SSMP Auditing:
The Why's and How's

BACWA Collections Committee
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Presentation Agenda

- SSMP audit? – regulations/requirements

- What type of audit are we discussing today?

- What is Effectiveness?

- How to complete the SSMP Audit?

- What have we seen from audits?

- Available References and Background Info

- Upcoming SWRCB References and Library

What Audit are we discussing?

- Internal self audit

- Not external audits

- Required by the WDR, section 13(x)

- Conducted by staff, consultants, other agency or combination

- Every two years from adoption

- Recertification every 5 years

What is an SSMP internal Audit? Synonyms?

- Inspection
- Check
- Checkup,
- Examination
- Going-over
- Look-see
- Review,
- Scan
- Scrutiny
- Survey
- View

Internal Audit - Defined

Internal auditing is an independent, objective assurance ~~and consulting activity~~ designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.

Ref: Chartered Institute of Internal Auditors

WDR Audit Requirements

(x) SSMP Program Audits - As part of the SSMP, the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs.   At a minimum, these audits must occur every two years and a report must be prepared and kept on file.   This audit shall focus on evaluating the effectiveness of the SSMP and the Enrollee's compliance with the SSMP requirements identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them.

Minimum Audit Requirements

- Narrative of the SSMP Effectiveness
  - Document things working well
  - Document areas needing improvement
  - List of strategies to reduce/eliminate SSOs
- Demonstration of compliance
- Narrative discussion
- Steps and schedule

Ref: SWRCB Presentation by Fischer 2011

"Effectiveness"

- *"The degree to which something is successful in producing a desired result; success."*

- *"Producing a result that is wanted: having an intended effect".*

- *"The power to be effective; the quality of being able to bring about an effect".*

Audit Effectiveness

- Goals both narrative and metric-based

- Goals, strategies and successes in improving performance identified

- Identify areas needing updating

- Schedule for the updates

- Make someone responsible to manage

- Metrics/benchmarks that are agency specific

How to Demonstrate Effectiveness

- Performance metrics tied to goals

- Comparison of SSO metrics to region/state

- Historical trends in performance results

- Narrative discussion of successes/failures

- Make sure that changes can be afforded

- Assure adequate staffing for changes

- Document changes made during period

- Completion of changes on schedule

Why Do an SSMP Audit?

- Required by the WDR
- SSMP should be a living document
- Another training opportunity
- Things change, procedures change
- Changes from industry innovations
- Knowledge and information sharing
- Good business practices
- Personnel Changes
- Justify further funding or staffing needs

How of an SSMP Audit?

- At least every two years from adoption date

- Whenever substantial changes made - **$$$$**

- Review of all Elements of SSMP

- Review of all references in the SSMP

- Conducted by:
  ◦ Staff – collections, internal auditor, other depts
  ◦ Consultants
  ◦ Other agency personnel
  ◦ Combination

- Five year recertification by Board

Recertification: Significant Updates Defined

32. When is governing board approval required for changes to the SSMP?

"The SSMP must be updated every five (5) years, and must include any significant program changes. Re-certification by the governing board of the SSMP is only required, in accordance with section D.14 of the SSS WDRs, when significant updates to the SSMP are made. Significant updates generally mean SSMP updates requiring additional monies to implement the SSMP which must be approved by the governing board."

Ref: Enrollee's Guide to the SSO Database, SWRCB

Others Uses for/from the Audit

- Changes in operations
- Determination of SSMP compliance
- Education of elected officials
- Education of service area customers
- Training for collection employees
- Environmental Organization review
- Regulatory Compliance
- Legal Challenges and Enforcement

What constitutes a Good Audit?

- Detailed review of each SSMP Element based upon size and SSO results
- Narrative of findings general/by element
- Explanation of data anomalies/unusual events
- Identification of changes and schedule
- Assignment of changes to specific persons
- On time completion of the audit
- Approval by the LRO (WDR Section J1)
- Results shared with governing body/public

What is a Poor Audit?

- One that ignores "effectiveness"
- One that ignores the WDR deadlines
- One that is just a simple checklist
- One that does not consider changes in the industry or agency since last audit
- One that ignores legal challenges to WDR
- One that is started but never completed
- One that can't be found in files

What Have We Found?

