

California

Water Board

Preserve, enhance, and restore the quality of California's water resources for the benefit of present and future generations.



Statewide Sanitary Sewer Overflow Reduction Program (SSO Program)

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Overview

1. State and Regional Board SSO Responsibilities
2. Statewide Data Summary
3. Statewide Compliance and Enforcement
4. SSO Order Review and Update
5. SSO Program Contacts

Roles and Responsibilities

- **State Water Resources Control Board (WDR Unit)**
 1. Lead on Statewide SSO program management
 2. Oversees coordination of statewide compliance and enforcement
 3. Statewide audits (targeted and random) to support SSO program, State Water Board's Office of Enforcement and all nine Regional Water Board enforcement activities
 4. SSO Order Review and Update

Roles and Responsibilities (cont'd.)

- **Regional Water Boards (9 regions statewide)**
 1. Responding, investigating and enforcement of individual Sewage Spills (including SSOs)
 2. Supports State Board collection system audits underway to evaluate enrollee enrollment, reporting, data accuracy, SSMP efficacy, etc
 3. Provides technical guidance and assistance to State Board with enforcement, enrollment, and SSO Order Review and Update
 4. May issue or require additional requirements beyond those contained in the statewide SSO Order

SSO Basic Requirements

STATE WATER RESOURCES CONTROL BOARD
ORDER NO. 2006-0003-DWQ

STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS
FOR
SANITARY SEWER SYSTEMS

The State Water Resources Control Board, hereinafter referred to as "State Water Board", finds that:

1. All federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California are required to comply with the terms of this Order. Such entities are hereinafter referred to as "Enrollees".
2. Sanitary sewer overflows (SSOs) are overflows from sanitary sewer systems of domestic wastewater, as well as industrial and commercial wastewater, depending on the pattern of land uses in the area served by the sanitary sewer system. SSOs often contain high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oxygen-demanding organic compounds, oil and grease and other pollutants. SSOs may cause a public nuisance, particularly when raw untreated wastewater is discharged to areas with high public exposure, such as streets or surface waters used for drinking, fishing, or body contact recreation. SSOs may pollute surface or ground waters, threaten public health, adversely affect aquatic life, and impair the recreational use and aesthetic enjoyment of surface waters.
3. Sanitary sewer systems experience periodic failures resulting in discharges that may affect waters of the state. There are many factors (including factors related to geology, design, construction methods and materials, age of the system, population growth, and system operation and maintenance), which affect the likelihood of an SSO. A proactive approach that requires Enrollees to ensure a system-wide operation, maintenance, and management plan is in place will reduce the number and frequency of SSOs within the state. This approach will in turn decrease the risk to human health and the environment caused by SSOs.
4. Major causes of SSOs include: grease blockages, root blockages, sewer line flood damage, manhole structure failures, vandalism, pump station mechanical failures, power outages, excessive storm or ground water inflow/infiltration, debris blockages, sanitary sewer system age and construction material failures, lack of proper operation and maintenance, insufficient capacity and contractor-caused damages. Many SSOs are preventable with adequate and appropriate facilities, source control measures and operation and maintenance of the sanitary sewer system.

ORDER NO.
2006-0003-DWQ

SSO Basic Requirements (cont'd)

1. Enrollment and establishment of Legally Responsible Official (LRO)
2. Maintain compliance with SSO MRP (2/20/2008 version posted on web)
3. Complete mandatory Collection System Questionnaire and update annually
4. Electronically report any SSO(s) or do monthly "No-Spill" Certification" if no SSOs for any individual calendar month
5. Develop, Implement, and Certify Sewer System Management Plan (SSMP):
 - Ensures proper management, operation and maintenance of collection systems
 - Provides an effective tool for state/regional boards to determine efficacy of local agency collection system management activities, comparing individual SSO reports and records with actual SSMP tasks
 - Provides additional transparency to reveal individual agency collection system operations, maintenance and best management activities

SSMP Requirements

- Enrollee “self approves” all SSMP Tasks and Certifies each in CIWQS online after each element is completed
 - Element schedule on SSO Website
 - **All SSMPs to be fully implemented statewide on or before August 2, 2010**
- State or Regional Board staff may review SSMPs upon request (prior approval is not required)

SSMP Requirements (cont'd)

- i. Development Plan and Schedule (requires a record to show local governing board's approval)
- ii. Legal Authority
- iii. Operation and Maintenance
- iv. Design and Performance
- v. Overflow Emergency Response
- vi. Fats, Oils and Grease (F.O.G.)**
- vii. Systems Evaluation and Capacity Assurance
- viii. Monitoring and Program Modifications
- ix. Program Audits
- x. Communication Program

- xi. Final SSMP Implementation (requires a record to show local governing board's approval)

