100%	1.0	Lab water control

Table 6.3 – Ceriodaphnia (C. dubia)

Sample Date	Survival		Reproduction	
	NOEC	TUc (100/NOEC)	NOEC	TUc (100/NOEL)
03-07-16 [1]	<100%	> 1.0	<100%	> 1.0
04-10-16	100%	1.0	100%	1.0
08-07-16 [2]	<100%	> 1.0	<100%	> 1.0

[1] March: Toxicity to survival and reproduction initiates accelerated monitoring.
April accelerated monitoring result used for the 2nd Quarter Chronic Toxicity Testing
[2] August: Toxicity to survival and reproduction initiates accelerated monitoring.

Table 6.4 – Larval Fathead Minnow (Pimephales Promelas)

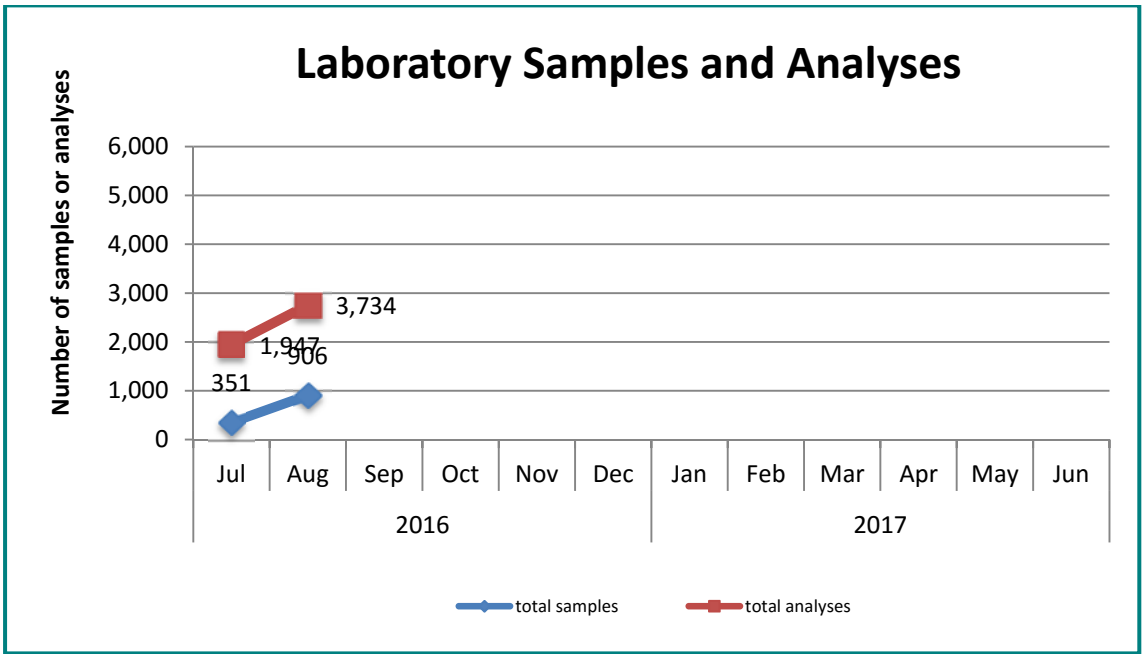
Sample Date	Survival		Growth	
	NOEC	TUc (100/NOEC)	NOEC	TUc (100/NOEL)
03-07-16	100%	1.0	100%	1.0
05-15-16	100%	1.0	100%	1.0
08-07-16	100%	1.0	100%	1.0

Testing continues quarterly.

Table 6.5 – Effluent Ammonia-N Summary

EFF-001 (Final Effluent)	Regulatory NH3-N, mg/L	Process Control NH3-N, mg/L
Monthly Minimum	<0.50	0.47
Monthly Maximum	0.80	0.90
Monthly Average	<0.65	0.68

Figure 6.A – Laboratory Samples and Analyses



Laboratory Samples and Analyses – Comparison Year 2015-2016

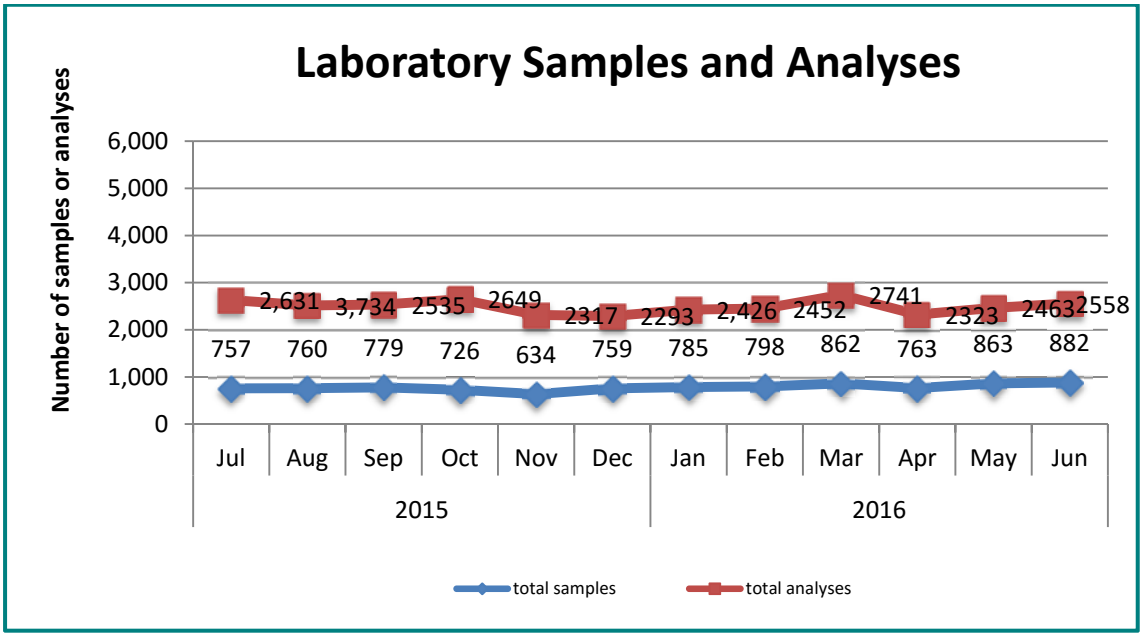
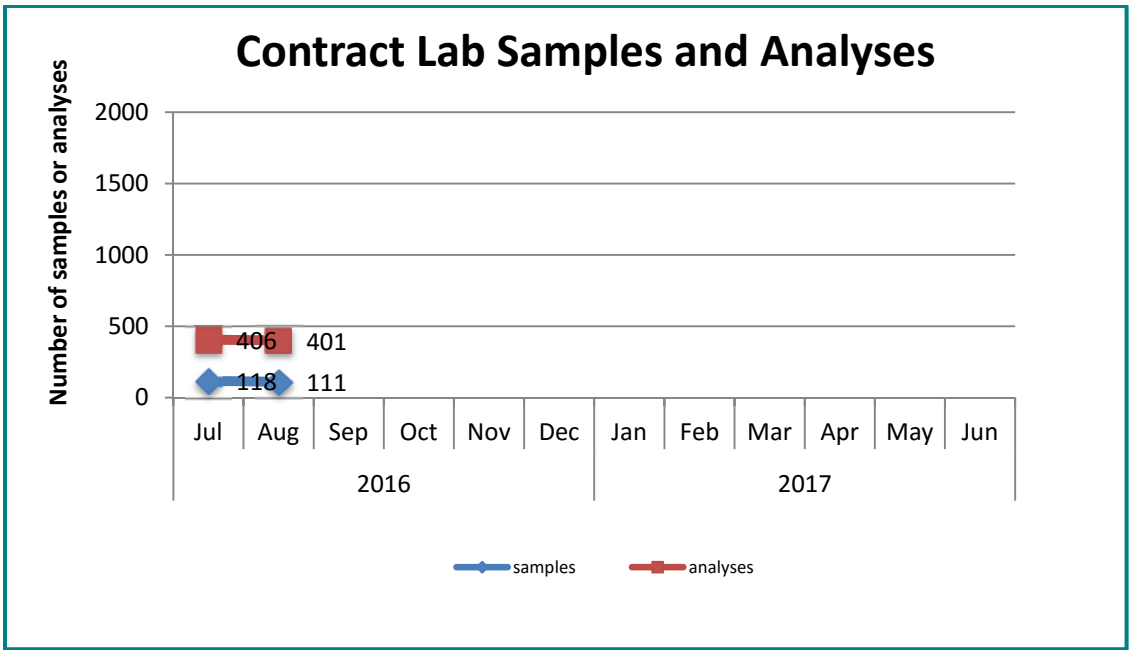