- Original SSMP not adopted by Board
- Inadequate description of agency system
- Required deadlines not being met
- Recertification not approved by GB
- Lack of historical performance information
- Goals not tied to Element 9 MMPM
- Few opting out of Elements – smalls
- Audits have limited or no narratives
- Lateral responsibilities not well defined
- CIWQS data discrepancies

What Have We Found? (Con't)

- Lack of agency commitment to regulation
- Too many appendices and references
- SSMPs not on agency websites
- SSMPs well hidden on the website
- No use or identification of the WDID
- Few if any comparisons to others
- Failure to remove LROs and DS from CIWQS
- Recordkeeping Issues and failures

Audit Concerns and Findings

- "Significant updates" to the SSMP not documented.

- Use of checklist only

- No narrative explanations

- Lack of defined agency effectiveness

- How do results support agency goals

- What needs to be changed to be more effective and enhance implementation

Other Concerns and Observations

- Not done on time – no later than 2 years
- Not done at all
- Failure to implement needed changes
- Lack of Implementation Plan/schedule
- Changes not in SSMP Change Log
- Don't include things the agency won't do
- Can't find the audit in agency filing system
- Audit Report is a legal document

Considerations as Part of the Audit

- Conform of referenced documents and SOPs

- Review the Municipal Code or Ordinances

- Review SSO recordkeeping records

- Update the SSMP Change Log

- File the Audit in an SSMP Appendix

- Review changes with staff and field crews

- Consider legal review of the Audit Report

- Management of Change Procedure needed?

SWRCB Areas of Non-compliance

- Failure to complete an SSMP audit timely;
- Failure to certify SSMP elements timely
- Failure to evaluate the effectiveness of SSMP
- Effectiveness of the SSMP not measured;
- Failure to evaluate SSMP compliance not completely evaluated;
- Failure to implement the SSMP as required;
- Lack of compliance with record keeping;
- Lack of short & long term planning

Suggested AUDIT Completion Steps

- LRO sign-off on the audit report (WDR Section J1(i))

- Consider filing the report in SSMP appendix

- Consider presenting findings to governing Board including comparative results

- Assign responsibility & schedules for follow-up action items – complete them or explain why not

Audit Resources & References

- SWRCB Statewide Sanitary Sewer Overflow Reduction Program – Annual Compliance Report

- CIWQS – *"Operational Performance"* information

- State General Waste Discharge Requirements for Sanitary Sewer Systems, Order No. 2006-0003-DWG

- Enrollee's Guide to the SSO Database, SWRCB SSO

- Guide for Evaluating Capacity, Management, Operations and Maintenance (CMOM), EPA 305-B-05-002

- Statewide Collection Committee documents

- New Guidance on Developing and Updating an SSMP – due in the Spring in the Library

- SWRCB Pre-inspection Questionnaire

CIWQS Performance Information
Interactive SSO Report Button

COLLECTION SYSTEM OPERATIONAL REPORT

Please see the **Glossary of Terms** for explanations of the search results column headings. **More information about the report is found at the bottom of this page**.

[VIEW PRINTER FRIENDLY VERSION]

SEARCH CRITERIA: [REFINE SEARCH] [NEW SEARCH] [GLOSSARY]
Date Range: Start_Date **(11/11/2013)** End_Date **(11/11/2014)**

**DRILLDOWN HISTORY:** [GO BACK TO LISTING OF COLLECTION SYSTEMS]

Agency:

General Information

Region	Place ID	Place Name	CS Category	Place Address	Place County
1	630382		Municipal (Public)		

Collection System Spill Summary

Operational Indices: Sebastopol City CS

Spill Rate Indice (#spills/100mi/yr)									
	Category 1			Category 2			Category 3		
	Mainlines	Laterals	Not Specified	Mainlines	Laterals	Not Specified	Mainlines	Laterals	Not Specified
	0.0	0.0	2.34	0.0	0.0	0.0	6.19	0.0	0.0
State Municipal (Public) Average	5.46	54.83	7.01	2.76	0.45	0.61	7.5	50.85	3.87
Region Municipal Average	4.15	0.0	1.73	0.88	0.0	0.0	6.13	14.25	3.0

