

Collection System Update 2022



JAMES FISCHER, P.E.



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Collection System Update 2022



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About

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



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Updates/News

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A. Draft WDRs



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<https://www.fischercompliance.com/draft-wdr-2022/>



April 8, 2022

"Comment Letter – Draft Sanitary Sewer Systems General Order Reissuance."

Fischer Compliance LLC appreciates the opportunity to provide comments and suggestions on the Draft Sanitary Sewer Systems Waste Discharge Requirements (Draft SSS WDR) released on January 31, 2022. These comments and suggestions build on information previously presented to the State Water Board at its virtual Draft WDR workshop on March 15, 2022 available for download at: www.fischercompliance.com.

We first would like to thank Water Board staff for the extensive outreach and thoughtful approach taken soliciting input from stakeholders for this important regulatory program. We support many of the proposed requirements in the Draft Order including:

- Improved transparency and clarification of Water Board authority, regulatory priorities and policies established since adoption of the 2006 WDR to "encourage the regulated community to anticipate, identify and correct violations" as stated in Enforcement Policy.
- Optional regulatory oversight by regional boards for privately-owned sewer systems which often negatively impact professionally managed public systems.
- Reduced agency costs for compliance with extending timelines for SSMPs/Audits.

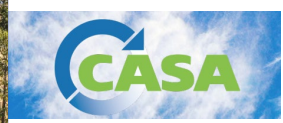
A. Draft WDRs

- ✓ Implementation Committee
- ✓ Bi-Annual review (regulation performance + NGO Lawsuits)
- ✓ More time to transition
- ✓ Reduce inspections via added transparency
- ✓ Flexibility for LROs
- ✓ Incentives for Certification
- ✓ “Fix-it-Ticket” (Close Small SSO Violations)
- ✓ Other fixes for improving current WDRs

B. Statewide Compliance/Enforcement



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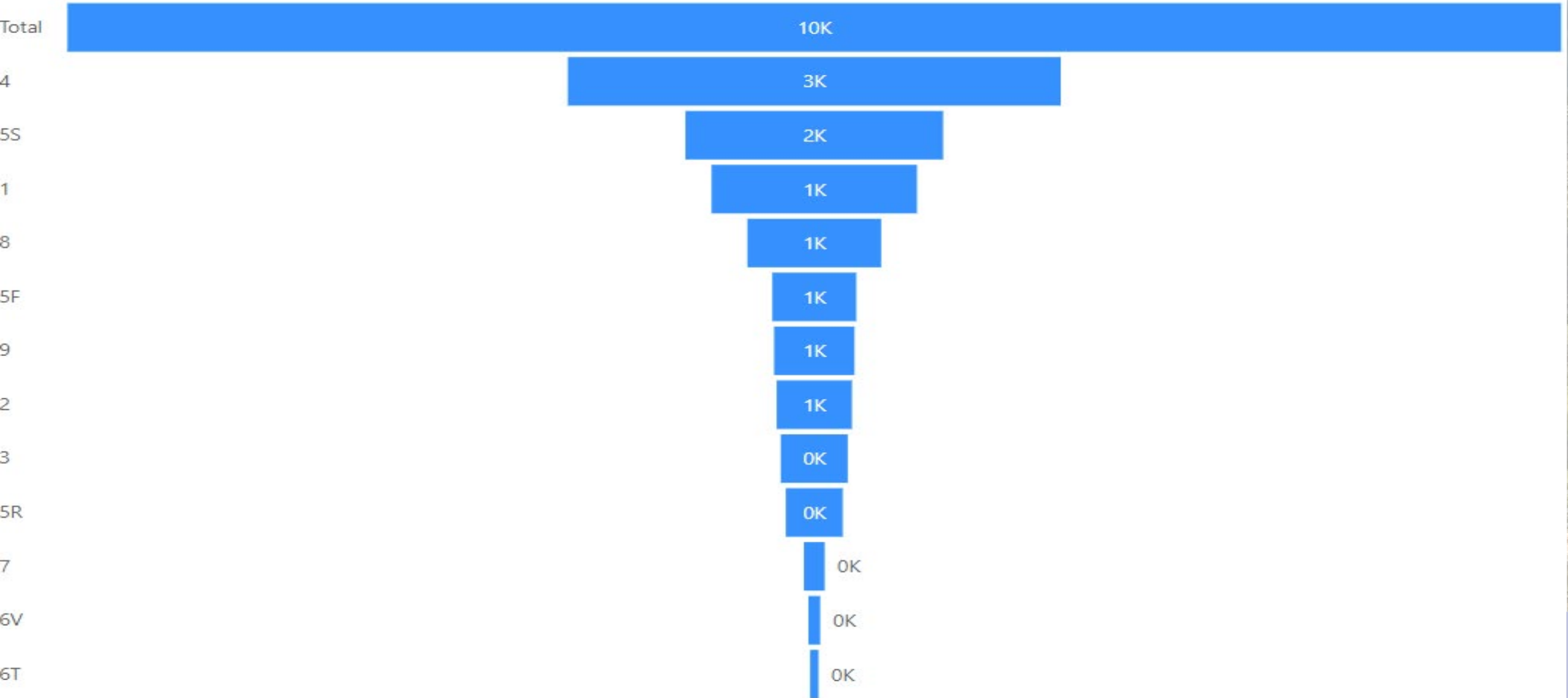


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B. Statewide Compliance/Enforcement

NOV by Region

Regional Board Enforcement (2017-2022)



| 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 |



Regional Board Enforcement (2022)

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

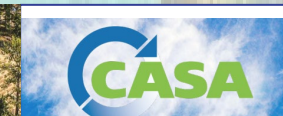
PALM DESERT – Desert Water Agency, a public utility that owns and operates a wastewater collection system serving Cathedral City, agreed to pay a \$181,947 penalty for discharging approximately 268,916 gallons of raw sewage into the Whitewater River Channel.

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.



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Recommendations

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A.