Figure 6.B – Contract Laboratory Samples and Analyses



Contract Laboratory Samples and Analyses – Comparison Year 2015-2016

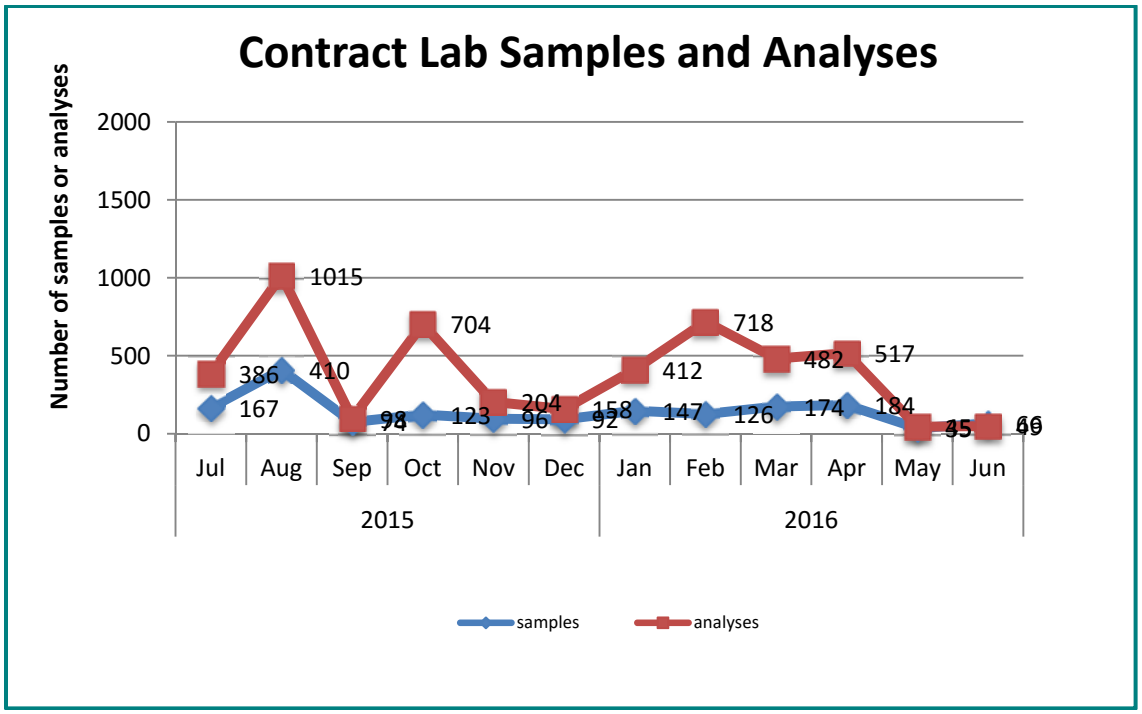
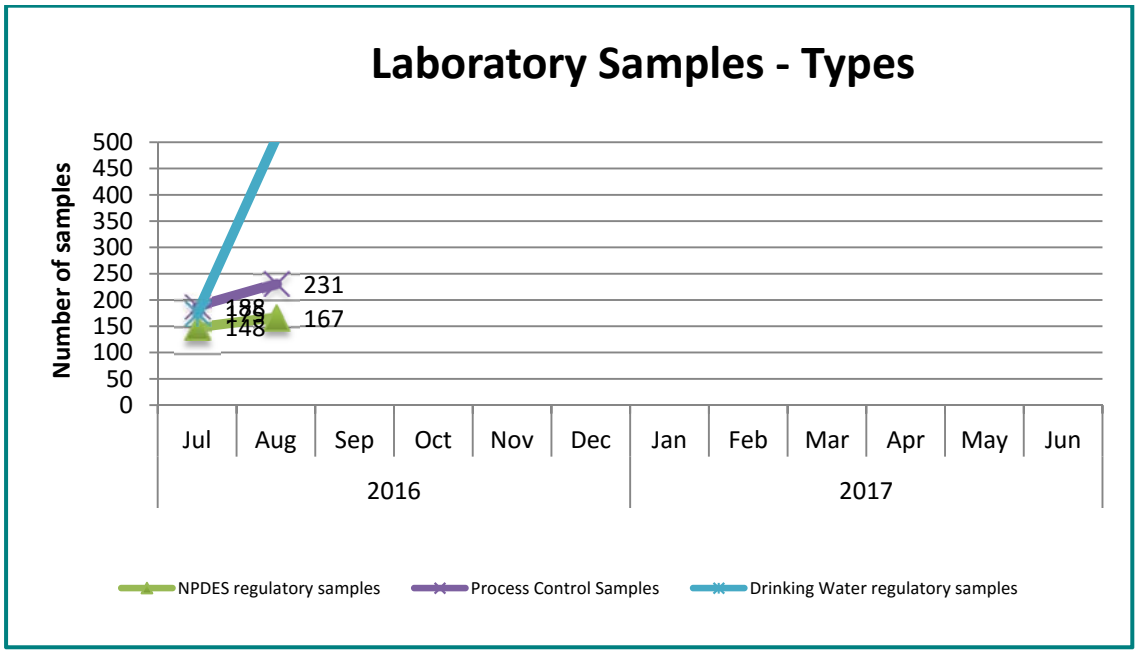
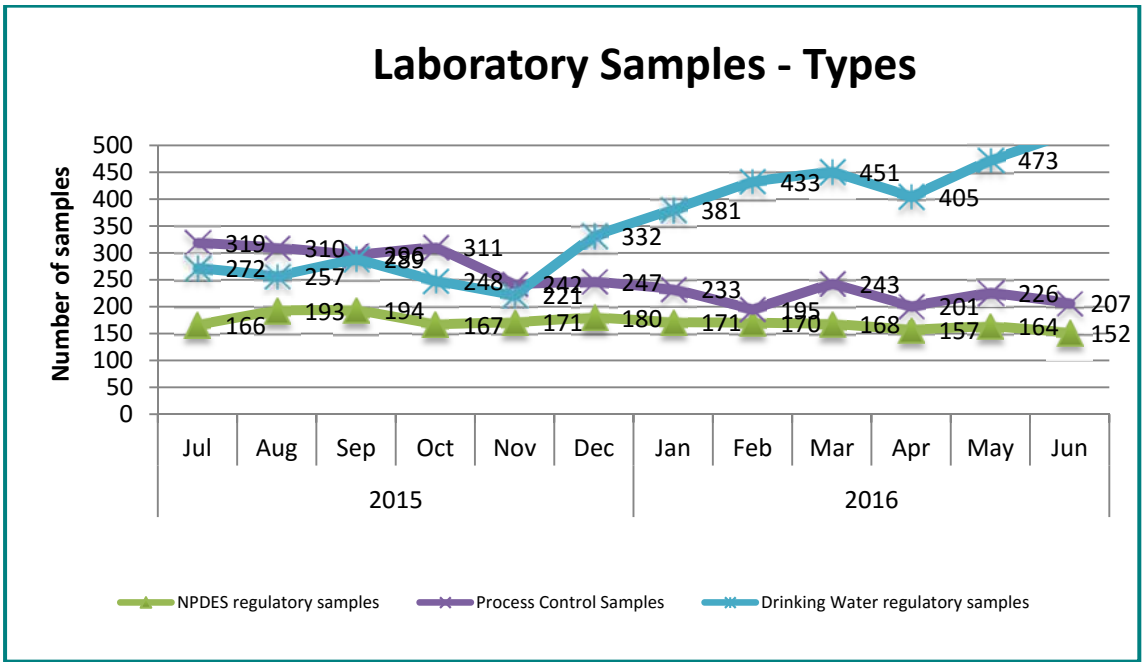


