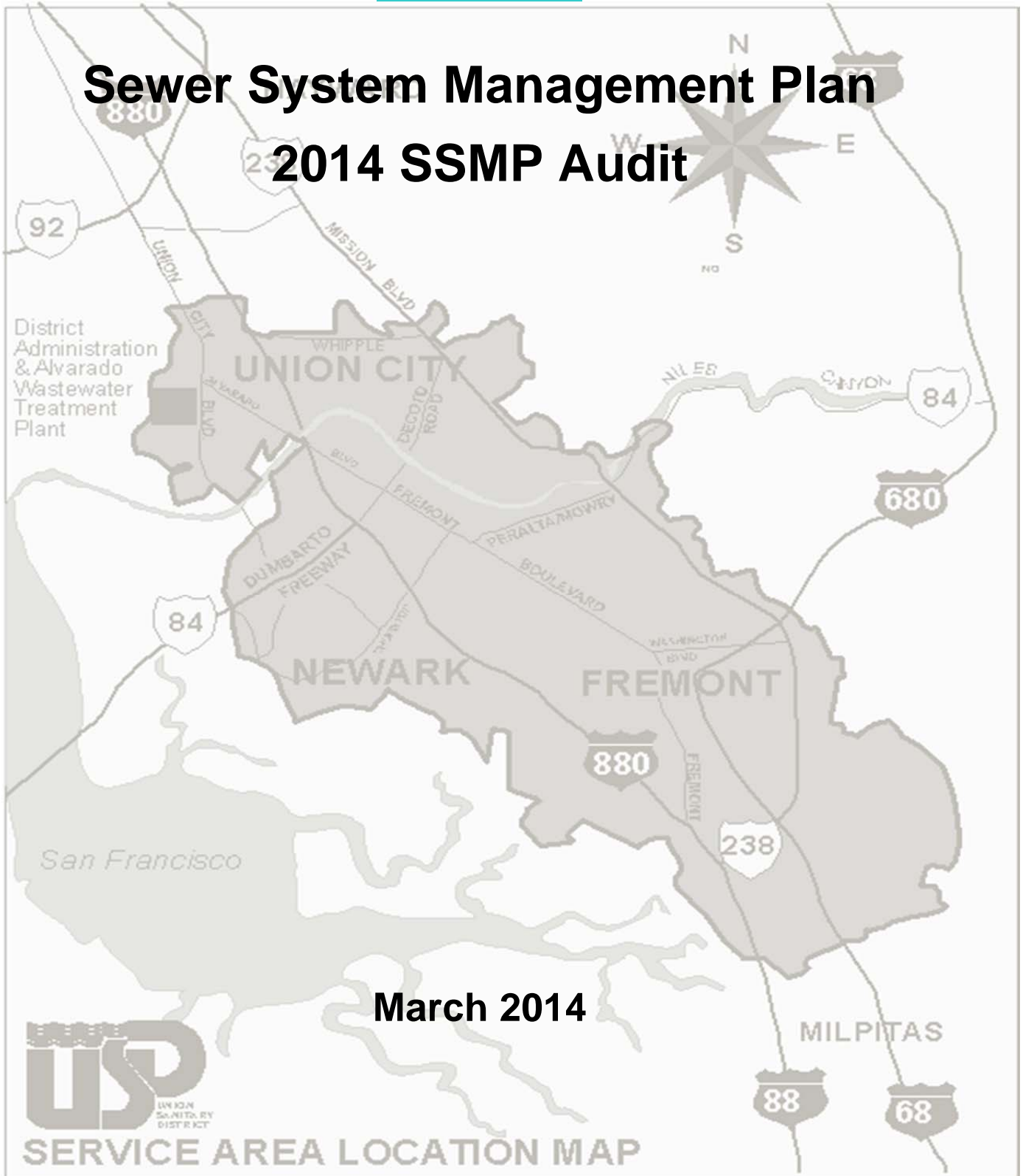




Sewer System Management Plan

2014 SSMP Audit



March 2014



SERVICE AREA LOCATION MAP

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SSMP – 2014 Audit

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2014 SSMP Audit

Executive Summary

March 2014



2014 SSMP Audit

Executive Summary

USD has completed our audit of our Sanitary Sewer Management Plan (SSMP). Attached you will find the details of this audit.

USD has had an SSMP addressing all of the required elements in place for 9 years. We use our SSMP as a tool to successfully manage our collection system. Since our last audit, we updated our SSMP four times. Specifics of the changes are detailed in the Update Log on page 11 of this audit. We have had 8 spills over the 2 calendar years of 2012 and 2013. We have recovered 98.8% of the total 2,690 gallons spilled. A total of 32 gals or 1.2% of the total volume spilled was not contained, but did not reach waters of the State. During the 24 months of calendar years 2012 and 2013, we had one period of operating 13 consecutive months with no SSOs.

Twice a year, we review and update our SSMP, once at the beginning of the Fiscal Year and once at the beginning of the Calendar Year.



2014 SSMP Audit

SSMP Audit Checklist

March 2014

Sewer System Management Plan 2014 SSMP Audit

Element	Title	Requirement	Compliant	Current	Comments
I	Goals	Reduce, prevent & mitigate SSOs	Y	Y	USD uses a performance management tool called the Balance Scorecard. The Scorecard has objectives and measures with a focus on the prevention of SSOs. Performance is tracked and reported monthly and the version in the SSMP is updated twice a year.
II	Organization	Designate Legally Responsible Official (LRO)	Y	Y	LRO – General Manager, Rich Currie, (510) 477-7502. Collection Services Manager, Andy Morrison, (510) 477-7542, Office, or Cell (510) 813-4035. These people are responsible for implementing, managing and updating the SSMP.
		Organization Chart	Y	Y	Updated twice yearly
		Names & phone numbers of key personnel	Y	Y	Updated to reflect current contact information
		Chain of Communication for reporting SSOs	Y	Y	<p><u>Chain of Communication for responding to SSO's:</u></p> <ul style="list-style-type: none"> - Initial call is received and dispatched by: <ul style="list-style-type: none"> o Customer Service Team during normal business hours – (510) 477-7500 o Total Productive Operations Team after normal business hours – (510) 477-7500 - Dispatched call is received by: <ul style="list-style-type: none"> o Construction or Maintenance/TV Team 24/7/365 o Or Fabrication, Maintenance & Construction Team 24/7/365 if it is related to Pump Stations, Lift Stations or Force Mains <p><u>Chain of Communication for reporting SSO's:</u></p> <ul style="list-style-type: none"> • Either a Coach or Manager from Collection Services will report SSO's from the gravity system – Andy Morrison, (510) 477-7542, Office, or Cell (510) 813-4035

