

California

Water Boards

Protecting California's Water



Sanitary Sewer Overflow (SSO) Reduction Program

Revised Sanitary Sewer System Waste Discharge Requirements

State Water Resources Control Board
1001 I Street, Sacramento, CA 95814

October 25, 2011

Overview

- The Current Sanitary Sewer Systems Waste Discharge (SSS WDRs) Requirements
- Spill Data and Trends
- Outreach Conducted In Response to the Board Requested WDR Review & Update
- Proposed Revisions to the SSS WDRs
- Next Steps

The Current Sanitary Sewer Systems Waste Discharge (SSS WDRs) Requirements

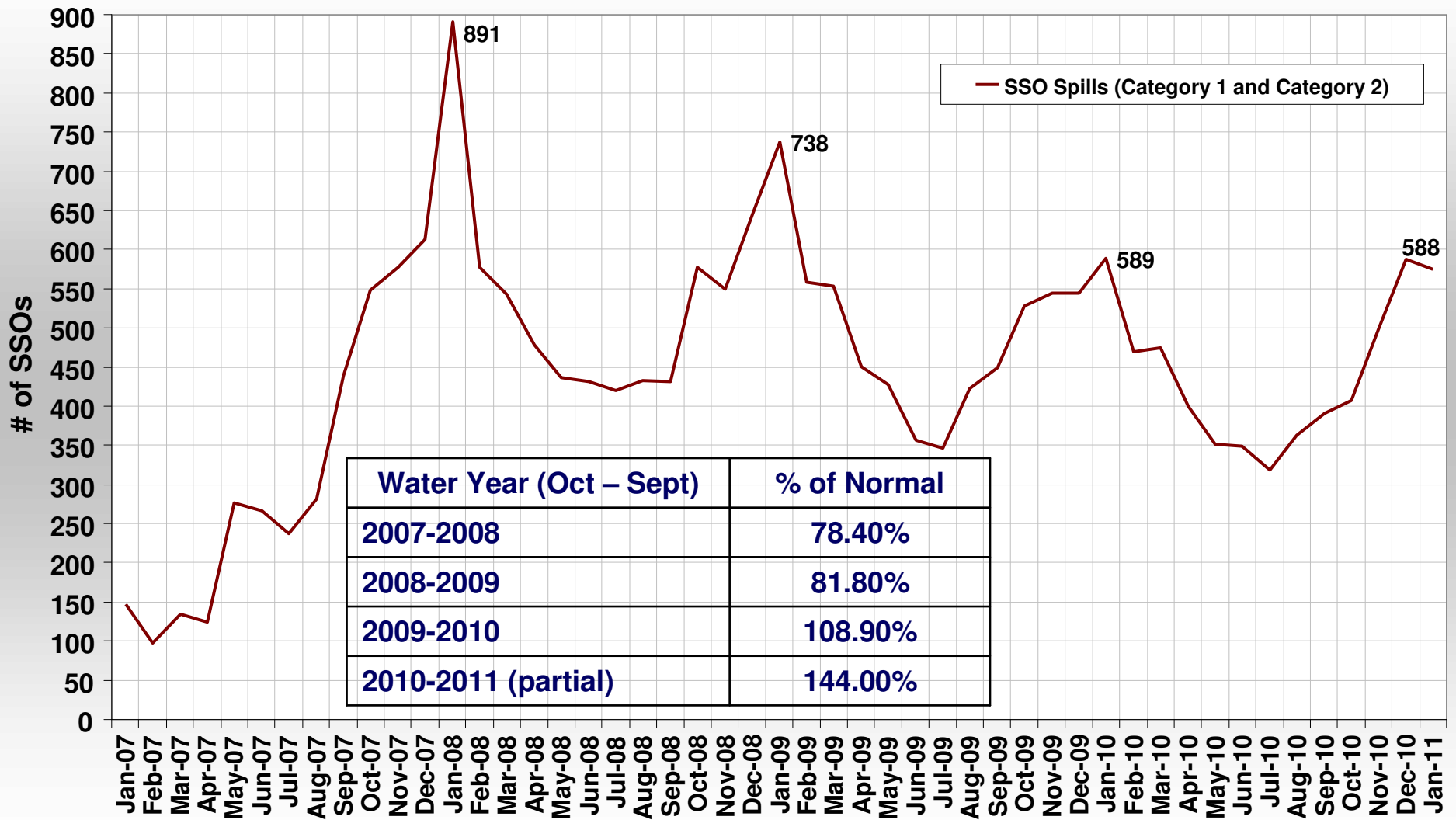
- Applies to publicly owned sanitary sewer systems over 1 mile in pipe length
 - 1,081 currently enrolled
- Regulates Sanitary Sewer Overflows (SSOs)
 - Spills of untreated sewage from publicly owned portions of sanitary sewer systems upstream of a sewage treatment plant head-works
 - Treatment plant and permitted combined sewage overflow points not regulated
 - Private Lateral Sewage Discharges (PLSDs) not regulated, enrollees are encouraged to report them
- Requires all Sanitary Sewer Overflows be reported and enrollees to develop a Sewer System Management Plan (SSMP) for their sanitary sewer system
- San Francisco Bay and San Diego Regional Water Boards have additional requirements for sanitary sewer systems in addition to the statewide Waste Discharge Requirements

