



Statewide Sanitary Sewer Overflow Reduction Program

Russell Norman, P.E.

Division of Water Quality / WDR Unit
State Water Resources Control Board

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Overview

1. The Sanitary Sewer Systems WDR
2. Trends in Annual Spill Volumes & Rates
3. Data Summary
4. Compliance and Enforcement
5. WDR Review and Update

The Sanitary Sewer Systems WDR

- **November 2004** - Resolution to reduce numbers & volume of sewage spills
- **May 2006** - Adoption of Statewide Sanitary Sewer Systems WDR

California is first state in the nation to comprehensively regulate sanitary sewer collection systems to reduce Sewage Spills

- **November 2006** - All publicly owned agencies enroll applicable collection systems for coverage
- **September 2007** - Statewide monthly Spill or No-Spill reporting required in all Water Board Regions

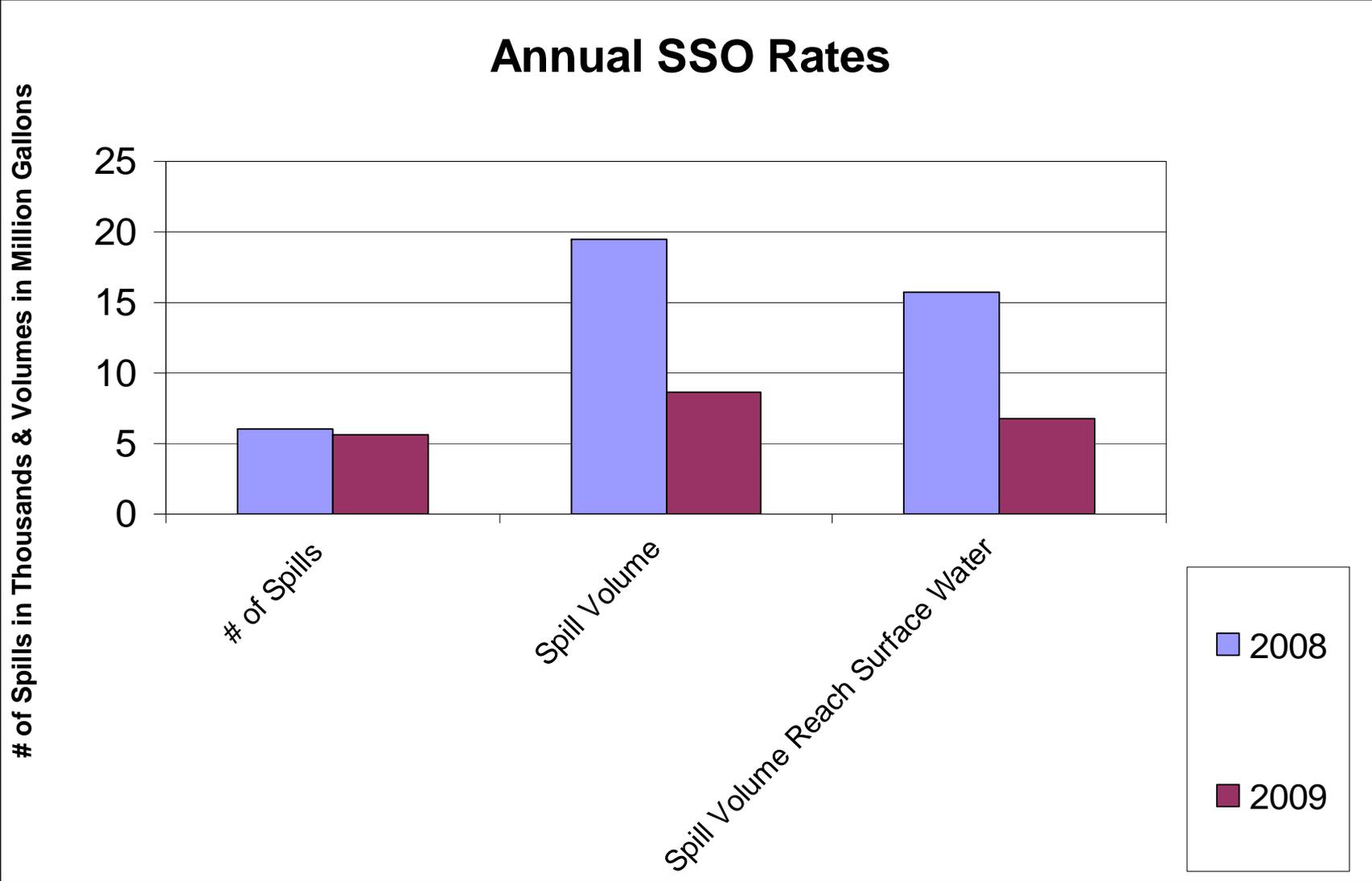
The Sanitary Sewer Systems WDR (contd.)

