



SSS WDRs: Avoiding Enforcement for LROs, Supervisors and Managers



17th Annual
Sewer and Stormwater Summit
October 12, 2022 - Virtual/Online

James Fischer, P.E.



Agenda

1. Background
2. Auditing: Resilience
3. Recommendations



James Fischer, P.E.





- Sewer System Management Plan (SSMP) Audits
- SSMP updates
- Compliance Evaluation Inspections utilizing USEPA recommended standards with a credentialed inspector.



About Fischer Compliance

James Fischer, P.E.

Mr. Fischer has over 33 years of professional regulatory experience covering public and private sectors. He retired in 2020 from the State Water Resources Control Board as statewide Collection System Lead for Compliance and Enforcement for the SSS WDRs and started Fischer Compliance, LLC (fischercompliance.com). His company focuses on providing collection system agencies including Special Districts with unique best practice compliance services for reducing risks and optimizing SSMP effectiveness. Technical services include comprehensive Sewer System Management Plan (SSMP) Audits, SSMP updates and “Simulated” Compliance Evaluation Inspections (CEIs) mirroring procedures used by U.S. EPA and the Water Board. Mr. Fischer is a registered Professional Engineer (P.E.) and a credentialed U.S. EPA NPDES Compliance Inspector.

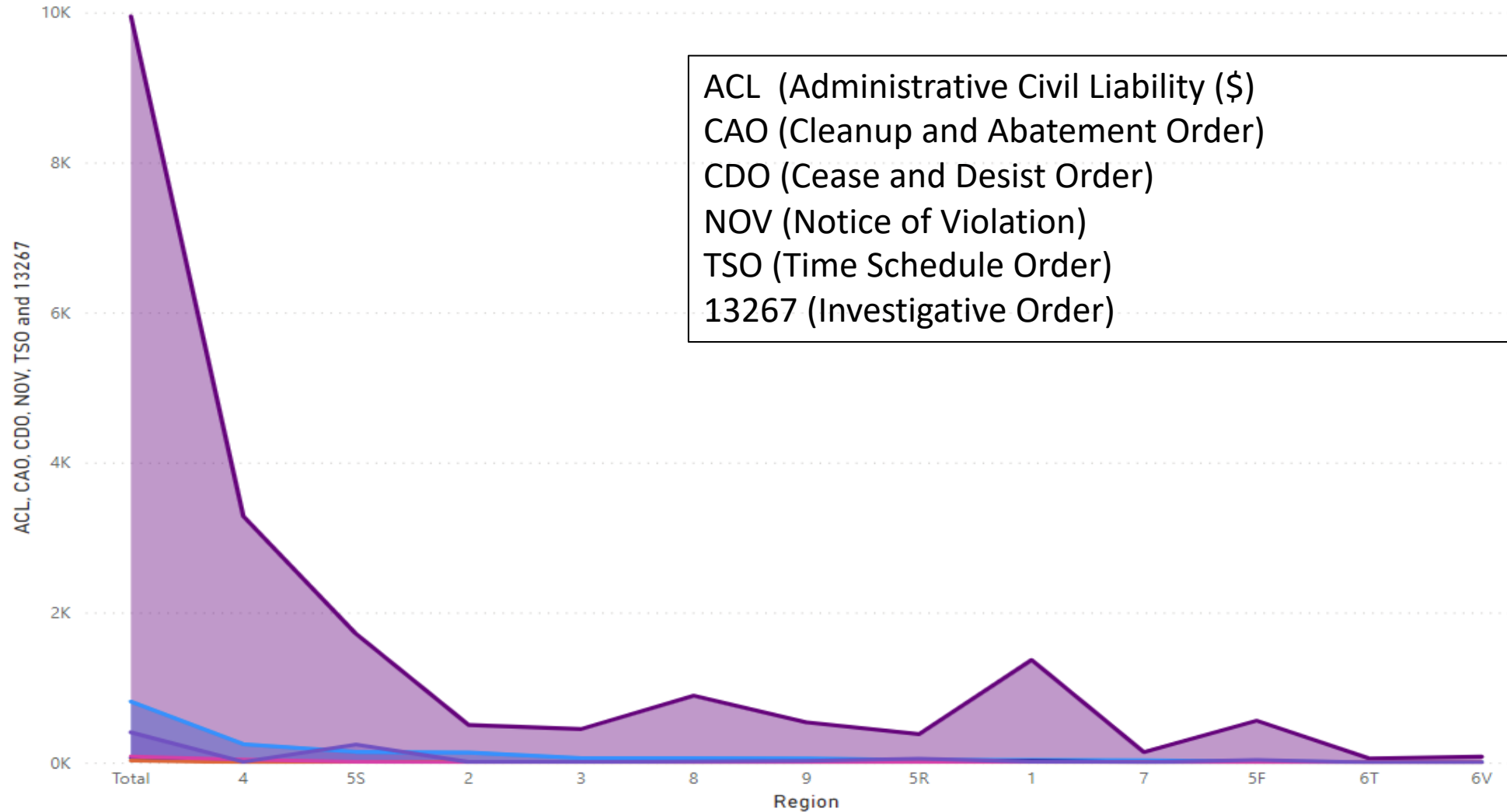


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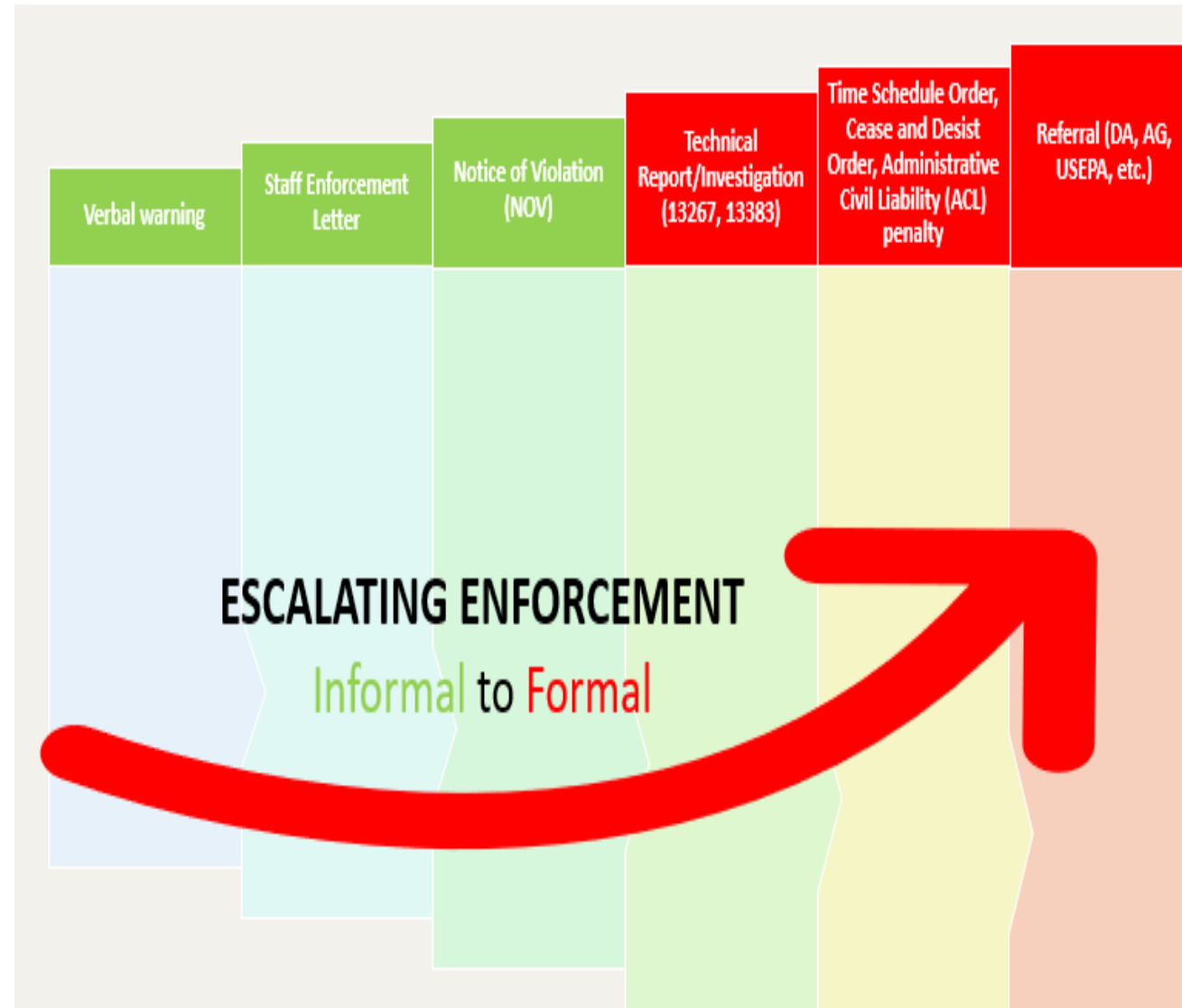
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ACL, CAO, CDO, NOV, TSO and 13267 by Region

● ACL ● CAO ● CDO ● NOV ● TSO ● 13267



1. Background



1. Background

Water Quality Violations	Date
Settlement reached with sewer district that had hundreds of raw sewage spills	12/29/2021
Los Angeles Water Board reaches settlements with four companies for waste discharge violations <i>\$411,282 will be deposited in state's cleanup account</i>	12/22/2021
Global real estate company agrees to pay \$565,304 for unauthorized discharges at construction site <i>Exeter reaches settlement with Santa Ana Water Board</i>	09/29/2021
Imperial Irrigation District settlement leads to water quality upgrade for disadvantaged households <i>\$549,000 fine will be used to provide Point of Entry water treatment</i>	09/20/2021
Monterey One Water to pay \$800,000 for discharges of untreated wastewater into Monterey Bay	08/17/2021
Settlement reached but monitoring continues of crude oil release in Ventura County watershed <i>\$330,218 in fines will be deposited in the Waste Discharge Permit Fund</i>	06/30/2021
San Diego Water Board orders federal treatment plant to stop discharge permit violations <i>Agency also directed to make repairs at wastewater border facility</i>	06/29/2021
PG&E settlement for once-through-cooling discharges at Diablo Canyon nuclear plant	06/22/2021
Court decision upholds \$2.8 million fine, clears path for long-awaited restoration of Point Buckler Island <i>Unauthorized levee construction considered brazen and harmful</i>	06/17/2021
Laguna Beach reaches \$1.5 million settlement for wastewater collection system failure	06/09/2021
Pistachio processing facility in Tulare County will pay \$221,440 fine for odor violations	06/07/2021
\$2.5 million settlement reached for Mule Creek State Prison violations of Clean Water Act	03/29/2021
City of Colfax agrees to settlement for Bunch Creek sewage spill	03/26/2021
Sumiden Wire Co. agrees to settlement in industrial wastewater discharge case	03/11/2021

1. Background



Desert Water Agency agrees to pay \$181,947 penalty for sewage collection system spill

Colorado River Basin Regional Board approves settlement

April 12, 2022

Contact: [Ailene Voisin](#) – Public Information Officer

PALM DESERT – Desert Water Agency, a public utility that owns and operates a wastewater collection system serving Cathedral City, agreed to pay a \$181,947 penalty for discharging approximately 268,916 gallons of raw sewage into the Whitewater River Channel.

The incident occurred between Feb. 15-19 after a main pipe ruptured during a heavy storm, sending the untreated wastewater into the channel in Cathedral City. The agency successfully diverted the sewage when it became aware of the spill and later replaced the sewer line.

In the settlement approved today by the Colorado River Basin Regional Water Quality Control Board, half of the penalty will be deposited in the State Water Resources Control Board's Cleanup and Abatement Account. The remaining funds will be used to purchase and install the Cathedral Canyon Lift Station Flow Meter Monitoring Vault and Sample Box to detect flow variations that indicate pipe breakages and take water samples to identify pollution in the river channel and local groundwater.

1. Background

Penalty Calculation Methodology Worksheet - Version Date: 10/11/2017

Instructions

1. Select Degree of Toxicity of the Discharge
2. Select Actual or Potential Harm to Beneficial Uses
3. Select Susceptibility to Cleanup or Abatement
4. Select Deviation from Requirement
5. Click "Determine Harm & per Gallon/Day..."
6. Enter Values into the Yellow highlighted fields

Green cells are calculated from these factors.

Select Item: Degree of Toxicity of the Discharge
 Select Item: Potential Harm to Beneficial Uses
 Select Item: Susceptibility to Cleanup or Abatement
 Select Item: Deviation from Requirement

Select Item: Degree of Toxicity of the Discharge
 Select Item: Potential Harm to Beneficial Uses
 Select Item: Susceptibility to Cleanup or Abatement
 Select Item: Deviation from Requirement

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 Select Item: Deviation from Requirement

Select Item: Degree of Toxicity of the Discharge
 Select Item: Potential Harm to Beneficial Uses
 Select Item: Susceptibility to Cleanup or Abatement
 Select Item: Deviation from Requirement

Determine Harm & per Gallon/Day Factors for Violation #1

Determine Harm & per Gallon/Day Factors for Violation #2

Determine Harm & per Gallon/Day Factors for Violation #3

Determine Harm & per Gallon/Day Factors for Violation #4

Charger Name/ID:	Violation 1	Violation 2	Violation 3	Violation 4
Step 1 Actual or Potential Harm Factor (Generated from Button)				
Step 2 Per Gallon Factor (Generated from Button)				
Gallons				
Statutory Maximum				
High Volume				
Total				
Per Day Factor (Generated from Button)	0	0	0	0
Total Days				
Multiple Day Violation Reduction				
Statutory Max per Day				
Total				
Step 3 Per Day Factor				
Total Days				
Multiple Day Violation Reduction				
Statutory Max per Day				
Total				
Initial Amount of the ACL				
Step 4 Culpability				
History of Violations				
Cleanup and Cooperation				
Total				
Maximum for this Violation				
Amount for this Violation				
Step 5 Total Base Liability Amount				
Step 6 Ability to Pay & to Continue in Business				
Step 7 Economic Benefit				
Step 8 Other Factors as Justice May Require				
Staff Costs				
Step 9 Minimum Liability Amount				
Maximum Liability Amount				
Step 10 Final Liability Amount				