Figure 6.C – Laboratory Sample Types



Laboratory Sample Types Comparison Year 2015-2016



Engineering

Figure 7.A – Development Reviews Received and Completed

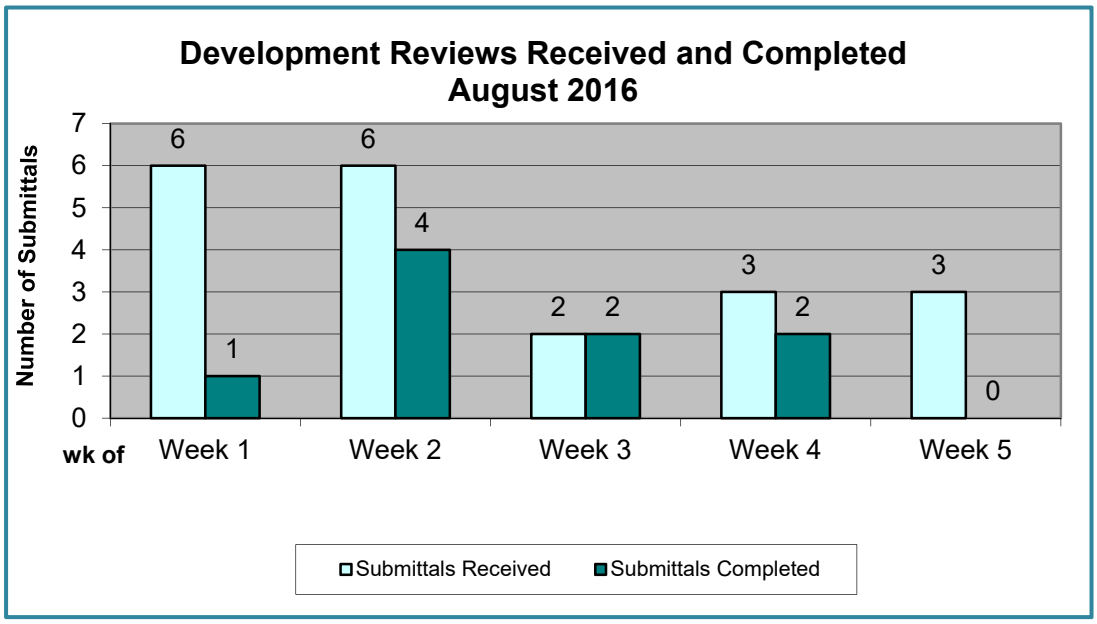
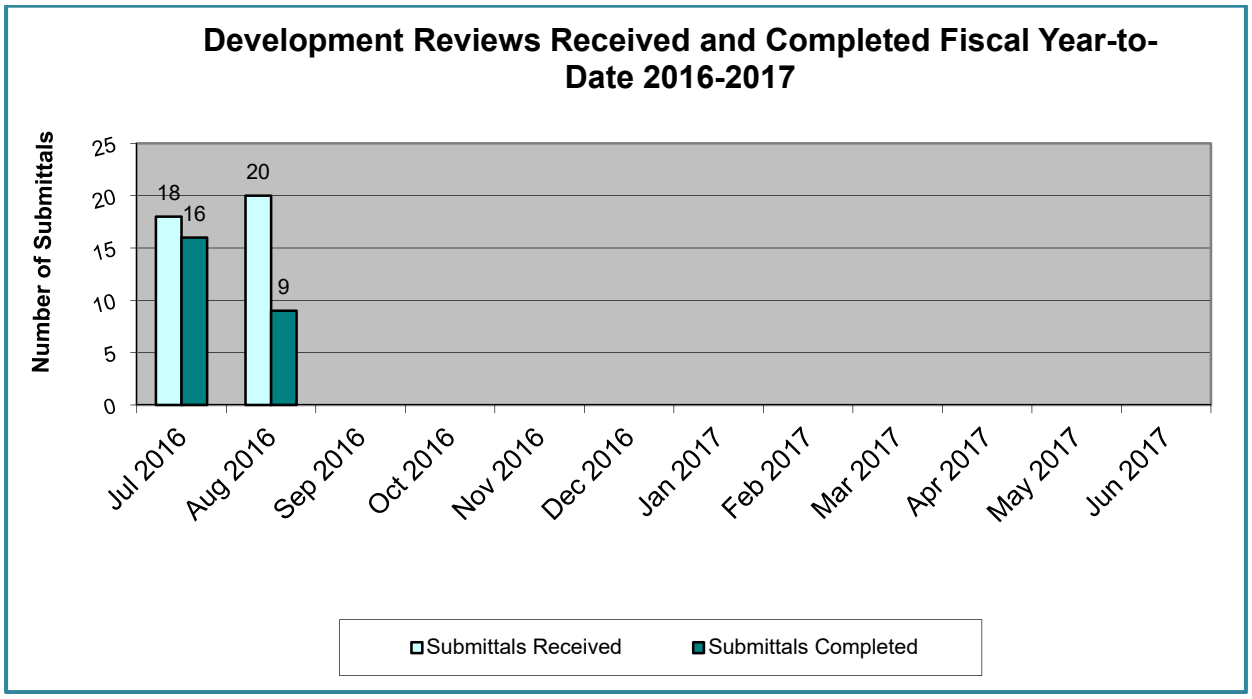