Sewer System Management Plan (SSMP) Time Schedule

Task and Associated WDR Section	Completion Date			
	Population > 100,000	Population Between 100,000 and 10,000	Population Between 10,000 and 2,500	Population < 2,500
SSMP Development Plan and Schedule <i>No Specific Section</i>	August 2, 2007	November 2, 2007	February 2, 2008	May 2, 2008
Goal <i>Section D 13 (i)</i>	November 2, 2007	November 2, 2007	May 2, 2008	May 2, 2008
Organization <i>Section D 13 (ii)</i>				
Legal Authority <i>Section D 13 (iii)</i>	November 2, 2008	May 2, 2009	November 2, 2009	February 2, 2010
Operation and Maintenance Program <i>Section D 13 (iv)</i>				
Overflow Emergency Response Program <i>Section D 13 (vi)</i>				
FOG Control Program <i>Section D 13 (iiv)</i>				
Design and Performance Provisions <i>Section D 13 (v)</i>	May 2, 2009	August 2, 2009	May 2, 2010	August 2, 2010
System Evaluation and Capacity Assurance Plan <i>Section D 13 (viii)</i>				
Monitoring and Program Modifications <i>Section D 13 (ix)</i>				
Program Audits <i>Section D 13 (x)</i>				
Communication Program <i>Section D 13 (xi)</i>				
Final SSMP				

Statewide Data Summary

SSO Spill Data Summary

Since CIWQS Inception (Jan 2, 2007):

- 12,576 SSO & PLSD Reports
- 36,806,360 gallons spilled
- 12,837,922 gallons recovered
- 27,846,301 gallons reached surface waters

Infrastructure

- 13,871 miles pressure sewer
- 176,393 miles gravity sewer
- 17,732 miles of laterals (publicly-owned)

SSO Spill Data Summary (contd.)

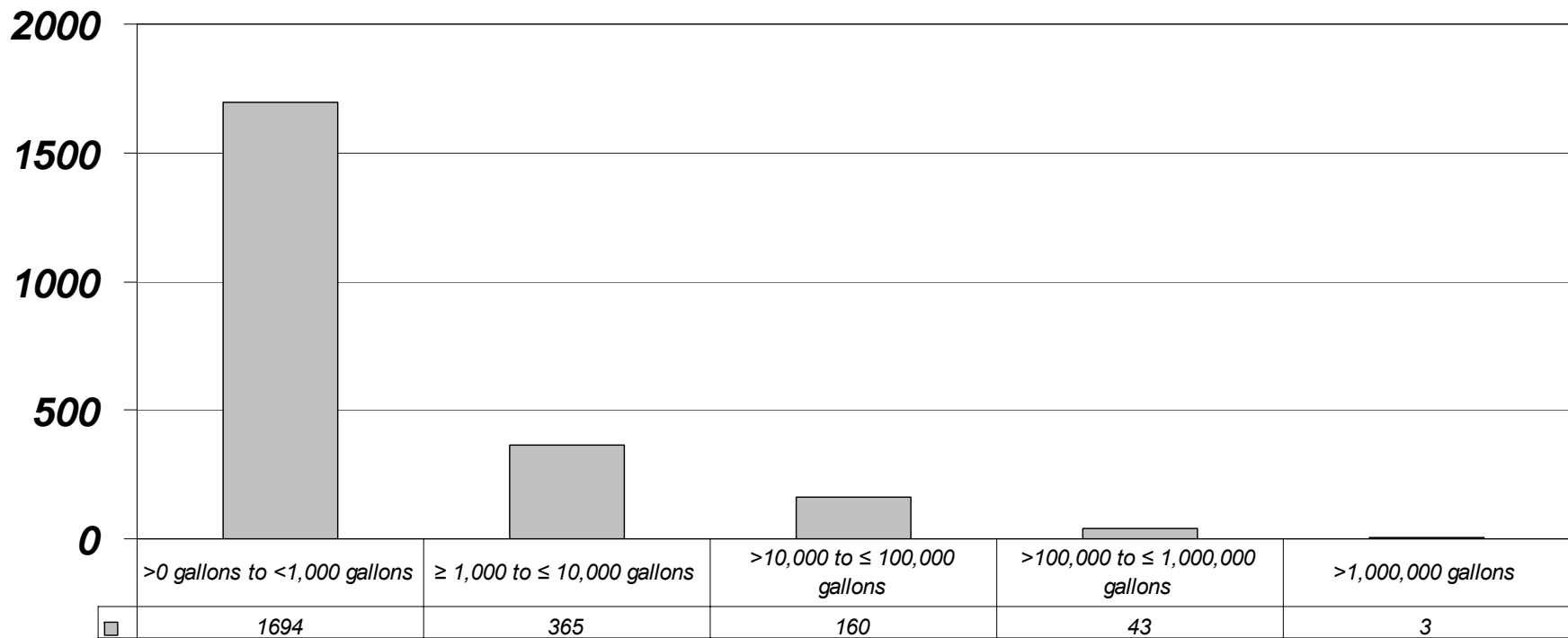
- 2,265 SSO & PLSD spills reached surface waters since program inception.
 - 75% of these spills were less than 1,000 gallons, only 2% were greater than 100,000 gallons.
- 92% of all spills in State are less than 1,000 gallons and account for only 4% of the volume spilled.
- 1.1% are greater than 50,000 gallons and account for 79% of the volume spilled.
- Urban areas have higher spill rates and volumes.
 - Regions 2, 4, 5S and 9 have the greatest number of spills.
 - Regions 2 and 9 have the highest volumes spilled.