Spill Data and Trends

- As of February 2011:
 - 1081 enrolled public sanitary sewer systems
 - ~67% of enrolled sanitary sewer systems have reported one or more spills
 - ~33% of enrolled sanitary sewer systems have never reported a spill
- Between January 2007 and February 2011:
 - ~ 22,000 sanitary sewer overflows reported resulting in ~93 million gallons of raw sewage spilled
 - 80% reached surface water
- ~5% (54) enrollees are responsible for 90% volume spilled since program inception
- Trends in spill characteristics reported in prior years remain unchanged, specifically:
 - ~92% of spills are < 1,000 gallons
 - Leading Causes are Roots, Fats\Oils\Grease (FOG), and Debris
 - ~2% of total volume spilled resulted from these 92% of spill events
 - ~8% are > 1,000 gallons
 - Leading Causes are Capacity & Pipe Structural Issues
 - ~98% of volume spilled

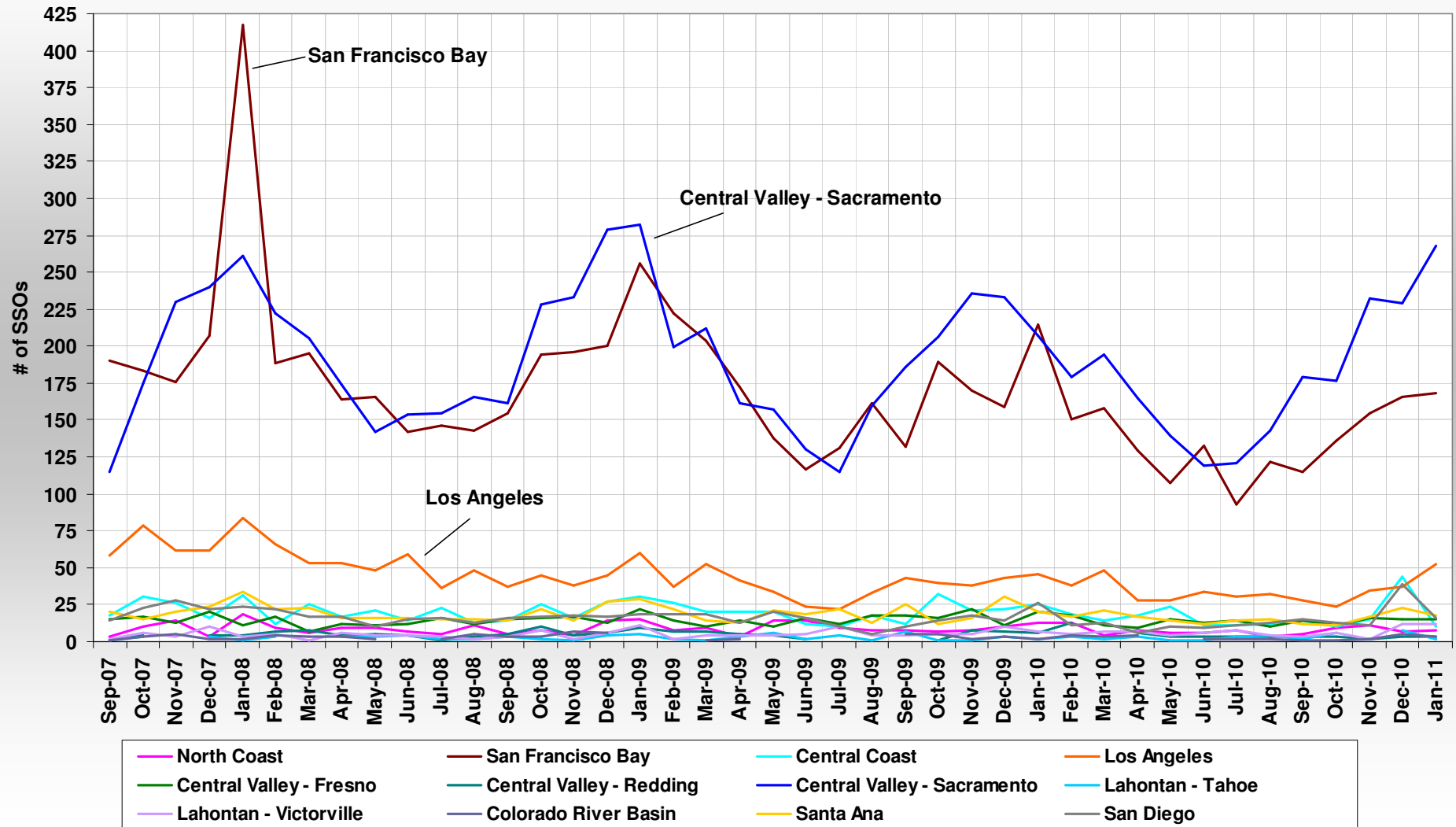
Monthly Trend in Number of SSOs

State of California Monthly Trend in Number of SSOs



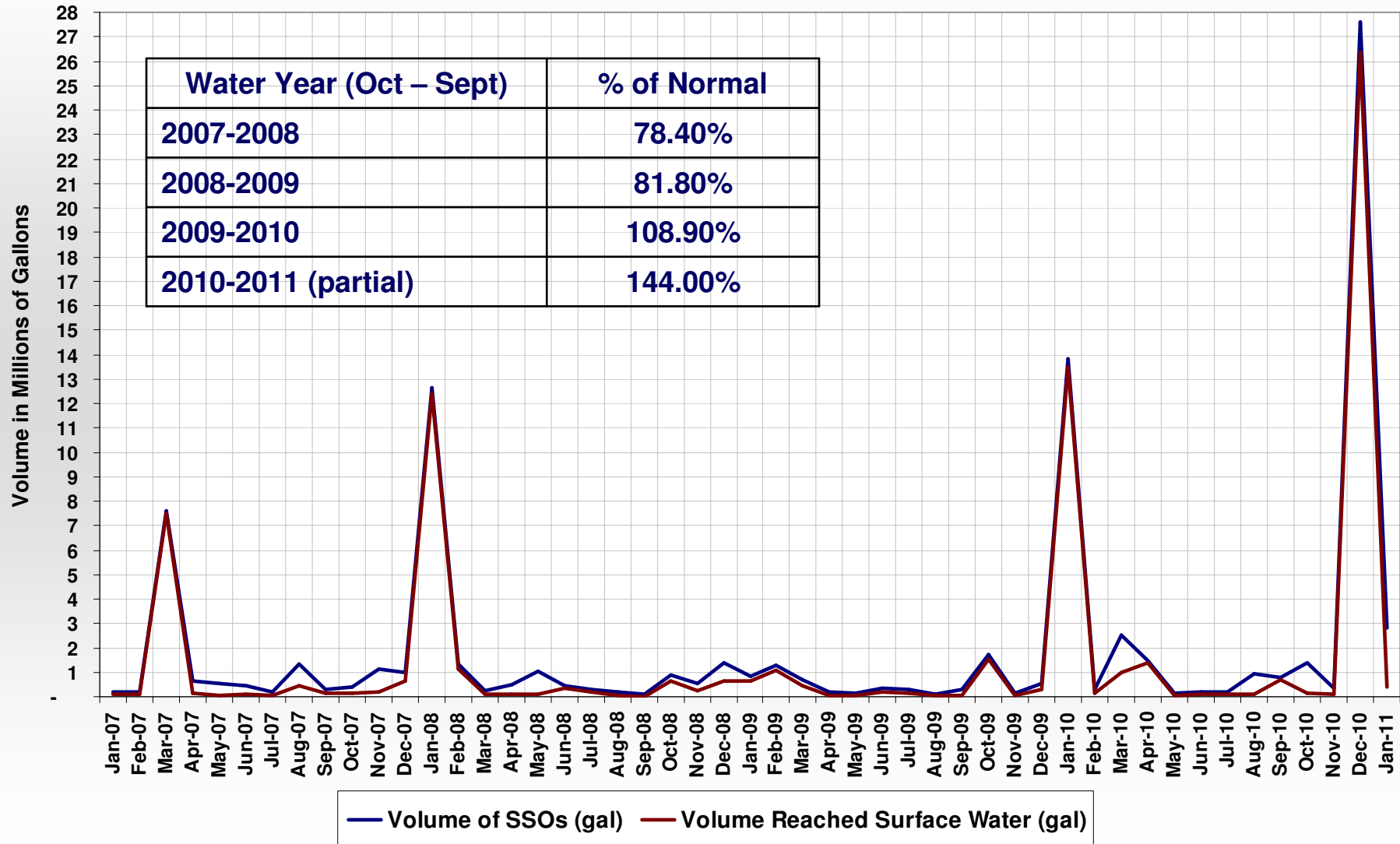
Monthly Trend in Number of SSOs

Regional Monthly Trend in Number of SSOs