Figure 7.B – Development Reviews Received and Completed



Development Reviews Received and Completed – Comparison Year 2015-2016

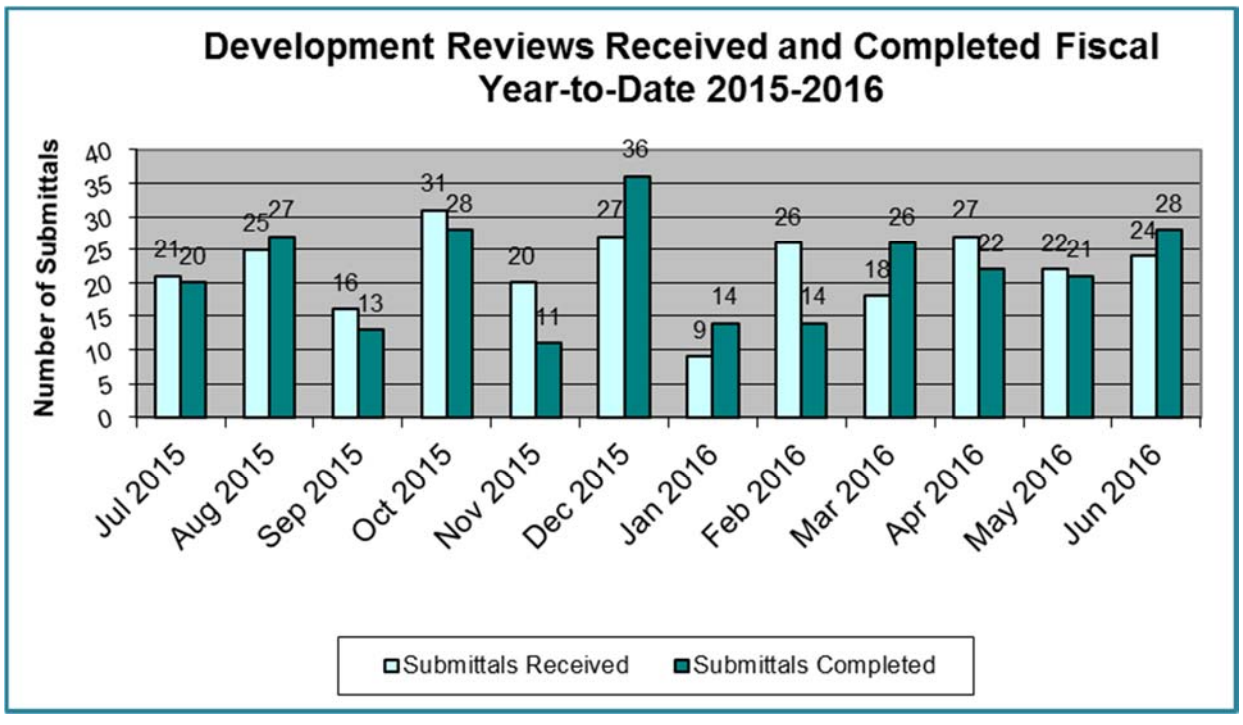
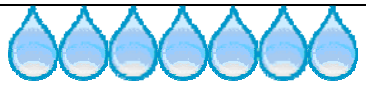
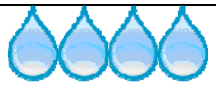
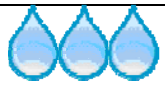
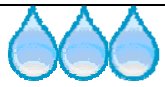
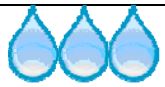


Table 7.1 – Nonpotable, Stormwater, Water, and Wastewater Projects

LEGEND			
Project Type		*Phase Of Project*	
Nonpotable	Purple		Beginning Planning
Stormwater	Magenta		Planning Completed
Water	Blue		Beginning Design
Wastewater	Green		Ending Design
			Beginning Construction
			Construction Continuing
			Project Completed

Projects	*Project Type*	*Cost*	*Project Phase*
Capital Improvement and Energy Management Plan EIR (M12019)		$400,000	
Water Well 25 & 26 Engine Conversion (M14020)		$282,800	
Crown and Pershing Avenues Sewer Crossing at the Calaveras River (M13005)		$1,999,000	
Highway 99 at Farmington Fresh Sewer Replacement (M14034)		$238,000	
2014 Sanitary Sewer Maintenance Hole Rehabilitation Project (M15004)		$5,000,000	
Eighth Street Storm Water Pump Station (M14019) and Weston Ranch Storm Water Pump Station (M13014)		$208,000	
Rehabilitation/Replacement of Distributor Arms - Biotower No. 4 (M14027)		$355,750	
Rehabilitate Don Avenue (M13010) and Thornton Road (M13009) Sanitary Pump Stations		$590,000	
Rehabilitate Harding Way Subway (M15010) and Wilson Way Subway (M15011) Storm Drain Pump Stations Design		$134,000	
Rehabilitate Charter Wy & Walnut Plant (M16002) and Charter Way Subway (M16001) Storm Drain Pump Stations Design		$148,000	
SCADA Master Plan – Outfall Controls Improvements (Task 8.5, - M14010)		$259,638	
Swenson Park Access Road Rehabilitation (M16015)		$313,000	

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Stormwater

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Table 8.1 – Stormwater Maintenance Activity Summary

	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	FISCAL YTD
Repairs – Storm													
# of Catch Basin Lateral Repairs/New	0	0											0
Catch Basin Lateral Repairs/New, Linear Feet	0	0											0
# of Storm Main Line Repairs	1	1											2
Storm Main Line Repairs, Linear Feet	120	240											360
# of Catch Basin Storm Repairs/New	1	1											2
# of Storm Maintenance-hole Repairs/New	0	1											1
Storm – Maintenance													
# of Catch Basin Laterals Cleaned	0	92											92
Catch Basin Laterals Jetted, Linear Feet	0	51											51
# of Catch Basin Laterals Rodded	0	4											4
Catch Basin Laterals Rodded, Linear Feet	0	200											200
# of Storm Main Lines Jetted	0	0											0
Storm Main Lines Jetted, Linear Feet	0	0											0
# of Storm Main Lines Rodded	0	0											0
Storm Main Lines Rodded, Linear Feet	0	0											0
# of Storm Maintenance-holes Cleaned	1	1											2
# of Storm Pump Stations Cleaned	13	13											26
# of tons of Debris Removed from Storm Stations	10.10	6.10											16.20
# of Storm Catch Basins Inspected	2,920	1,563											4,483
# of Storm Catch Basins Stenciled	770	468											1,238
# of Storm Event Calls	0	0											0
Storm Event Line Clean-up, Linear Feet	0	0											0
TV Storm Line Segment Inspections	2	2											4
TV Storm Line Segment Inspections, Linear Feet	316	262											578
Spoils Storm Pump Stations / CBs - # of Loads	0	0											0
Spoils Storm Pump Stations / CBs - Tonnage	0	0											0

(Chart totals do not include work done by contractors.)