SSO & PLSD Spill Statistics

Discharges to Surface Waters

- 75% of spills reaching surface water are < 1,000 gallons and 2% are > 100,000 gallons

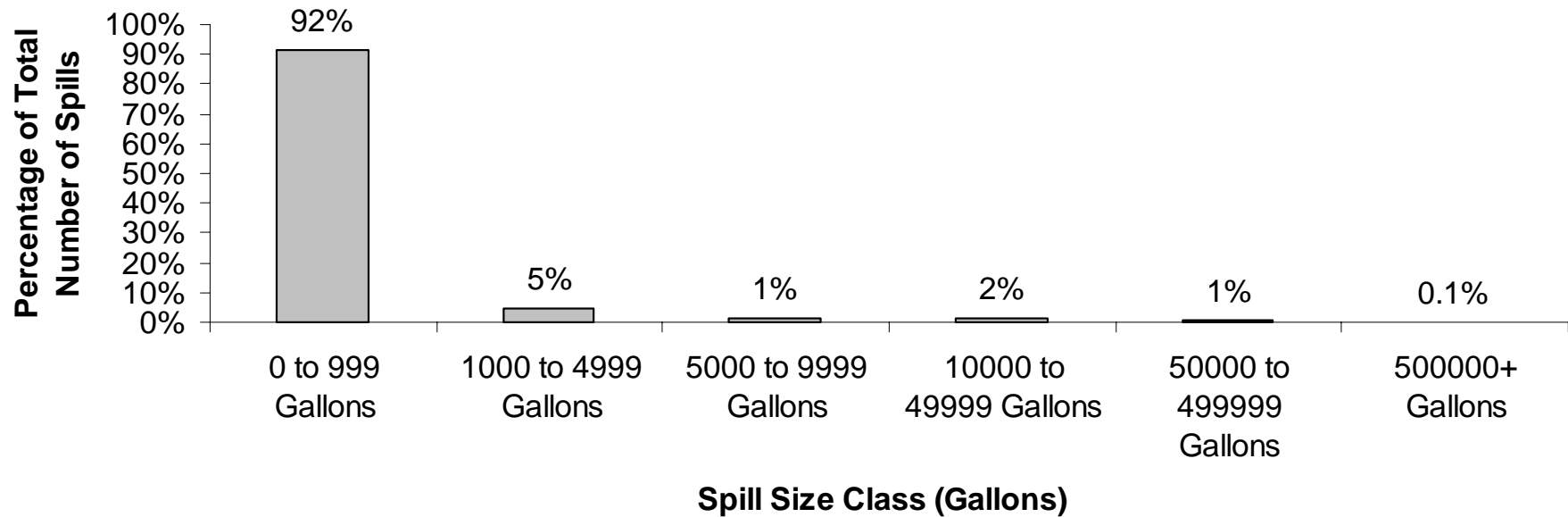
**Number of SSO and Private Lateral Sewage Discharge Reports
by Volume Reaching Surface Waters
(Total = 2,265 Spills Reaching Surface Water)**



SSO & PLSD Spill Statistics

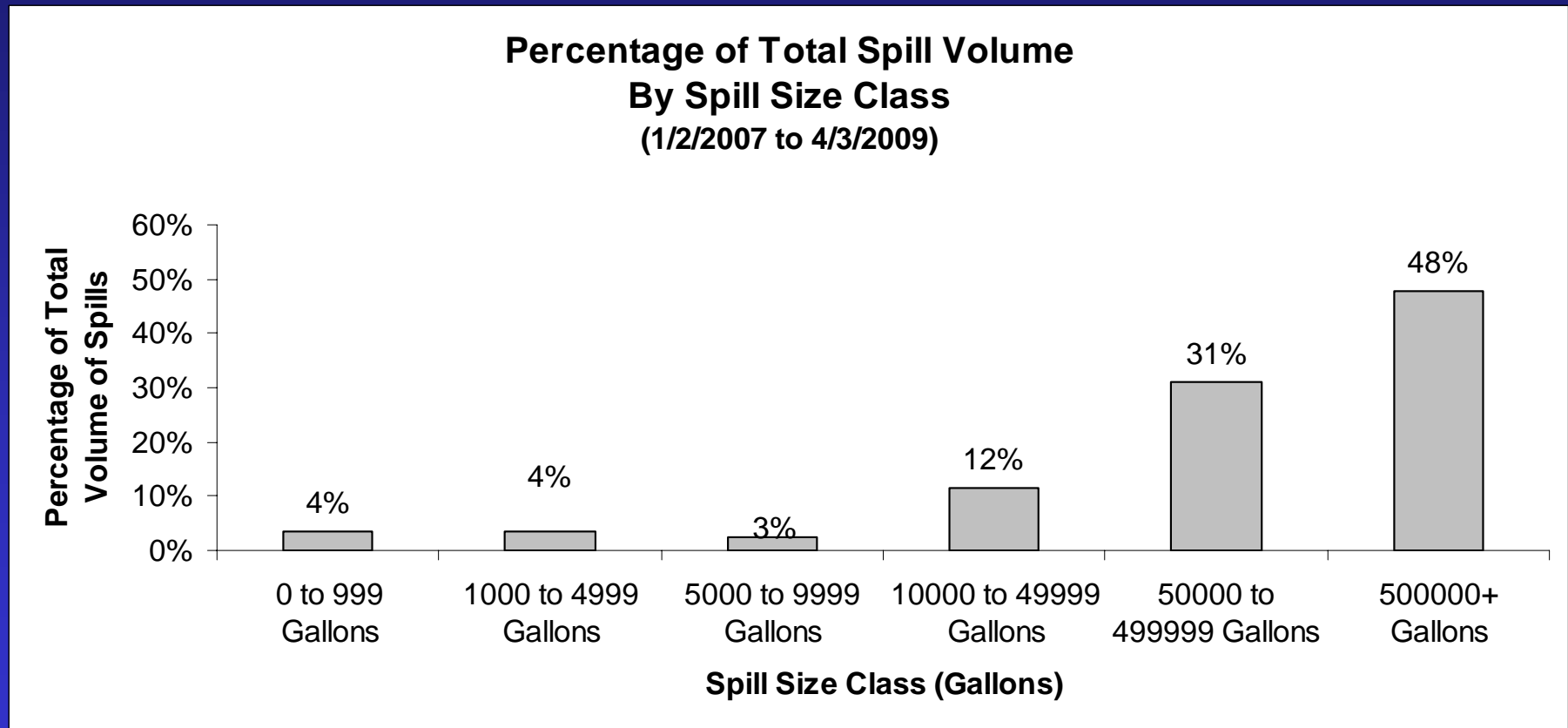
- 92% of spills are < 1,000 gallons and 1.1% are > 50,000 gallons