Net Volume Spills Indice (Net Vol in gallons/1000 Capita/yr)									
	Category 1			Category 2			Category 3		
	Mainlines	Laterals	Not Specified	Mainlines	Laterals	Not Specified	Mainlines	Laterals	Not Specified
City CS	0.0	0.0	5.42	0.0	0.0	0.0	10.32	0.0	0.0
State Municipal (Public) Average	686.19	5.78	78.63	779.2	0.0	34.33	79.28	7.97	21.53
Region Municipal Average	3218.22	0.0	56.18	281.25	0.0	0.0	44.34	16.46	1.59

Number of Municipal Sanitary Sewer Systems by Class
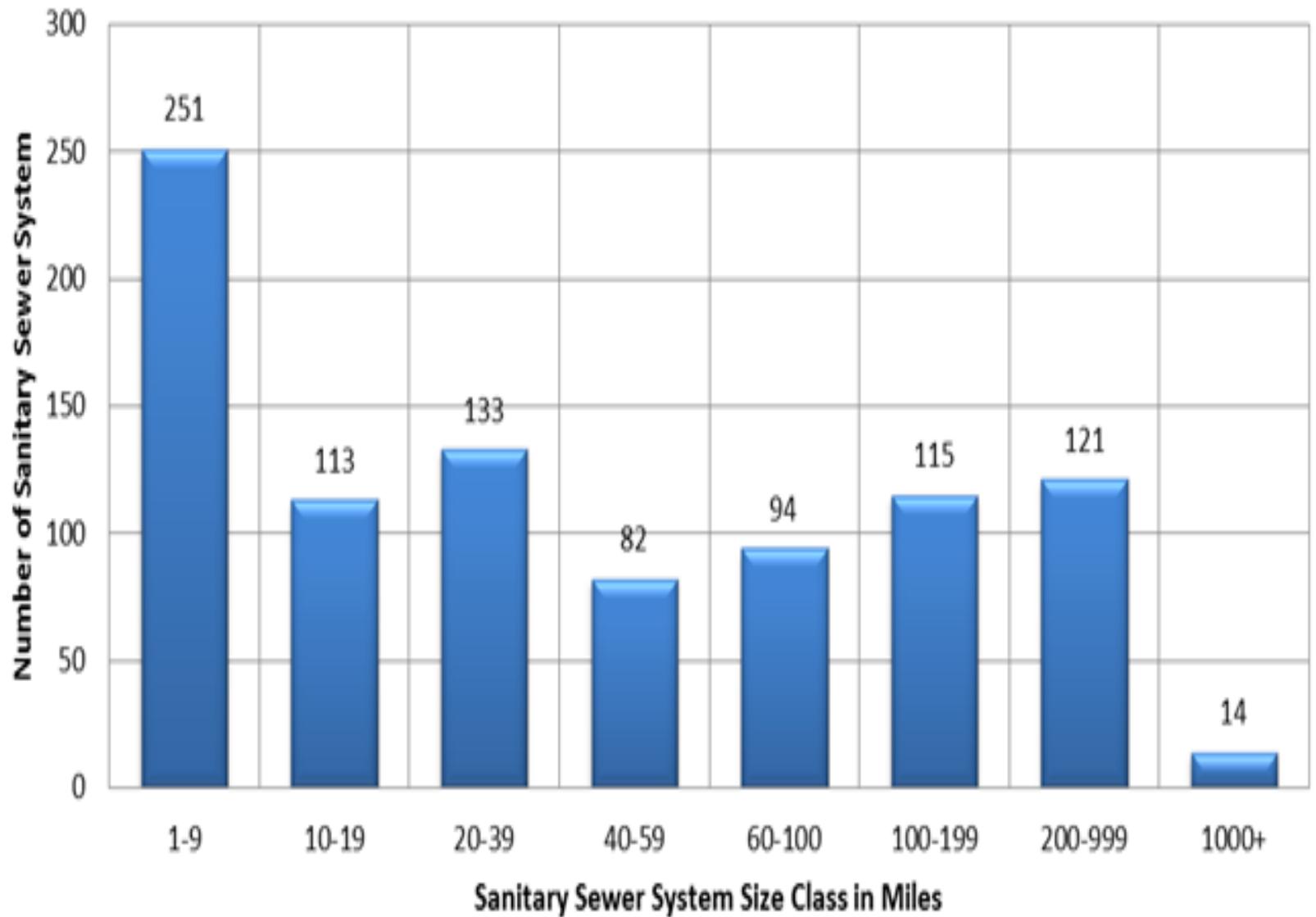