Know Responsibilities



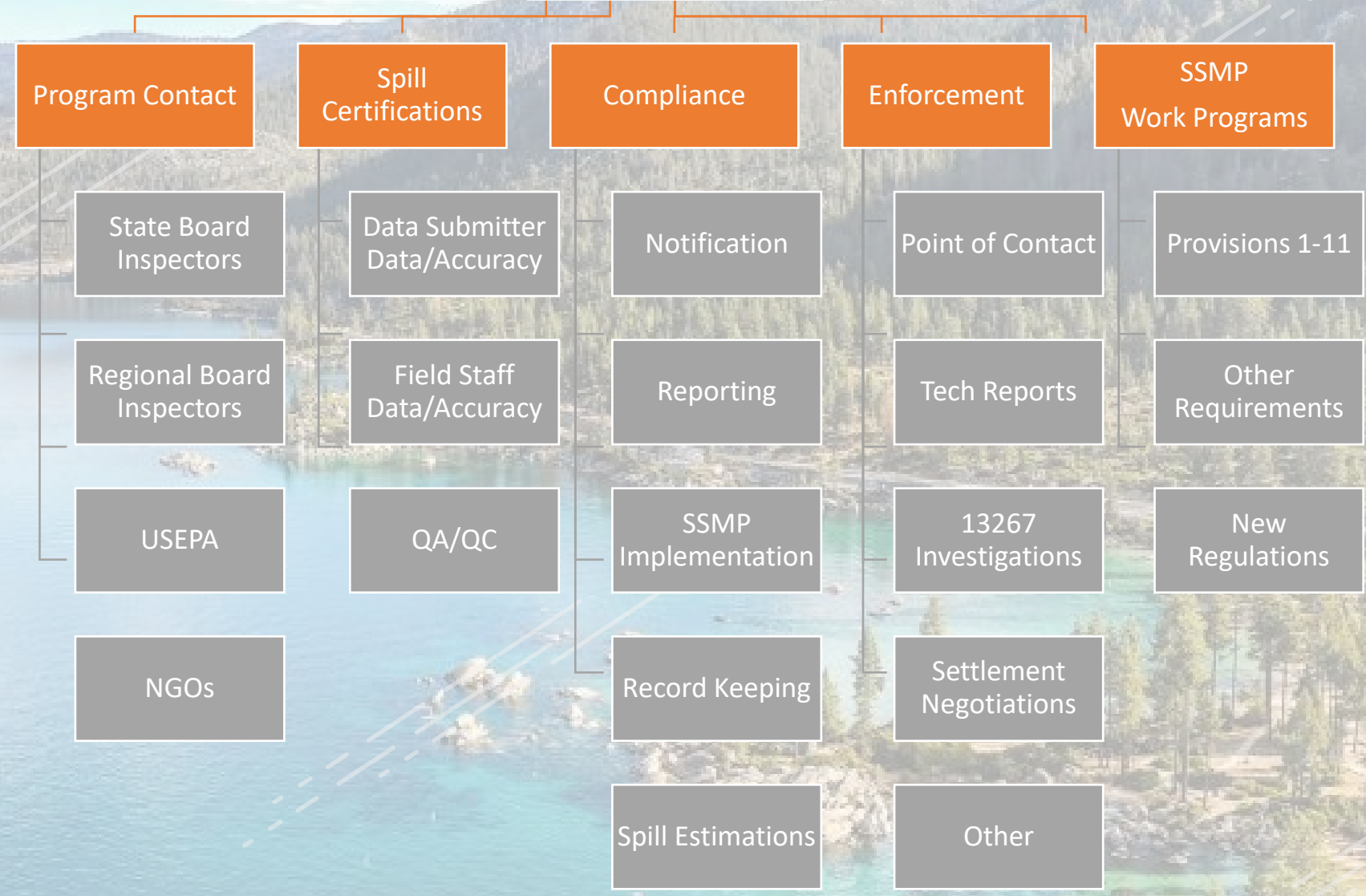
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A. Know Responsibilities

LRO Responsibilities



B. Get Resilient



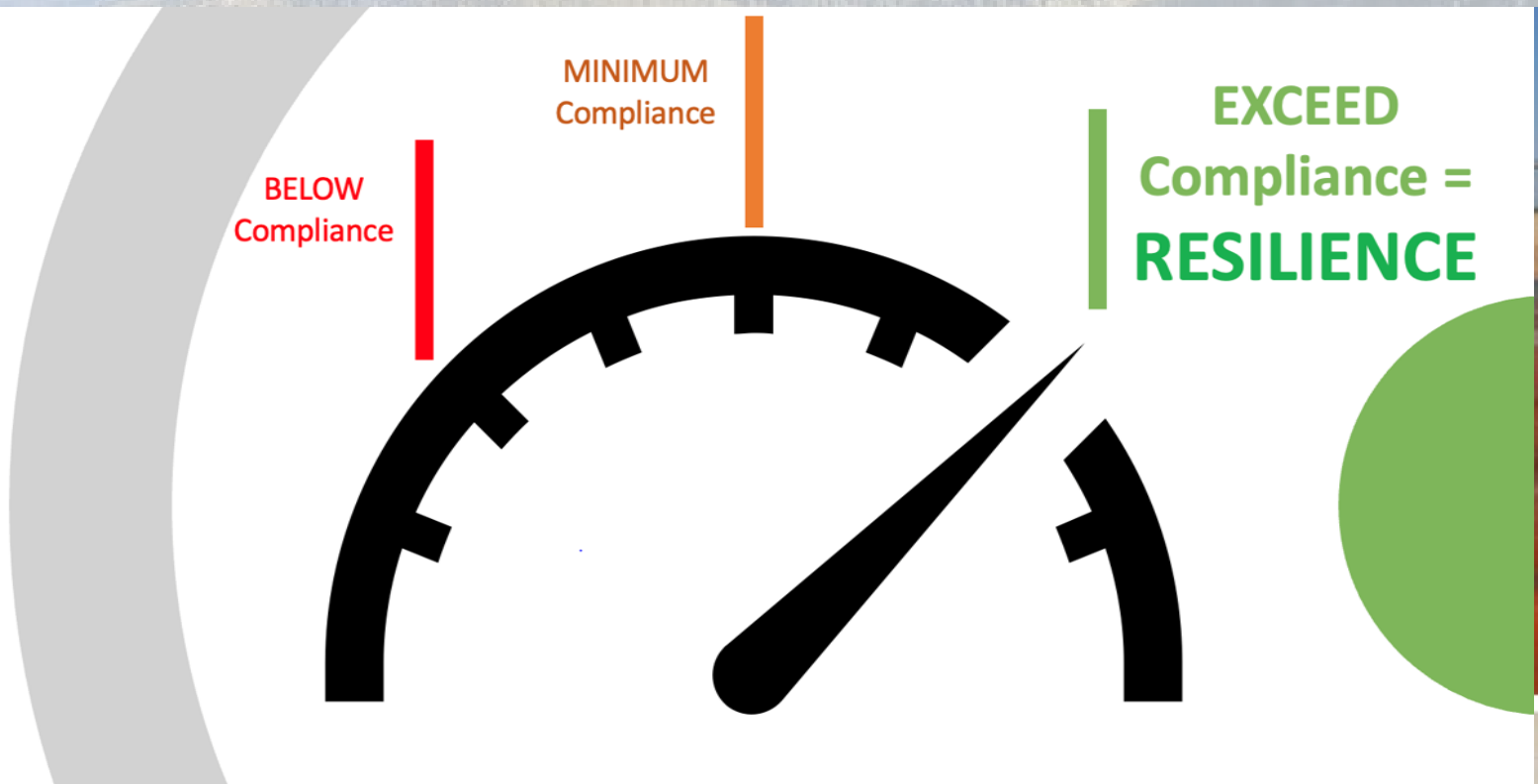
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B.