Sewer System Management Plan 2014 SSMP Audit

Element	Title	Requirement	Compliant	Current	Comments
					<ul style="list-style-type: none"> • Or the FMC Manager will report SSO's from Pump Stations, Lift Stations or Force Mains – Robert Simonich – (510) 477-7518, Office, or Cell (510) 701-4337 <p><u>Other Points of Contacts:</u></p> <ul style="list-style-type: none"> • New Sewer Installations – Rollie Arbolante, (510) 477-7602, Office, or Pager (510) 828-0000 • Engineering Plan/Designs – Sami Ghossain, (510) 477-7601, Office • Environmental Compliance – Michael Dunning, (510) 477-7369, Office, or Cell (510) 508-0891
III	Legal Authority	Prevent illicit discharges to sanitary sewer system	Y	Y	Ordinance 36 - Pretreatment Ordinance & Technically Based Local Limits, Updated July 2008 and adopted in February 1994
		Require sewers and connection be properly designed & constructed	Y	Y	2006 Standard Specification & Information Bulletin
		Ensure access for inspection, maintenance and repairs	Y	Y	Ordinance 34.05 - 2009
		Limit discharge of FOG and debris that may cause blockages	Y	Y	Ordinance 38 - Fats, Oils and Grease Control - May 2004
		Ability to inspect FOG producing facilities	Y	Y	Ordinance 38 - Fats, Oils and Grease Control - May 2004
		Enforce violations of the District ordinances	Y	Y	All USD's Ordinances – Including Ordinance #36, #34.05, #38 and Standard Specifications & Information Bulletin
IV	O & M Program	Maintain up-to-date maps of the sanitary sewer system	Y	Y	Maps are continually updated and inputs from field staff are used to update GIS & CMMS database

Sewer System Management Plan 2014 SSMP Audit

Element	Title	Requirement	Compliant	Current	Comments
		Adequate planning, resources and budget to support effective sewer system management and long term goals	Y	Y	Operating and Maintenance & 10 Yr CIP budgets approved annually
		Describe routine preventative maintenance program	Y	Y	72 Month PMP, Selective PM, Root Control Program, Corrosion Control and Easement Maintenance Program
		Document completed preventative maintenance program	Y	Y	Monthly reporting to staff and Board, as well as entered into our Computerized Maintenance Management System (CMMS)
		Adequate I/I monitoring	Y	Y	USD has very few problems with I/I and we follow up on any new sources identified.
		Rehabilitation and replacement plan that identifies and prioritizes sanitary sewer system defects	Y	Y	USD TV's the entire system every 6 years, performs condition assessment, defects are identified and prioritized to be addressed either through repairs, replacement, rehabilitation or maintenance.
		Provide regular technical training for sewer system staff	Y	Y	USD has an ongoing aggressive approach to training as outlined in the annual training schedule
		Require contractors to provide training for their workers who work in the Districts sewer system facilities	Y	Y	Included in contract specifications for all Contractors.
		Maintain equipment inventory	Y	Y	<ul style="list-style-type: none"> All pump stations have redundant pumps. The loss of one pump doesn't affect our ability to transport wastewater. Six of the seven stations have emergency standby generators. Flow to the smallest lift station will divert to another section of the gravity system when flow backs up. (Standby generator is not needed.) Longer lead time parts (impellers, wear rings & mechanical seals) are stocked.

Sewer System Management Plan 2014 SSMP Audit

Element	Title	Requirement	Compliant	Current	Comments
					<ul style="list-style-type: none"> Stations are monitored by SCADA and remote operation can be instituted to certain equipment and systems. Twin Force Mains are in place on large pump stations.
		Maintain critical spare part inventory	Y	Y	<ul style="list-style-type: none"> Materials and Equipment are on site at our Corporation Yard to make emergency repairs on sewer mains. Pumps, hoses, temporary piping and various parts are on site at our Corporation Yard to by-pass failed sewers until repairs are completed.
		Outreach to plumbers and contractors	Y	Y	USD has an informative brochure that we give to contractors and plumbers. Information is also available on our website.
V	Design & Performance Provisions	Design and construction standards for new sanitary sewer system facilities	Y	Y	USD Standard Specifications and Information Bulletin dated 2006. (Also available on website.) Individual Specifications and Drawings for Capital Projects are included in Project Plans.
		Design and construction standards for repair and rehabilitation of existing sanitary sewer system facilities	Y	Y	USD Standard Specifications and Information Bulletin dated 2006.
		Procedures for the inspection and acceptance of new sanitary sewer system facilities	Y	Y	USD Standard Specifications and Information Bulletin dated 2006.
		Procedures for the inspection and acceptance of repaired and rehabilitated sanitary sewer system facilities	Y	Y	USD Standard Specifications and Information Bulletin dated 2006.

