

ELEMENT 9 - MONITORING, MEASUREMENT & PROGRAM MODIFICATIONS

The District monitors the implementation of the SSMP elements in order to measure the effectiveness of the District’s SSMP program in reducing SSOs. The manner in which each SSMP element is monitored and evaluated and the schedule with which the District completes this monitoring and evaluation is described in this SSMP Element.

9.1 Regulatory Requirements

WDR Order No. 2006-0003-DWQ Section D.13(ix) states:

The Enrollee shall:

- (a) Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;
- (b) Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;
- (c) Assess the success of the preventative maintenance program;
- (d) Update program elements, as appropriate, based on monitoring or performance evaluations; and
- (e) Identify and illustrate SSO trends, including: frequency, location, and volume.

9.2 Establishing and Prioritizing SSMP Activities [WDR D.13(ix)(a)]

Table 9-1 outlines the relevant information maintained by the District to establish and prioritize appropriate SSMP activities:

Table 9-1: SSMP Implementation Management

SSMP Element	SSMP Information
1. Goal	This SSMP Element contains the District’s goals for the operation, maintenance, and management of the sanitary sewer collection system, which provide focus to help reduce SSOs and mitigate SSOs that do occur.
2. Organization	A table containing names, job titles, roles, responsibilities, and contact information is contained in this SSMP Element, which allows the public, staff, and regulators to directly contact the person most knowledgeable for each aspect of the SSMP Program. An organization chart shows lines of authority.
3. Legal Authority	Appendices to this SSMP Element contain the complete District Ordinances and MRWPCA Ordinance cited.

SSMP Element	SSMP Information
4. Operation and Maintenance Program	Appendices to this SSMP Element thoroughly document the sanitary sewer system operation and maintenance activities, which are utilized to develop the District's Rehabilitation and Replacement Plan. Appendices include maps, equipment and replacement part inventories, and the CIP and associated funding mechanisms.
5. Design and Performance Provisions	Appendices to this SSMP Element include the in use Design Standards and Specifications.
6. Overflow Emergency Response Plan	Appendices to this SSMP Element include notification, response, and emergency operations procedures, training records, and response and mitigation programs.
7. FOG Control Program	A summary report documenting the annual FOG Record check will be included in the appendix to this element starting in 2014.
8. System Evaluation and Capacity Assurance Plan	This SSMP Element contains the 2011 SMP which conducted a thorough hydraulic analyses and evaluation of the District's collection system and provides the CIP that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event.
9. Monitoring, Measurement, and Program Modifications	This SSMP Element will be updated annually with the number of SSOs that occur and their causes in a calendar year. This is the most important trend to document and the reason for the SSMP.
10. SSMP Program Audits	SSMP Audit Reports will be appended to this SSMP Element when they are generated, the next audit is due on or before August 2, 2015.
11. Communication Program	Appendices to this SSMP Element contain examples of public outreach articles, flyers and pertinent Seaside County Sanitation District and MRWPCA website addresses, as well as meeting agendas and minutes from meetings with stakeholders.

9.3 SSMP Implementation Monitoring [WDR D.13(ix)(b)]

The District Manager and District Engineer are responsible for:

9.3.1 Element 1 – Goals

The District Manager is responsible for monitoring the implementation of this SSMP Element. The District's sanitary sewer system goals will be evaluated and progress toward meeting these goals will be measured on an annual basis by the Associate District Engineer, who will submit a staff report to the District Board in February of each year, which communicates the District's progress toward achieving these goals and implementing the SSMP. Copies of these reports will be included in Appendix 9A.

9.3.2 Element 2 – Organization

The Associate District Engineer is responsible for monitoring the implementation of this SSMP Element. The organization charts will be reviewed and revised annually in February of each year. The SSO response and notification process will be reviewed and revised to increase its effectiveness annually in February of each year.

9.3.3 Element 3 – Legal Authority

The Associate District Engineer will receive input from the Maintenance and Utility Superintendent, and MRWPCA Source Control Supervisor on the effectiveness of the District and MRWPCA legal authorities in preventing SSOs annually in February of each year. Information gathered from this Staff will annually be sent in a memo to the District Legal Council and MRWPCA legal counsel for consideration in updates to the District Ordinances and MRWPCA Ordinance.