Get Resilient



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B. Get Resilient



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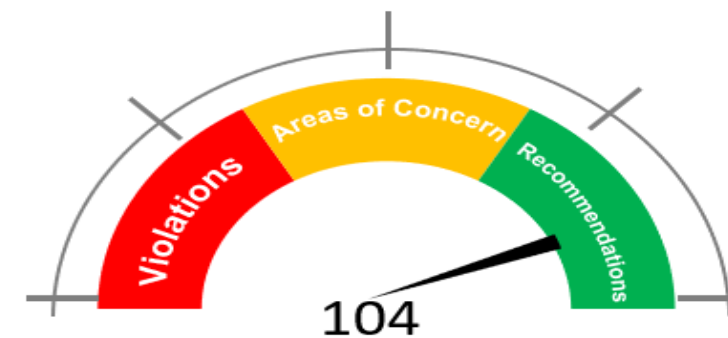
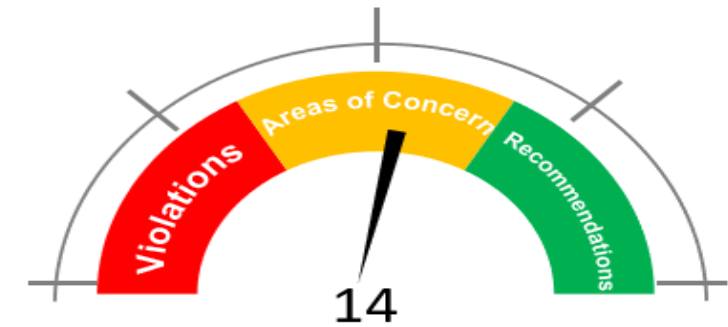
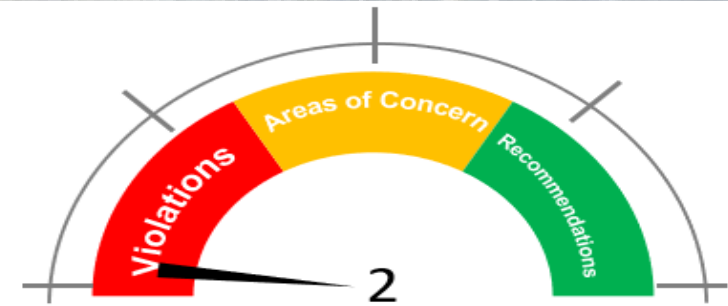
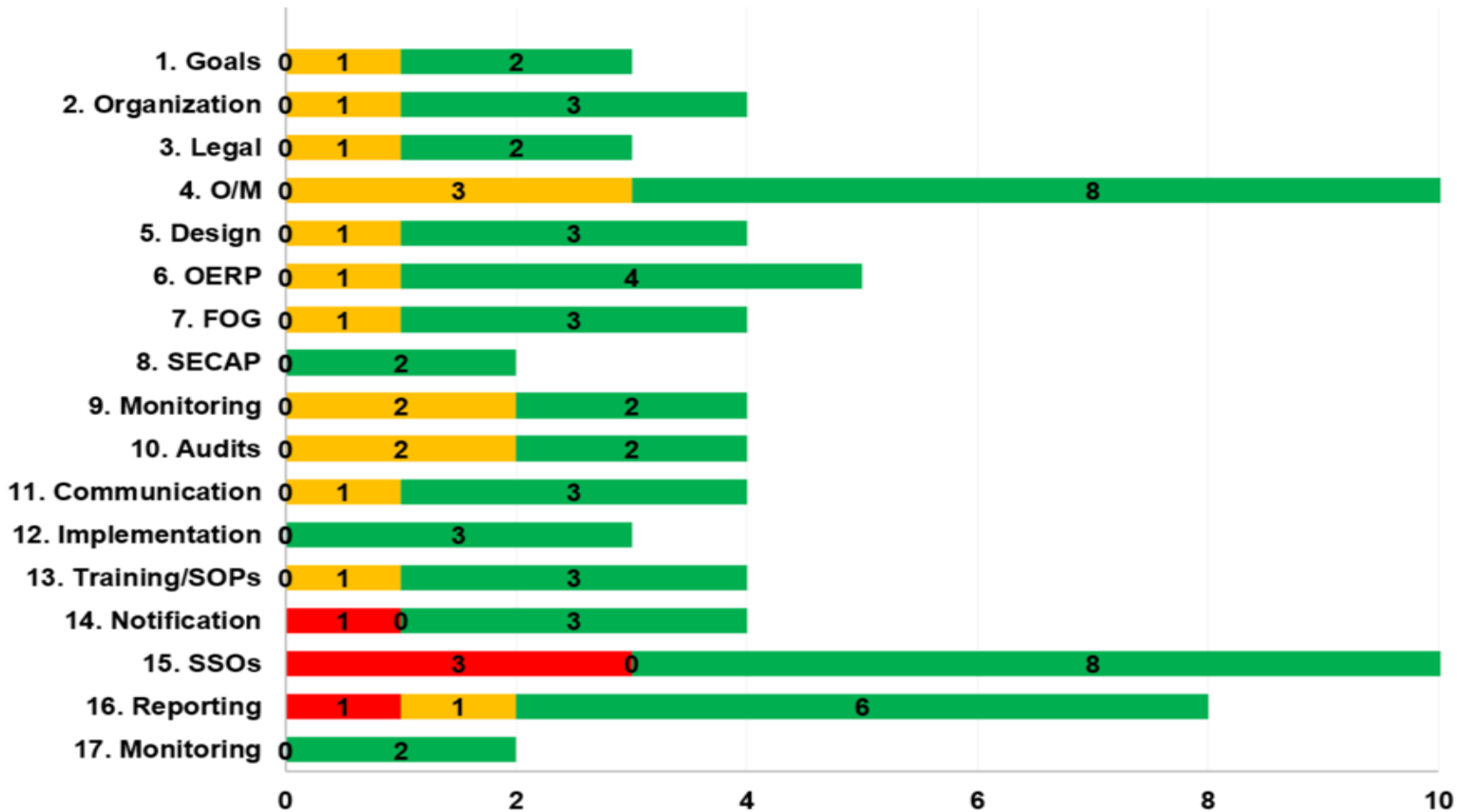
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| Major Compliance Points | 2006 WDRs (#) | 2022 Draft WDRs (#) |
|-------------------------|------------------|---------------------|
| • Definitions | 7 | 33 |
| • Findings | 11 | 19 |
| • Prohibitions | 2 | 3 |
| • Specifications | (see Provisions)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