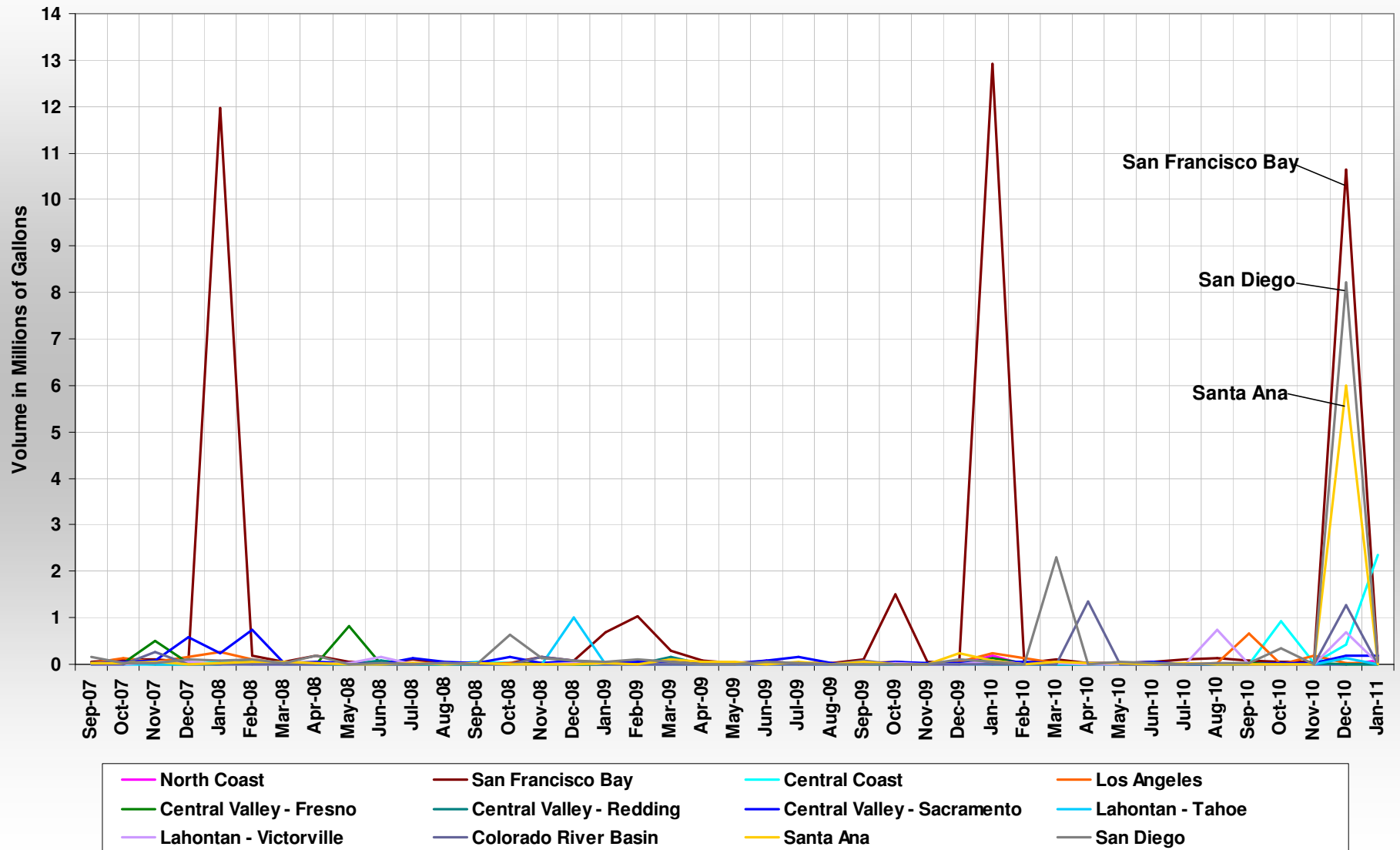
Monthly Trend in SSO Volume

State of California Monthly Trend in SSO Volume



Monthly Trend in SSO Volume

Regional Monthly Trend in Volume of SSOs



**Outreach Conducted In Response to
the Board Requested WDR Review &
Update**

Outreach Conducted In Response To The Board Requested WDR Review & Update

- **2009 → Staff Public Meetings & Comment Letter Solicitation**
 - 2 meetings held, 183 participants
 - 42 comment letters received → 341 comments
- **2009-2010 → Other Outreach**
 - Workshop with Regional Water Board Staff
 - Coordination with California Emergency Management Agency (Cal EMA)
 - Coordination with Local Health Departments
 - Data Review Committee
- **2011 → Draft SSS WDR Released for Public Comment**
 - 176 Comment Letters Received → ~2,400 Comments Including Duplicates, ~250 Unique Comments
- **2011-2012 → Comment Verification, Workshop, & Adoption Hearing**
 - ~October 2011, Comment Summaries To Be Posted For Verification
 - ~January 2012 Board Workshop
 - ~March 2012 Adoption Hearing

Outreach (contd.)