Penalty Day Range Generator

Start Date of Violation=

End Date of Violation=

Maximum Days Fined (Steps 2 & 3) = Days

Minimum Days Fined (Steps 2 & 3) = Days

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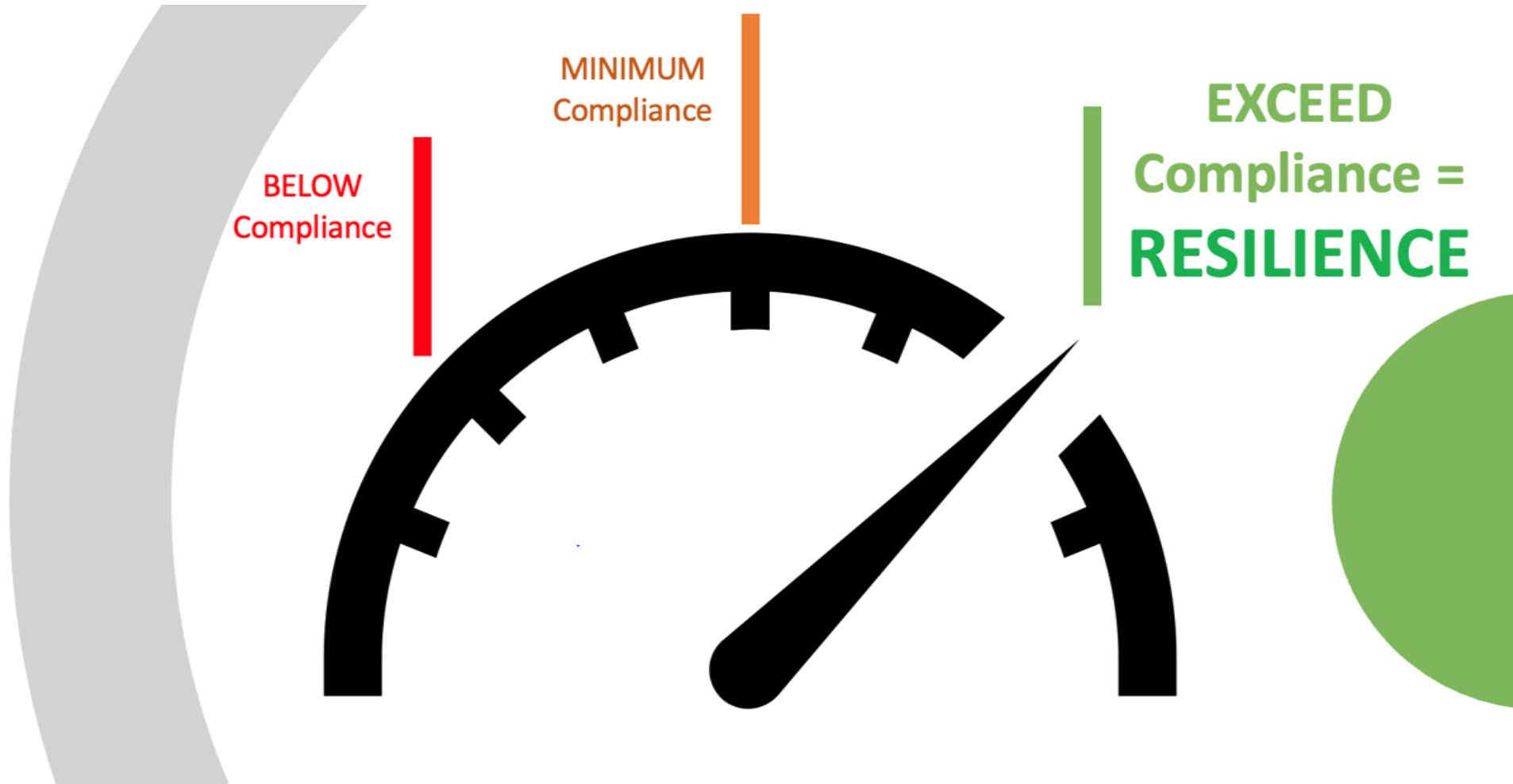
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FINDINGS

The inspection itself as well as review of the additional requested information, resulted in the following areas of concern:

1. No testing of pump station alarms, except indirectly through SCADA.
2. No testing of built-in bypass systems at pump stations.
3. No emergency signage posted at the pump stations.
4. Relatively low fuel level in the generator at the Tierra Linda Pump Station.
5. No method currently in place for inspecting or analyzing force mains, except indirectly.
6. Reliance on general knowledge instead of written standard operating procedures (SOPs).
 - a. While there are existing SOPs for some equipment and processes – such as CCTV inspections, culvert and lateral cleaning, prioritizing food service establishments based on their FOG performance, SSO response and cause determination, and pipe repairs – there are no written SOPs for several major programs including FOG and root control. Additionally, there are currently no written standard or emergency operating procedures for major sewer assets covering power and/or pumping failures.
7. No current schedule in place for general CCTV inspections of sewer mainlines.
8. Quality of existing CCTV inspections and callouts.
9. Prioritization of pipe rehabilitation based on CCTV, including mainlines in easements.
10. No infiltration and inflow (I/I) identification program currently in place.
11. Frequency of cleaning for critical manholes, such as manholes receiving crossflow from other agencies.
12. Allowance of private contractors to work on the City's mainlines without a City inspector present until work is completed.
13. The absence of maps showing locations of laterals and utility easements.
14. Number of customer complaints, especially from homes with utility easements on their properties.
15. The non-immediate repair and replacement approach regarding Grade 5 defects which the City does not consider emergency work, such as depressions, offsets, and visible soil.

1. Background



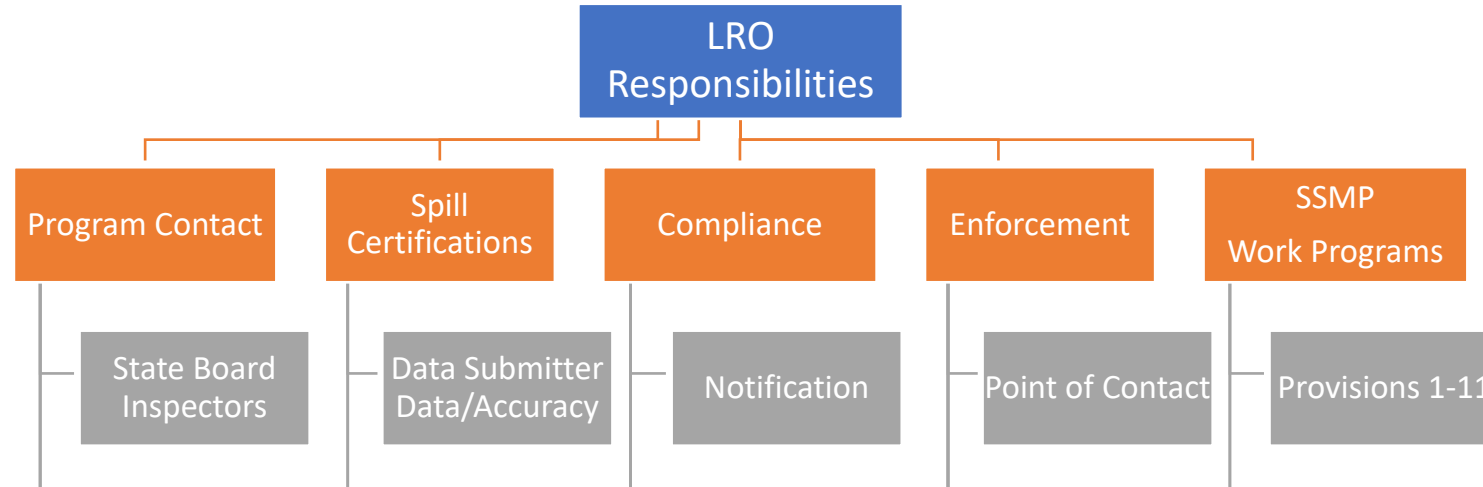
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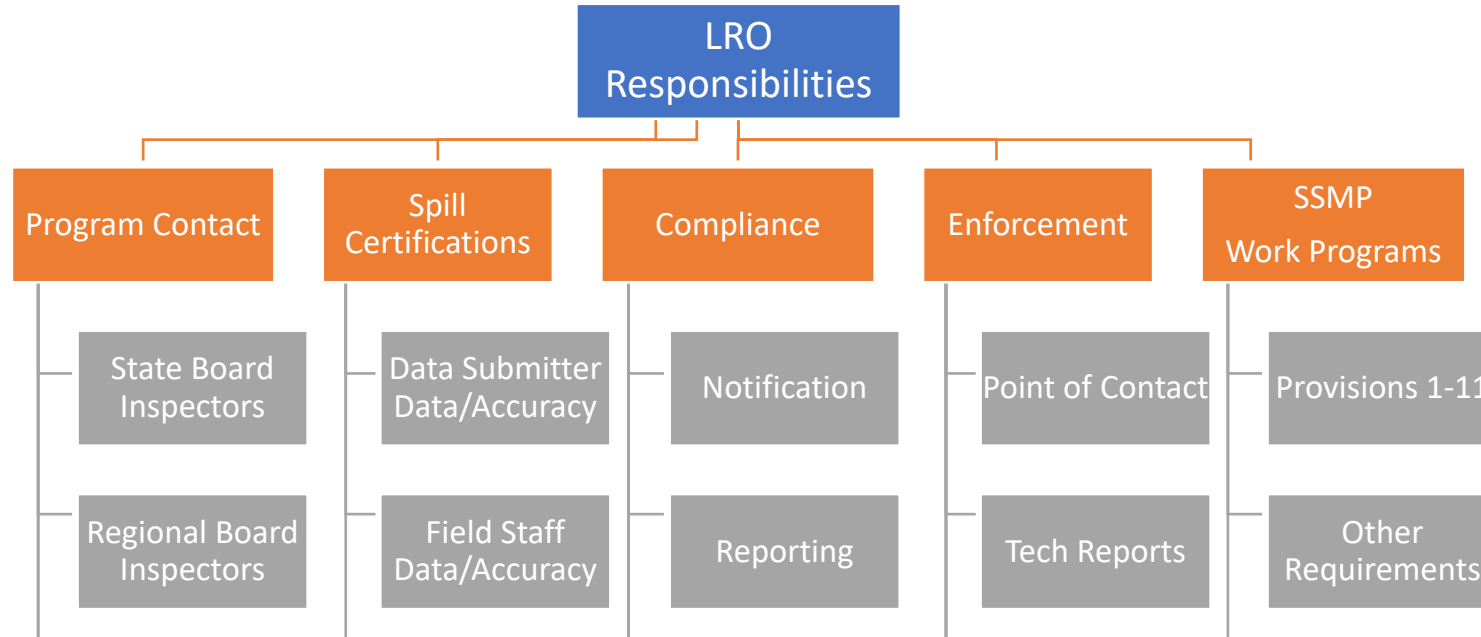
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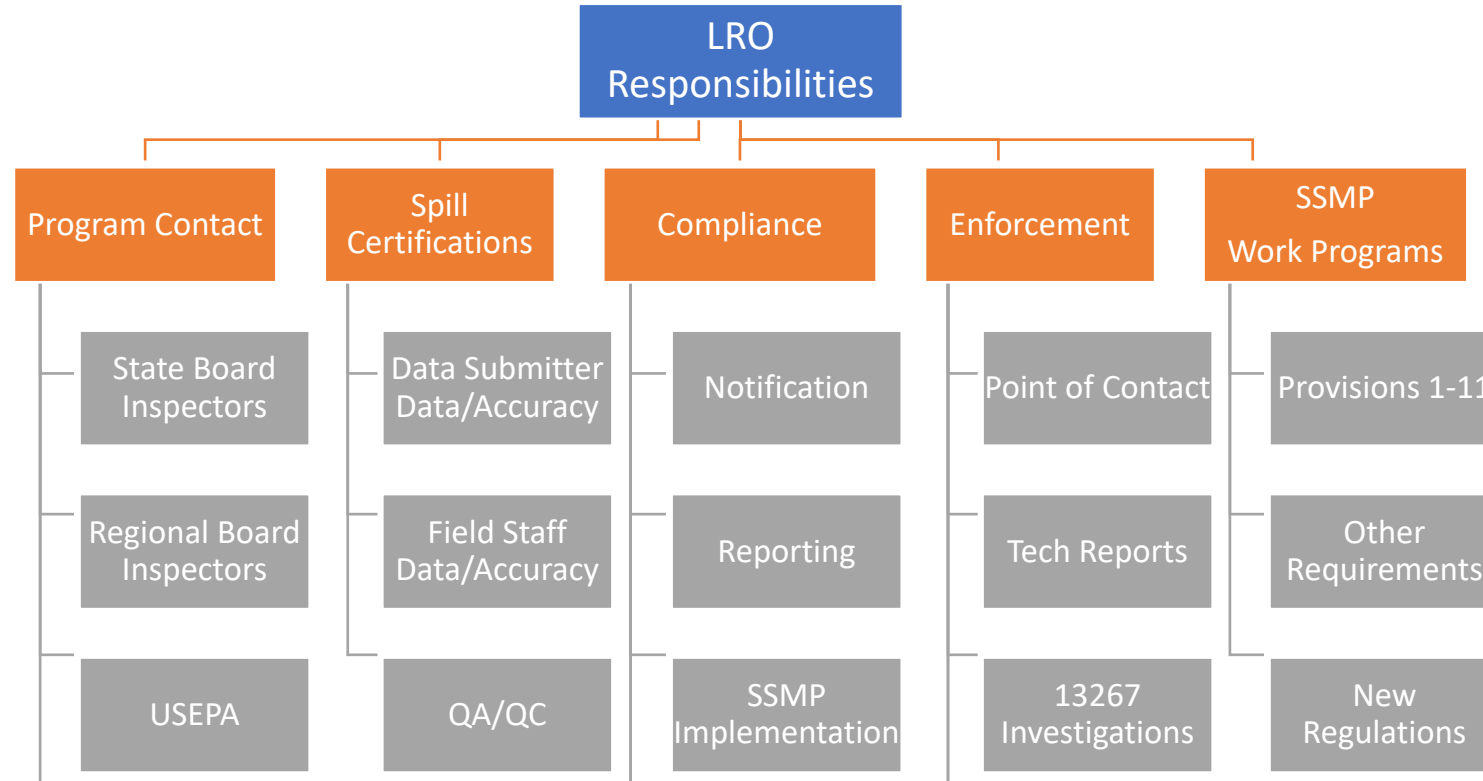
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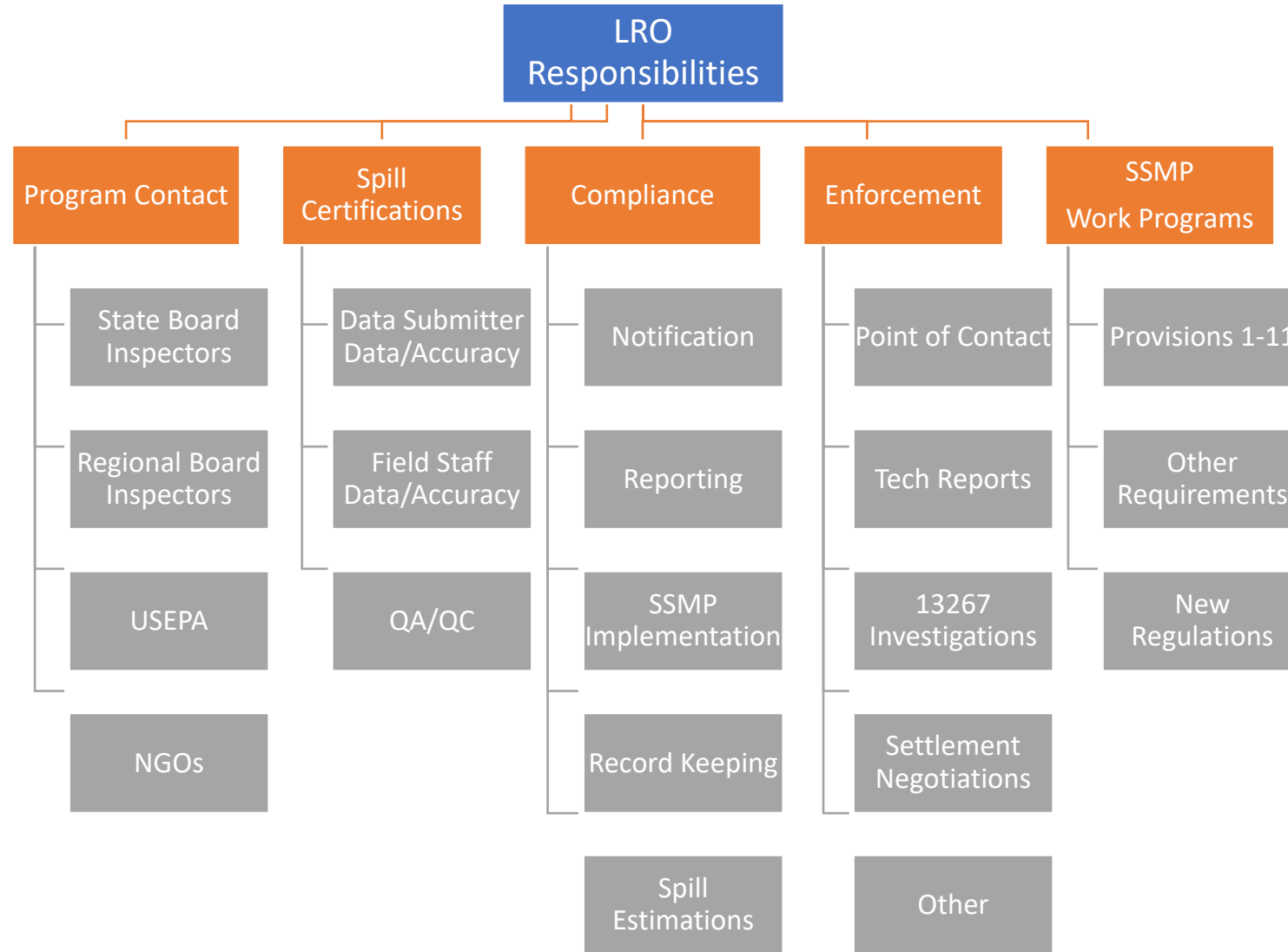
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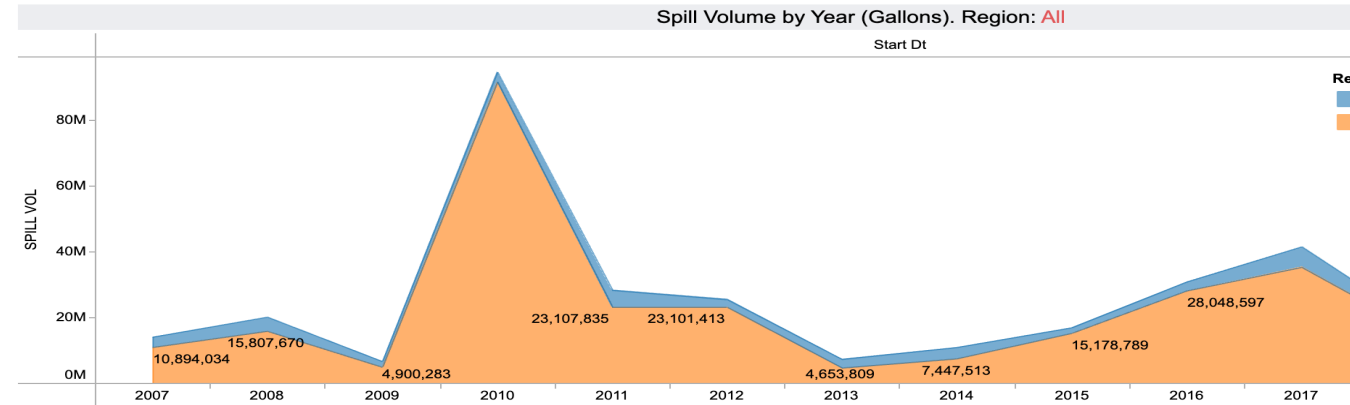
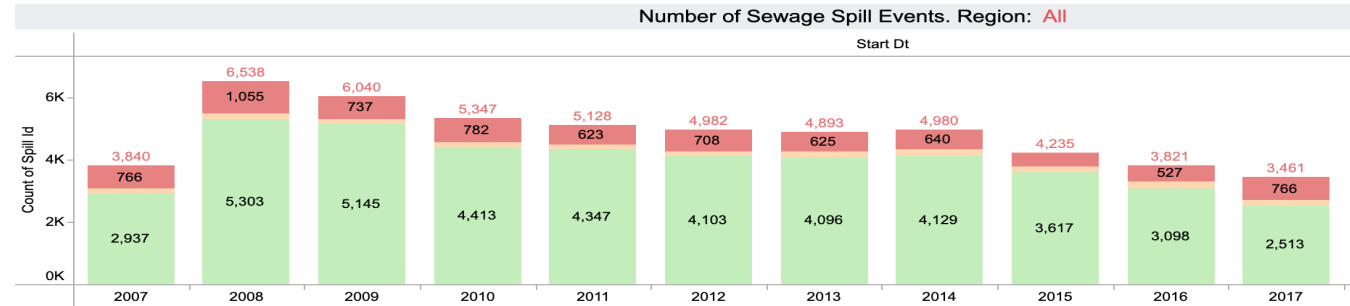
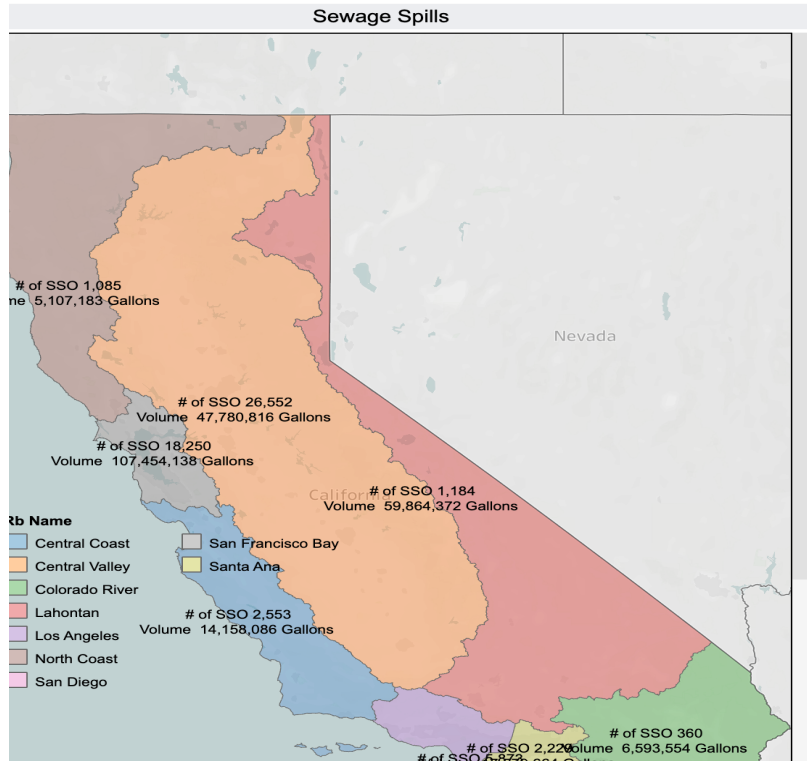
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1. Background