Get Resilient

| 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 |

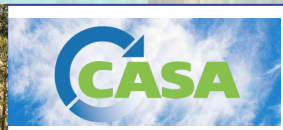
SSMP AUDIT DASHBOARD



 Get Training



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WDRs WORKSHOPS
(full-day in-person)
\$299



Elsinore Valley Municipal Water District

8/18/2022
(830-1530)



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

- ✓ **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!

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c. Get Training

1. Expedite SSMP/Audit compliance.

2. Avoid Common Violations

3. Reduce Enforcement/Fines

4. Gear-up for Anticipated New WDRs.

5. Resilience/hold-up to scrutiny.



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



Rich Cunningham
Cunningham Consulting:
Retired Manager



Sam Rose
Sam Rose Consulting:
Retired Superintendent

EXAMPLE CONTENT
(SSMP AUDITS)



APPENDIX 1
COMPLIANCE EVALUATION INSPECTION (CEI) REPORT

| | |
|---|--|
| FACILITY INSPECTED: | INSPECTED BY: |
| West Bay Sanitary District 500 Laurel Street Menlo Park, CA 94025 | James Fischer, P.E. NPDES Compliance Inspector ¹ Principal, FISCHER COMPLIANCE, LLC <i>James Fischer</i> Date: 5/17/2022 |
| | REVIEWED BY: |
| | Sam Rose Principal, SAM ROSE CONSULTING |
| SANITARY SEWER COLLECTION SYSTEM (WASTEWATER) | Waste Discharge ID (WDID) #XSSOXXXX |
| Water Quality Order(s) | 2006-003-DWQ/2013-0058-EXEC |
| CIWQS Place ID | 631678 |
| Regional Water Quality Control Board | 2 |
| County | San Mateo |
| Population/Area | 55,000 |
| Miles of Sewers (gravity) | 200.23 |
| Miles of Sewers (force mains) | 10.6 |
| Sewer Connections (#) | 19,141 |
| Lift Stations (#) | 12 |
| Final wastewater disposal | Silicon Valley Clean Water (WDID 2SSO10190) |

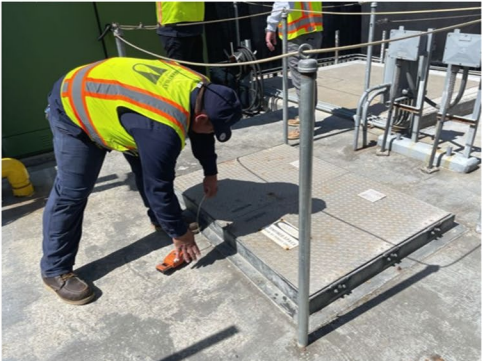


Photo 9: Safety gas monitoring checked by operations staff prior to opening wet well hatches; no hazardous gas levels were observed by meter prior to inspection.



Photo 10: District staff inspecting wet well at station.



Photo 11: View inside wet well at station; no significant buildup of grease, grit, or major corrosion observed.



Photo 12: Inspection with operations staff on station operations, maintenance, bypassing, wet well holding time, and other details.

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EXAMPLE CONTENT
(Reporting)

- Measured Volume Method
- Duration and Flow Rate Method (Account for diurnal flow pattern for long duration)
- SSO Flow Rate Estimating Tool
- Other (explain) i.e.; estimated daily use per capita upstream or meter @ Pump Station.

USED 5.6 GPM OR LESS BASED ON FLOW RATE

FROM SURCHARGED MANHOLE FLOW RATE PHOTOS

Agency was not able to produce photo of spilling manhole

Was this spill under reported?