Comparison Year 2015-2016 – Stormwater Maintenance Activity Summary

	JUL	*AUG*	*SEP*	*OCT*	*NOV*	*DEC*	*JAN*	*FEB*	*MAR*	*APR*	*MAY*	*JUN*	*FISCAL YTD*
Repairs – Storm													
# of Catch Basin Lateral Repairs/New	1	0	0	0	0	0	0	0	1	0	0	0	2
Catch Basin Lateral Repairs/New, Linear Feet	16	0	0	0	0	0	0	0	7	0	0	0	23
# of Storm Main Line Repairs	1	0	0	0	0	0	0	3	0	0	2	2	8
Storm Main Line Repairs, Linear Feet	3	0	0	0	0	0	0	4	0	0	2	5	14
# of Catch Basin Storm Repairs/New	1	2	0	1	0	1	1	0	1	0	1	3	11
# of Storm Maintenance-hole Repairs/New	5	1	0	0	0	0	0	1	0	0	1	1	9
Storm – Maintenance													
# of Catch Basin Laterals Cleaned	1	28	72	7	16	93	9	5	13	1	12	1	258
Catch Basin Laterals Jetted, Linear Feet	25	60	245	278	30	152	0	0	766	50	150	0	1,756
# of Catch Basin Laterals Rodded	0	0	0	0	1	1	0	0	6	0	0	0	8
Catch Basin Laterals Rodded, Linear Feet	0	0	0	0	35	2	0	0	390	0	0	0	427
# of Storm Main Lines Jetted	0	4	0	0	2	1	2	1	5	3	0	2	20
Storm Main Lines Jetted, Linear Feet	0	664	0	0	400	380	200	400	1,255	510	0	580	4,389
# of Storm Main Lines Rodded	0	0	0	0	0	0	5	0	0	0	0	0	5
Storm Main Lines Rodded, Linear Feet	0	0	0	0	0	0	975	0	0	0	0	0	975
# of Storm Maintenance-holes Cleaned	0	1	0	0	0	1	1	0	12	1	0	2	18
# of Storm Pump Stations Cleaned	2	6	3	6	0	0	0	0	0	0	1	3	21
# of tons of Debris Removed from Storm Stations	.30	6.15	5.00	2.50	0.00	0.00	0	0	0	0	.15	1	14.10
# of Storm Catch Basins Inspected	739	474	239	35	0	3	0	1	3	0	0	0	1,494
# of Storm Catch Basins Stenciled	332	257	63	0	0	0	0	0	0	0	0	0	652
# of Storm Event Calls	0	0	0	0	174	17	534	3	165	1	0	0	894
Storm Event Line Clean-up, Linear Feet	0	0	0	0	55	100	1,659	50	364	75	0	0	2,303
TV Storm Line Segment Inspections	1	0	1	0	0	0	1	2	0	2	0	1	8
TV Storm Line Segment Inspections, Linear Feet	289	0	460	0	0	0	18	77	0	199	0	19	1,062
Spoils Storm Pump Stations / CBs - # of Loads	0	0	0	2	1	0	0	0	0	0	0	0	3
Spoils Storm Pump Stations / CBs - Tonnage	0	0	0.00	18.22	14.40	0.00	0	0	0	0	0	0	33

(Chart totals do not include work done by contractors.)

Table 8.2 – Inspections

	Jul	*Aug*	*Sep*	*Oct*	*Nov*	*Dec*	*Jan*	*Feb*	*Mar*	*Apr*	*May*	*Jun*
Total Sites	24	25										
Inspections	24	25										
Verbal Warnings	10	8										
Correction Orders	4	8										
Notice to Clean	3	5										
Notice of Violation	2	1										
Admin. Citations	0	3										
Referred to RWQCB	1	1										

Inspections – Comparison Year 2015-2016

	Jul	*Aug*	*Sep*	*Oct*	*Nov*	*Dec*	*Jan*	*Feb*	*Mar*	*Apr*	*May*	*Jun*
Total Sites	18	22	21	21	20	22	22	24	24	24	20	24
Inspections	18	22	21	21	20	22	22	24	24	24	20	24
Verbal Warnings	4	8	10	9	10	9	11	13	3	8	5	10
Correction Orders	2	6	5	8	5	7	9	10	3	4	3	4
Notice to Clean	2	6	6	5	7	7	5	7	2	4	3	3
Notice of Violation	1	0	0	0	0	0	0	0	3	2	1	2
Admin. Citations	1	0	0	0	0	0	0	0	3	0	0	0
Referred to RWQCB	1	0	0	0	0	0	0	0	1	1	1	0

Table 8.3 –Stormwater Pumping Facilities Work Order Summary

	JUL	*AUG*	*SEP*	*OCT*	*NOV*	*DEC*	*JAN*	*FEB*	*MAR*	*APR*	*MAY*	*JUN*
Pump Station Mechanical												
Corrective Maintenance	6	N/A										
% Completed	4	N/A										
% Backlog	33.3											
Preventive Maintenance - % Backlog	30.9	N/A										
Pump Station Electrical												
Corrective Maintenance	6	N/A										
% Completed	83.3	N/A										
% Backlog	16.7	N/A										
Preventive Maintenance - % Backlog	25.0	N/A										

Work Order Summary - Comparison Year 2015-2016

	JUL	*AUG*	*SEP*	*OCT*	*NOV*	*DEC*	*JAN*	*FEB*	*MAR*	*APR*	*MAY*	*JUN*
Pump Station Mechanical												
Corrective Maintenance	11	22	8	8	11	8	21	10	7	40	13	14
% Completed	54.5	50.0	50	37.5	54.5	87.5	10	60.0	42.9	15.0	92.3	92.9
% Backlog	45.5	50.0	50	62.5	45.5	12.5	52.4	40.0	57.1	85.0	7.7	7.1
Preventive Maintenance												
% Backlog	81.1	41.0	69.2	74.8	76.1	27.8	75.7	50.3	64.2	27.1	13.2	18.7
Pump Station Electrical												
Corrective Maintenance	9	15	13	6	12	6	14	9	27	11	10	11
% Completed	100..0	80.0	53.8	66.7	100.0	100.0	71.4	88.9	51.9	54.5	70.0	100.0
% Backlog	0.0	20.0	46.2	33.3	0.0	0.0	28.6	11.1	48.1	45.5	30.0	0.0
Preventive Maintenance - % Backlog	75.0	100.0	100	100	0.0	77.3	0.0	52.2	0.0	25.0	42.9	73.7

Administration

Safety and Training Activities

Table 9.1 – Summary of Unsafe Conditions or Acts

	Current Month	*Calendar Year*
Number of Unsafe Conditions or Acts Reported	3	7
Number of Vehicle Incidents: No Fault of Employee	0	4
Number of Vehicle Incidents: Fault of Employee	0	3

Table 9.2 – Summary of Work-Related Injuries and Illnesses

	Current Month	*Calendar Year*
Number of Cases	3	17
Number of Cases with Lost Time	1	5
Number of Cases with Work Restrictions	1	7

Table 9.3 – Summary of Safety Training

	Hours Delivered	*# of Attendees*	*Total Attendee Hours*
Tailgate Sessions			
Horseplay in the Workplace	0.5	5	5.5
Defensive Driving	0.5	5	5.5
Good Housekeeping Practices	0.5	6	6.5
Proper Lifting	0.5	32	32.5
OSHA Standards/Employee Rights	0.5	31	31.5
Fire Extinguisher Training	0.5	10	10.5
Ergonomic Injuries	0.5	5	5.5
Training			
New Hire Safety Orientation	1	3	4
Heat Illness	1	10	10
TOTAL	5.5	107	97.5

Human Resources Operational Activities

Table 9.4 – Staffing Summary

Divisions	*# of Positions*	*# of Employees*	*Vacancies*	*Change (+/-)*
Administration	19	16	3	
Financial Services	5	5	0	
Collections	48	45	3	
Engineering	14	13	1	-1
Environmental Control	7	5	2	
Laboratory	7	7	0	
Maintenance	43	36	7	-1
Wastewater Treatment	31	28	3	
Water Treatment/Distribution	27	22	5	-2
Water Resources/Treatment	17	16	1	
Total Staff Count	218	193	25	-4