age Spills

← Sewage spills by Regional Board
Size, location, type and year Quarter/Year of spills
Table by Region
WDID Total Spills and Volume
WDID Spills and Volume by Year Graph
WDID Spills and Volume by week!
Animation Spills by Year
Spills by County and year Animation →

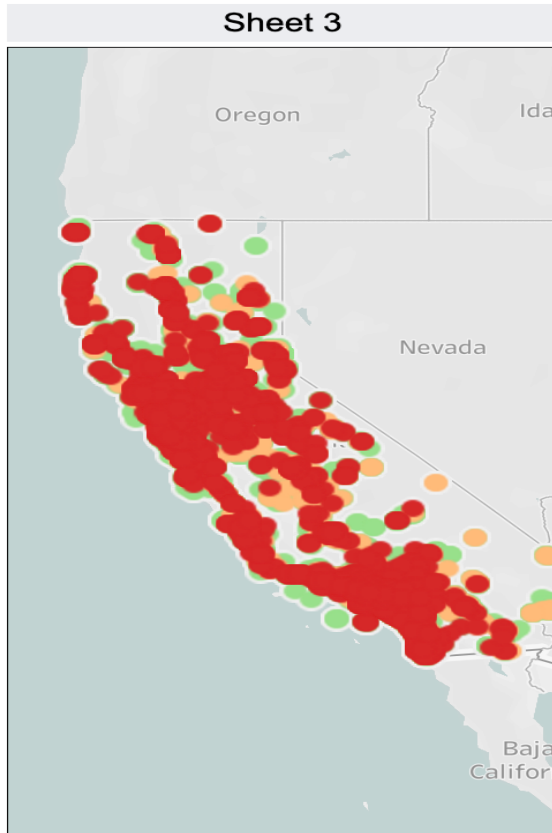


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1. Background

Spill Type

(All) ▾



Spill Type



You are logged-in as: PUBLIC.

SSO - General Information

SSO Event ID:	650170	Regional Water Board:	2
Spill Location Name:	200 ft. west of McCallister Drive	Agency:	E
WDID:	2SSO10095	Sanitary Sewer System:	E

File Name	File Description	Date/Time Uploaded	Status
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General Info

[Glossary of Terms](#)

[Locate the spill on map](#)

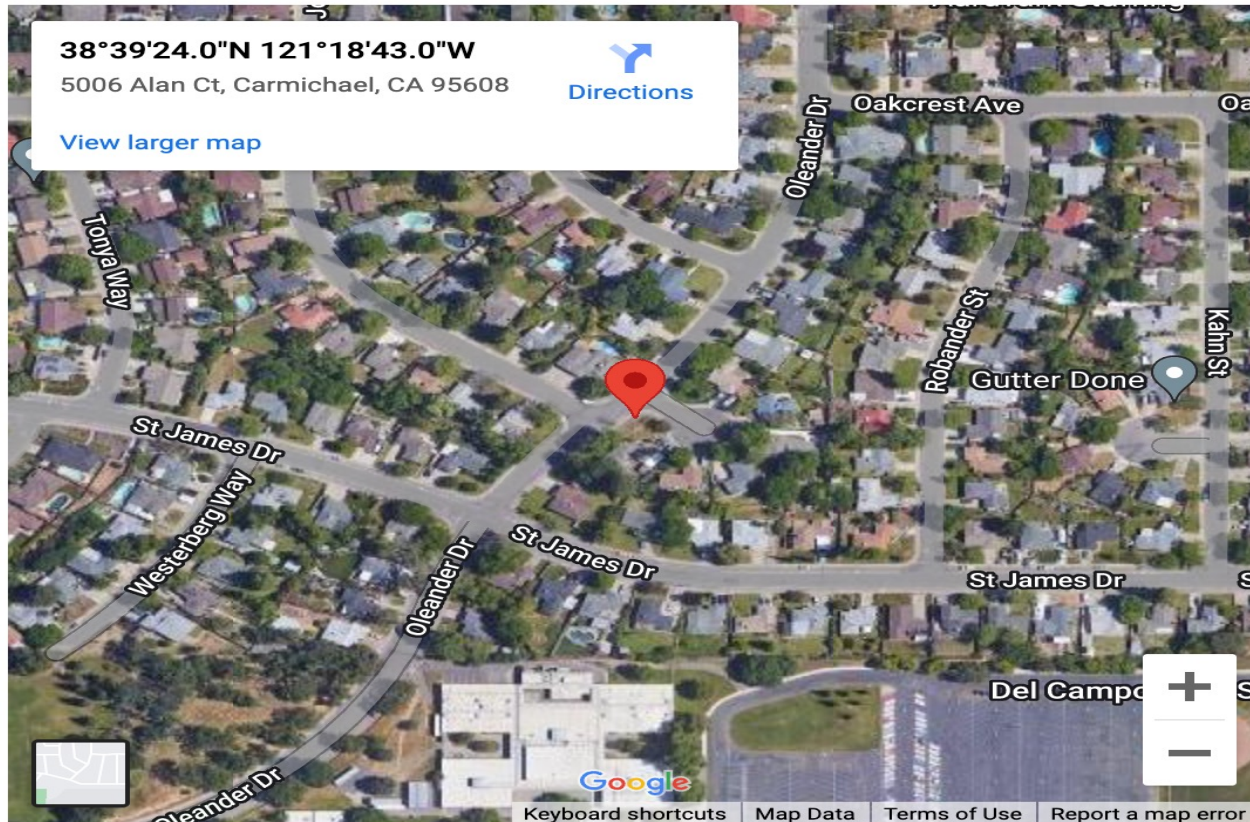
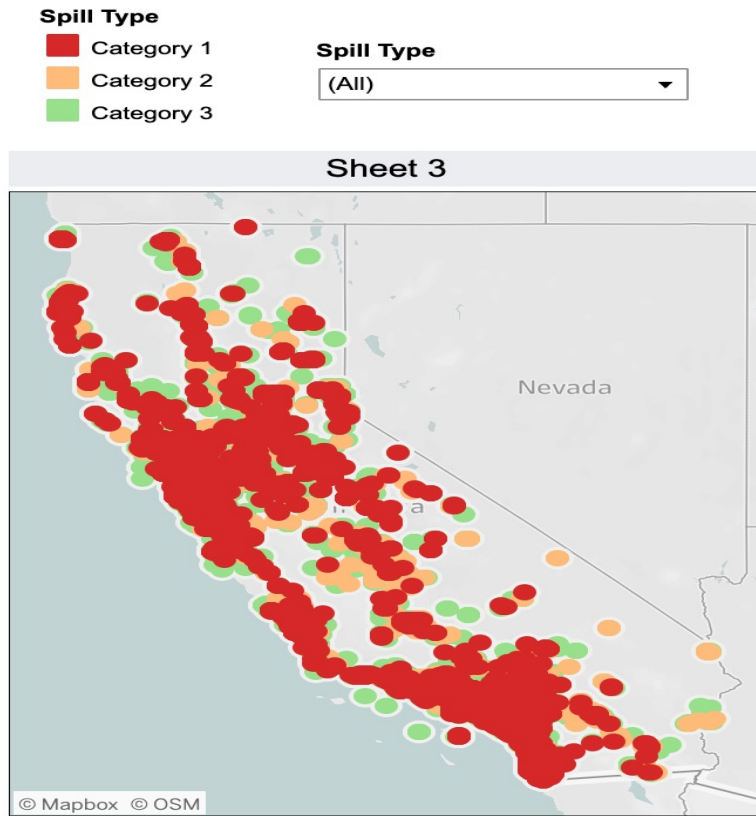
Certified by Gerald Gall on 2007-05-10 00:00:00.0