- Applies to publicly owned collection systems over 1 mile in pipe length
 - 1,091 enrolled
- Regulates Sanitary Sewer Overflows (SSOs)
 - Spills of untreated sewage from publicly owned portions of collection systems upstream of a sewage treatment plant headworks
 - Treatment plant and permitted combined sewage overflow points not regulated
 - Private Lateral Sewage Discharges (PLSDs) not regulated, enrollees are encouraged to report them
- San Francisco Bay and San Diego Regional Water Boards have additional requirements for collection systems beyond statewide WDR requirements

Trends in Annual SSO Volumes & Rates

Is the Program resulting in an overall reduction in the number and volume of Sanitary Sewer Overflows?

Trends in Annual SSO Volumes & Rates (contd.)



Data Summary

Spills (Jan. 2, 2007 to Jan. 31, 2010):

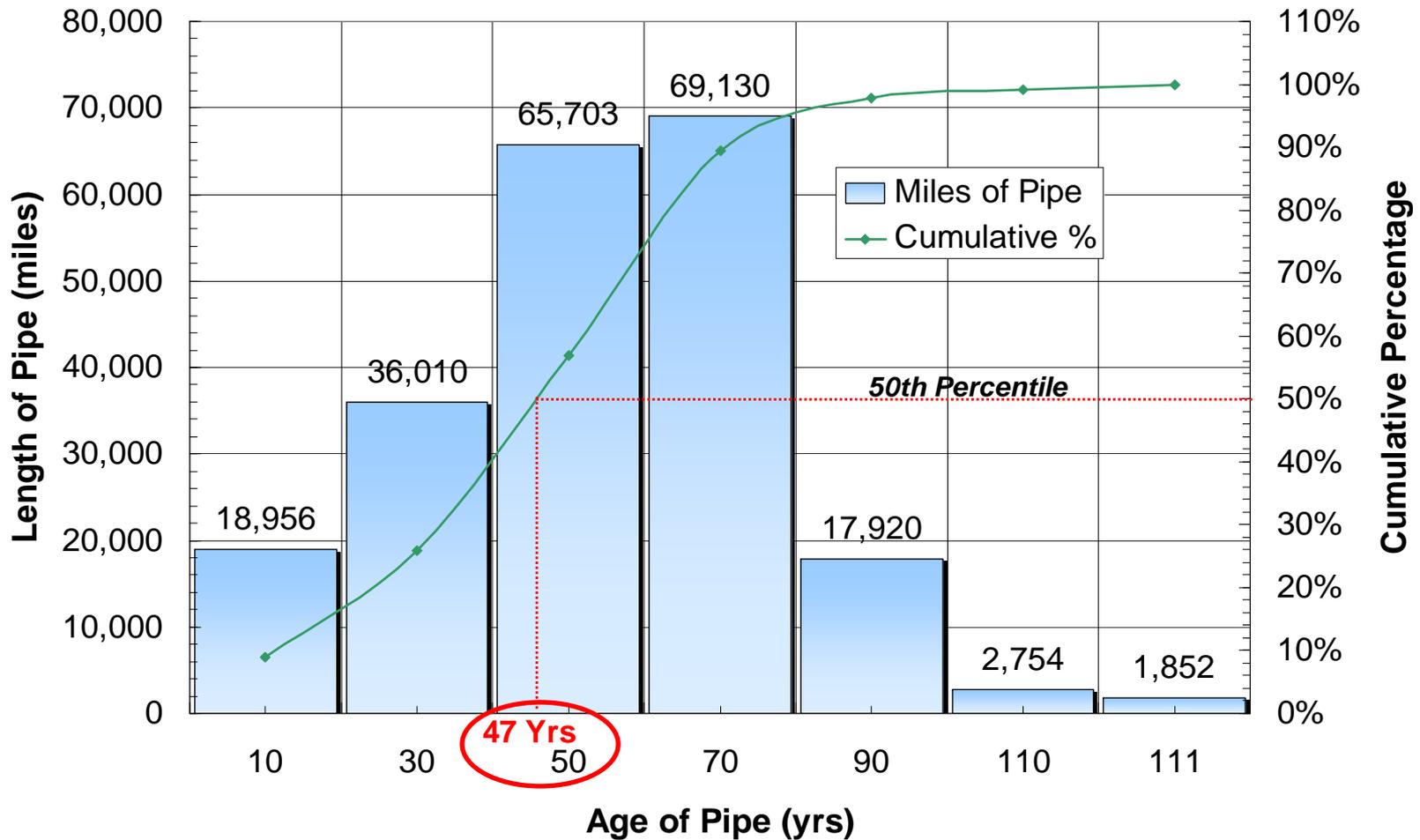
- 17.9 Thousand SSO & PLSD Reports
- 56.9 Million gal. spilled
- 14.3 Million gal. recovered
- 46.2 Million gal. reached surface waters (81%)
- 5% of enrolled collection systems responsible for 90% of total volume spilled
- 57% of enrolled collection systems have reported one or more spills