Sewer System Management Plan 2014 SSMP Audit

Element	Title	Requirement	Compliant	Current	Comments
VI	Overflow Emergency Response Plan (OERP)	Procedure for the notification of primary responders	Y	Y	Defined Call-Out procedures are on the On-Call Schedules and SOP CS103-SSO Response, updated in Dec. 2013
		Procedures for the notification of regulatory agencies	Y	Y	WDR & MRP & Other SSO Reporting Requirements Flow Chart updated May-11 and SOP CS103-SSO Response recently updated
		Proper reporting of all SSOs	Y	Y	Updated Sept-2008, Jun-2011 & Sept-2013 to reflect state changes
		Procedure to ensure District Staff are aware of and follow OERP	Y	Y	WDR & MRP & Other SSO Reporting Requirements Flow Chart updated Sept-13 and SOP CS103-SSO Response updated in Dec. 2013. Last training in Sept. 2013 for Spill Response and SSOETTS.
		Procedure to ensure District staff are trained in the OERP procedures	Y	Y	WDR & MRP & Other SSO Reporting Requirements Flow Chart updated May-11 and SOP CS103-SSO Response updated December 2013
		Procedure to ensure contractor personnel are trained in the OERP procedures	Y	Y	Any Contractor used for this is directly supervised by USD Management
		Procedures to address emergency operations such as traffic and crowd control	Y	Y	Covered in SOP-CS103 SSO Response updated in December 2013
		Program to prevent the discharge of sewage to surface waters	Y	Y	Covered in SOP-CS103 SSO Response updated in December 2013
		Program to minimize or correct the impacts of any SSOs that occur	Y	Y	Covered in SOP-CS103 SSO Response updated in December 2013
		Program of accelerated monitoring to determine the impacts on surface waters of any SSOs that occur	Y	Y	Covered in SOP-CS103 SSO Response updated in December 2013

Sewer System Management Plan 2014 SSMP Audit

Element	Title	Requirement	Compliant	Current	Comments
VII	FOG Control Program	Identification of "hot spots" with FOG-related problems	Y	Y	<u>Prevention of Recurring FOG-related SSO's & Main Line Stoppages (MLS)</u> All SSO's and MLS's are investigated for cause. If FOG is determined to be the cause, the Environmental Compliance Team is notified and their FOG Inspector follows up with Source Control. Further, the sewer mains' Cleaning Schedule is adjusted in frequency and method of cleaning to prevent recurrence.
		Public outreach program that promotes the proper disposal of FOG	Y	Y	USD uses a variety of approaches including door Hangers, outreach during inspections, newsletter, newspaper ads, BAPPG, and Spanish speaking radio ads
		Plan for the disposal of FOG generated within the Districts service area	Y	Y	Covered in Ordinance 38 Fats, Oils and Grease Control
		Demonstrate that the District has allocated adequate resources for FOG control	Y	Y	Operating and Maintenance & 10 Yr CIP budgets approved annually
		Program of preventative maintenance for sanitary sewer system facilities that have FOG-related problems	Y	Y	USD's Selective Maintenance Program identifies sewer mains with (hot spots) sags, surcharges, grease deposits, debris, siphons, capacity and velocity problems as well as other maintenance problems, then assigns the appropriate method and frequency of preventive maintenance to prevent SSOs.
VIII	System Evaluation and Capacity Assurance Program (SECAP)	Identification of elements of the sanitary sewer system that experience or contribute to SSOs caused by hydraulic deficiencies	Y	Y	USD owns and operates the InfoWorks™ Flow Model to assess current and future capacity requirements in the District's collection system. The District completed the Sewer Master Plans for the Irvington, Newark and Alvarado Basins in 1995, 1997, and 2000. Thereafter, the District updated the Irvington Basin Sewer Master Plan in 2004 and 2012 and the Alvarado Basin Sewer Master Plan

Sewer System Management Plan 2014 SSMP Audit

Element	Title	Requirement	Compliant	Current	Comments
					in 2008 and the Newark Basin Sewer Master Plan was updated in 2012.
		Establish design criteria that provide adequate capacity	Y	Y	USD owns a variety of flow monitoring equipment that it uses periodically to check peak flows in various pipe sections. When working on the Sewer Master Plans, flow monitoring is conducted at about a dozen locations in each basin of the collections system. The flow data is then used to calibrate the flow model to ensure accuracy of the program along with land use information and rain fall data. The Flow Model is then run to assess the capacity requirements in the District's collection system. USD uses the Design Storm criterion of 'a storm with a 10 year recurrence interval'. The capacity deficiencies identified by the flow model are then grouped, prioritized, and, if needed, included in the District's 10-yr CIP budget.
		Short term CIP that addresses known hydraulic deficiencies	Y	Y	Same as above
		Long term CIP that provides for future capacity needs	Y	Y	Same as above
		Procedures that provide for the analysis, evaluation, and prioritization of hydraulic deficiencies	Y	Y	Same as above
		The short and long term CIPs include schedules for the correction of each identified hydraulic deficiency	Y	Y	Same as above

Sewer System Management Plan 2014 SSMP Audit

Element	Title	Requirement	Compliant	Current	Comments
IX	Monitoring, Measurement and Program Modifications (MMPM)	Maintain relevant information to establish, evaluate, and prioritize SSMP activities	Y	Y	USD uses the Balance Scorecard to track critical activities as well as the Annual Report of Sanitary Sewer Overflows for Calendar Years 2007 thru 2011 and SSMP Audit, as well as the 2014 SSMP Audit.
		Monitor implementation of the SSMP	Y	Y	Same as above.
		Measure, where appropriate, performance of the elements of the SSMP	Y	Y	Same as above. Measures in Balance Scorecard include: Minimize Overflows SSOs: - # of Category 3 SSOs - # of Category 2 SSOs - # of Category 1 SSOs - Percent spill recovery - SSOs # of repeats - Critical Asset Failures Provide Uninterrupted Service: - Response Time from notification thru initial contact includes dispatch time Preventing SSOs: - Feet Per Crew/Day - Cleaning - Feet Per Crew/Day - Televising Learning & Growth: - # of individual Competency Assessments passed
		Assess success of the preventative maintenance program	Y	Y	Same as above.
		Update SSMP program elements based on monitoring or performance	Y	Y	Same as above.
		Identify and illustrate SSO trends	Y	Y	Same as above.
X	SSMP Program Audits	Conduct periodic audits	Y	Y	USD uses the Balance Scorecard to track critical activities as well as the Annual Report of Sanitary Sewer Overflows

Sewer System Management Plan 2014 SSMP Audit

Element	Title	Requirement	Compliant	Current	Comments
					for Calendar Years 2007 thru 2011 and SSMP Audit, as well as the 2014 SSMP Audit.
		Record results of the audit in a report	Y	Y	Same as above.
		Record changes made and/or corrective actions taken	Y	Y	SSMP Update Log has been kept since 2008. It identifies specific changes to the SSMP and the dates the changes were made. Refer to the SSMP 2008 to 2014 Update Log Summary.pdf.
XI	Communication Program	Communicate with the public regarding the preparation of the SSMP	Y	Y	Placed ad in local newspapers. Presented to the Board of Directors at regular Public Meetings.
		Communicate with the public regarding SSMP performance	Y	Y	Done at Board Meetings.
		Communicate with satellite sewer systems	NA	NA	We do not have satellite sewer systems.