1 - Spill Type: Category 1

2 - Estimate Spill Volumes

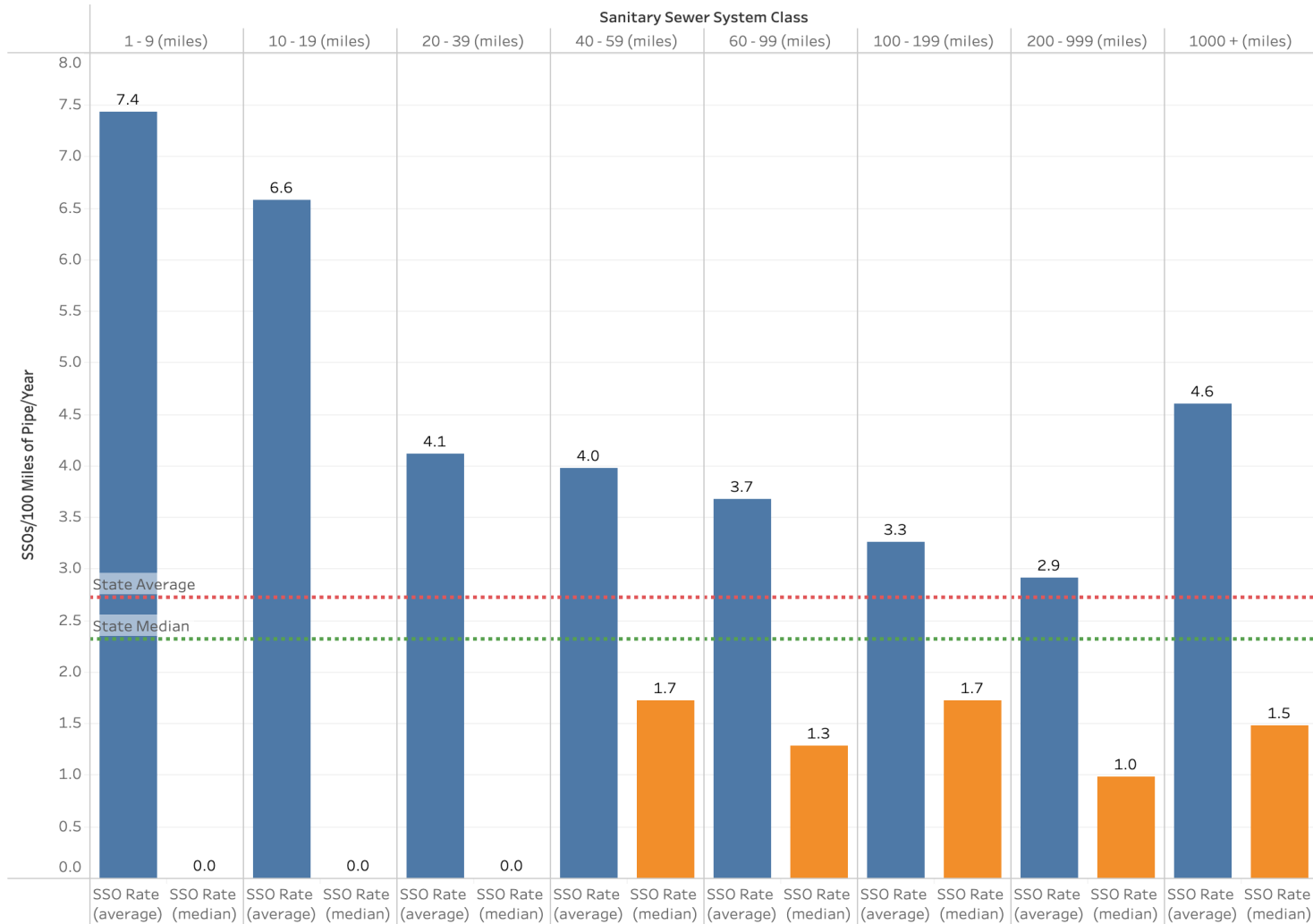
- a) Estimated spill volume that reached a separate storm drain that flows to a surface water body? 0
- b) Estimated spill volume recovered from the separate storm drain that flows to a surface water body? (Do not include water used for clean-up) 0
- c) Estimated spill volume that reached a drainage channel that flows to a surface water body? 0
- d) Estimated spill volume recovered from a drainage channel that flows to a surface water body? 0
- e) Estimated spill volume discharged directly to a surface water body? 0

1. Background



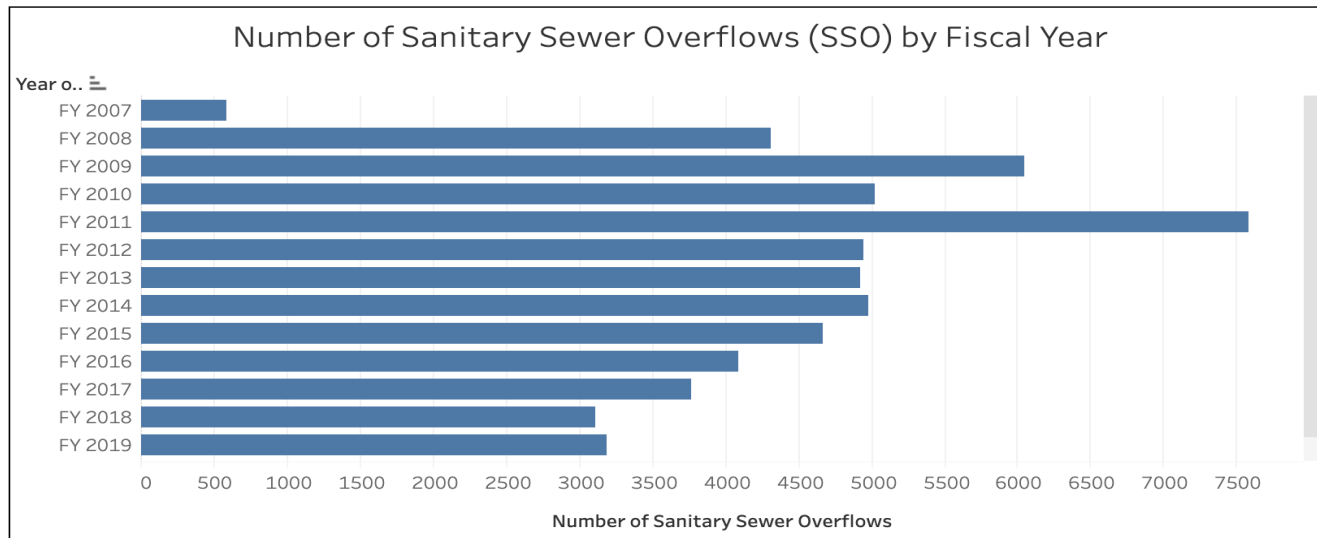
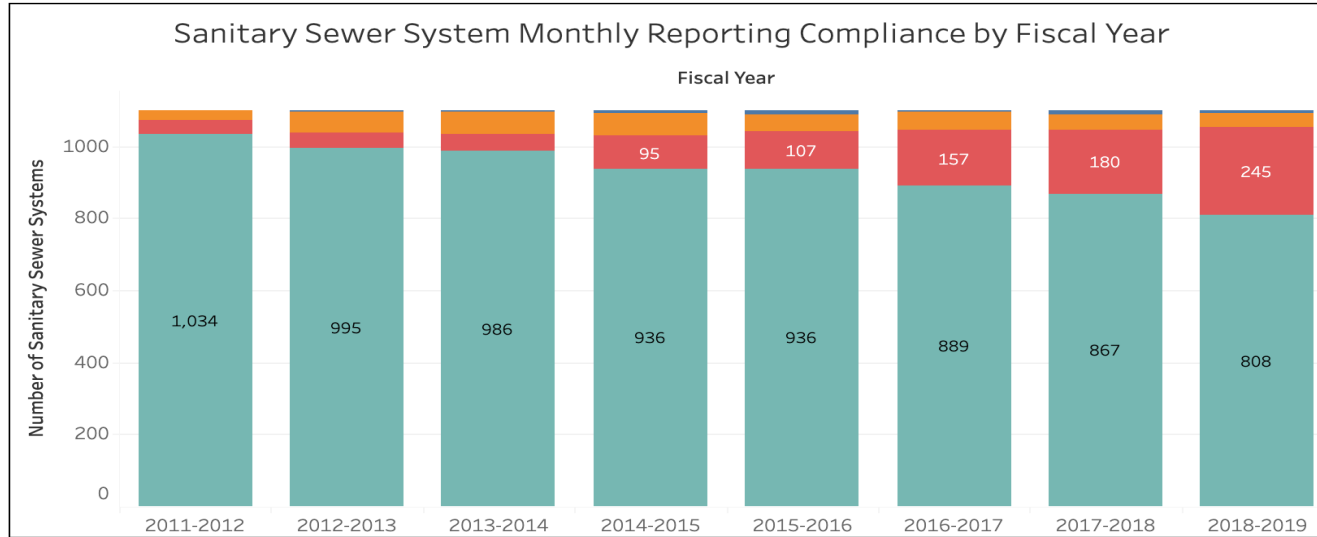
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SSOs/100 Miles of Pipe/Year by Sanitary Sewer System Class in Miles of Pipe



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1. Background



Regional Board Office

- (All)
- 1
- 2
- 3

WDID

- (All)
- 1SSO10001
- 1SSO10003
- 1SSO10004

Compliance/Noncompliance

- Both failed to rep...
- Contradictory rep...
- Failed to report
- In Compliance

Regional Board Office

- (All)
- 1
- 2
- 3

WDID

- (All)
- 1SSO10001
- 1SSO10003
- 1SSO10004

SSO Volume (gal)



SSO Category

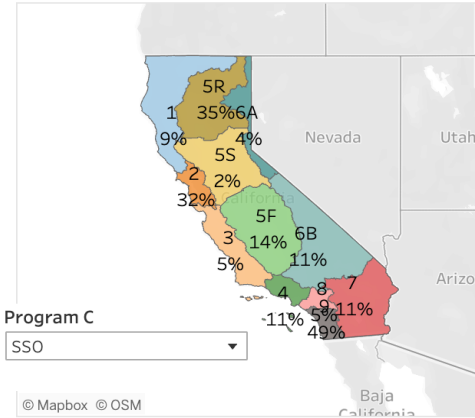
- (All)
- Category 1
- Category 2
- Category 3

SSO Cause

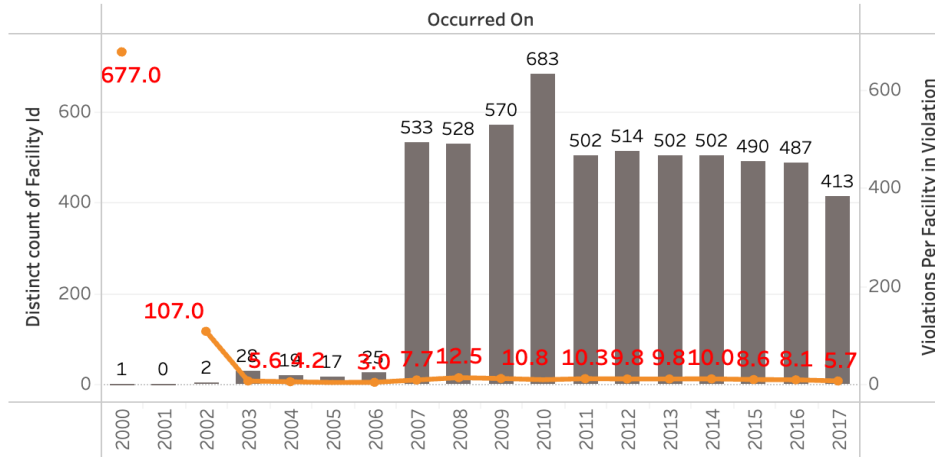
- (All)
- Null
- Air Relief (ARV)/B...
- Air Relief Valve (A...