SSO Rates for Municipal Sanitary Sewer Systems by System Size Class
(1/2/2007 to 6/30/2012)
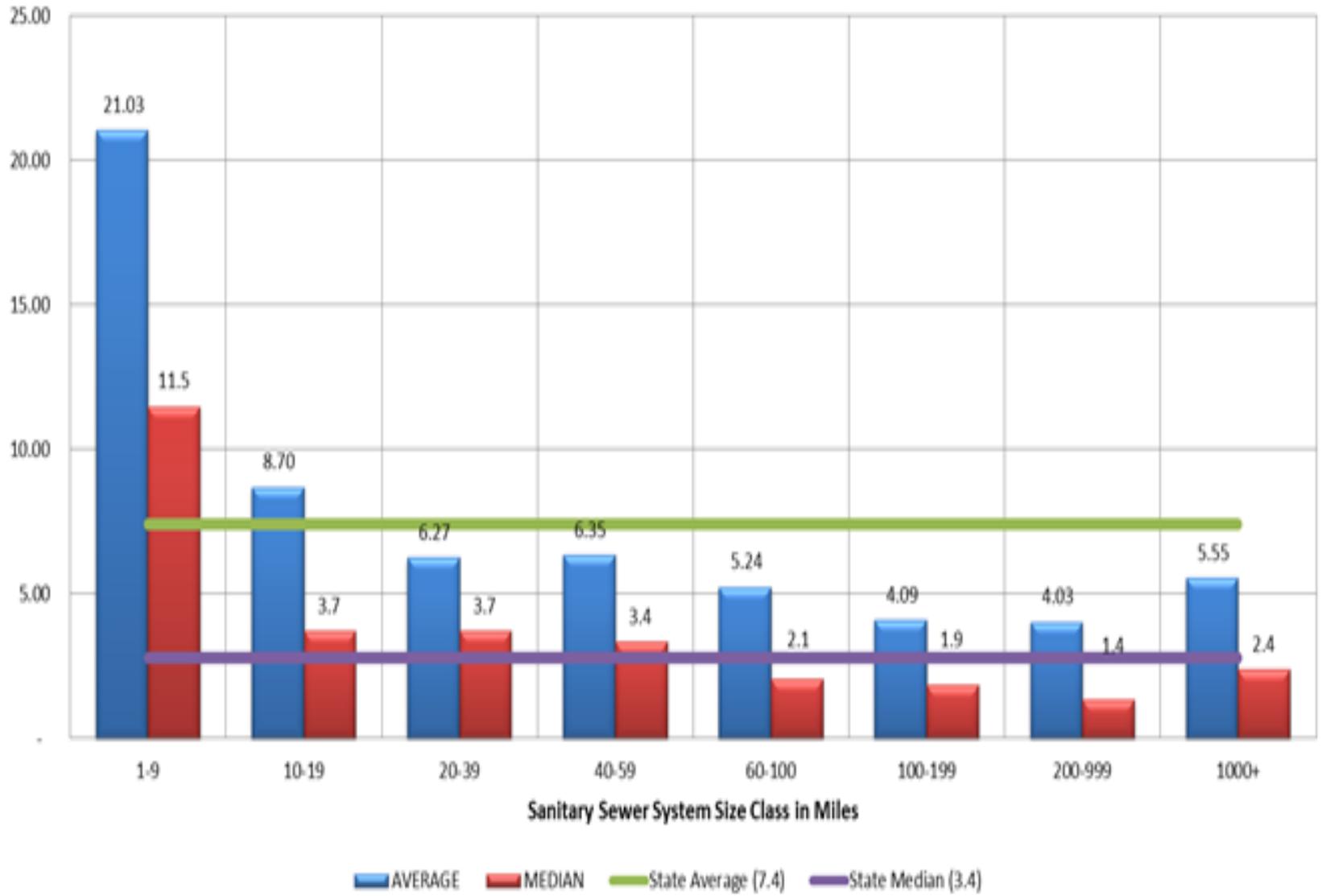
SSO Volume Rates for Municipal Sanitary Sewer Systems by System Size Class
(1/2/2007 to 6/30/2012)
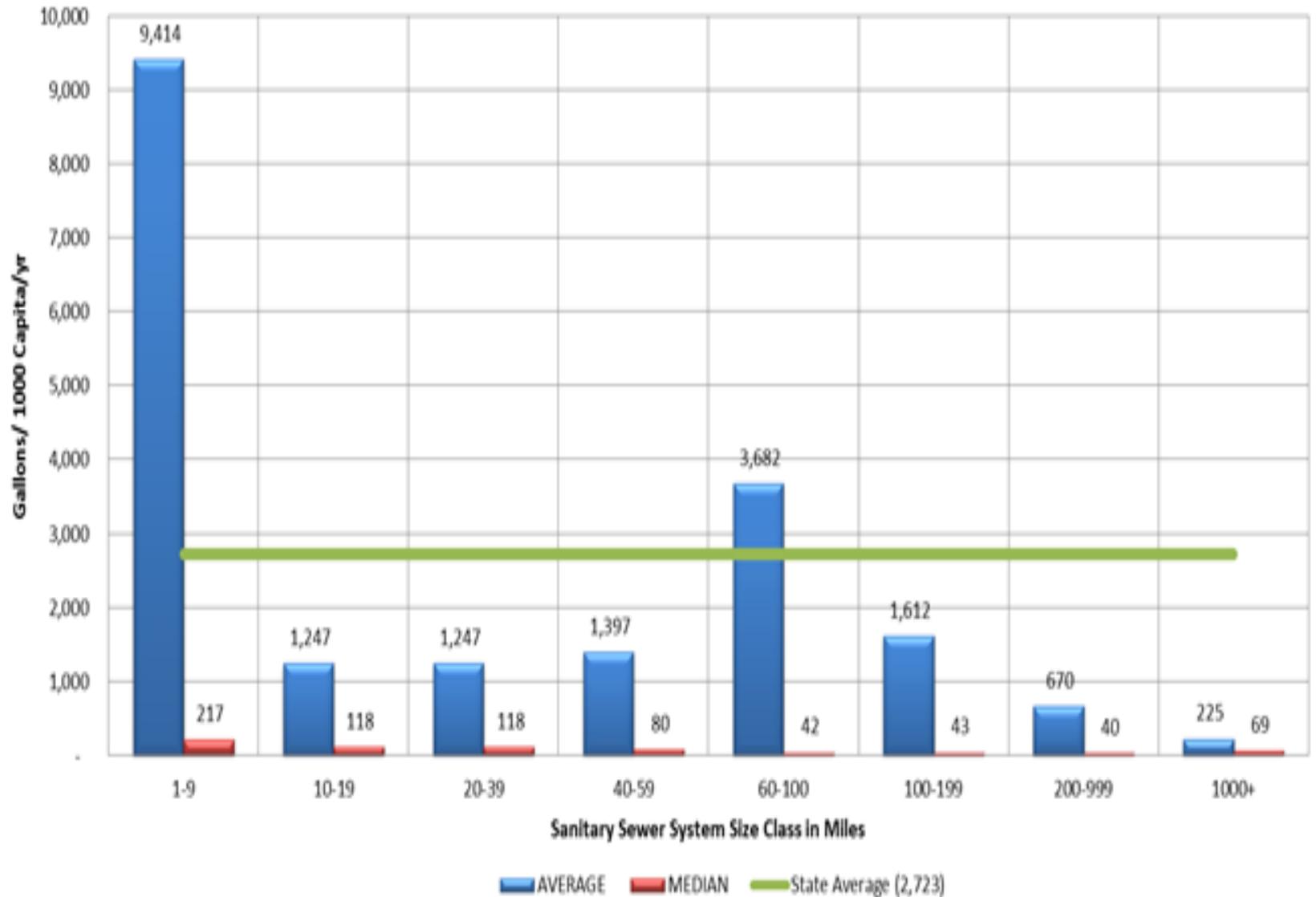
SSO Statewide Causes