As of this revision to the SSMP, Revision 02, the District maintains the Legal Authorities stated by WDR Section D.13(iii) with the exception of the right to operate and maintain sewer laterals. The District does not currently own any laterals except to District-owned properties and, therefore, does not require the legal authorities to operate and maintain laterals to private properties.

9.3.4 Element 4 – Operation and Maintenance Program

The District's Maintenance and Utility Superintendent is responsible for monitoring the implementation of this SSMP Element, which is to be reviewed and revised annually.

The District plans to include interactive links incorporated into the District's existing GIS database to provide immediate access to sanitary sewer collection system photos, closed circuit television (CCTV) inspection videos, and the trunk system's as-built plans and construction drawings over the course of the next two years. As-built plans and construction drawings are maintained as the collection system is improved through each CIP, and this data will also be routinely integrated back into the collection system GIS database as this system is upgraded.

SSMP Element 4 – Operation and Maintenance Program includes funding and identification of historical and current fiscal year capital projects. Progress towards funding and completion of the short and long term capital projects beyond Fiscal Year 2013/14 and beyond will be tracked in this Element.

By the end of 2014, the District will develop a formal training program that incorporates future and existing operation, maintenance, and safety procedures. Annual training on all procedures and SSMP Element 4 – Operation and Maintenance Program will be conducted with District Staff and any contractors implementing portions of SSMP Element 4 – Operation and Maintenance Program. Training will be documented and tracked by the District.

9.3.5 Element 5 – Design and Performance Provisions

The Associate District Engineer is responsible for monitoring the implementation of this SSMP Element. The Seaside County Sanitation District has contracted CIP project design services to Wallace Group. Currently, Wallace Group creates design and construction standards and specifications specific to the projects the District undertakes, such as the individual standards and specifications created and utilized for the District's CIP.

For routine repair work the District uses Standard Plans for the Public Works Construction, 2009, by Public Works Standards, Inc. which is included as Appendix 5A to this element.

9.3.6 Element 6 – Overflow Emergency Response Plan

The Associate District Engineer is responsible for monitoring the implementation of this SSMP Element. The District's OERP, which includes emergency response procedures, will be reviewed and revised on an annual basis by the Associate District Engineer and Maintenance and Utilities Superintendent.

If a SSO occurs, the District's Associate District Engineer will evaluate the effectiveness of the OERP to determine whether any modifications need to be made to the procedures and protocol contained in the OERP and make the revisions needed to improve the effectiveness of the District's SSO response and notification processes.

9.3.7 Element 7 – FOG Control Program

The Junior Engineer is responsible for monitoring the implementation of this SSMP Element and its effectiveness at reducing SSOs on an annual basis.

FOG Program changes necessitated by an increase in SSOs caused by FOG or an increase in number of FSE's in violation will be developed by the Junior Engineer with the Associate District Engineer and decided upon by the District Engineer and District Manager.

9.3.8 Element 8 – System Evaluation and Capacity Assurance Plan

The Associate District Engineer is responsible for the implementation of this SSMP Element, which is to be reviewed and revised annually with the status of CIP projects identified in the 2011 SMP.

9.3.9 Element 9 – Monitoring, Measurement, and Program Modifications

The Associate District Engineer is responsible for the implementation of this SSMP Element, which is to be reviewed and revised annually. The review and revisions are to be documented on the revision record, which is the first page of each element. The metrics contained in this SSMP Element are important tools in the determination of what tasks and projects contained in each element are a priority from fiscal year to fiscal year.

9.3.10 Element 10 – SSMP Program Audits

The Associate District Engineer or their designee is responsible for assuring the SSMP Audit is conducted and complete prior to the August 2, 2015 deadline and continuously on a two year interval following this date.