1. Background

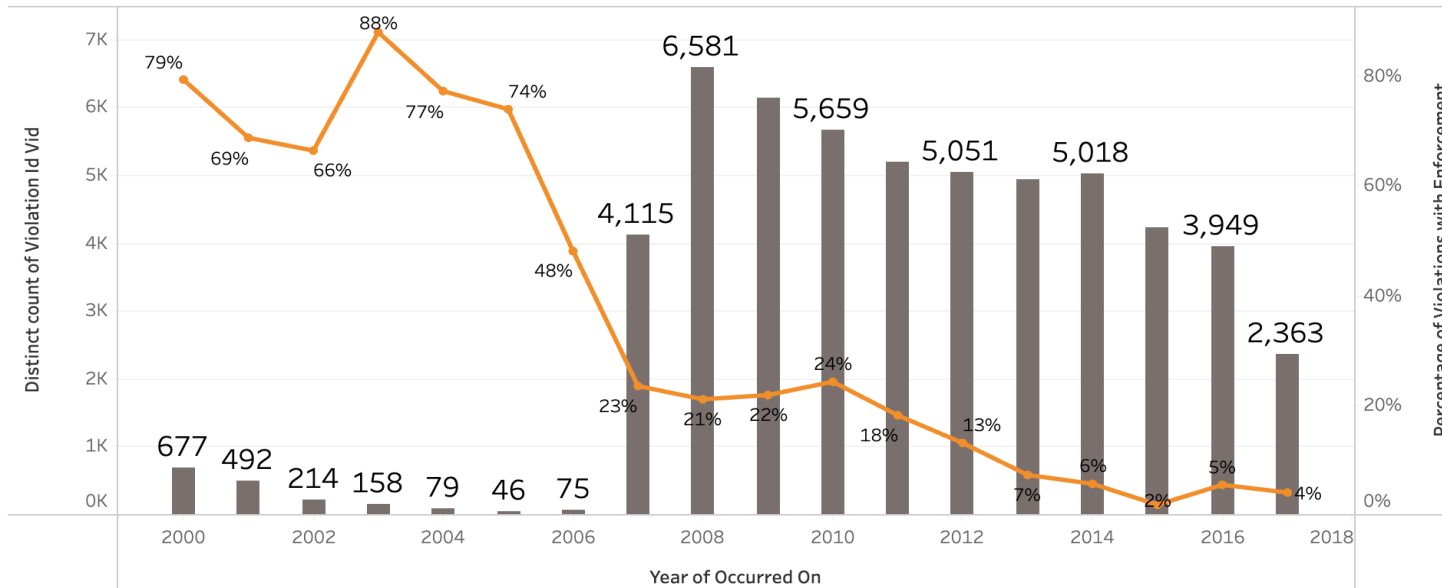
Select a Regional Board Office



Facilities with Violations Program: SSO and Percentage of Violations with Enforcement. Region:

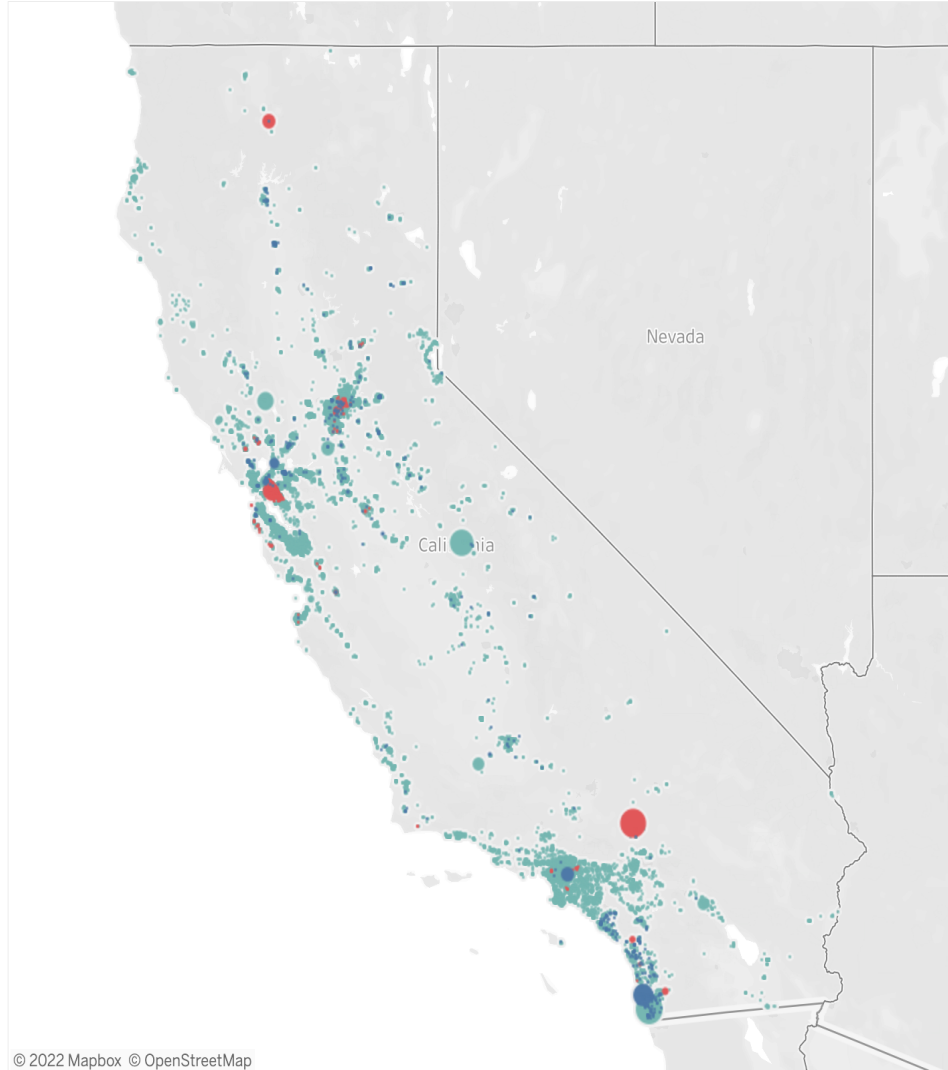


Number of Violations by Program and Percentage of Violations with Enforcement. Region: All



1. Background

SSO Receiving Enforcement Category of Spills: All Years: 2013, 2014, 2015 and 5 more



Enforcement Highest Level

- L1
- L3
- No Enforcement

Enforcement Highest Level

(All) ▼

Year of Occurred On

(Multiple values) ▼

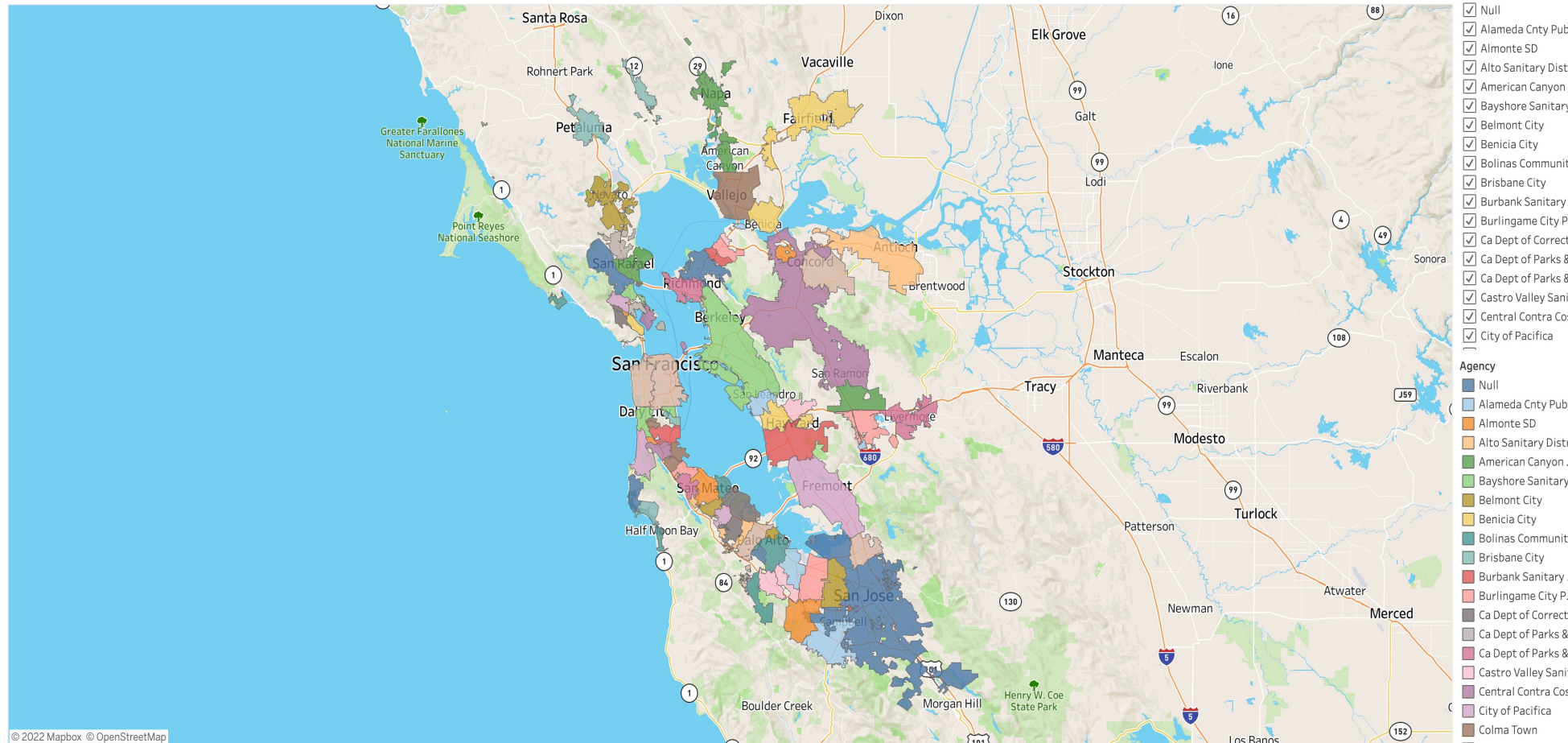
Year of Occurred On	Category 1			Spill Type / Enforcement Highest Level Category 2		
	L1	L3	No Enforcement	L1	L3	No Enforcement
2013	114	49	456	15	2	151
2014	63	45	288	1	1	130
2015	42	38	353			184
2016	55	34	437	8	1	185
2017	137	32	597	4	1	177
2018	29	2	411	1		175
2019	29		614	1		172
2020			175			42
Grand Total	469	200	3,331	30	5	1,216

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1. Background

R2 SSO Collection System Service Areas



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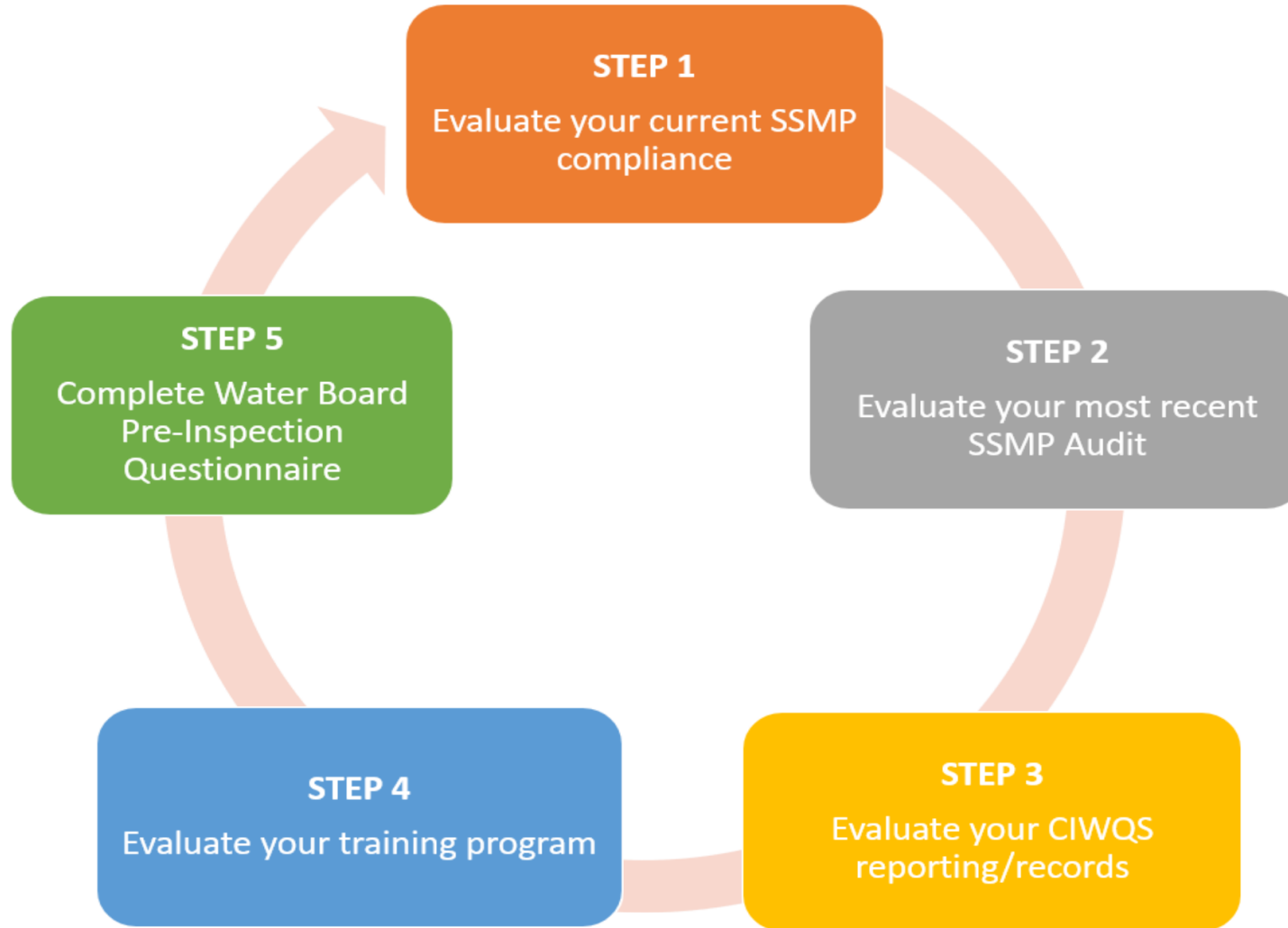
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Major Compliance Points	2006 WDRs (#)	2022 Draft WDRs (#)
• Definitions	7	33
• Findings	11	19
• Prohibitions	2	3
• Specifications	(see Provisions)	21
• Provisions	15	12
• MRP	dozens	dozens
• SSMP elements	11	16
• Attachments	0	6

1. Background

Major Requirements	2006 WDRs (23 pages)	2022 Draft WDRs (85 pages)
• Findings	X	X
• Prohibitions	X	X
• Specifications		X
• Provisions	X	X
• MRP	X	X
• SSMP elements (with flexibility)	X	X
• Attachments		X
• LRO Licensing (operator cert.)		X
• Enforcement (Water Code 13267/13383)		X
• SSMP (detailed/prescriptive requirements/CIWQS/public link)		X
• Audits (detailed/prescriptive requirements/CIWQS/public link)		X
• Risk assessment		X
• Resilience planning		X
• Sewer rate/funding/budget detailed narrative including commitments		X
• Resource allocation/details		X
• Legal authority (expanded) including easements, storm drain access, lateral defined ownership and maintenance if applicable		X
• Category 4 spills/reduced reporting option (< 50 gallons)		X
• Condition assessment (detailed requirements)		X
• Sewer system boundary (GIS shape file)		X
• Monitoring (large SSOs, 50,000 gallons or greater to waters of state)		X
• Use of current industry practices (equipment, tech, strategies)		X