Percent of SSOs by Cause

- Other 13%
- tural 6
- n
- Operational 78%
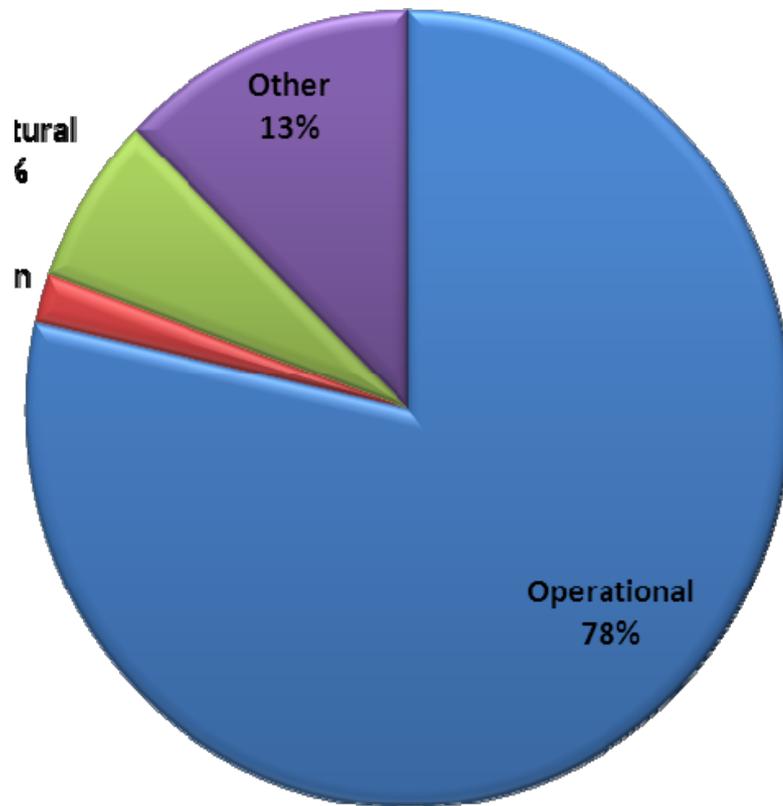
Percent of SSOs Volume by C

- Operational 9%
- Other 34%
- Structural 13%
- Condition 44%
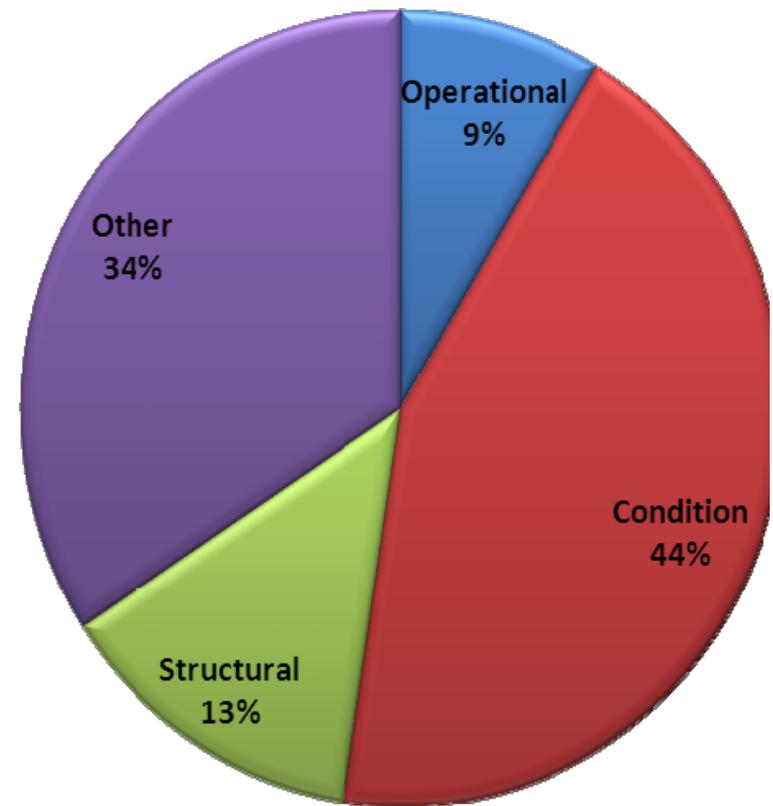
Number of SSOs for Municipal Sanitary Sewer Systems by System Size