■ Data Review Committee

– Purpose is:

- Review SSO data collection process and make improvements to enhance the value of collected spill data for all stakeholders
- Redesign the spill database and report forms for event based versus the current location based reporting
- Evaluate and develop indices of collection system performance to be used in California

– 352 stakeholders registered for the committee Lyris list and 52 registered for the Data Review Committee Google Group. Meetings will continue through approximately February 2012

Proposed Revisions to the SSS WDRs

Proposed Revisions to the Sanitary Sewer System WDRs

1. Findings
2. Regulatory Considerations
3. Definitions
4. Application Requirements
5. Prohibitions & Provisions
6. Sewer System Management Plan (SSMP) Requirements
7. Compliance Schedules
8. Spill Notification
9. Private Lateral Sewage Discharge (PLSD) Reporting
10. SSO Reporting
11. Record Keeping

Application Requirements

- **Proposed WDR Applies to:**

- Private sanitary systems and public sanitary sewer systems

- Sanitary sewer systems with over one mile of pipe and with a peak flow over 25,000 gallons per day

- To establish flow, can use either measured peak daily flow or calculated peak daily flow (e.g., number of EDUs x Flow per EDUs x Peaking Factor)

- All enrolled and potential enrollees will be required to submit a new Notice of Intent (NOI) or Notice of Non-Applicability (NON) **(B.1)**

Application Requirements (continued)

- **Enrollment of multiple sanitary sewer systems by an agency (B.2)**
 - Enrollees who own multiple sanitary sewer systems meeting the applicability criteria and that are not physically connected are required to enroll each distinct sanitary sewer system separately under the SSS WDRs
 - If they are managed as distinct assets in the form of separate sanitation districts,
 - Under separate operations and maintenance and/or capital improvement budgets, and/or
 - Managed as distinct and separate sanitary sewer systems.

Application Requirements (continued)

- **If an enrollee owns at least one sanitary sewer system meeting the applicability criteria (B.3):**
 - Any sanitary sewer systems with connected systems of pipes less than one mile in contiguous length not physically connected to the enrolled sanitary sewer system,
 - Enrollee is required report spills from those sanitary sewer systems under one mile in contiguous length, and
 - Manage them under a Sewer System Management Plan.

Prohibitions

- Changed prohibition from waters of the U.S. to “**surface water of the State**”,
 - Discharges to storm drains that are not fully captured are prohibited
 - Fully recovered discharges are not prohibited (still need to report them)
 - Discharges to drainage channels if the drainage channel is a surface water of the state or tributary to a surface water of the state.
- Prohibition against creating a nuisance is unchanged,
- Prohibition of discharge of chlorine, or any other toxic substance used for disinfection and cleanup of wastewater spills to any surface water body.
 - This prohibition applies to the chlorine residual in the potable water used for wash down and clean-up of wastewater spills.

Provisions

- PLSD reporting proposed to be mandatory when the enrollee becomes aware of the spill (D.4)
- Professional evaluation and judgments shall be provided by a professional engineer registered in California for the SSMP,
 - At a minimum, for the System Evaluation and Capacity Assurance Plan (D.11)
- If the Enrollee believes that any element of the SSMP is not appropriate or applicable
 - Shall still address each element listed below in its SSMP and justify why that element is not applicable.
- Other minor changes to SSS WDR text

SSMP Requirements

- **Organization**
- **Legal Authority**
- **Operations and Maintenance Program**
- **Design and Performance Provisions**
- **Overflow Emergency Response Plan**
- **FOG Control Program**
- **System Evaluation and Capacity Assurance Plan**
- **Performance Targets and Program Modifications**
- **SSMP Program Audits**
- **Communication Program**