Public Infrastructure:

- 17.6 Thousand miles pressure sewer
- 177 Thousand miles gravity sewer
- 17.7 Thousand miles of laterals (publicly-owned)

AGE OF PUBLICLY OWNED SEWER PIPE IN CALIFORNIA

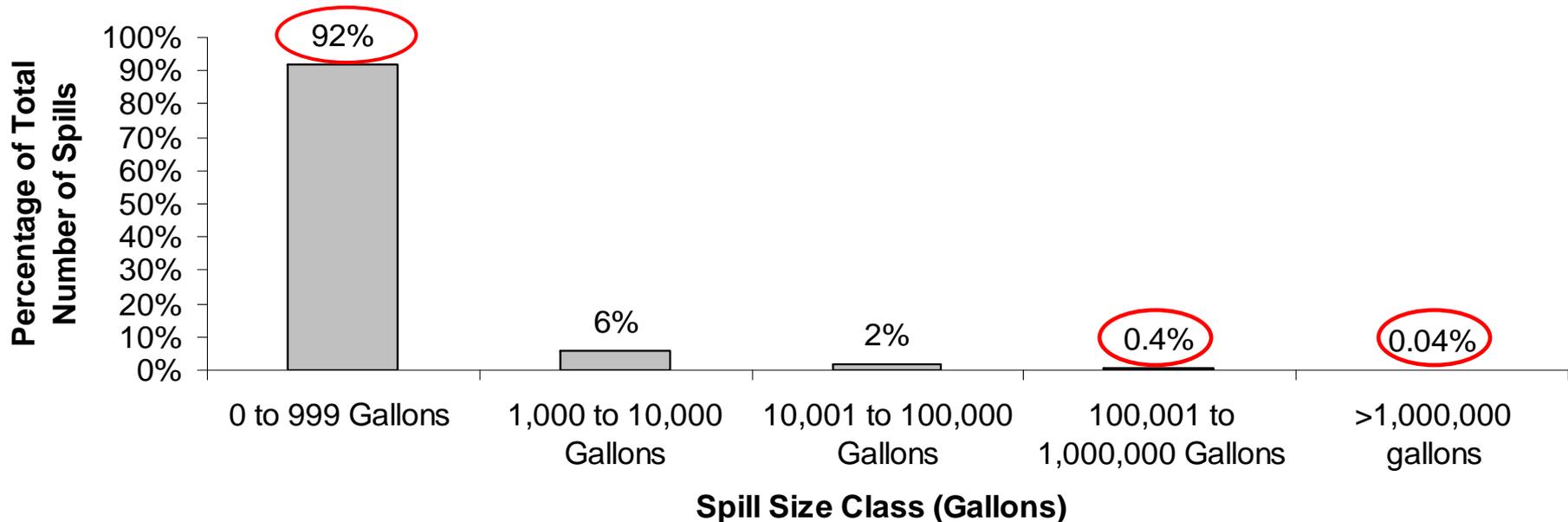
Publicly Owned Sewer Pipe Age Distribution for the State of California