SSMP Audits should be conducted with cooperation of all of the management, administrative, maintenance, and contract positions responsible for implementing specific measures in the SSMP program. When conducting the SSMP Audit, District Staff must evaluate the effectiveness of each element of the District's SSMP. A comprehensive, effective review of the District's SSMP must be documented in a SSMP Audit Report.

Upon the completion of the third SSMP Audit, which is due August 2, 2015, the District must evaluate the effectiveness of the SSMP Audit and the manner in which it was performed in this SSMP Element.

9.3.11 Element 11 – Communication Program

The Associate District Engineer is responsible for the implementation of this SSMP Element, which is to be reviewed and revised annually. Revisions must include examples of public outreach articles, flyers and pertinent Seaside County Sanitation District and MRWPCA website addresses, as well as meeting agendas and minutes from meetings with stakeholders.

The Seaside County Sanitation District is a member of the MRWPCA Technical Advisory Committee, which is comprised of MRWPCA and its tributary agencies: Pacific Grove, Monterey, Del Rey Oaks, Seaside, Sand District, Fort Ord, Marina, Castroville, Moss Landing, Boronda, Salinas, and some unincorporated areas in northern Monterey County. This committee is designed to be a venue for communication and coordination between these agencies, but meetings have not occurred in several years. However, the District plans to work with MRWPCA to reinstate these meetings or to create a new quarterly meeting between District Staff and MRWPCA Staff in order to increase coordination and communication between these agencies starting at the end of 2014

9.4 Preventative Maintenance Program Assessment [WDR D.13(ix)(b)]

The District's Preventative Maintenance Program includes CCTV inspection starting in 2014, cleaning, visual manhole inspection, and HMA identification and maintenance and has been successful at decreasing the amount of SSOs, which occur on an annual basis, as identified and described below in Section 9.6: SSO Trends. The improvements the District is making to its Preventative Maintenance Program are described in SSMP Element 4 – Operation and Maintenance Program and above in Section 9.3.4: Element 4 – Operation and Maintenance Program.

9.5 SSMP Updates [WDR D.13(ix)(d)]

The intention of the District is to use the SSMP for training, planning and regular maintenance of the collection system. As the document is utilized, any deficiencies or discrepancies will be corrected. Program elements will be updated based on performance evaluations, organizational, operational, and maintenance changes, new regulatory requirements, and repairs, replacements, and upgrades made to the collection system.

At a minimum, the District will review and revise the SSMP annually. The Associate District Engineer is responsible for revising and maintaining the SSMP. A revision record will be maintained to track changes.

9.6 SSO Trends [WDR D.13(ix)(e)]

The trends in the Seaside County Sanitation District's SSOs for 2009 through 2014 are illustrated in Figure 9-1 and 9-2 and identified in Table 9-2. The cause categories identified in Table 9-2 are the causes available for use in the SSO Report in California Integrated Water Quality System (CIWQS). District Staff is responsible for determining which cause category is appropriate for each SSO when the SSO is reported in CIWQS.