2014 SSMP Audit

SSMP Update Log

March 2014

SSMP 2008 Through 2014 Update Log Summary

(Update Log Binder in CS Mgr. Office)

Date Updated	Item	Comments
<p>Sept. 2008 - -</p>	<p><u>BACWA & Other Agencies Revisions:</u> <u>BACWA Collection Systems</u> <u>Committee,</u> -</p>	<p>The official email address for reporting SSOs under the 2-hour notification/certification requirement when there is no access to the internet or if the website is down, is as follows: RB2SpillReports@waterboards.ca.gov</p>
<p>Sept. 2008 - - - - - - - - - - - -</p>	<p><u>Reporting SSOs Flow Chart changes</u> - - - - - - - - - - -</p>	<p>Added a new box on page 1 – under ‘Did it reach a Storm Drain in Fremont?’ – It should read ‘Did it occur in an area that is colored Red or Yellow on USD Block Books?’ If the answer is NO, arrow should point down If the answer is YES, arrow should point to the right, that box should read ‘Go to J, then answer the next question.’ On second page add arrow at the bottom of the table. If the SSO was a Category 1 in an area shaded RED, Notify ACWD ASAP @ 668-4200 If the SSO was a Category 1 in an area shaded Yellow, Notify ACWD within 2 hours @ 668-4200. If the SSO was a Category 2 in any area, forward the CIWQS email of the certified report to steve.dennis@acwd.com and gregorylee.buncab@acwd.com. On Page 2, in the rows ‘B’ and ‘C’ add this to the descriptions “Forward the CIWQS email of the certified report to steve.dennis@acwd.com and gregorylee.buncab@acwd.com”</p>
<p>Sept. 2008 - - - - - - - - - - -</p>	<p><u>USD Fiscal Year Baseline Updates</u> - - - - - - - - - -</p>	<p><u>General Update of Information for FY09:</u> FY08 Y/E Collection Services Monthly Status FY08 Y/E Collection Services Balance Scorecard July 2008 Ordinance No. 36 July 2008 Ordinance 34.04 2006 Standard Specifications & Information Bulletin Union Sanitary District FY09 Operating & CIP Budgets FY09 Collection Services Project PM Plan Corrosion Control Program Dosing Schedule Update Ten Year CIP FY 09-18 Expenditure Plan FY09 Training Schedule FY 2008-2013 Renewal & Replacement – Vehicles & Equipment Plan</p>

SSMP 2008 Through 2014 Update Log Summary

(Update Log Binder in CS Mgr. Office)

Date Updated	Item	Comments
-	-	September 2008 WDR Reporting Flow Chart Update
-	-	FOG Program FY09 Collection Services Selective Lines PM Plan
-	-	March 27, 2008 Brown & Caldwell Technical Memorandum on Force Main Assessment
-	-	FY08 Y/E Collection Services Labor Utilization
-	-	FY08 Y/E Collection Services Annual Baseline
Sept. 2009	<u>USD Fiscal Year Baseline Updates</u>	<u>General Update of Information for FY10:</u>
-	-	FY09 Y/E Collection Services Monthly Status
-	-	FY09 Y/E Collection Services Balance Scorecard
-	-	FY09 Y/E Collection Services Labor Utilization
-	-	FY09 Y/E Collection Services Annual Baseline
-	-	Union Sanitary District FY2010 Operating & CIP Budgets
-	-	FY10 Collection Services Projected PM Plan
-	-	Corrosion Control Program Dosing Schedule Update
-	-	FY 2010 & 2011 Budgets
-	-	Ten Year CIP FY 10-18 Expenditure Plan
-	-	FY10 Training Schedule
-	-	FY 2010-20 Renewal & Replacement – Vehicles & Equipment Plan
-	-	SSMP Audit document update
-	-	USD Brochure – Thinking About Repairing or Replacing Your Sewer?
March 2010	<u>USD Annual SSO & SSMP Update</u>	USD Annual Report of Sanitary SSOs for CY2009 and SSMP Audit
-	-	Signed Return Receipt Card & documents
-	-	<u>General Update of Information for FY10:</u>
March 2010	<u>Updates & Changes</u>	USD Organization Chart
-	-	Updated Easement Maintenance Procedures Page
May 2010	<u>SSMP Business Practice Evaluation</u>	<u>May 2010 SSMP Audit – Final Docs</u>
-	-	5-12-10 Letter from James J. Courchaine, Westin (Outside Auditor of SSMP)
-	-	USD Management Operations Maintenance Score Sheet
-	-	<i>Preliminary SSMP Business Practice Evaluation for USD</i>
Sept. 2010	<u>USD Fiscal Year Baseline Updates</u>	<u>General Update of Information for FY11:</u>
-	-	FY10 Y/E Collection Services Monthly Status
-	-	FY10 Y/E Collection Services Balance Scorecard
-	-	FY10 Y/E Collection Services Labor Utilization

SSMP 2008 Through 2014 Update Log Summary

(Update Log Binder in CS Mgr. Office)