$135 \text{ minutes} \times 2.5 \text{ GPM} = 338 \text{ Gallons}$

$135 \text{ minutes} \times 5.0 \text{ GPM} = 675 \text{ Gallons}$

Duration and Flow Rate Method worksheet:

| | |
|---|------------------|
| Start Date and Time | 1. 8:30 AM |
| End Date and time | 2. 10:45 AM |
| Total time elapsed of SSO event (subtract line 1 from line 2. Show time in minutes) | 3. 2 HR, 15 MIN. |
| Average flow rate GPM (account for diurnal pattern) | 4. 1.6 GPM. ← |
| Total volume estimate using duration and flow rate method (Line 3 x Line 4) | 5. 135 GAL. |

Spill Volume Under Reported?

03

Benchmarking

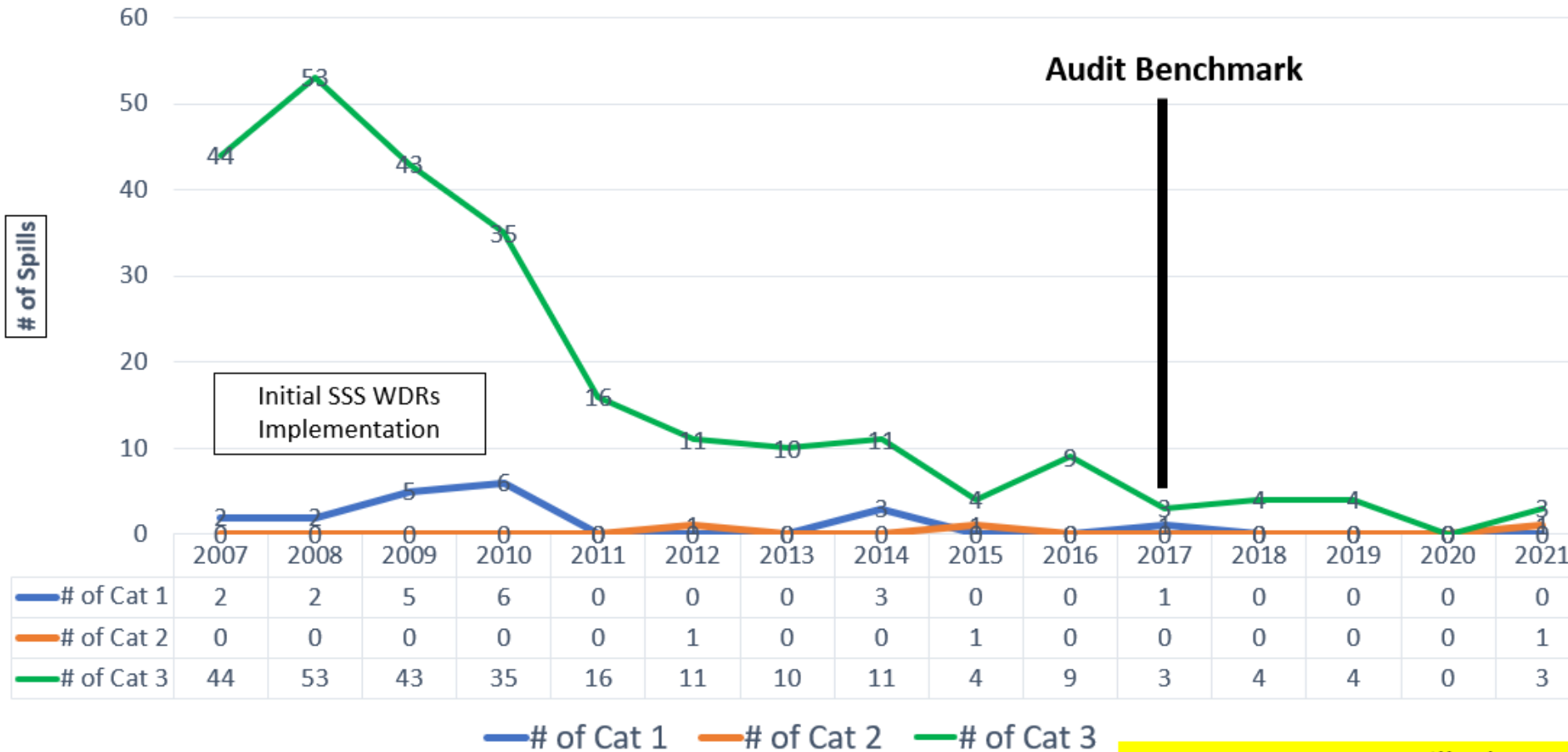
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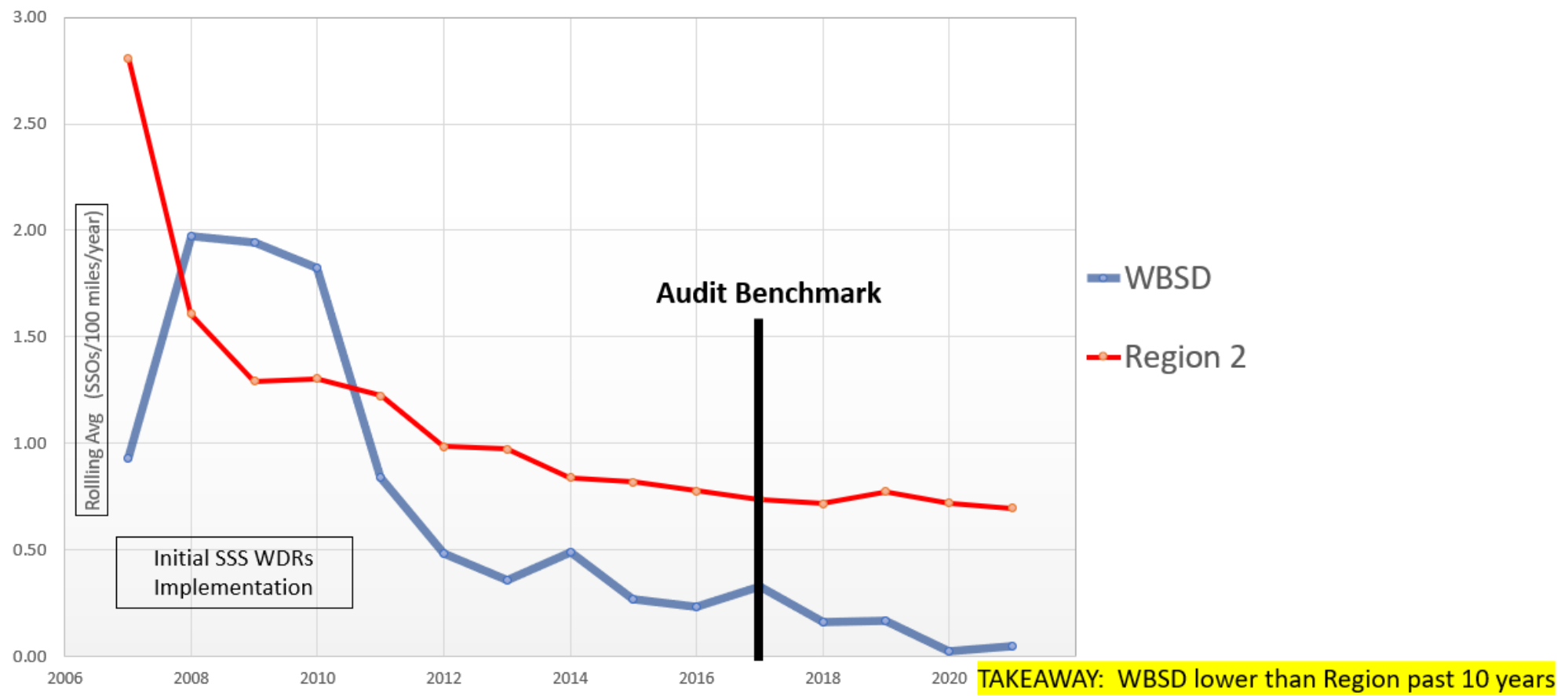
WBSD Spills (SSOs), 2007-2021