Spill Statistics

Number of Spills

Percentage of Total Number of Spills
By Spill Size Class
(1/2/2007 to 1/31/2010)

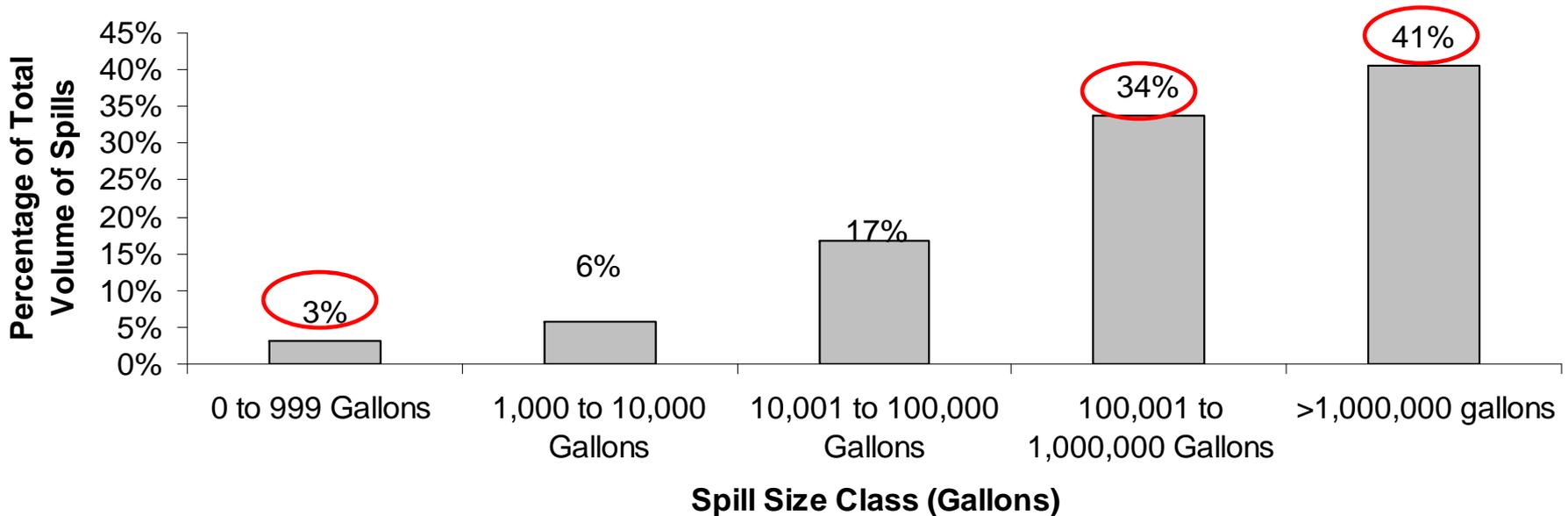


- **92% of spills are < 1,000 gallons**
 - Leading Causes are Roots, Fats\Oils\Grease (FOG), and Debris
- **0.44% are > 100,000 gallons**
 - Leading Causes are Capacity & Pipe Structural Issues

Spill Statistics

Volume of Spills

Percentage of Total Spill Volume
By Spill Size Class
(1/2/2007 to 1/31/2010)