1. Background



1. Background

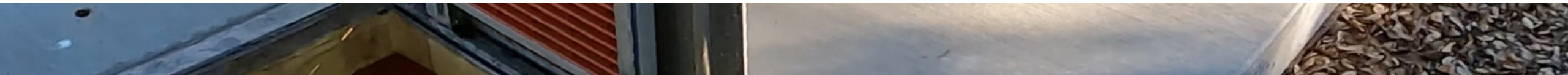


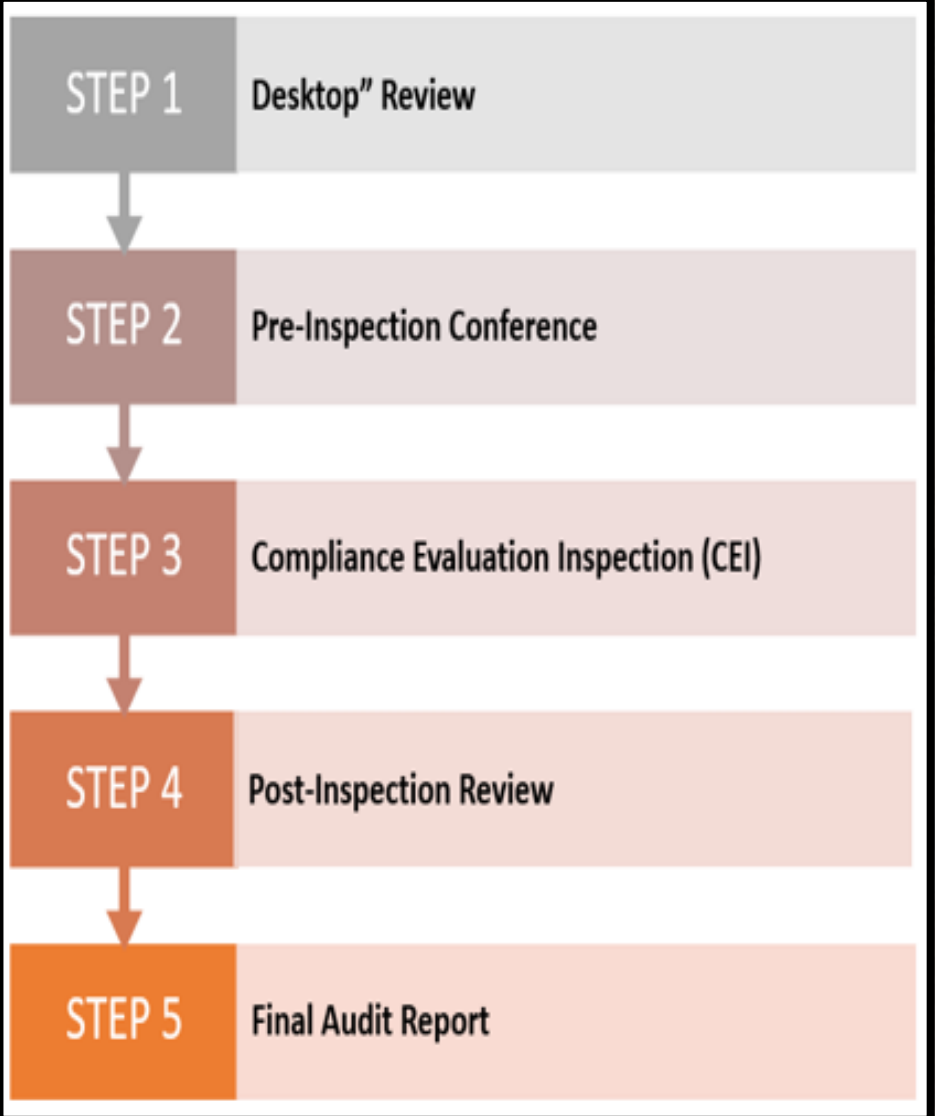
KEY TAKEAWAYS

1. Know your responsibilities.
2. Know what compliance and enforcement look like.
3. Prepare for changes.
4. Get your SSMP ready for inspectors!



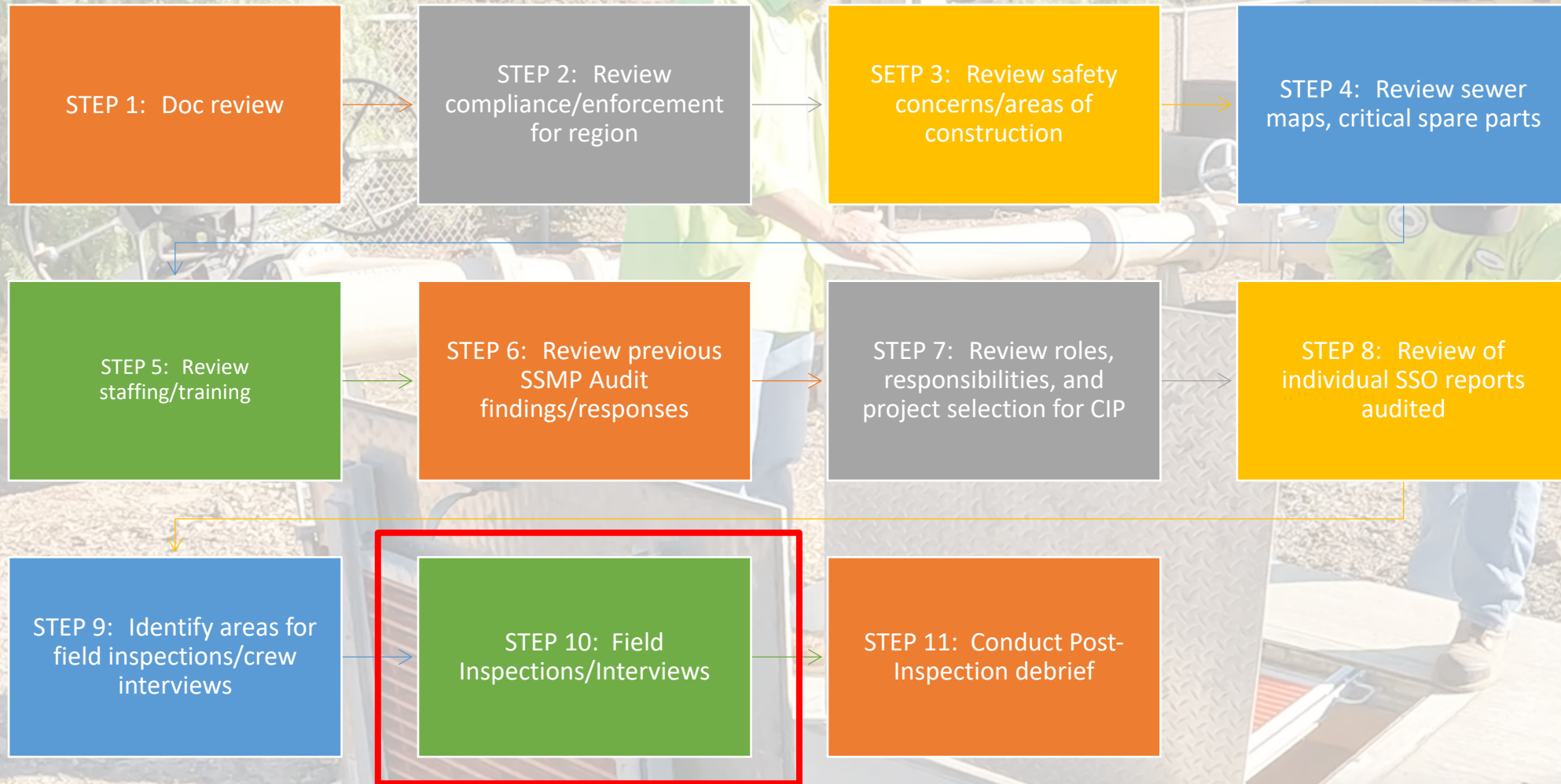
2. Auditing: Resilience





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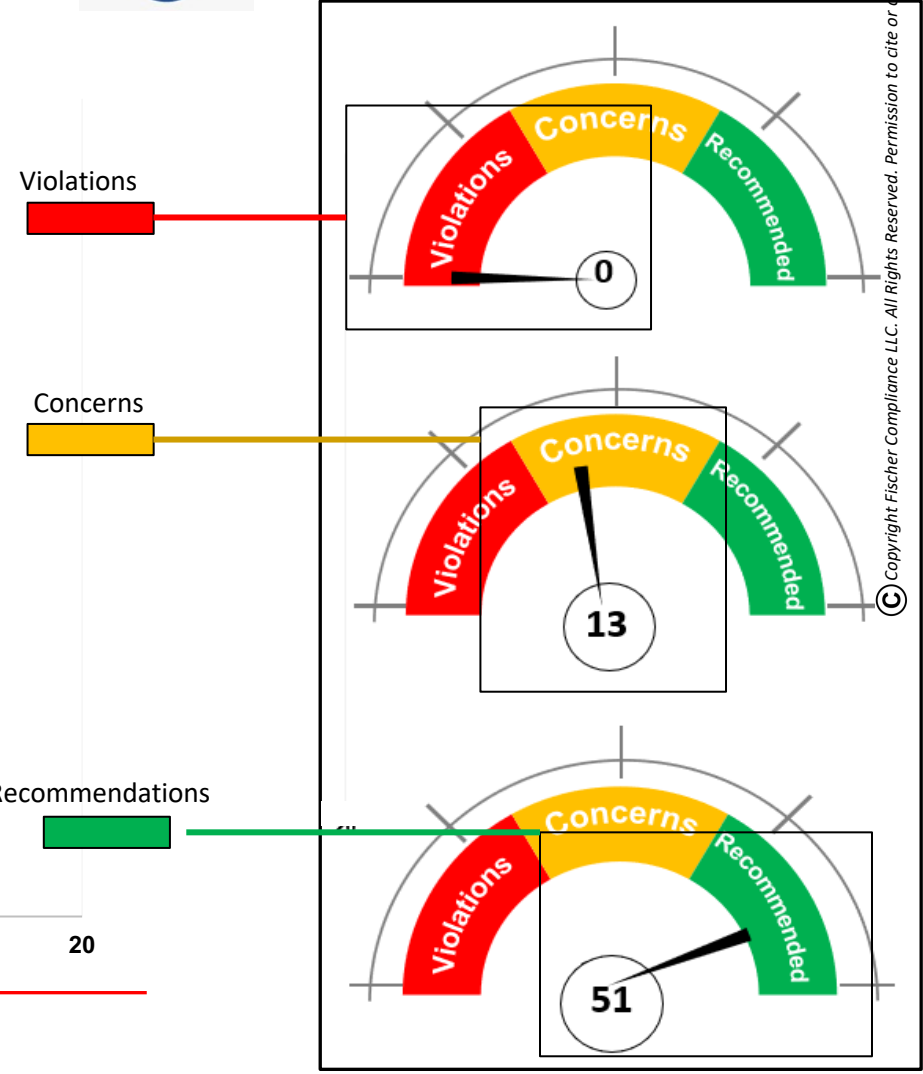
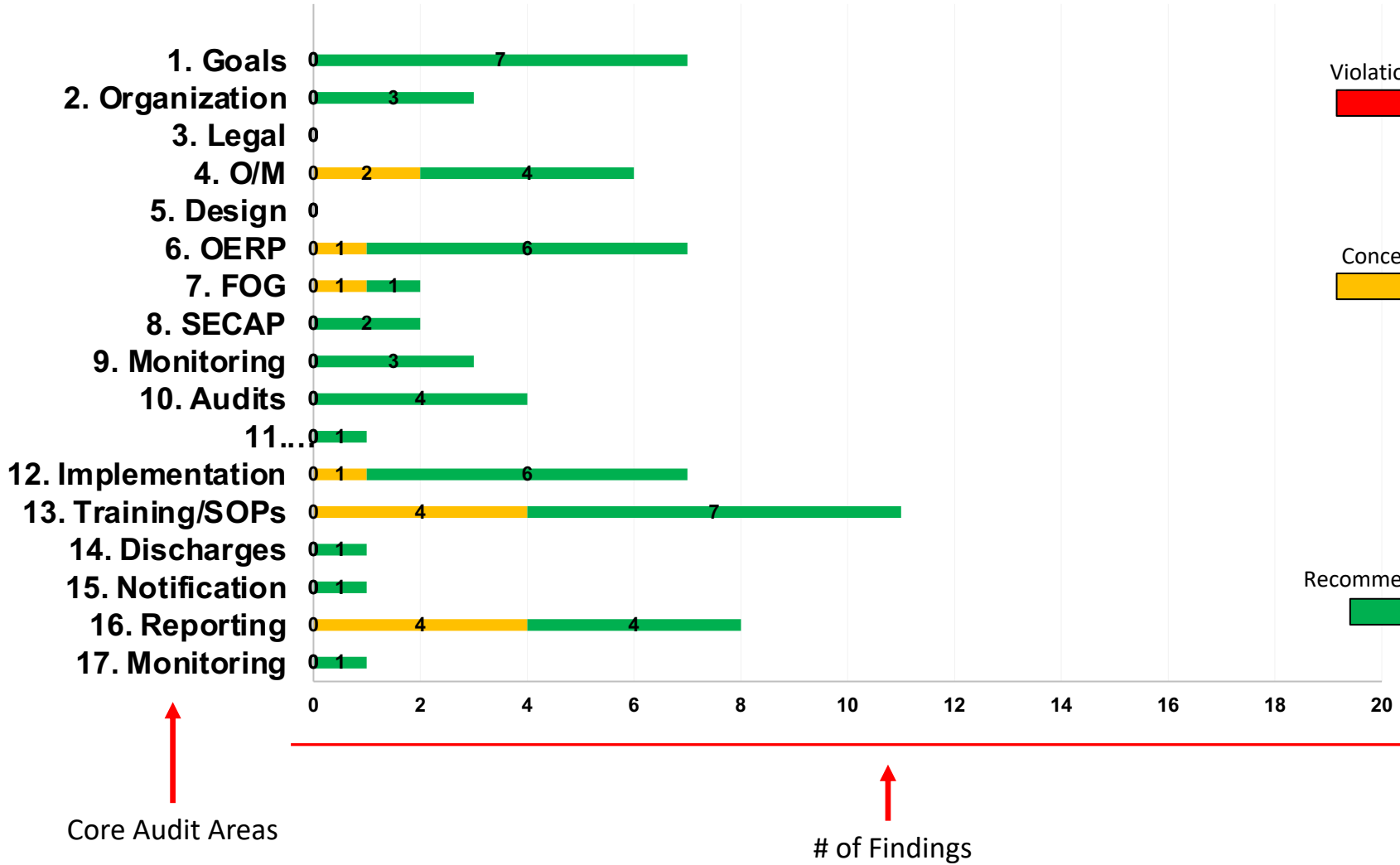
2. Auditing: Resilience



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2. Auditing: Resilience

Audit/Benchmarks (West Bay Sanitary District)



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SSMP Audit Presentation (2022)

Best Practices

Successful work programs in place.

Dedication to high spill reduction performance.