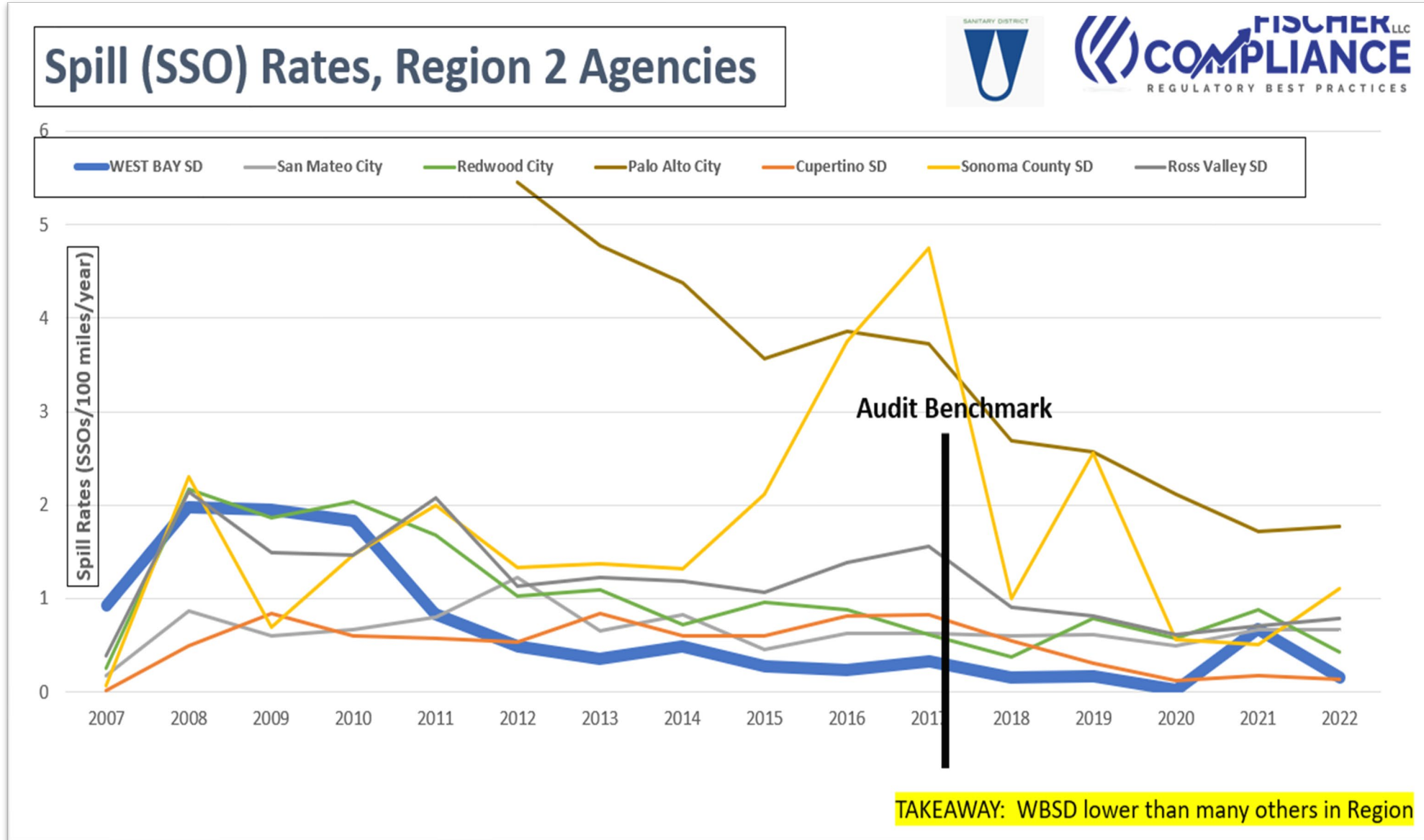


TAKEAWAY: WBSD spills dramatically reduced



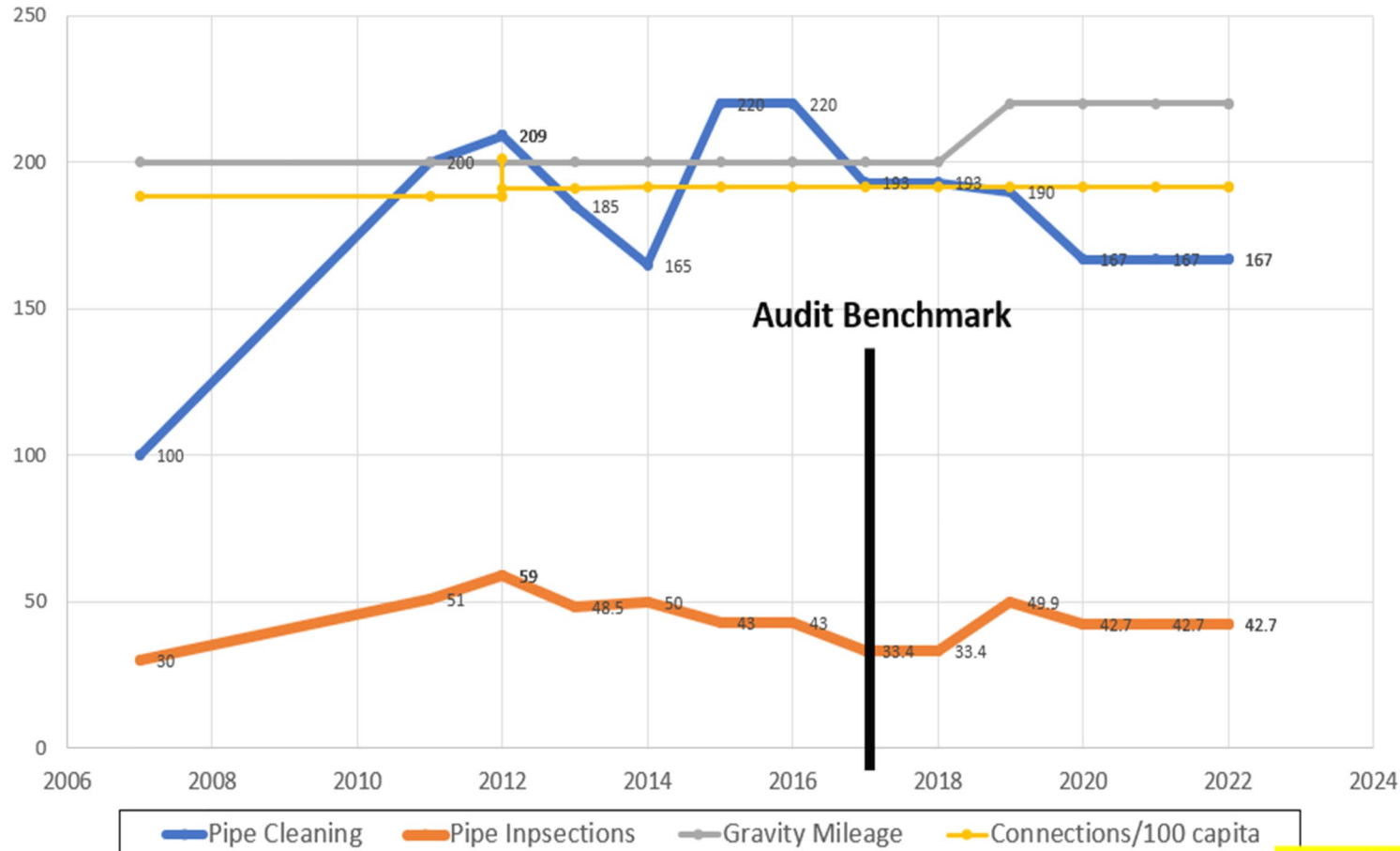