Compliance Schedules

- **Current enrollees of Order No. 2006-0003-DWQ**
 - Enroll 6 months after adoption
 - SSMP – have until next full bi-annual audit to add new/enhanced SSMP elements
- **New Enrollees Meeting the Enrollment Criteria**
 - Enroll 6 months after adoption
 - Complete SSMP 30 – 45 months after enrollment depending on size of collection system
- **Expanding or New Collection Systems (after adoption)**
 - Apply for coverage three (3) months prior to operation of facilities
 - Complete SSMP 30 – 45 months after enrollment depending on size of collection system
- **Public Sanitary Sewer Systems that Never Enrolled**
 - Should have enrolled under No. 2006-0003-DWQ but never did
 - Enroll on adoption or as soon as practicable
 - State Water Board to approve SSMP Development Schedule
 - Have to provide historic spill data back to when enrollment was required

Monitoring and Reporting Program (MRP) Changes

- **Spill Notification**
- **Private Lateral Sewage Discharge (PLSD) Reporting**
- **SSO Reporting**
- **Record Keeping**

Spill Notification

NOTIFICATION:

- **ONLY REQUIRED FOR CAT 1 SSO Reaching Surface Water**
 - **2hrs after aware:**
 - Notifies California Emergency Management Agency (CalEMA), formerly OES.

PLSD Reporting

■ **Mandatory Reporting of PLSDs**

- PLSD - discharges of wastewater resulting from a failure in a privately owned sanitary sewer system asset,
 - When become aware
- Report within 30 Calendar days after end of calendar month in which PLSD occurred,
- Enrollee not responsible for the cause, clean-up, or lateral repair,
- Enrollee encouraged to notify CalEMA when applicable, or advise the discharger to do so,
- PLSDs still do not count towards No-spill Certifications
 - *You can file a no-spill certification even if you had one or more PLSDs*

Spill Reporting

- Streamline Spill Reporting
- Category 1 and 2 SSO Mandatory information:
 - Actual or estimated SSO start date and time
 - SSO Failure Point (main, lateral, etc.)
- Category 1 SSO Mandatory information:
 - Identification of method(s) used for volume estimates,
 - Name surface waters impacted (if applicable)
- PLSD information to be included:
 - The address, or most accurate location information known (e.g., GPS Coordinates), of where the PLSD occurred;

Record Keeping

- Photographic records of each SSO event
- A printed or electronic record of each SSO initial draft report
- A printed record of certified SSO report, plus any amended and re-certified report(s);
- Records of all incoming SSO and/or PLSD complaints
- Field crew records to document SSO response activities
- Steps that have been and will be taken to prevent SSOs from recurring,
- Records of inspections, maintenance, operations, repairs, and funding of assets, and
- Records of implementation all the elements of the SSMP.

Comments Received on Proposed Changes

- **Key Issues Raised** (*ranked by number of comments received*)
 - Mandatory PLSD Reporting
 - Re-adopting as a NPDES permit or NPDES/WDR hybrid permit
 - Revision timing (too early in the process to revise SSS WDRs)
 - SSMP Requirements – Too Prescriptive
 - Providing Coverage of Private Systems
 - Streamline Notification and Reporting
 - Applicability Criteria
 - Prohibition of toxic substances used for clean-up

Next Steps

- Finalize revised Sanitary Sewer Systems WDR and Monitoring and Reporting Plan,
- Issue Notice of Revised WDR and MRP and Solicit Comment Letters Before Board Workshop,
- Board Workshop Around January 2012,
- Finalize and Release Response to Comments Document and WDR/MRP Revisions from Board Workshop,
- Target Adoption Hearing in March 2012.

Program Contacts & Info

Russell Norman, P.E.
SSO Program Lead
State Water Resources Control Board
rnorman@waterboards.ca.gov
(916) 323-5598

Victor Lopez, E.I.T
SSO Program Lead
State Water Resources Control Board
vlopez@waterboards.ca.gov
(916) 323-5511

Jim Fischer, P.E.
Office of Enforcement
State Water Resources Control Board
jfischer@waterboards.ca.gov
(916) 341-5548

SSO Main Website:

http://www.waterboards.ca.gov/water_issues/programs/sso/

List Serve Sign-Up:

http://www.waterboards.ca.gov/resources/email_subscriptions/swrcb_subscribe.shtml