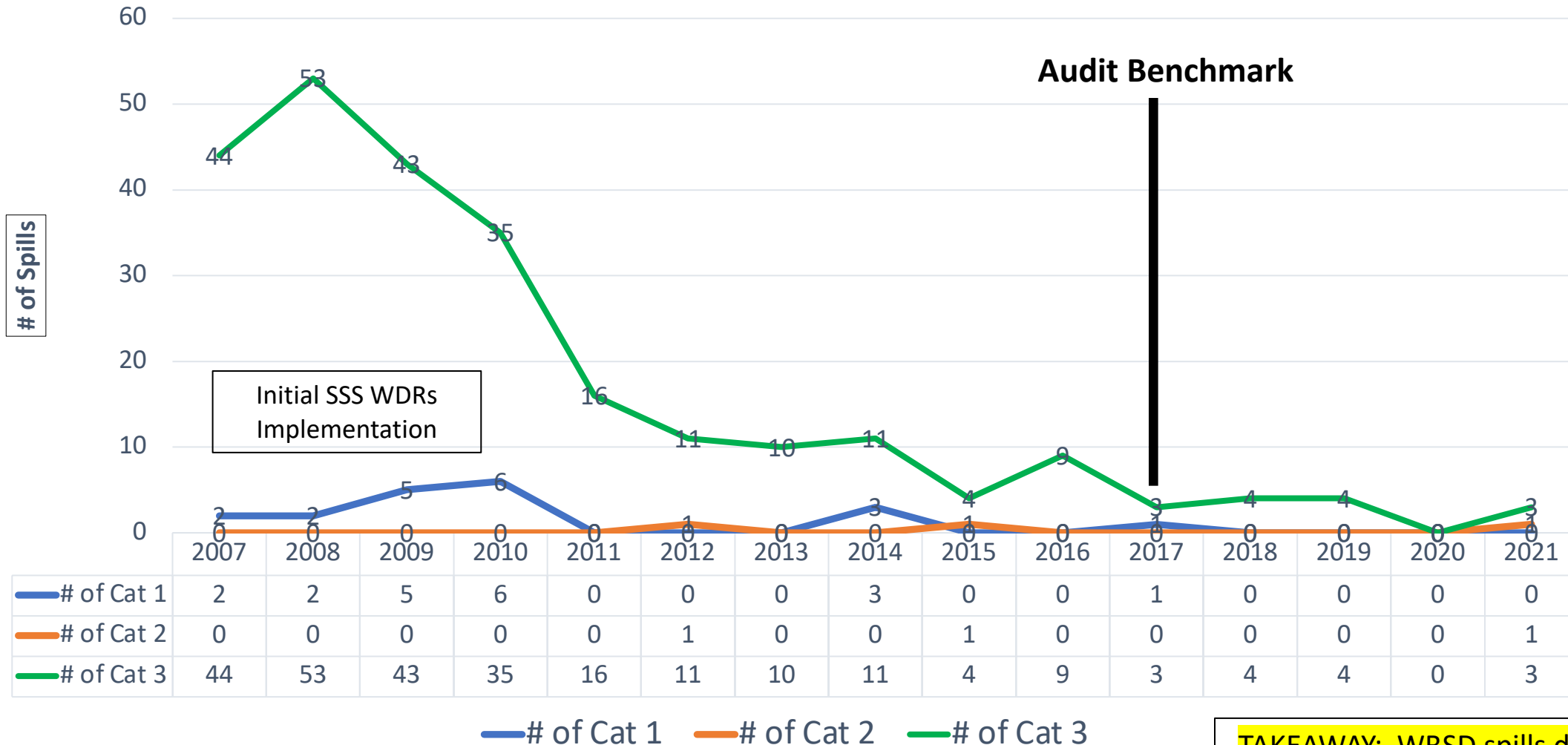
Dedication to continuous improvement.

Spill metrics and other benchmarks show District near top in region and state.



Spills (SSOs), 2007-2021

SSMP Audit Presentation (2022)

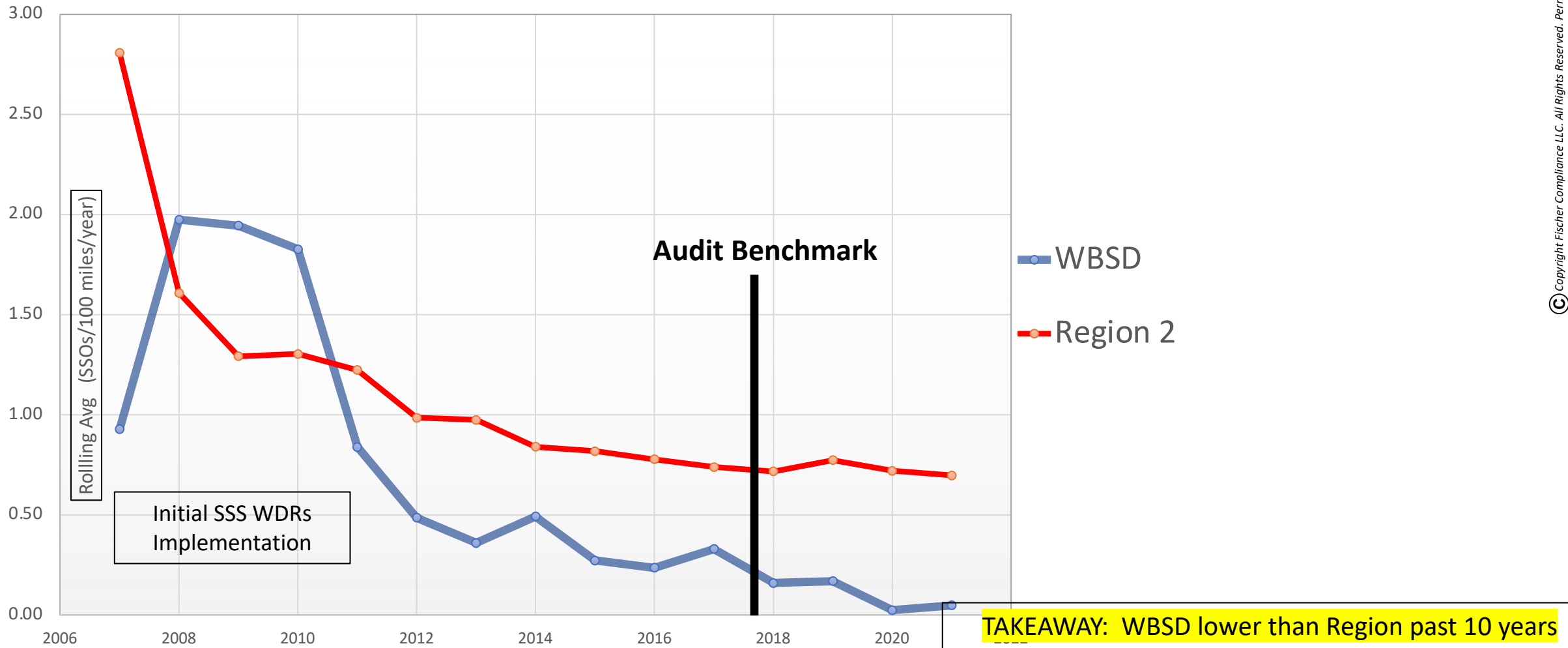


TAKEAWAY: WBSD spills dramatically reduced

Spill (SSO) Rates, 2007-2021



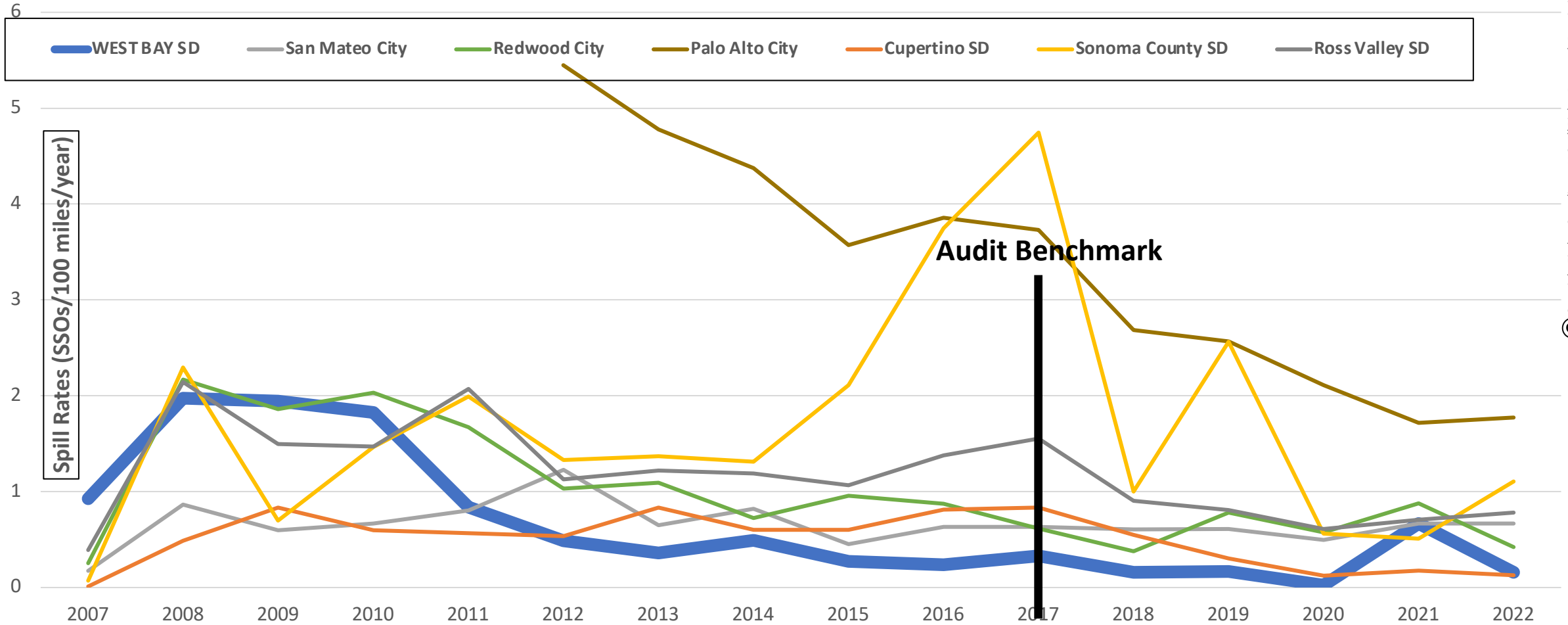
SSMP Audit Presentation (2022)



Spill (SSO) Rates, Region 2 Agencies



SSMP Audit Presentation (2022)

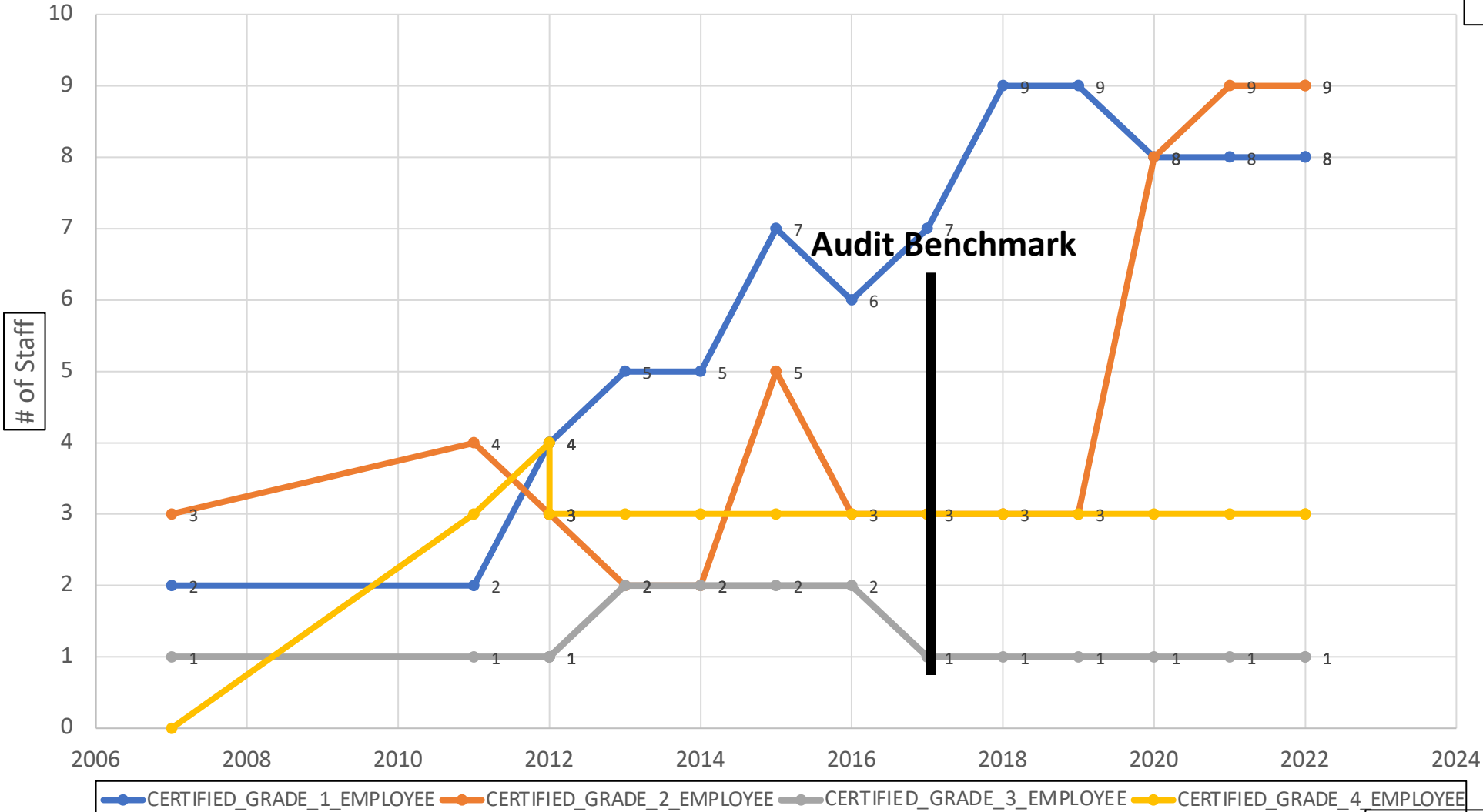


TAKEAWAY: WBSD lower than many others in Region

WBSD Certified Staffing, 2007-2022



SSMP Audit Presentation (2022)