Spill (SSO) Rates, 2007-2021





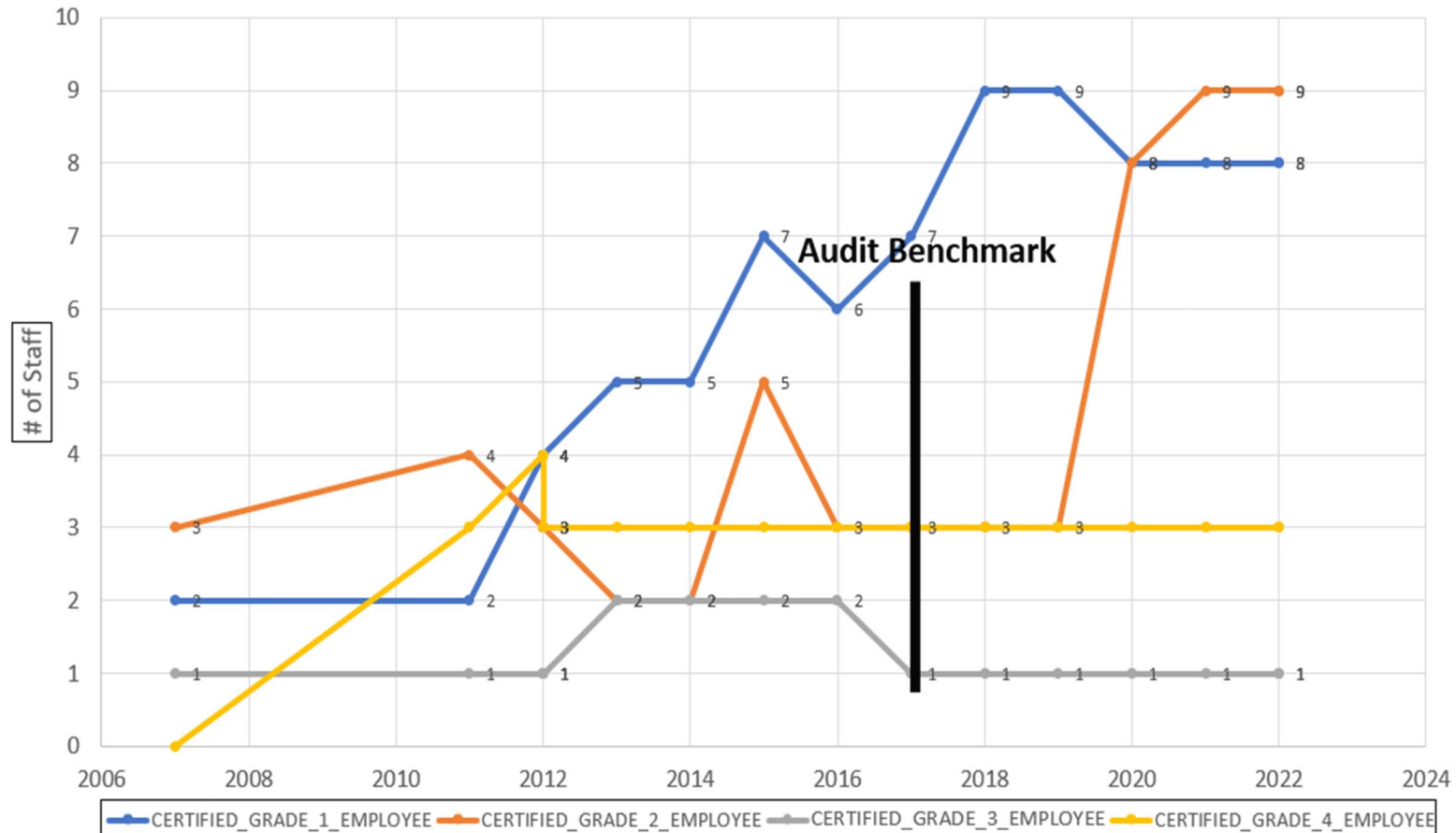
BENCHMARKING (West Bay SD)