**Percentage of Total Number of Spills
By Spill Size Class
(1/2/2007 to 4/3/2009)**



SSO & PLSD Spill Statistics

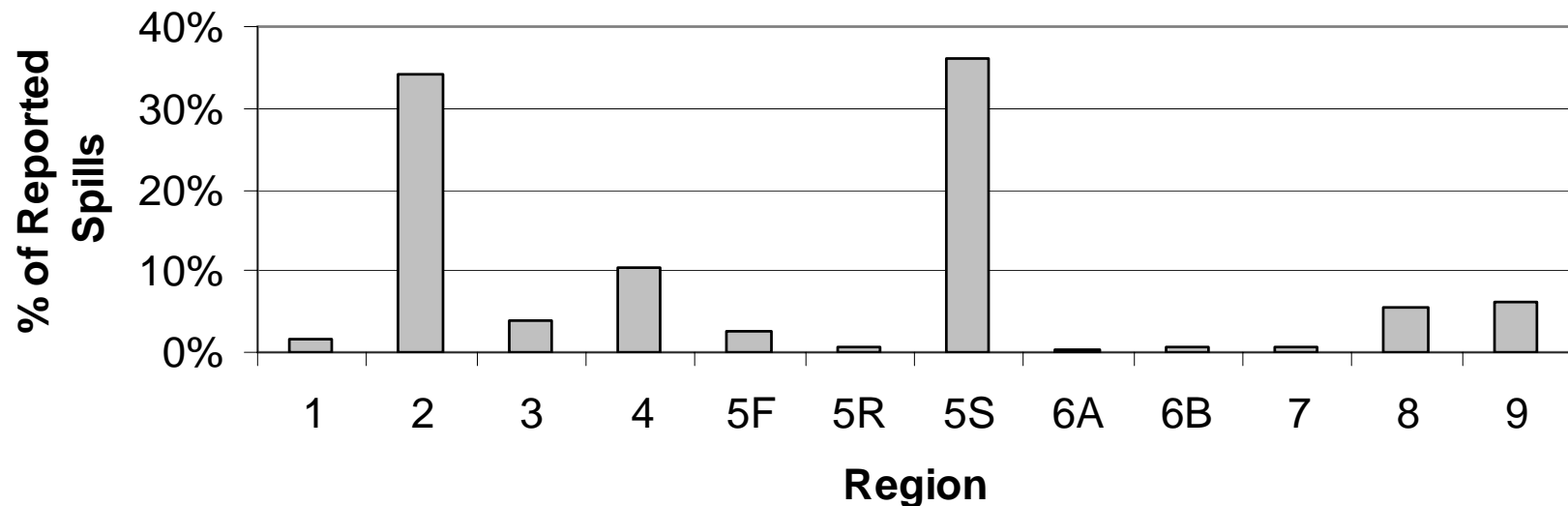
- 4% of spilled volume results from 92% of spill events and, 79% of spilled volume results from 1.1% of spill events.



Regional Spill Statistics

- Urban areas of the state (Regions 2, 5S, 4, and 9) have the largest number of spill events.