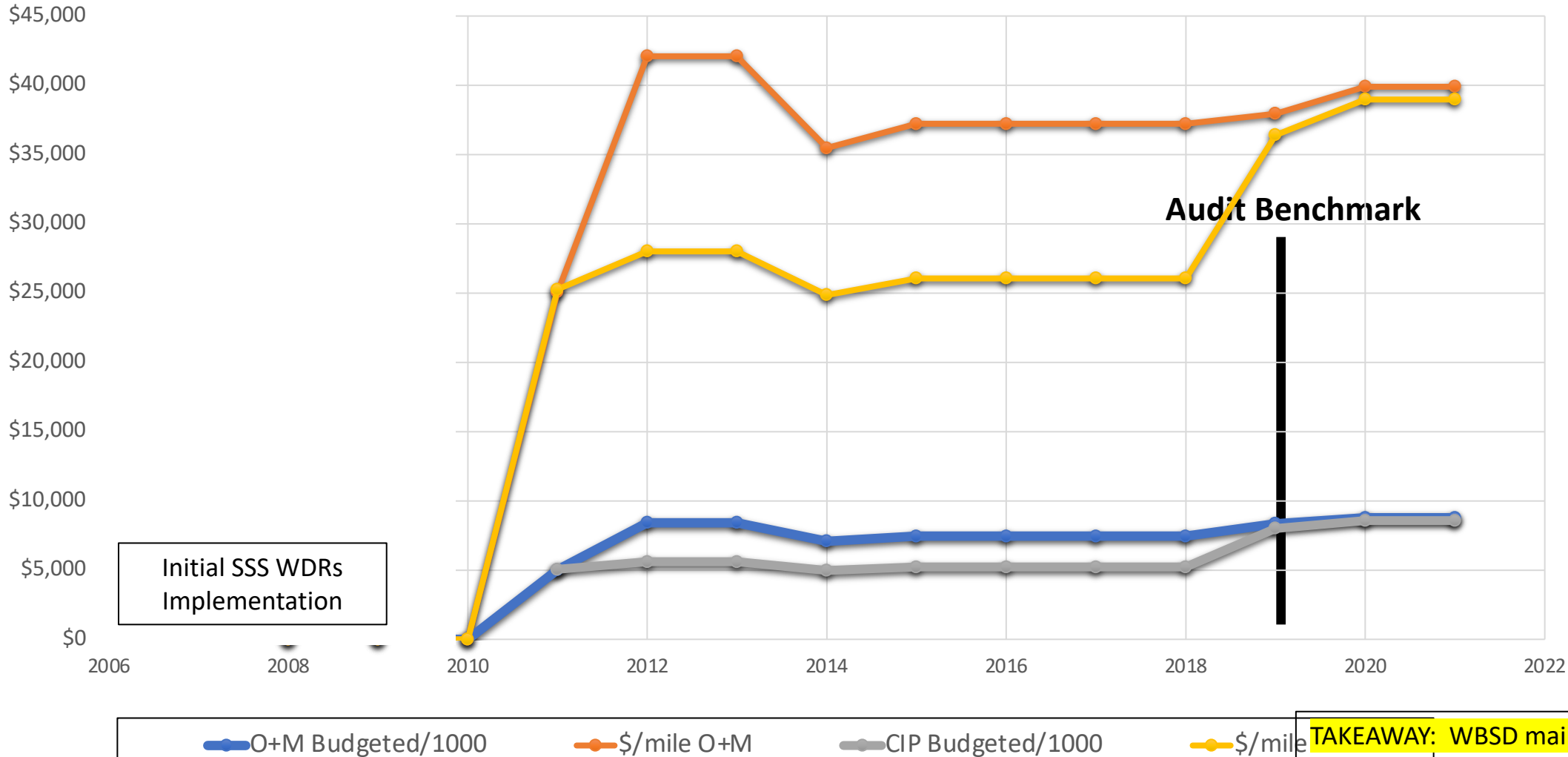


TAKEAWAY: WBSD increases cert. staffing

WBSD Funding, 2007-2022



SSMP Audit Presentation (2022)



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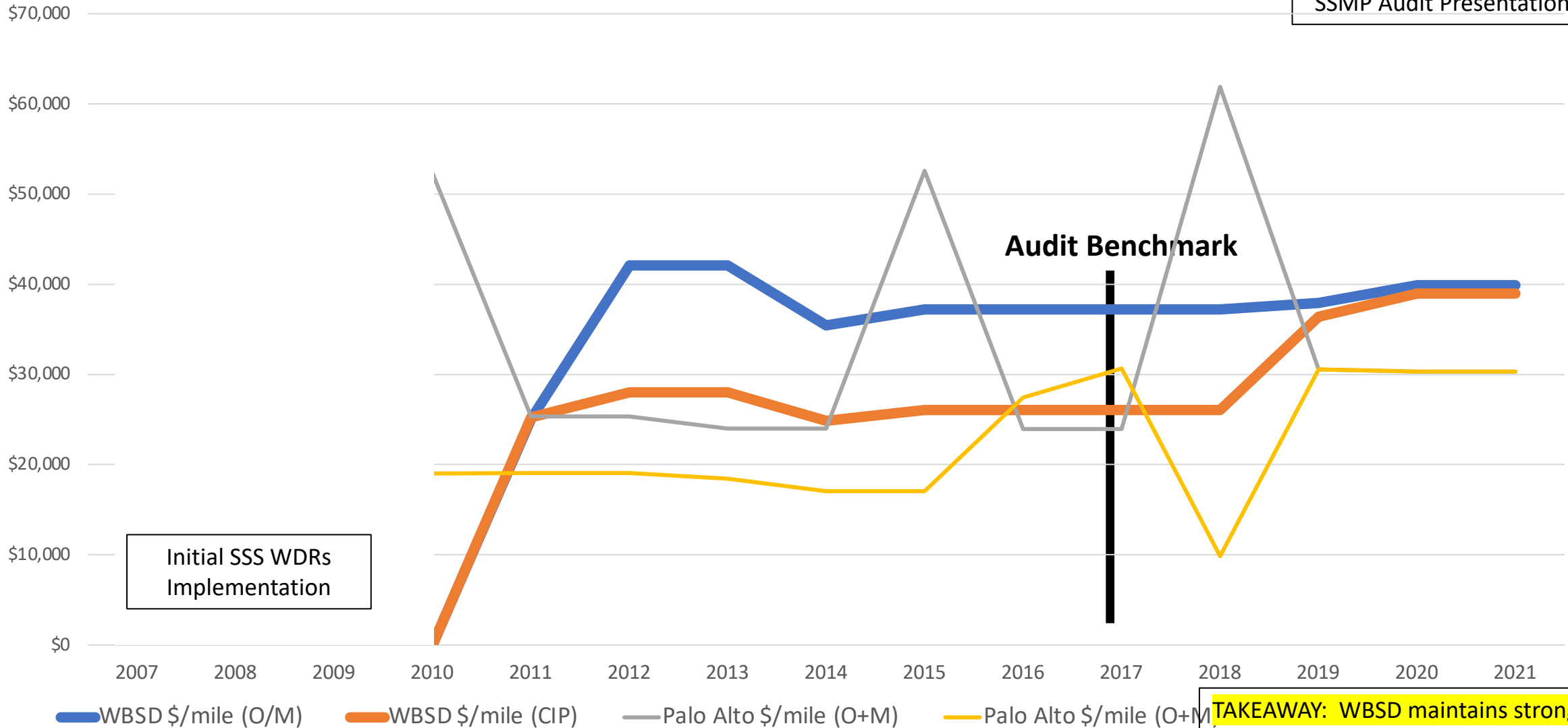
TAKEAWAY: WBSD maintains strong funding

2. Auditing: Resilience

WBSD vs. Palo Alto Funding, 2007-2022



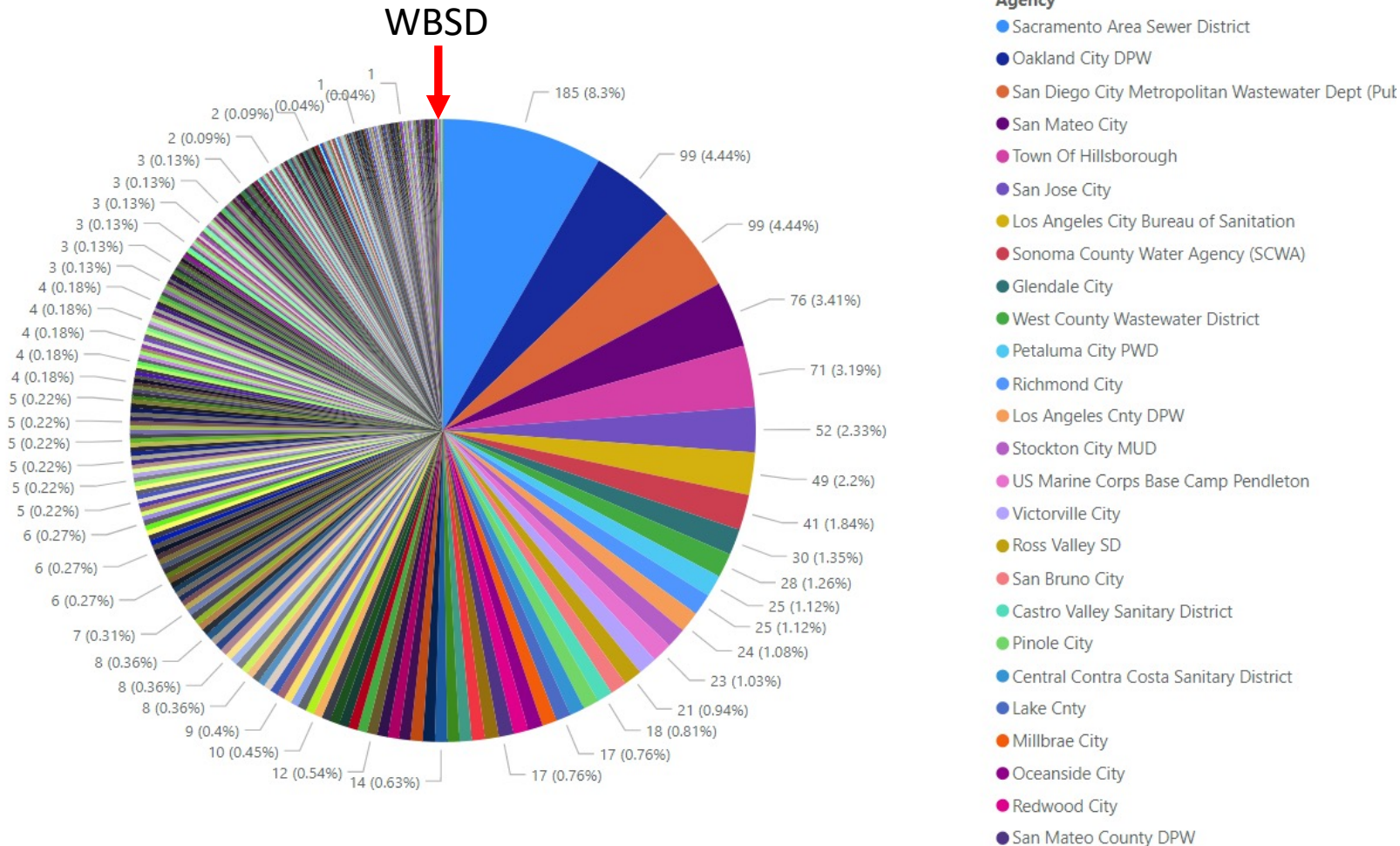
SSMP Audit Presentation (2022)



WBSD Category 1 SSO Notification Violations (1)



Count of CAT 1 Notification Requirement by Agency



TAKEAWAY: WBSD maintains strong Cat 1 SSO notification compliance compared with all other agencies in California

2. Auditing: Resilience



KEY TAKEAWAYS

1. Know how you compare.
2. Know your data.
3. Be ready for scrutiny.





3. Recommendations

Compliance and
Regulatory Expectations

PART 1: Compliance Resilience - Regulators

What You Will Learn

1. Understanding Enforcement
2. Auditing your SSMP
3. Avoiding Violations
4. Being Ready for Inspectors
5. Record Keeping and Training



Download video: fischercompliance.com



FISCHER LLC
COMPLIANCE

REGULATORY BEST PRACTICES



• **Sample Recommendations – Managers/Supervisors**

1. Where is your most likely location for you next SSO to occur from a gravity pipe? Have you conducted any basic evaluation(s) of risk and threats for SSOs? Are these locations mapped and documented? Are you adequately operating, maintaining and managing all parts of the collection system [SSS WDRs, Provision D.8]?
2. Are you collecting data on how your system is or may be impacted from changes in climate (heat, temps, fires, sea level)
3. Are you conducting any predictive monitoring in the collection system?

3. Recommendations



- **Sample Recommendations – Managers/Supervisors**

4. Are your ongoing sewer work programs adequately described and updated? Is your “equipment and replacement part inventories, including identification of critical parts” updated and adequate [SSS WDRs, Provision D.13(iv)(e)]?
5. Are your sewer capital budget/spending programs adequate for addressing your ongoing areas of concern?
6. Are you testing alarms and documented testing results?

3. Recommendations



• **Sample Recommendations – Managers/Supervisors**

- ✓ **BE A PROACTIVE MANAGER**
- ✓ **DO YOUR HOMEWORK**
- ✓ **PREPARE YOUR TEAM**
- ✓ **TAKE AVAILABLE TRAINING**

3. Recommendations



Sanitary Sewer Systems New Waste Discharge Requirements for LRO's, Supervisors, and Managers

About the Instructors:



James Fischer
Fischer Compliance LLC:
Retired State Water Board
NPDES Inspector



Sam Rose
Sam Rose Consulting:
Retired Superintendent



Rich Cunningham
Cunningham Consulting:
Retired Manager

- ✓ **Expedite** agency compliance to avoid violations.
- ✓ **Reduce** risks for enforcement and fines.
- ✓ **Learn** Regional Board insights to get your program ready before inspectors arrive.
- ✓ **Learn** SSMP Auditing Best Practices for resilience with Regulators/NGOs.

+Bring your Current SSMP/Audits for expert compliance feedback!

>100 years of combined experience

3. Recommendations

SSS WDRs In-Person Training for Sewer System Managers

Includes Complimentary SSMP Compliance Feedback

Fischer Compliance LLC is offering a full-day in-person workshop for helping Legally Responsible Officials (LROs), Data Submitters, Supervisors and Managers to expedite SSS WDRs compliance and avoid violations. The workshop is the first of its kind covering the existing and draft Orders for empowering managers with the latest information and best compliance practices for improving their jobs, meeting and exceeding compliance expectations, and reducing risks for enforcement.

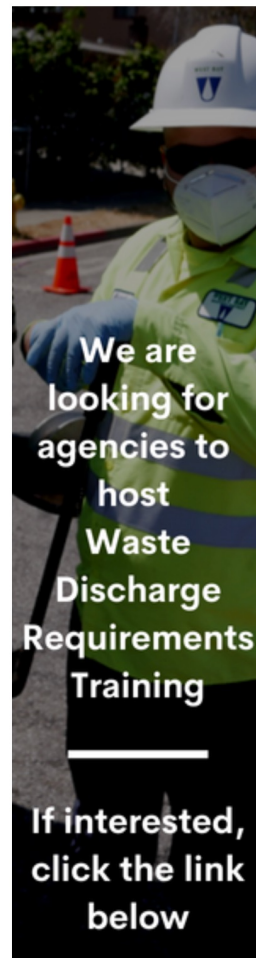
Our next workshop is being offered on **Tuesday, October 18, 2022 at 8:30 a.m. - 3:30 p.m. at Goleta Sanitary District in Goleta, CA** (Santa Barbara County).



GOLETA SANITARY
Water Resource Recovery District

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Q&As