Table 9.5 – Overtime Summary

Division	*Jul*	*Aug*	*Sep*	*Oct*	*Nov*	*Dec*	*Jan*	*Feb*	*Mar*	*Apr*	*May*	*Jun*
Administration	13.5	3.75										
Financial Services	0	1.5										
Collections	266	291										
Engineering	4	0										
Env. Control	22.25	30.75										
Laboratory	11.75	0										
Maintenance	218.50	200.25										
WW Treatment	708.25	657.75										
Stormwater	0	18										
Water Distribution	114	96.75										
Water Resources	1.5	0										
Water Treatment	263.25	257										
TOTALS	1623.00	1556.75										

Overtime Summary – Comparison Year 2015-2016

Division	*Jul*	*Aug*	*Sep*	*Oct*	*Nov*	*Dec*	*Jan*	*Feb*	*Mar*	*Apr*	*May*	*Jun*
Administration	8	3	22.25	14.75	17.75	12.75	26.25	18.75	15.25	17.5	18.5	22.25
Financial Services	0	0	0	0	0	0	2.5	3.25	2.5	0	.5	0
Collections	465	473.25	518	438	167	220.5	250.25	210.75	297.5	144.25	126.75	178.25
Engineering	0	4	9.5	21	6	0	0	0	2.5	3	6	7.5
Env. Control	32.5	13.5	5	28	29.5	40	9	19.5	81.75	36.75	13.25	17
Laboratory	10	0	7.5	0	16	8.75	18.5	13.75	8	8.5	7	9.5
Maintenance	248	352.75	279	574.25	198.5	296.75	796.00	376.25	574.75	234	253	114.50
WW Treatment	567	754.75	658.5	689.75	959.25	686.25	744.75	760.25	725.50	606	721	734.5
Stormwater	0	0	0	0	0	0	0	0	0	0	0	12.5
Water Distribution	192.5	164.75	226.25	105.5	124.5	122.5	199.25	103.50	108.75	81.5	114.25	161.25
Water Resources	0	0	7.5	0	0	0	0	0	7.25	7.5	6.25	0
Water Treatment	359.5	331.50	261.25	368	466.25	347.25	364.75	269.75	227.50	175.5	184	190
TOTALS	1882.50	2097.50	1994.75	2239.25	1984.50	1734.75	2411.25	1775.75	2051.25	1314.50	1450.50	1447.25

Appendix A

Water

Title 22 Compliance Water Well Sampling

Summary Well System Operations

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Title 22 Compliance - Drinking Water Monitoring

Compliance Sampling

Title 22 Monthly Compliance Report
Source & Distribution System (excluding monthly bact sampling)

Required Monitoring updated: 9-8-16

Source (Well # or DS)	Sample Date	Parameter
18	08-17-16	Nitrate / VOCs
19	08-17-16	Nitrate / VOCs
21	08-17-16	Nitrate / VOCs
27	08-18-16	T22 Gen Min / Phys / Inorg / VOCs
30	08-18-16	T22 Gen Min / Phys / Inorg / VOCs
3-R	08-18-16	T22 Gen Min / Phys / Inorg / VOCs
10-R	08-18-16	T22 Gen Min / Phys / Inorg / VOCs
28	08-24-16	Nitrate / VOCs
29	08-24-16	Nitrate / VOCs / Quarterly EC/TDS
31	08-24-16	Nitrate / VOCs / Quarterly EC/TDS
32	08-24-16	Nitrate / Quarterly EC/TDS
SS 3	08-24-16	Nitrate / VOCs / Quarterly EC/TDS
SS 2	08-25-16	T22 Gen Min / Phys / Inorg / VOCs
SS 8	08-25-16	T22 Gen Min / Phys / Inorg / VOCs
SS 9	08-25-16	T22 Gen Min / Phys / Inorg / VOCs

Exceptions

NONE

Well Status Changes

NONE

Other

NONE

CITY OF STOCKTON MONTHLY SYSTEM OPERATION
AUG 2016

31 WELL STA. No.	WELL STATION LOCATION	MONTHLY OPERATIONS HRS OPERATED	PROD. MG	RATE MGD	RATE GPM	WELL SOUNDING	MONTHLY POWER KWH	KWH/MG	GAS POWER 1000FT3	1000FT3 per MG	MONTHLY CHEMICALS CL2 TOTAL LBS.	AMMONIA GALS.
NORTH WELL SYSTEM												
1	PARKWOODS	0.00	0.00	0.00	0		160	0			0	
4	VILLA DORADO	0.00	0.00	0.00	0		720	0			0	
7	GALLOWAY	0.00	0.00	0.00	0		0	0			0	
9	DON CARLOS	0.00	0.00	0.00	0		111	0			0	
10R	VALVERDE PARK	303.30	44.81	1.45	2462		56640	1264			334	88
11	INGLEWOOD	0.00	0.00	0.00	0		80	0			0	
15	GLASGOW	0.00	0.00	0.00	0		80	0			0	
16	ROYAL OAKS	0.00	0.00	0.00	0		373	0	0.0	0	0	
18	HICKOCK	0.20	0.00	0.00	0		74	0			0	
19	MORADA/WEST LANE	0.30	0.00	0.00	167		120	40000			0	
20	WEST LANE/MOSHER	0.10	0.00	0.00	0		2228	0	0.0	0	0	
21	CORTEZ PARK	0.50	0.01	0.00	167		240	48000			0	
24	SAFFRON	0.00	0.00	0.00	0		200	0			0	
25	PANELLA PARK	0.00	0.00	0.00	0		0	0	0.0	0	0	
26	AUTO CENTER	0.00	0.00	0.00	0		0	0	0.0	0	0	
27	HORSE PARK	0.00	0.00	0.00	0		280	280000			0	
28	BLOSSOM RANCH	0.00	0.00	0.00	0		280	0			0	
28	alternate electric meter				monitor well #17		0	0			0	
29	BAXTER PARK	57.30	8.39	0.27	2441		10720	1278			70	18
30	GRIDER	102.80	12.47	0.40	2021		18800	1508			116	22
31	IVANO LANE"	320.70	38.13	1.23	1982		53200	1395			334	76
32	HWY 99 FRONTAGE"	357.70	43.71	1.41	2036		57360	1312			301	97
3R	7400 N. WEST LANE	417.90	51.36	1.66	2048		62960	1226			450	92
NSPAF	WHITE FORGE DR	0.00							0.0			0
NWR	NORTHWEST RESERVOIR						27000		0.8		0	
14 Mile	14 MILE RESERVOIR						11200				0	
I	TOTAL SYSTEM PRODUCTION	1,560.80	198.87			Total N. Elec->	302826		0.8		1605	393
	TOTAL STOCKTON EAST PURCHASED WATER		0.00			N. Well Elec->	264626					
	DWTP		752.29			N. Res Elec->	38200					
	TOTAL NORTH SYSTEM		951.16									
	DAILY AVERAGE	50.3	30.68				9769		0.0		52	13
SOUTH WELL SYSTEM												
SS1	QUANTAS	0.00	0.00	0.00	0		468	0	0.0	0	0	
SS2	N. ARCH FRONTAGE	0.00	0.00	0.00	0		136	0			0	
SS3	FRONTIER"	0.90	0.00	0.00	0		600	0			0	
SS4	AIRPORT SOUTH	0.00	0.00	0.00	0		0	0			0	
SS5	AIRPORT NORTH	0.00	0.00	0.00	0		0	0			0	
SS6	SHROPSHIRE PARK	0.40	0.00	0.00	0		320	0			0	
SS9	B ST. & LITTLEJOHN	0.00	0.00	0.00	0		2560	0			0	
Weston	WESTON RANCH RESERVOIR						13600				59	
K	TOTAL SOUTH WELL PRODUCTION	1.3	0.00									
SSA	SO SYS AQUEDUCT		198.23			99 Frtng Batr ->	36				0	
	TOTAL SOUTH SYSTEM		198.23			Tot. S. Elec->	17720		0.0		59	0
	DAILY AVERAGE	0.0	6.39				572		0.0		2	0
FILBERT/MLK INTERCONNECT						S. Wells Elec->	4084					
	FILBERT INTERCONNECT		7.50			S. Res Elec->	13600					
	DAILY AVERAGE		0.24			S. Batr Elec->	36					
CITY & COUNTY INTERCONNECTIONS		Meter Reading										
F	PLYMOUTH ROAD	212790	22.07									
E	PERSHING	370479	13.36									
G	GREELEY	676573	12.65									
M	PORTOLA AVENUE	89728	3.94									
N	THORNTON	87746	12.78									
R	BALBOA	311	0.16									
			64.97									
			2.10									