Date Updated	Item	Comments
-	-	FY10 Y/E Collection Services Annual Baseline
-	-	Union Sanitary District FY2011 Operating & CIP Budgets
-	-	FY11 Collection Services Projected PM Plan
-	-	Corrosion Control Program Dosing Schedule Update
-	-	FY 2011 Budgets
-	-	Ten Year CIP FY 11-19 Expenditure Plan
-	-	FY11 Training Schedule
-	-	FY 2011-21 Renewal & Replacement – Vehicles & Equipment Plan
-	-	SSMP Audit document update
-	-	USD Brochure – Thinking About Repairing or Replacing Your Sewer?
Sept. 2010	<u>Other Updates:</u>	<u>Other Updates:</u>
-	-	Organization Chart
-	-	GIS – CMMS Integration 8/30/10 update
-	-	District CS PM Map
-	-	FY11 Plan & detail schedules
-	-	Dosing Schedule
-	-	FAC 04 Newark Pump Station FMC PM update
-	-	Vehicle & Equipment Excel Spreadsheet update
-	-	Emergency Bypass Inventory update 8-31-10
-	-	Responding to SSOs Flow Chart
-	-	Prevention of Recurring FOG related SSO – FOG Program update
-	-	Capacity Management sheet update
-	-	FY10 Labor Utilization Graph Update
April 2011	<u>USD Annual SSO & SSMP Update</u>	USD Annual Report of Sanitary Systems Overflows for CY 2010 and SSMP Audit
-	-	Signed Return Receipt Card & documents
June 2011	<u>Update & Change:</u>	Update & Change State Waste Discharge Requirements-WDR Flow Chart (OES changed to CAL-EMA and SSO on-line reporting eliminated)
-	-	
January 2012	<u>Update & Change</u>	SOP CS-103 SSO Response
-	-	FY12 Q2 M/E Status
-	-	FY12 Q2 BSC Update
February 2012	-	Root Control Maintenance Program

SSMP 2008 Through 2014 Update Log Summary

(Update Log Binder in CS Mgr. Office)

Date Updated	Item	Comments
-	-	o Changed wording to: Cut- Cleaning using Chain Flail method
April 2012	<u>Update & Change</u>	Corrosion Control Updated Schedule
-	-	USD Org Chart updated 1-30-2012
April 2012	<u>USD Annual SSO & SSMP Update</u>	USD Annual Report of Sanitary SSOs for CY2011 and SSMP Audit
-	-	Signed Return Receipt Card & documents
-	-	FY12 Q3 M/E Status
-	-	FY12 Q3 BSC Update
May 2012	<u>Re-Certify SSMP Audit Updates</u>	USD Annual Report of Sanitary SSOs for CY2011 and SSMP Audit
-	-	Signed Return Receipt Card & documents
-	-	<u>General Update of Information for FY12:</u>
-	-	USD Organization Chart & FY12 Qtr3 BSC
-	-	May 21 st Re-Certify SSMP Binders for Board Workshop
-	-	Updated various SSMP Element Summary Title Sheets
-	-	Updated Summary of Master Plans sheet
-	-	Created & Updated 2012 SSMP Audit Table
-	-	Consolidated SSMP Log Update Summary Sheet
-	-	Created Re-Certification Public Notice sheet
-	-	Updated SSMP binders with all changes, additions and updates
April 2013	<u>Add & Update Plans</u>	USD Newark Basin Sewer Master Plan Update sheet added
-	-	FY13 Revised Projected Footages Plan
-	-	FY13 Qtr3 CS Balance Scorecard
-	-	WDR – SSO Response Flow Chart Update
Nov/Dec 2013	<u>Add, Change & Update</u>	MRP – 2013 Update
		<ul style="list-style-type: none"> • Jul. 26, 2013 Amendment Letter • Fact Sheet • Order No. WQ 2013-0058-EXEC
		Jul-2013 USD Org Chart Update
		Jul-2013 CIWQS USD Collection System Questionnaire Update
		FY14 USD Operating & CIP Budgets
		FY14 CS Plan
		<ul style="list-style-type: none"> • FY14 Selective Listing • FY14 C/F & Other Areas R/C Listing • FY14 Evaluate for R/C – 218/219 Listing

SSMP 2008 Through 2014 Update Log Summary

(Update Log Binder in CS Mgr. Office)

Date Updated	Item	Comments
		<ul style="list-style-type: none"> • FY14 Visual Inspect Main List • FY14 Corrosion Control PMP – 12 Mo
	-	Ten Year CIP FY14-23 Expenditure Plan
	-	<ul style="list-style-type: none"> • CIP FY14-23 Listing
	-	FY14 Training Schedule
		<ul style="list-style-type: none"> • FY14 Veh-Eqt Renewal & Replacement Bdgt • FY14 Plant & Pump Stn Renewal & Replacement Bdgt • FY14 Vehicle & Equipment Listing
	-	Jul-13 SSO Questionnaire
		<ul style="list-style-type: none"> • Notification & Reporting of SSO Change Update • SSO Response SOP-CS103 • SSO Reporting Flow Chart
	-	10-3-12 Discontinuation of Rqt for Annual SSOs & Annual SSMP Audits
		<ul style="list-style-type: none"> • FY13 Labor Utilization Graph • FY13 Annual Baseline • FY14 Plan Goal Graph
	-	SSMP 2008 Through 2013 Update Log Summary
<u>Dec 20/30 2013</u>	-	SSMP converted to PDF and put on Districts website
<u>Feb-May 2014</u>	<u>2014 SSMP Audit Summary</u>	<ul style="list-style-type: none"> • Prepare 2014 SSMP Document to include: <ul style="list-style-type: none"> ▪ 2014 SSMP Audit Cover Page ▪ Table of Contents ▪ Executive Summary ▪ SSMP Audit Checklist ▪ SSMP Update Log ▪ CY2012 & CY2013 SSOs Graphs ▪ Efforts to Prevent SSOs ▪ Capital Improvement Programs ▪ Training Activities ▪ Accomplishments <p>Update USD portal and webpage</p>
	-	
	-	



2014 SSMP Audit

CY2012 & CY2013 SSOs Graphs

March 2014

Calendar years 2012 and 2013 Graphic Representations:

Table 2. Volume of SSOs CY 2012 & CY2013

Description	Volume	Percent of Total
Total volume contained & returned to sewer system for treatment	2,658	98.8%
Total volume reaching waters of the State	0	0.0%
Total Volume not contained but not reaching waters of the State	32	1.2%
Total	2,690	100.0%