Figure 9-1: Annual SSO Volume 2009 - 2013

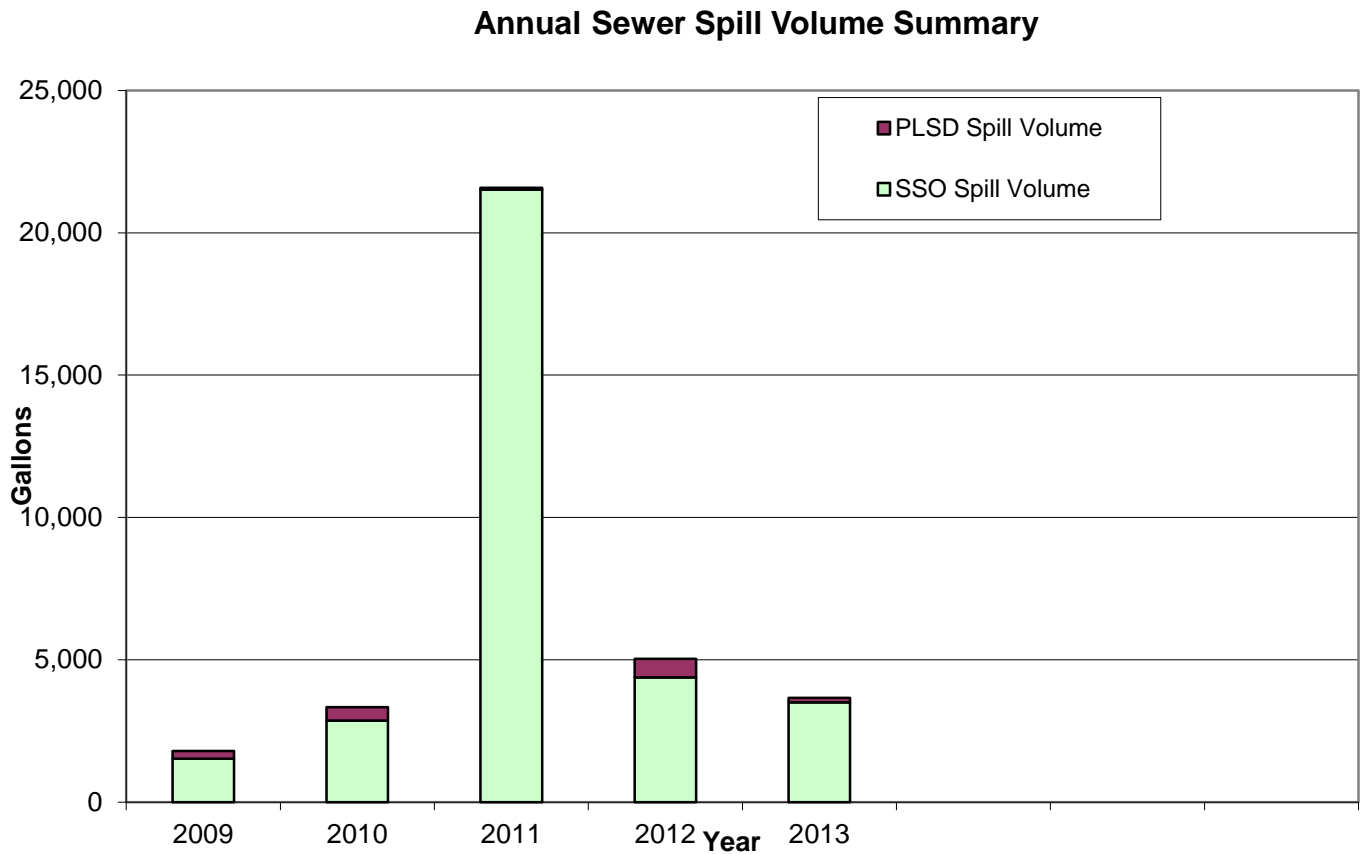


Figure 9-2: SSO Category 1, 2 and 3 SSO's 2009 – 2013

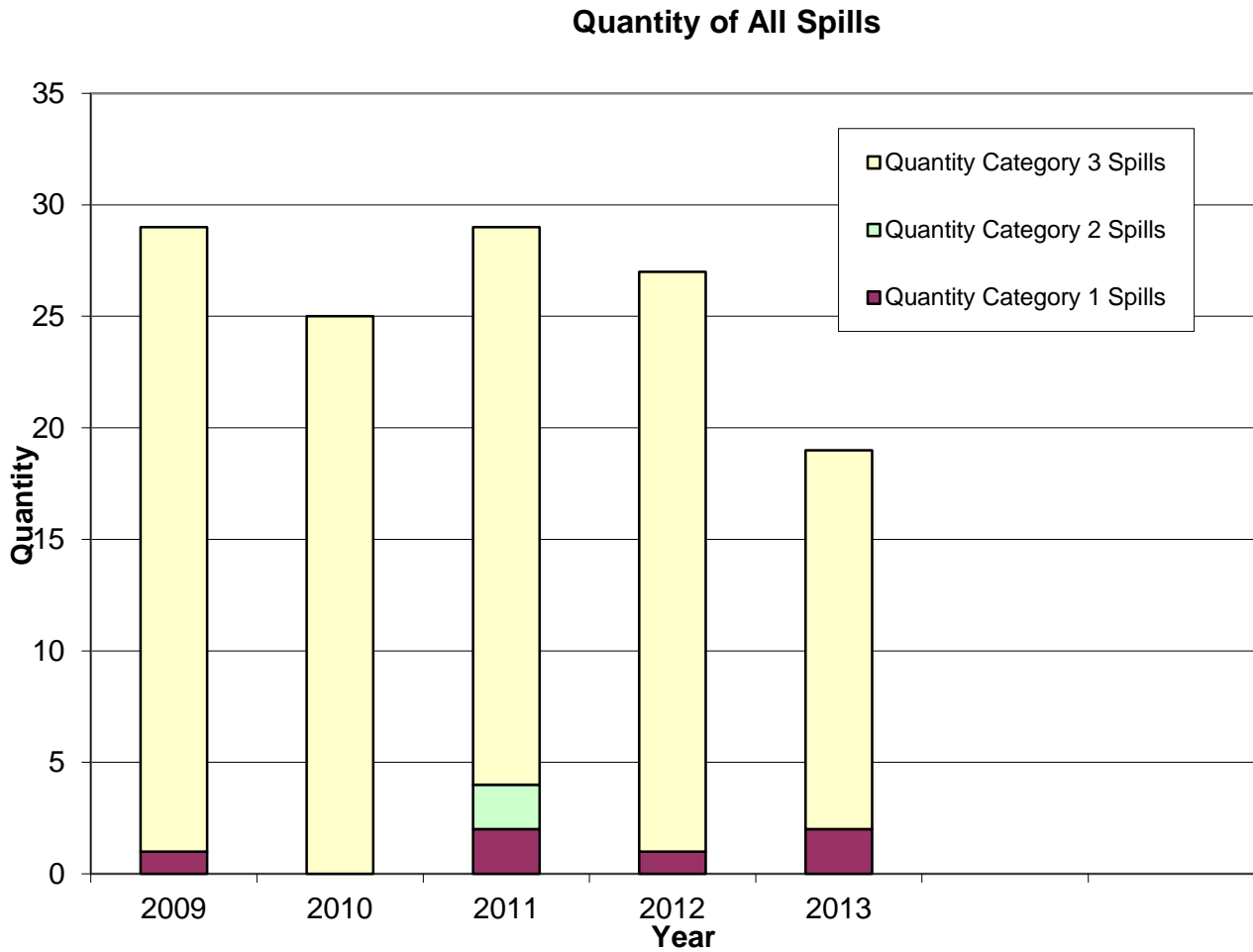


Table 9-2: Number of SCSD SSOs per Indicator per Year

Indicator		2010	2011	2012	2013	2014	Total
No. of SSOs		25	25	26	19	0	95
Locations with Multiple SSOs		1	0	0	0	0	0
Volume (gal)	Volume	1,521	21,510	4,385	3,506	0	32,266
	Volume Recovered¹	0	0	0	0	0	0
	Volume Reached Surface Water	0	51	0	0	0	904
Causes	Debris	1	0	0	1	0	1

Indicator	2010	2011	2012	2013	2014	Total
Debris – General	2	1	2	0	0	5
Debris – Rags	1	1	1	0	0	5
Flow Exceeded Capacity	0	0	0	0	0	0
FOG	10	15	18	6	0	3
Operator Error	0	0	0	0	0	2
Other	1	0	1	2	0	6
Pipe Structural Problem/Failure	0	0	0	0	0	0
Pump Station Failure	0	0	0	0	0	0
Rainfall Exceeded Design	0	0	0	0	0	0
Root Intrusion	5	5	8	9	0	7
Vandalism	0	0	1	0	0	1

¹Several of SSO Reports in CIWQS include a comment under spill response activities, which state that all or a portion of the SSO was contained when the reported volume recovered was zero gallons.

Appendix 9A contains the CIWQS report of the SSO history from January 2009 to February 2014 and the Collection System Operation Report for the same time frame.

SCSD expects to continue to work towards reducing the number of SSOs.