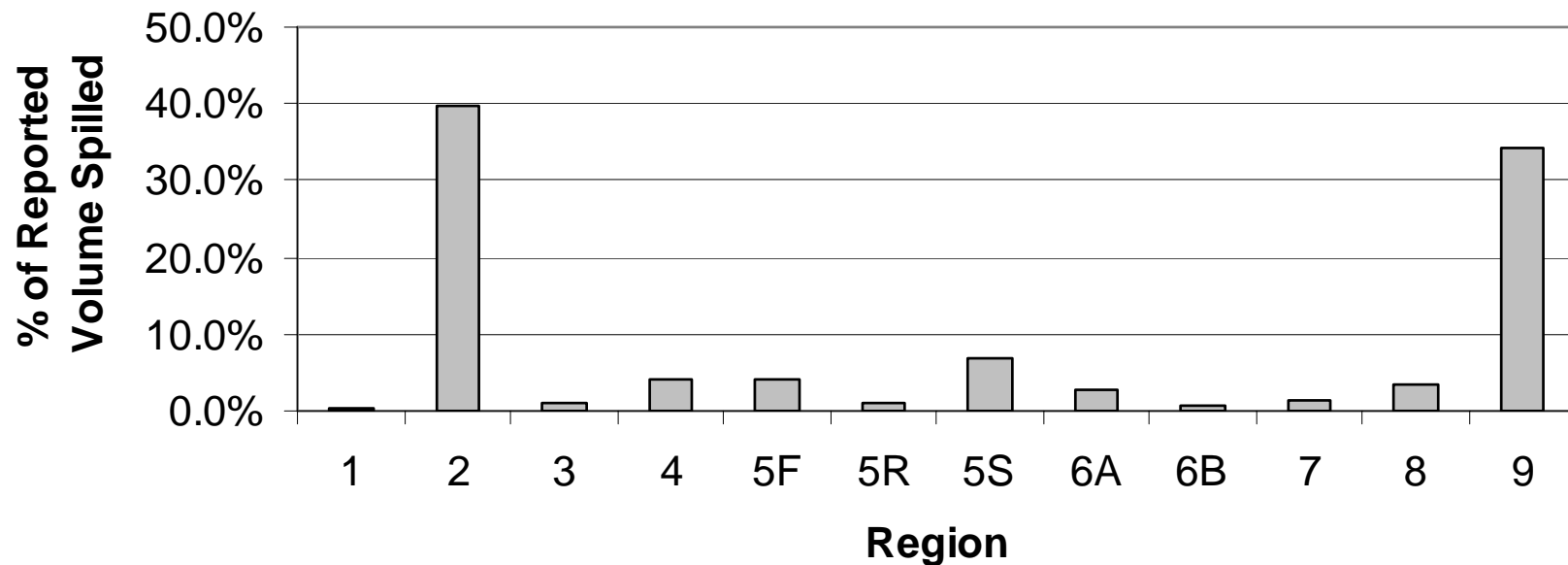
PERCENTAGE OF REPORTED SPILLS BY WATER BOARD REGION
(Sept. 2, 2007 to April 6, 2009)



Regional Spill Statistics

- Urban areas of the state (Regions 2, 5S, 4, and 9) have the largest volumes spilled.

**PERCENTAGE OF TOTAL VOLUME SPILLED
BY WATER BOARD REGION**



Statewide Compliance and Enforcement

Current SSO Order Compliance

Appendix 4

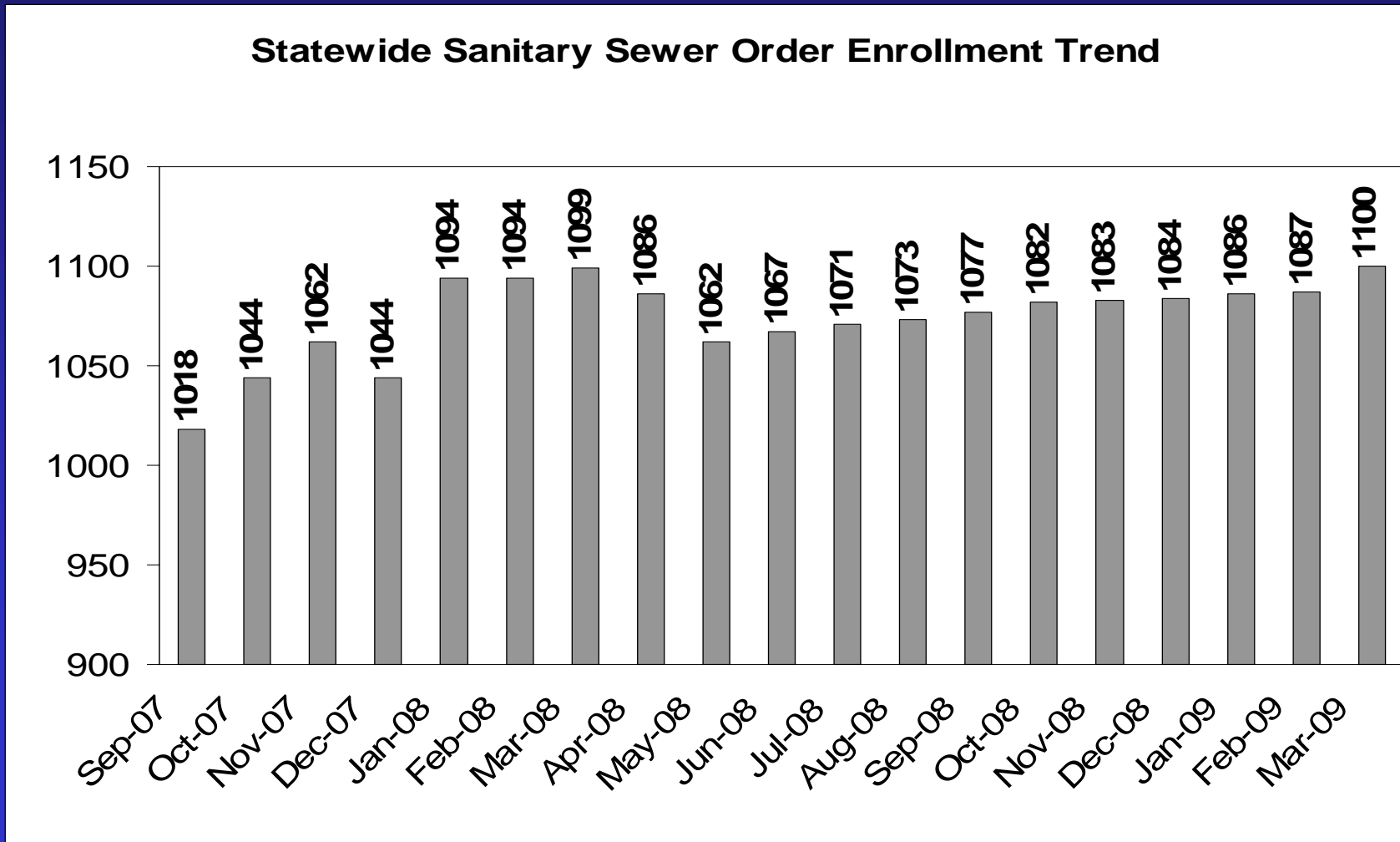
Statewide Sanitary Sewer Overflow Reduction Program Annual Compliance Report