Appendix B

Environmental Compliance

Monitored Industrial User Charges

Customer Charges Report

Septic Waste Haulers' Charges

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8/24/2016

MONITORED INDUSTRIAL USER MONTHLY CHARGES

July-

CUST ID #	COMPANY	CHG CODE	STANDBY			SUB-TOTAL	LOADING			OTHER	SUB-TOTAL	ADMIN FEE	TOTAL
			FLOW	BOD	TSS		FLOW	BOD	TSS				
6305	American Sunny Foods	SIM15	0.48	1.20	0.45	$446.98	0.09	0.34	0.18	$0.00	$70.29	$23.16	$540.42
86601	Boretech Resource Recovery	SIM33	0.83	0.68	0.17	$588.77	0.36	0.03	0.02	$0.00	$195.06	$23.16	$806.99
85629	Foodliner	SIM16	0.51	12.51	1.25	$1,646.97	0.22	4.46	0.14	$0.00	$287.57	$23.16	$1,957.70
84901	Niagara 811 Zephyr	SIM28	7.86	12.78	3.29	$6,333.46	2.02	0.27	0.34	$0.00	$1,102.18	$23.16	$7,458.81
89691	JMS Holding Company LLC	SIM2				$0.00	0.02	0.00	0.00	$7.41	$11.49	$23.16	$42.06
4950	California Tank Lines	SIM17	1.00	14.18	4.90	$2,378.52	0.71	5.16	4.17	$0.00	$814.45	$23.16	$3,216.13
6240	Campbell Soup Supply	SIM12	65.00	330.00	230.00	$89,384.10	43.37	199.45	157.51	$0.00	$39,707.07	$23.16	$129,114.33
43328	Cintas Corporation	SIM24	3.60	23.00	12.00	$5,366.25	2.36	3.02	1.65	$0.00	$1,460.91	$23.16	$6,850.31
6245	Ingredion Incorporated	SIM3	40.45	458.58	93.50	$77,184.61	20.47	338.34	122.46	$0.00	$30,617.48	$23.16	$107,825.25
88946	Le Tote	SIM34	0.35	0.35	0.30	$271.40	0.05	0.12	0.02	$0.00	$30.01	$22.80	$324.21
83095	California Health Care Facility	USI6				$0.00	1.96			$0.00	$5,305.89	$23.16	$5,329.05
43838	Midway, Crosstown Commons	SIM4	3.00	10.00	0.30	$2,857.05	0.00	0.00	0.00	$0.00	$0.00	$23.16	$2,880.21
6270	Diamond of California	SIM5	8.00	210.00	145.00	$36,301.23	2.22	36.17	8.86	$0.00	$3,041.87	$23.16	$39,366.26
75519	Dole Packaged Foods LLC Stock	SIM30	1.22	10.30	5.22	$2,148.78	0.19	0.78	0.26	$0.00	$144.75	$23.16	$2,316.69
5700	Duraflame	SIM14	3.10	3.75	1.75	$2,029.96	0.09	0.02	0.01	$0.00	$48.84	$23.16	$2,101.96
5100	San Joaquin County French Camp	USI4					10.63			$0.00	$28,848.93	$23.16	$28,872.09
34202	Grimaud Farms	SIM19	0.80	6.00	2.00	$1,232.45	0.77	5.07	1.46	$0.00	$683.29	$23.16	$1,938.90
47912	New Stockton Poultry	SIM25	0.75	8.37	3.04	$1,612.73	0.07	2.51	0.85	$0.00	$178.87	$23.16	$1,714.77
52651	Niagara	SIM27	7.50	2.04	0.69	$4,856.54	6.23	0.29	0.18	$0.00	$3,325.39	$23.16	$8,205.09
5625	Northern California Youth Center	USI3					4.19			$0.00	$11,382.70	$23.16	$11,405.86
61265	Pacific Ethanol	SIM29	4.50	3.94	1.45	$3,259.11	1.85	0.46	0.27	$0.00	$1,016.35	$23.16	$4,298.62
89372	AECOM Tech Svcs	USI5					0.37			$0.00	$813.59	$23.16	$836.75
11149	Port of Stockton - Rough and Ready	USI2					3.83			$0.00	$10,405.11	$23.16	$10,428.27
6250	DTE	SIM10	5.50	7.62	7.62	$4,686.41	4.27	0.83	2.72	$0.00	$2,457.71	$23.16	$7,167.28
86113	Aramark	SIM18	6.93	29.60	6.77	$7,686.90	2.50	8.42	2.83	$0.00	$1,803.03	$23.16	$9,513.09
21193	Stockton Sanitary Wash Rack	SIM20	0.64	50.06	5.12	$5,736.81	0.13	30.09	0.23	$0.00	$1,192.82	$23.16	$6,952.78
42136	Tankerwash USA	SIM22	1.00	22.39	6.79	$3,331.50	0.72	18.79	2.23	$0.00	$1,207.40	$23.16	$4,562.07
88939	Mizkan (R&B Foods)	SIM13	60.00	675.00	300.00	$125,677.35	29.86	271.38	147.37	$0.00	$34,594.58	$23.16	$160,295.09
40039	Unifirst Corp	SIM21	3.25	16.82	4.44	$3,988.26	2.06	12.00	2.88	$0.00	$1,709.28	$23.16	$5,720.70
80635	Wilmer Gavilon LLC	SIM31	1.00	1.50	1.00	$835.49	0.38	0.46	0.09	$0.00	$223.19	$23.16	$1,081.83
83602	Zacky Kitchens	SIM11	5.37	6.32	8.86	$4,567.42	1.67	5.16	2.70	$0.00	$1,236.18	$23.16	$5,826.76
APPROVED BY:			232.63	1916.97	845.90	$394,309.06	143.66	943.60	459.44	$7.41	$183,916.28	$717.60	$578,950.35