BACWA Collection Committee
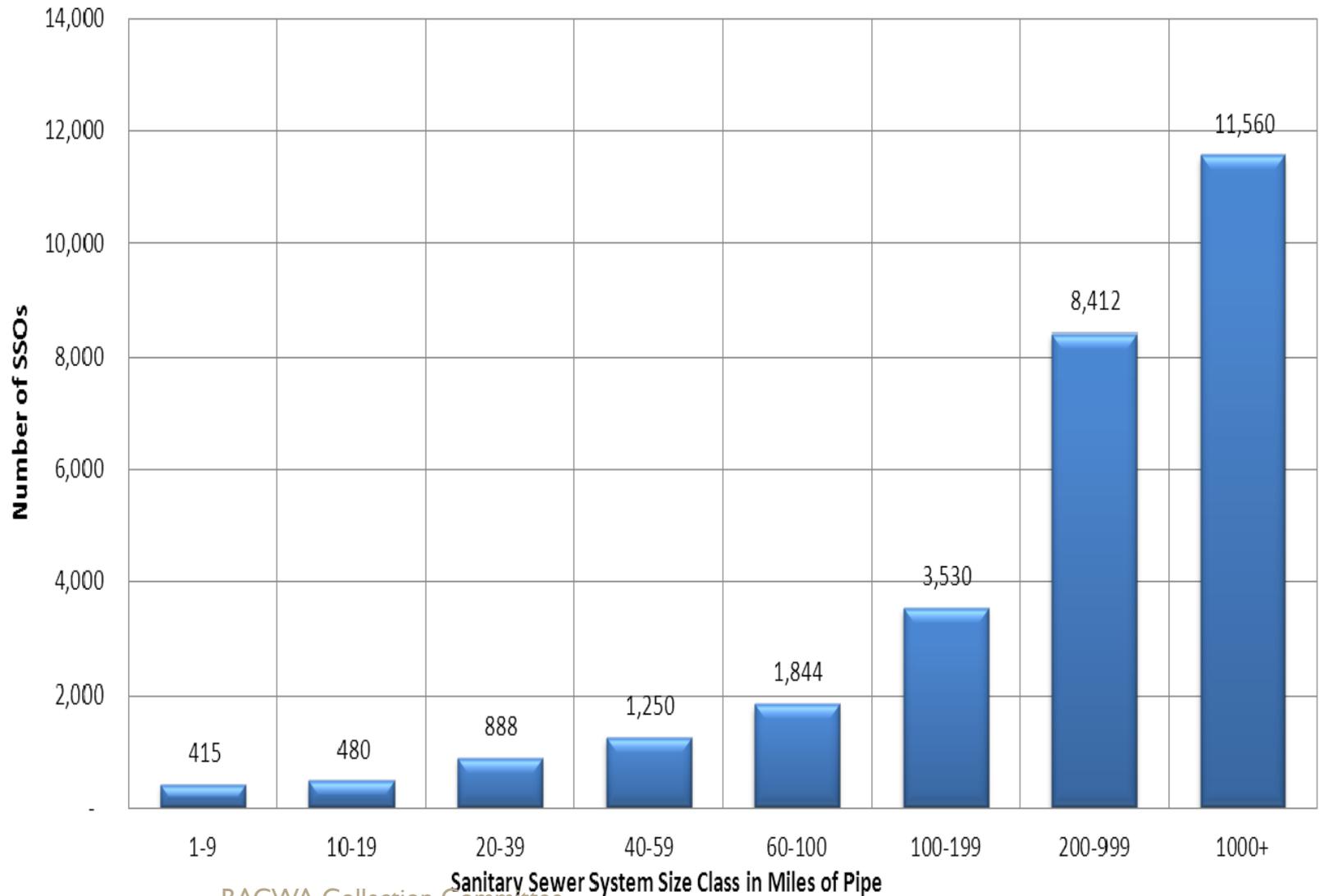
Percentage of total Number of SSO Reaching Surface Water by Spill Size Class
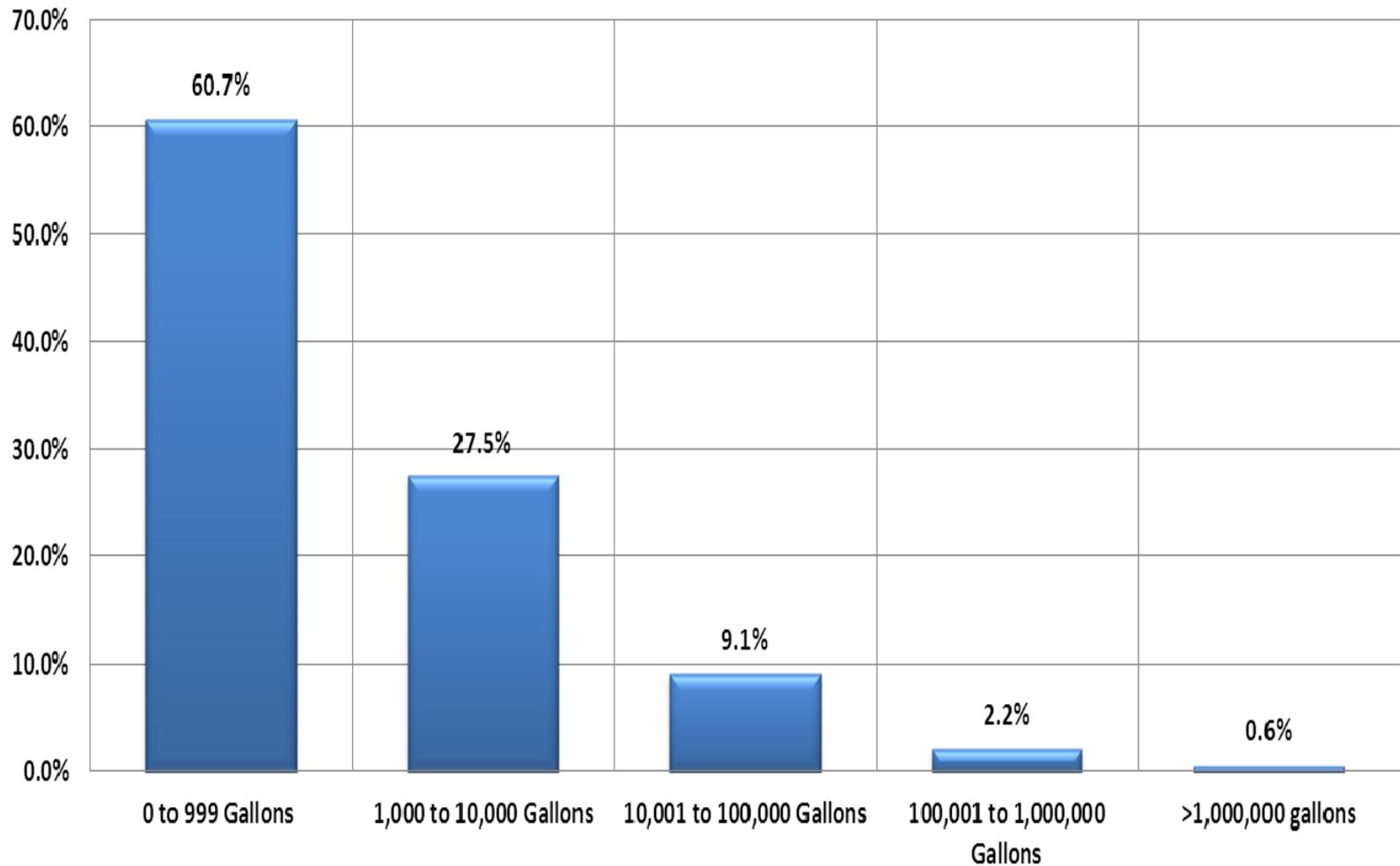
Note: Percentages are rounded to the nearest tenth decimal point, summing the percentages might exceed one hundred percent due to rounding