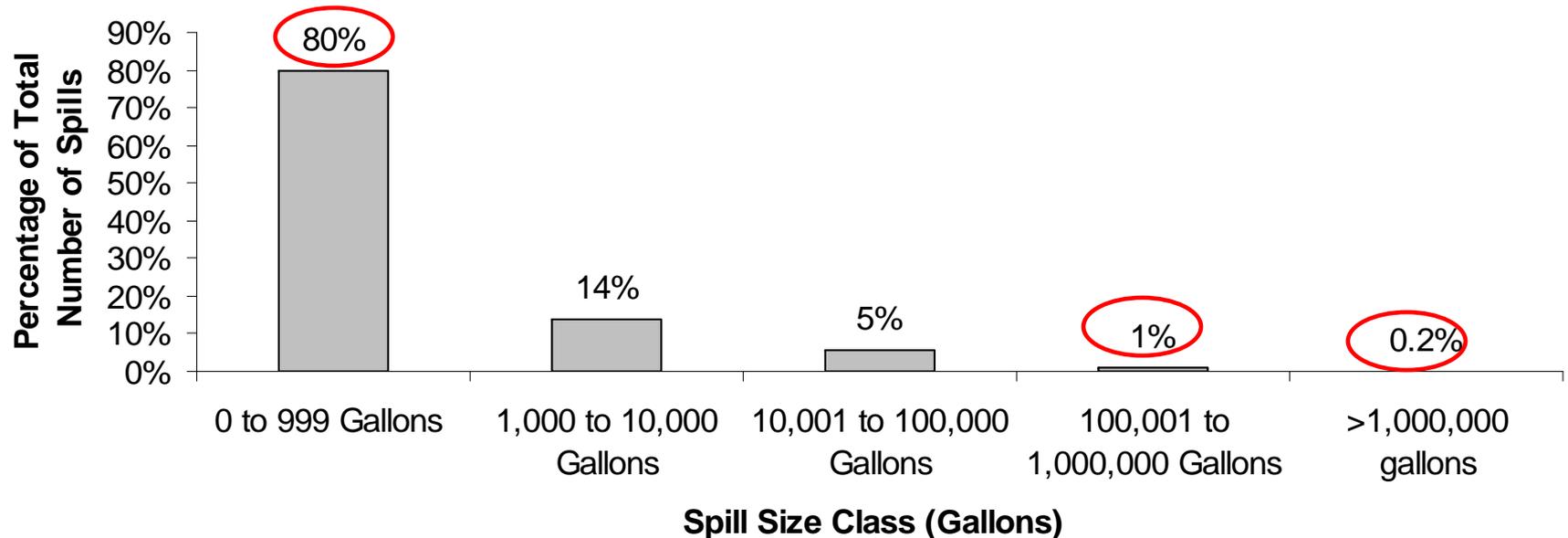
- 3% of total volume spilled resulted from 92% of spill events
- 75% of volume spilled resulted from 0.44% of spill events

Spill Statistics

Number of Spills to Surface Waters

Percentage of Total Number of Spills Reaching Surface Water By Spill Size Class

(Total = 3,873 Spills Reaching Surface Water, 1/2/2007 to 1/31/2010)