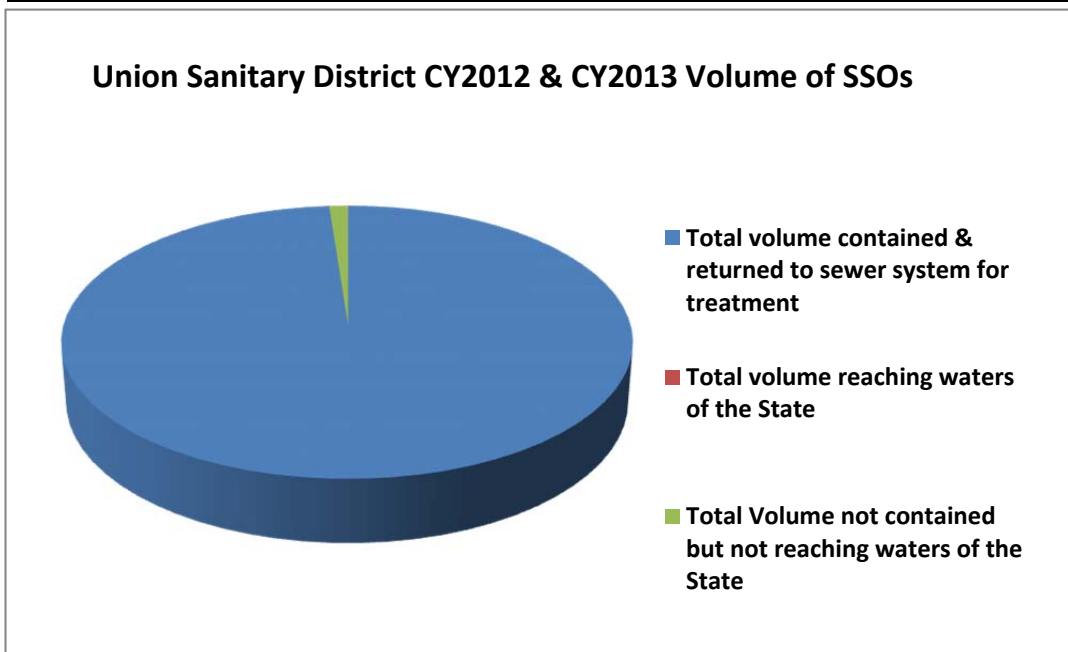
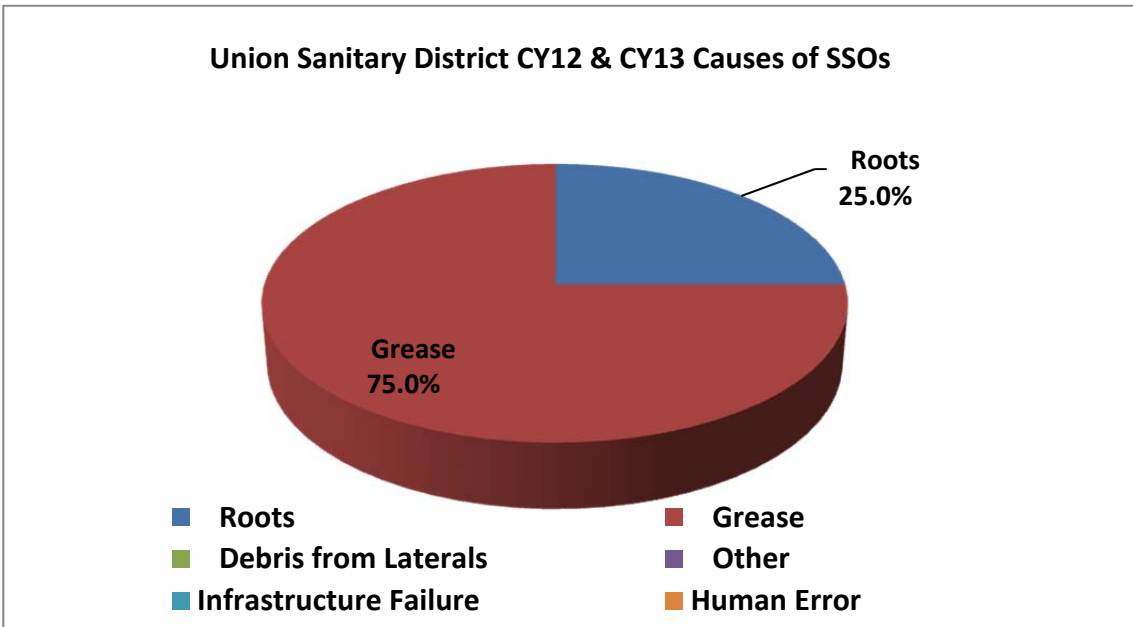