NOW AVAILABLE ON STATE SSO WEBSITE

SSO Enrollment Compliance

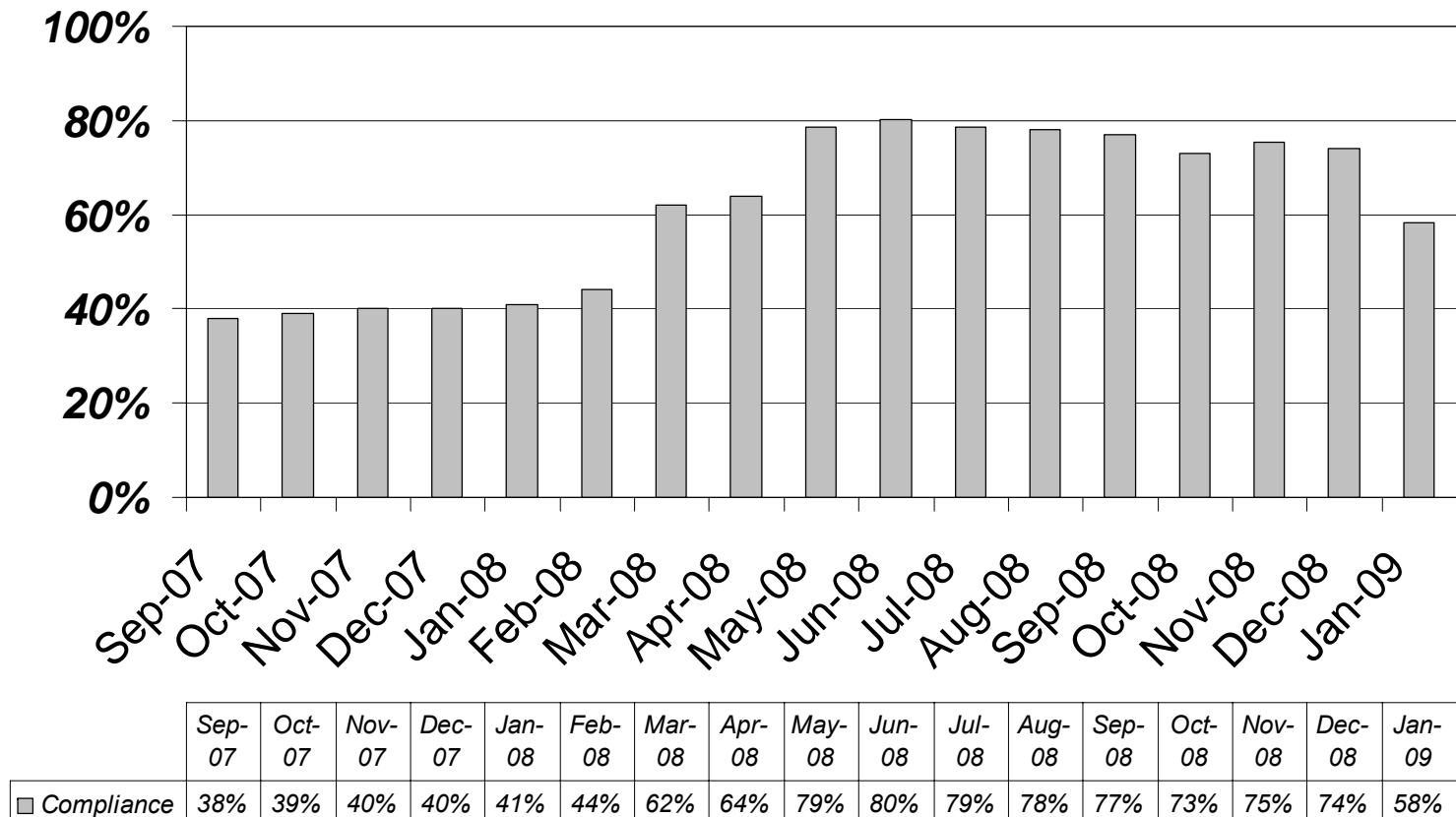
- Current enrollment is 1,098 as of May 2009.