WBSD Cleanings/Inspections, 2007-2022



TAKEAWAY: WBSD maintains strong benchmarks

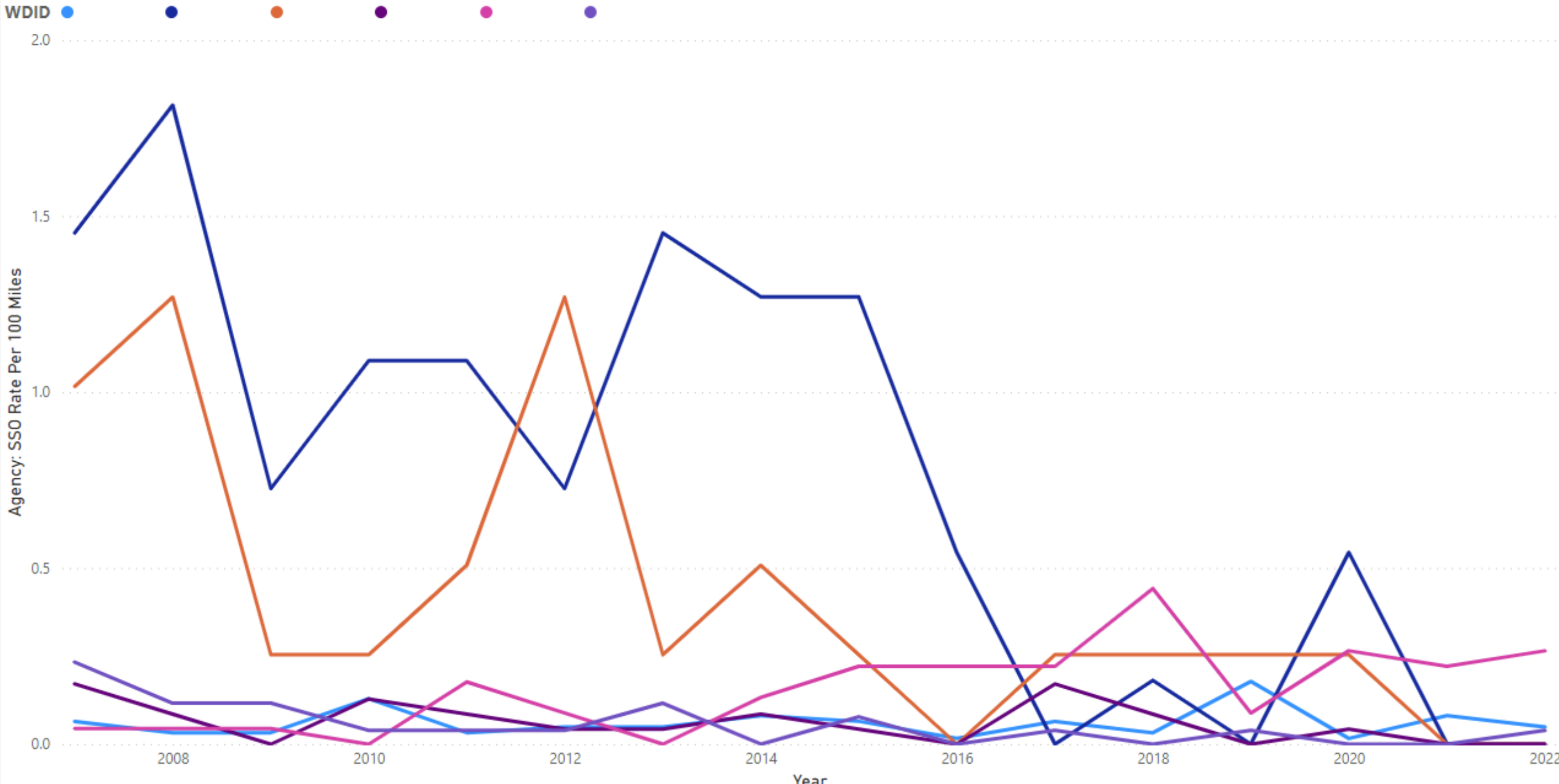
WBSD Certified Staffing, 2007-2022



TAKEAWAY: WBSD increases cert. staffing

Back to report

AGENCY: SSO RATE PER 100 MILES BY YEAR AND WDID





Conclusions

1. Comply with Current Order
2. Prepare for Changes
3. Know LRO Responsibilities
4. Get Resilient
5. Get Trained

What's Next

1. More Benchmarking
2. Comparisons with CIWQS
3. More Audit Results
4. More WDRs Statewide Trainings





Conclusions

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