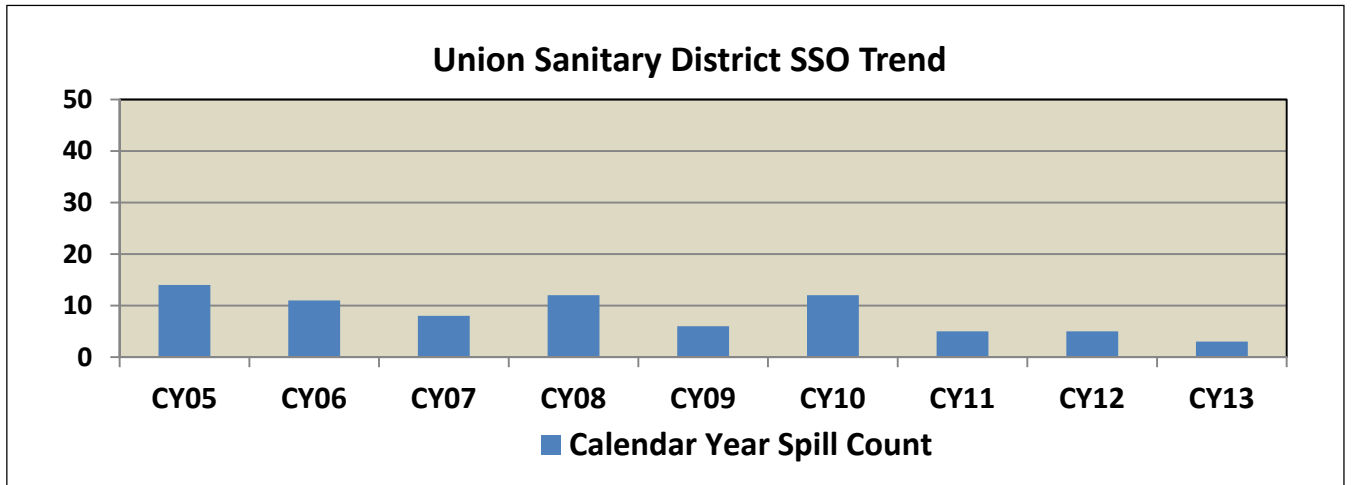
Table 3. Causes of SSOs

Cause of SSO	CY2012	CY2013	Totals	Percent of Total
Blockage:				0.0%
Roots	1	1	2	25.0%
Grease	4	2	6	75.0%
Rags				0.0%
Debris from Laterals				0.0%
Vandalism				0.0%
Animal Carcass				0.0%
Construction Debris				0.0%
Multiple Causes				0.0%
Other				0.0%
Subtotal for Blockage	5	3	8	100.0%
Infrastructure Failure				0.0%
Inflow & Infiltration				0.0%
Electrical Power Failure				0.0%
Flow Capacity Deficiency				0.0%
Natural Disaster				0.0%
Bypass				0.0%
Cause Unknown				0.0%
Human Error				0.0%
Total	5	3	8	100.0%



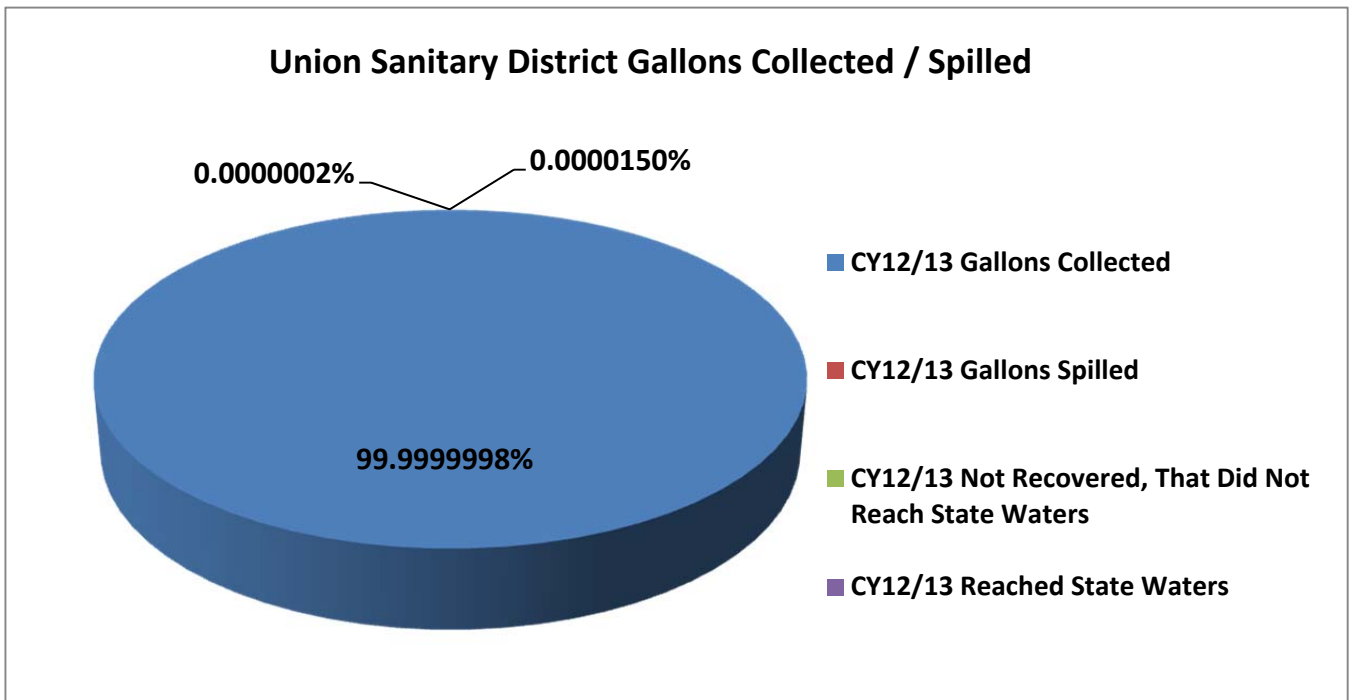
SSO Trends

Calendar Year	CY05	CY06	CY07	CY08	CY09	CY10	CY11	CY12	CY13
Calendar Year Spill Count	14.0	11.0	8.0	12.0	6.0	12.0	5.0	5.0	3.0
# of SSOs Per 100 Miles of Sewer	1.79	1.4	1.03	1.54	0.77	1.54	0.64	0.64	0.38



Union Sanitary District Gallons Collected / Spilled

Description	Gallons	Percentage
CY12/13 Gallons Collected	17,881,396,897	99.9999998%
CY12/13 Gallons Spilled	2,690	0.0000150%
CY12/13 Not Recovered, That Did Not Reach State Waters	32	0.0000002%
CY12/13 Reached State Waters	0	0.0000000%





2014 SSMP Audit

Efforts to Prevent SSOs

March 2014



2014 SSMP Audit

CY2012 & CY2013 Efforts to Prevent SSOs and Minimize Their Impact Through O & M

The USD Collection System Maintenance group conducted the following activities in an effort to proactively manage our system.