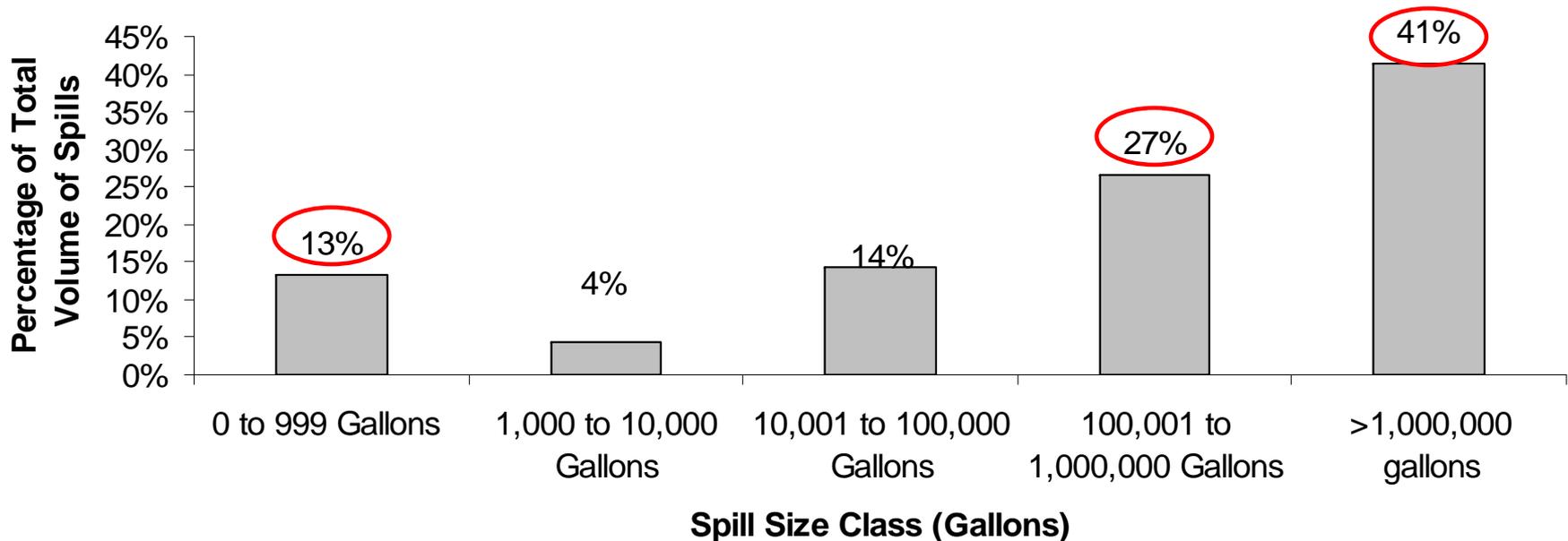


- **80% of spills reaching surface water are < 1,000 gallons**
 - Leading Causes are Roots, Fats\Oils\Grease (FOG), Debris
- **1.2% are > 100,000 gallons**
 - Leading Causes are Capacity & Pipe Structural Issues

Spill Statistics

Volume of Spills to Surface Waters

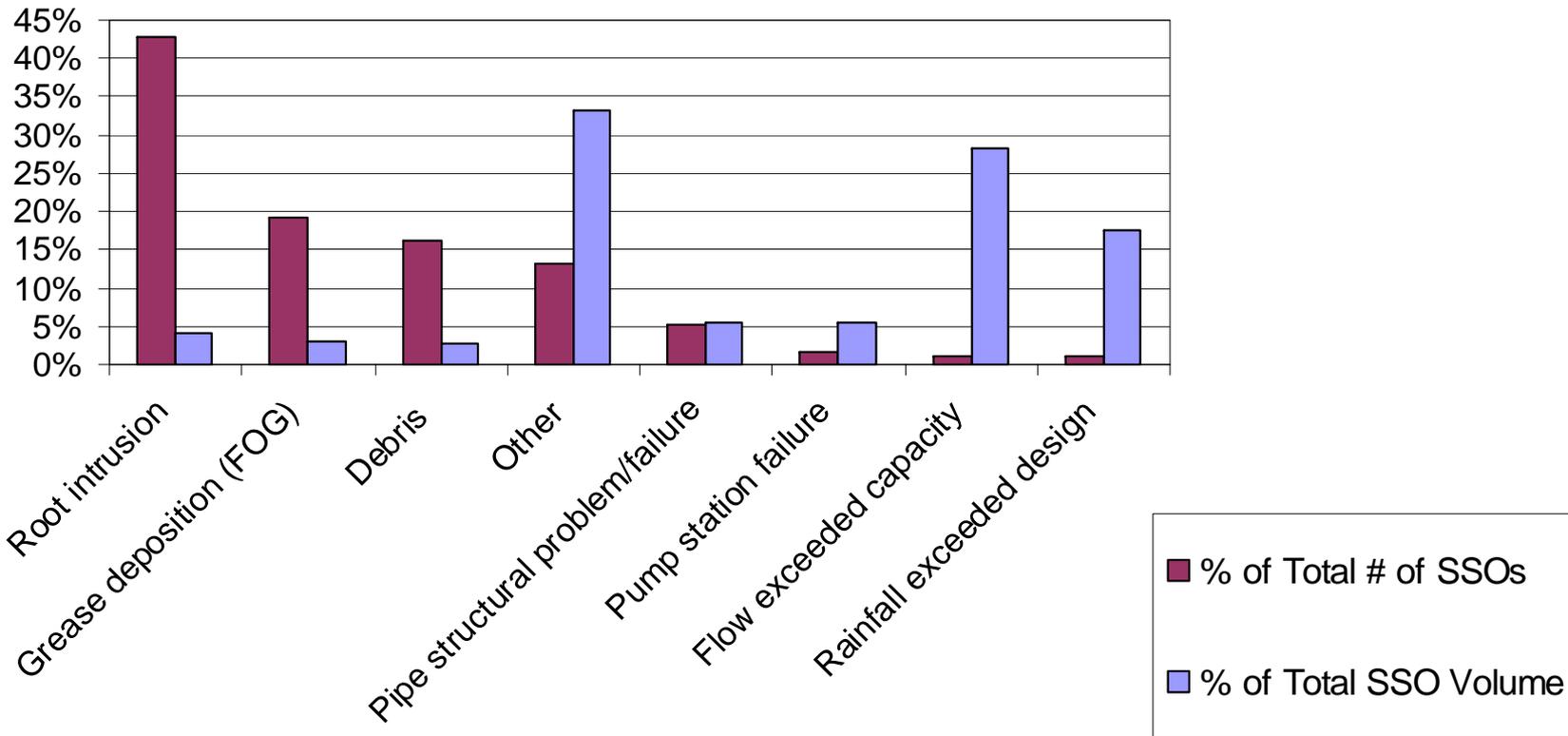
Percentage of Total Spill Volume Reaching Surface Water
By Spill Size Class
(1/2/2007 to 1/31/2010)