New SWRCB Reduction Program Library

- Now available at the SWRCB SSO website

- New repository for sample SSO documents

- To be sorted by of document types

- Any agency can submit documents to Victor

- Looking for good examples of audits to add

- To be used as examples for other agencies

- To include enforcement related documents by State and RWQCBs

Home ⇒ Water Issues ⇒ Programs ⇒ Sso

Sanitary Sewer Overflow Reduction Program

A sanitary sewer overflow (SSO) is any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs often contain high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oil, and grease. SSOs pollute surface and ground waters, threaten public health, adversely affect aquatic life, and impair the recreational use and aesthetic enjoyment of surface waters. Typical consequences of SSOs include the closure of beaches and other recreational areas, inundated properties, and polluted rivers and streams.

Quick Links

- SSO Reduction Program Review and Update
- General Order Information
- SSO Compliance & Enforcement Information Annual Compliance Report
- Interactive SSO Report
- Sewage Spill Incident Maps
- Online SSO Database Access and Use
- SSO Data
- Sewer System Management Plan Development/Implementation
- Sanitary Sewer Systems WDR Training
- Historical Information
- SSO Program Contacts

Announcements

New! FY 12/13 SSO Reduction Program Report

New! Dischargers User Guide

New! SSO Reduction Program Library

Questions and Discussion?

Thanks for Listening

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