Description Of Efforts	CY12 Count	CY13 Count	Total Count
Service Requests investigated	270	325	595
Spot Repairs completed	44	24	68
Trenchless Point Repairs completed	132	93	225
Mains Cleaned on the Selective Maintenance Program (these are lines that have had blockages in the past)	494	679	1173
Mains cleaned on 72 Months Preventative Maintenance Program	656	3787	4443
Mains Treated for Root Control (these are lines that have had root caused blockages in the past or were likely to in the future)	849	1093	1942
Stoppages that did <u>not</u> result in a spill due to a quick response or our system design with grade breaks and relief points	13	12	25
Mains Televised to assess line condition	1637	4056	5693
Mains received more frequent service on the Selective Maintenance Program	28	27	55
Mains added to Selective Maintenance due to line condition assessment	79	43	122
FOG Inspections	526	463	989
FOG Outreach events	67	69	136



2014 SSMP Audit

Capital Improvement Programs

March 2014



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Capital Improvement Program Activities

In CY2012 & CY2013 USD completed the following:

- Design and construction of the I680 at Sabercat Rd. sewer relocation
- Construction of the Boyce Rd. Lift Station Replacement project
- Construction of the Irvington PS Solar Project
- Newark Basin Master Plan Update – condition assessment portion
- Construction of the SFPUC/Mission Blvd. Sewer Relocation Project
- Design and construction of the Deer Road Sewer Improvements Project
- Design and construction of the Force Main flanged coupling adaptor replacement project, Phase II
- Design and construction of the Cast Iron Lining Project, Phase IV
- Design of the Cast Iron Lining Project, Phase V
- Design and construction of the Spot Repairs Project, Phase IV
- Design and construction of the Ibero Way Sewer Easement Improvement project
- Design and construction of the Newark Backyard Sewer Easement relocation project
- Design and construction of the Hayward Marsh Sewer Forcemain Rehabilitation project
- Design of the Jarvis Ave. Sewer Replacement project
- Design of the Upper Hetch Hetchy Sewer Rehabilitation project
- Irvington Basin Master Plan Update – condition assessment portion

In 2014, USD will work on the following projects:

- Design and construction of the Newark Backyard Easement Sewer Relocation project
- Design and construction of the Pine St. Easement Sewer Rehabilitation project
- Design and construction of the Veasy St. Sewer Improvements project
- Design and construction of the Jarvis Ave. Sewer Replacement project
- Design and construction of the Upper Hetch Hetchy Sewer Rehabilitation project
- Design and construction of the Cherry St. pump Station Access Rd. Improvements project
- Design of the Spot Repairs Project, Phase V
- Design and construction of the Boyce Rd. Lift Station Phase II project
- Irvington Basin Master Plan Update – capacity assessment portion
- Pump Station Master Plan Update
- Seismic Evaluation Of Pipelines



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Training Activities

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Training for CY2012 & CY2013:

- USD SSO Volume Estimating Processes
 - Met with CWEA to start developing statewide training for SSO Volume Estimation
 - Conducted two webinars for CWEA for SSO Volume Estimating
 - Conducted two hands on training sessions for CWEA, for SSO Volume Estimating
 - Provided training on how to estimate the volume of an SSO to West Valley Sanitary District and Cupertino Sanitary District, and CCCSD

Conducted over 100 training sessions for our Collection System workers: A sampling of those include:

- A review of 70 Standard Operating Procedures (SOPs) on various equipment and tasks involved in Collection System O & M, including:
 - Asbestos Cement Pipe Handling
 - Defensive Driving
 - Hazmat: Title 22/RCRA Hazardous Waste Handler
 - Fundamentals of Gas Detection
 - Excavation
 - 2012 Commercial Driver Laws
 - Construction Flagger
 - New Standards in PPE
- Conducted Competency Assessments on:
 - Bypass Pumping
 - Confined Space Entry
 - Lateral Assessment and Certification Program (LACP)
 - Pipeline Assessment and Certification Program (PACP)
 - Construction Flagger
 - Fall Protection
 - Forklift Operator
- A review of many Policies including:
 - Bloodborne Pathogens
 - Office Ergonomics
 - Ethics
 - Harassment & Discrimination A&I
- Attended CWEA Training Conferences or Workshops which included some of the following:
 - Emergency Packets / Hazcomm
 - Hazmat: Title 22/RCRA HazWaste Handler
 - ICS-100 Introduction to the Incident Command System (ICS) for Public
 - SSO Response / Trouble Calls
 - Vector Delivery A&I
 - D.O.T. for Employees/Management
 - CSRMA Tactical Communication: Violence in the Workplace



2014 SSMP Audit

Accomplishments

March 2014



2014 SSMP Audit

Accomplishments

In calendar year 2012 and 2013, we had the following accomplishments:

Progress/Accomplishments

- Received the CWEA SFBS Large Collection System of the Year award
- Converted the SSMP to PDF and put on USD's District's website
- All Lead CSWs and Acting Leads Obtained NASSCO PACP Certification
- Changed TV Inspection to NASSCO PACP format
- Completed 2,128,343 total feet of cleaning and 1,538,476 total feet of televising of sewer lines in calendar years 2012 and 2013
- Responded to a total of 298 service request calls calendar years 2012 and 2013
- Completed a total of 293 main repairs in calendar years 2012 and 2013
- Marked and located all sewer lines identified through Underground Service Alerts
- Completed 18 months out of 24 months with no SSOs and 13 of these months were consecutive
- Completed 397 days in a row with no injuries
- Recognized the Work Group for going year without an injury
- Provided support on the following projects: Asset Hierarchy, Asset Management, Boyce Pump Station, Irvington Solar Project, I-680 Crossing, Newark Basin Master Plan Update, Hansen 8, Pine St Easement, Lateral Condition Assessment and Plant Shut Downs
- Attended ABAGs Sewer Smart Summit and the BACWA Annual meeting
- Made a presentation to the BACWA CS Committee on trenchless repairs
- Hosted a BACWA CSC meeting and demonstrated our SSO Volume Estimating Facility
- Conducted two hands on training sessions for CWEA, for SSO Volume Estimating
- Conducted two webinars for CWEA for SSO Volume Estimating
- Provided training on how to estimate the volume of an SSO to West Valley Sanitary District and Cupertino Sanitary District, and CCCSD
- Assisted CWEA in determining the Cut Score for TCP Certification Exams
- Attended CWEA Regulatory Compliance workshop
- Attended the Annual CWEA Training Conferences
- Presented and participated in the CASSE meetings (California Alliance for Sewer System Excellence)
- Conducted SSMP Recertification Workshop
- Attended State Water Board Workshop on proposed revision to the SSSWDR
- Hosted a site visit from US EPA and the State Water Board Office of Enforcement to discuss USD Best Management Practices
- Made a site visit to WVSD to learn about their safety program
- Met with PG&E Consultant, FES, and discussed their crossbore program
- Met with the City of Fresno and shared the details of our Root Control Program
- Visited the City of Livermore to learn about their safety program