SSO Reporting Compliance

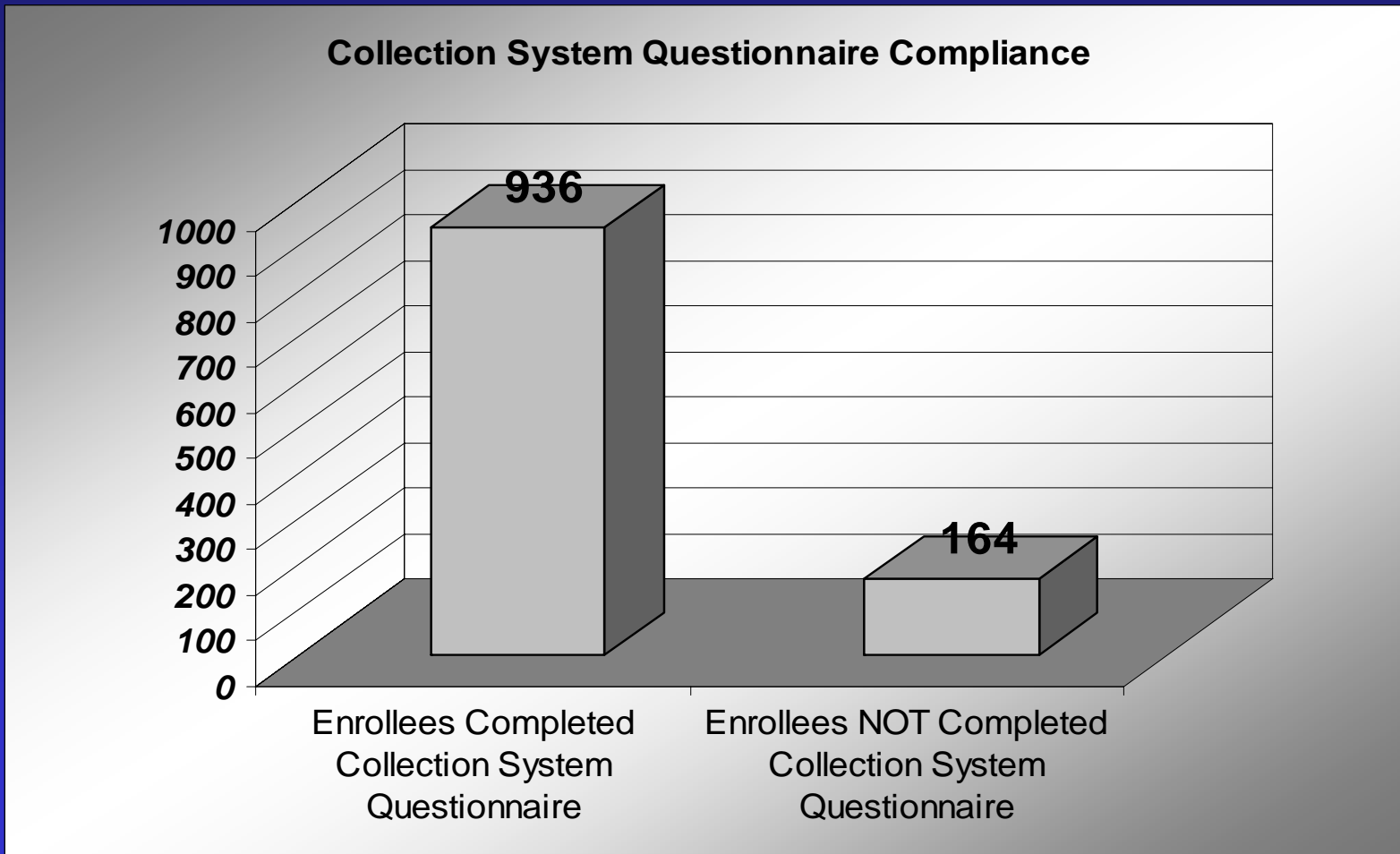
Current Reporting Compliance = **61% (Overall),**
70% (February 2008 to January 2009)

**Enrollees Reporting SSOs or No Spill Certifications
(Average = 61%)**



Collection System Questionnaire Compliance

Current Questionnaire Compliance = 85%



Statewide Compliance Summary

- CIWQS Monthly Reporting Compliance - **61%**
- CIWQS Questionnaire Compliance - **85%**
- SSMP Certification Compliance - **50%**

CIWQS SSO Automated Email Tool

- Alerts collection system Legally Responsible Officials and Data Submitters of possible SSO Order violations.
- Expected to help further increase statewide compliance for spill reporting, no spill certifications, SSMP elements and collection system questionnaires.
- Targeted for release on June 22, 2009.