- The 1.2% of spills > 100,000 gallons account for 68% of spill volume reaching surface
- The 80% of spills < 1,000 gallons account for 13% of spill volume reaching surface water

SSO Causes

Number & Volume of SSOs by Cause



- Numbers of spills are highest for maintenance related causes (i.e., Roots, FOG, Debris)
- Volumes of spills are highest for infrastructure related causes (i.e., undersized pipes, rainfall exceeds sewer design storm)

Current Compliance

- **Enrollment**
 - 1,091 collection systems enrolled
- **SSO Reporting Compliance**
 - 68% since program inception
 - 79% over the period of February 2009 to January 2010 (up 10% in past year)
- **Collection System Questionnaire Compliance**
 - 84% of enrollees have submitted and annually updated
- **Sewer System Management Plan (SSMP) Development**
 - 13% of enrollees have met all deadlines SSMP development
 - All collection systems subject to the WDR required to have SSMPs developed by August 2, 2010

Past Compliance and Enforcement Activities

- Enrollee education and staff outreach provided via numerous venues since September 2006
- “Failure to Submit” enforcement letters sent to identified “potential” enrollees in October 2007
- Compliance email reminder issued in 2008
- CIWQS modifications to encourage reporting applied in 2008
- Formal Enforcement Actions Addressing Spills:
 - FY 2008/2009 - Six Administrative Civil Liability (ACL) actions with over \$2 Million in assessed liabilities
 - FY 2009/2010 - Thirteen ACL actions and One Cease & Desist Order with over \$5 Million in assessed liabilities

Current Compliance and Enforcement Activities

- 130 Notices of Violation (NOVs) being sent to non-participating enrollees (i.e., those that have not provided any reports required by the WDR)
- NOVs being sent to Collection System Agencies that have collection systems subject to the WDR but are not enrolled
- NOVs being sent to participating enrollees who have not provided one or more reports required by the WDR

Additional Compliance and Enforcement Activities

- **Audits:**

- Evaluate completeness of Individual SSMP Elements
- Evaluate accuracy of Enrollee's reporting
- Target collection systems not reporting first
- 24 collection system audits per year provided for at Current staffing levels

- **Spill Enforcement:**

- Assist Regional Water Board staff and State Water Board Office of Enforcement with spill enforcement actions and investigations
- One CDO and Nineteen ACL actions with over \$7 Million in assessed liabilities issued to date

Sanitary Sewer Systems WDR Review and Update

- **Staff Public Meetings**
 - 2 meetings held, 183 participants
- **Comment Letter Solicitation**
 - 42 comment letters received
 - 305 comments
- **Other Outreach**
 - Workshop with Regional Water Board Staff
 - Coordination with California Emergency Management Agency (Cal EMA)
 - Coordination with Local Health Departments

Sanitary Sewer Systems WDR

Review and Update (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
- 129 stakeholders registered for the committee. Meetings will continue through approximately July 2010

- Upcoming Activities

- Draft response to comments document
- August 3, 2010 - Present Information Item to State Water Board with staff recommendations for WDR updates

Sanitary Sewer Systems WDR

Review and Update (contd.)

- Key Issues Raised *(ranked by number of comments received)*
 - Private Laterals: Change WDR requirements to mandate reporting of private lateral spills (e.g., spills from residential laterals)
 - Operator Certification: Change WDR requirements to mandate certification of collection system operators
 - Timing of WDR Update: Wait to open WDR until full participation is achieved and both WDR and SSMP implementation are complete
 - Private Systems: Change WDR requirements to cover Private Collection Systems (e.g., gated communities, shopping malls)
 - Data review Committee: Form Data Review Committee to study CIWQS SSO data and enhance data collection process
 - NPDES Permit: Adopt as NPDES permit versus WDR