$578,950.35

8/24/2016

WORKSHEET FOR MONITORED INDUSTRIAL USER MONTHLY CHARGES

July-16

COMPANY	CURRENT FLOW READING	PREVIOUS FLOW READING	TOTAL MONTHLY FLOW	AVERAGE BOD	TOTAL 1,000 LBS BOD	AVERAGE TSS	TOTAL 1,000 LBS TSS	OTHER CHARGES	DATE ENTERED Mo-Yr.
American Sunny Foods	3214212	3125425	0.09	495	0.34	254	0.18	$0.00	Aug-16
Boretech Resource Recovery	5759754	5396444	0.36	12	0.03	5.5	0.02	$0.00	Aug-16
Foodliner	28357072	28140999	0.22	2475	4.46	75.25	0.14	$0.00	Aug-16
Niagara 811 Zephyr	201265094	199244094	2.02	15.75	0.27	20	0.34	$0.00	Aug-16
JMS Holding Company, LLC	228016752	227995102	0.02	0	0.00	0	0.00	$0.00	Aug-16
California Tank lines	75370605	74669604	0.71	870	5.16	703	4.17	$0.00	Aug-16
Campbell Soup Supply	470202460	426829530	43.37	564	199.45	435	157.51	$0.00	Aug-16
Cintas Corporation	154054840	150714240	2.36	154	3.02	84	1.65	$0.00	Aug-16
Ingredion	1069227840	1048776464	20.47	2070	338.34	772	122.46	$0.00	Aug-16
Le Tote	46380	1080	0.05	327.43	0.12	62.67	0.02	$0.00	Aug-16
California Health Care Facilty	11317488	9362412	1.96		0.00		0.00	$0.00	Aug-16
Midway, Crosstown Commons	1588020	1588020	0.00	0	0.00	0	0.00	$0.00	Aug-16
Diamond of California			2.22	1961	36.17	480	8.86	$0.00	Aug-16
Dole Packaged Foods LLC Stockton	23097359	22907568	0.19	493	0.78	162.5	0.26	$0.00	Aug-16
Duraflame/Cal Cedar	5907360	5817261	0.09	21	0.02	10	0.01	$0.00	Aug-16
San Joaquin County - French Camp			10.63					$0.00	Aug-16
Grimaud Farms	99378253	98606795	0.77	787.5	5.07	227.5	1.46	$0.00	Aug-16
New Stockton Poultry	72135931	71528432	0.07	494.5	2.51	168.25	0.85	$0.00	Aug-16
Niagara	68250629	62024043	6.23	5.5	0.29	4	0.18	$0.00	Aug-16
Northern California Youth Center	179977032	175782816	4.19	150	5.25	275	9.62	$0.00	Aug-16
Pacific Ethanol	11570117	9717132	1.85	29.5	0.46	17.75	0.27	$0.00	Aug-16
AECOM (was Parsons Eng)			0.37					$0.00	Aug-16
Port of Stockton - Rough and Ready			3.83					$0.00	Aug-16
DTE Stockton	1245447 36	1209745 70	4.27	23.25	0.83	76.5	2.72	$0.00	Aug-16
Aramark	11712100	9216500	2.50	405	8.42	135.94	2.83	$0.00	Aug-16
Stockton Sanitary Wash Rack	3462476	3336283	0.13	28587	30.09	218	0.23	$0.00	Aug-16
Tankerwash USA	61660742	60942825	0.72	3138	18.79	373	2.23	$0.00	Aug-16
Mizkan	32549990	2693800	29.86	882	271.38	511	147.37	$0.00	Aug-16
Unifirst Corp	947407	98756192	2.06	697	12.00	167.5	2.88	$0.00	Aug-16
Wilmar Gavilon LLC	9079184	8701184	0.38	146	0.46	29.8	0.09	$0.00	Aug-16
Zacky Kitchens	133957260	132267821	1.67	376	5.16	196	2.70	$0.00	Aug-16
TOTAL			143.86		948.84		469.05	$0.00	

Customer Monthly Charges Report

Date Range: 7/1/2016 to 7/31/2016

Customer ID	Customer Name	Total Gallons	Gallon Charge	Trip Charge	Other Charges	Total Charges
85508	A-1 Septic	0	$0.00	$0.00	$0.00	$0.00
10708	A & A Portables	30,075	$293.23	$1,001.00	$0.00	$1,294.23
78477	A & J Rentals	8,100	$78.98	$693.00	$0.00	$771.98
11153	AAA Septic & Rooter	68,000	$663.00	$1,540.00	$0.00	$2,203.00
11491	ABC Plumbing	0	$0.00	$0.00	$0.00	$0.00
10495	ET Services	0	$0.00	$0.00	$0.00	$0.00
6195	Frank & Jrs Sewer Service	59,850	$583.54	$1,463.00	$0.00	$2,046.54
6200	G & C Septic	3,171	$30.92	$77.00	$0.00	$107.92
4735	Parrish and Sons	132,600	$1,292.85	$2,849.00	$0.00	$4,141.85
75717	Premium Packing	3,000	$29.25	$154.00	$0.00	$183.25
6210	Richards Pumping	185,000	$1,803.75	$5,698.00	$0.00	$7,501.75
39444	Roto Rooter Sewer Service	179,688	$1,751.96	$3,696.00	$0.00	$5,447.96
74032	SRC Pumping Co	80,172	$781.68	$1,386.00	$0.00	$2,167.68
	Grand Totals	**749,656**	**$7,309.15**	**$18,557.00**	**$0.00**	**$25,866.15**

Approved By: _____

Septic Waste Haulers Monthly Charges

Date Range: 7/1/2016 to 7/31/2016

Customer Name	Truck License	Tank Capacity	Total Trips	Total Gallons	Per 1000 Gal $9.75	Per Trip $77.00	Additional Charges
A-1 Septic	52396P1	2500	0	0	$0.00	$0.00	$0.00
A&A Portables	54107P1	1600	7	11,200	$109.20	$539.00	$0.00
A&A Portables	8K42091	3495	5	17,475	$170.38	$385.00	$0.00
A&A Portables	8H57716	1400	1	1,400	$13.65	$77.00	$0.00
A&A Portables	27308L1	2000	0	0	$0.00	$0.00	$0.00
A&A Portables	7X14631	1500	0	0	$0.00	$0.00	$0.00
A&A Portables	44377M1	3495	0	0	$0.00	$0.00	$0.00
A&J Rentals	8A44004	650	4	2,600	$25.35	$308.00	$0.00
A&J Rentals	66261V1	1100	5	5,500	$53.63	$385.00	$0.00
AAA Septic & Rooter	7S15871	3400	20	68,000	$663.00	$1,540.00	$0.00
ABC Plumbing	7X61008	2400	0	0	$0.00	$0.00	$0.00
ET Services	7M36196	4000	0	0	$0.00	$0.00	$0.00
Frank & Jrs Sewer Service	8M50181	3150	19	59,850	$583.54	$1,463.00	$0.00
G&C Septic	33525L1	3350	0	0	$0.00	$0.00	$0.00
G&C Septic	8W07059	3171	1	3,171	$30.92	$77.00	$0.00
Parrish and Sons	43308P1	3600	34	122,400	$1,193.40	$2,618.00	$0.00
Parrish and Sons	7H09683	3400	3	10,200	$99.45	$231.00	$0.00
Premium Packing	7R84640	1500	2	3,000	$29.25	$154.00	$0.00
Richards Pumping	SE598579	2500	74	185,000	$1,803.75	$5,698.00	$0.00
Roto Rooter Sewer Services	7T36952	3382	12	40,584	$395.69	$924.00	$0.00
Roto Rooter Sewer Services	5E84939	3200	4	12,800	$124.80	$308.00	$0.00
Roto Rooter Sewer Services	1055401	3947	32	126,304	$1,231.46	$2,464.00	$0.00
SRC Pumping Co	4DE5675	4454	18	80,172	$781.68	$1,386.00	$0.00
Monthly Total Charges:			**241**	**749,656**	**$7,309.15**	**$18,557.00**	**$0.00**

Grand Total: $25,866.15