Proposed SSO Program Compliance and Enforcement Activities

- **Enrollment for Coverage:** Applicable dischargers failing to enroll for coverage under the SSO General Order.
- **SSO Monthly Reporting:** Enrollees failing to report monthly SSOs or execute required monthly “No Spill Certifications.”
- **SSMP CIWQS Certification (Time Schedule):** Enrollees failing to Comply with the CIWQS certification for all SSMP elements.
- **Collection System Questionnaire:** Enrollees failing to Complete and annually update their Collection System Questionnaire.
- **SSMP Completeness:** Completeness of Individual SSMP Elements.
- **Reporting Accuracy:** Evaluating accuracy of Enrollee’s monthly reporting.
- **SSO Spill Enforcement:** Continue assisting Regional Water Board staff with spill enforcement actions and investigations

2009-2010 Statewide Compliance Goals

1. Enrollment for Coverage: current number unknown
2. SSO Reporting (Current = 70%, Target +85%),
3. SSMP CIWQS Certification (Current = 50%, Target +75%),
4. Collection System Questionnaire (Current = 85%, Target +95%),
5. SSMP Completeness (Target to conduct 50 audits),
6. Reporting Accuracy (Target to conduct 50 audits),
7. SSO Spill Enforcement (Target +25%).

Statewide Enforcement

- **SSO Compliance and Enforcement Details:** contained in State Board's May 2009 SSO Report available soon; Legally Responsible Officials will be emailed when report becomes public
- Discusses State and Regional Board enforcement plans including random and targeted audits
- Pertinent compliance data for all enrollees (SSMP, reporting, and Questionnaire Compliance, etc) will be public once report becomes available
- Individual enrollees now in violation of above requirements are individually being contacted; email notifications will begin soon; informal and formal enforcement activities now underway (confidential)

Statewide SSO Order Review and Update

SSO Order Review and Update

- Summary
 - Public Meetings (soon to be announced):
 - August 31, 2009 (Oakland)
 - September 15, 2009 (Orange County)
 - Regional Boards and industry are encouraged to participate in the public meetings.
 - Individual meetings with industry, environmental groups, etc anticipated to follow public meetings.
 - Process estimated to be completed in early 2010

SSO Order Review and Update

- How to become involved:
 - SSO website (information to be posted):
http://www.waterboards.ca.gov/water_issues/programs/sso/
 - SSO Listserv (sign-up information will be posted on the SSO website and also provided on CWEA's SSO YAHOO Groups web page)
 - For more information, email or call Jim Fischer, State Water Board's SSO Program at:
 - jfischer@waterboards.ca.gov
 - (916) 341-5548

Sewage Spill Incident Maps

Spill Incident Maps

- Supports State Water Board's efforts to implement California Water Code mandate (section 13193)
- Extensive input via Regional Boards and SSO External User Group outreach
- Presents individual SSO and Private Lateral Sewage Discharge (PLSD) data in CIWQS separately reported
- Serves as an SSO data Q/A & Q/C tool
- Allows Enrollees to individually search and investigate SSOs/PLSDs reported within their areas of responsibility
- Public Rollout May 2009

Spill Incident Maps

State Water Resources Control Board Sanitary Sewer Overflow (SSO) Incident Map -- DRAFT ** DRAF - Windows Internet Explorer pro

http://gistest.waterboards.ca.gov/webmap/sso_pub.html

File Edit View Favorites Tools Help

State Water Resources Control Board Sanitary Sewer...

Sanitary Sewer Overflow (SSO) Incident Map

Background Map

Yreka Falls
Mt Shasta Alturas
Winnemucca Battle Mountain Elko
Redding Susanville
Chico Reno Carson City
Rocklin Humboldt - Toiyabe National Forest
Santa Rosa Davis Sacramento Modesto
Concord Stockton
San Francisco Tracy Modesto
Fresno Madera
Visalia
Bakersfield
Santa Maria Santa Barbara Los Angeles
Lompoc Oxnard Long Beach Inglewood
San Diego

California Nevada

Death Valley National Park Mojave National Preserve
Las Vegas Henderson Bullhead City
Lak Havasu

Yuma

POWERED BY

Show only incidents with valid GPS coordinates

Filter by volume (gallons):
0 - 1,000,000+ gal.

Minimum: 0

Maximum: 1,000,000+

Set Volume

Filter by date:
03/22/2009 - 04/22/2009

Start: March 22 2009

End: April 22 2009

Set Dates

Done

Trusted sites 100%

Start 12 Nov... 3 Inter... 2 Micros... 3 Windo... Microsoft ... 2:25 PM

SSO Program Contacts

- **Username, Password, Registration or Data Issues:**

California Integrated Water Quality System (CIWQS) Help Center
(866) 792-4977 (M-F, 8am-5pm)
ciwqs@waterboards.ca.gov

- **SSO Technical Program Contacts:**

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Audits: northern California

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