

WDR Compliance:

Best Practices and Tips for Capitalizing on Requirements



for Legally Responsible Officials (LROs), Supervisors, and Managers



California Water Environment Association
Southern Section Collection Systems Committee
invite you to their Spring 2024

COLLECTIONS WORKSHOP

CWEA

SAN DIEGO • LABS • GOLDEN EMPIRE
SOUTHERN SECTIONS COLLECTION SYSTEMS COMMITTEE
DAMS • TRI-COUNTIES • SARBS • CORPS



James Fischer, P.E.



MISSION:POSSIBLE

A SUSTAINABLE WATER FUTURE AGAINST ALL ODDS

Thursday, April 11, 2024

9:10 AM – 10:00 AM



Best Practices for Expediting Compliance with the Reissued Collection System WDR



Location: A7-A8

Lead Presenter: [James E. Fischer, Jr.](#) – Fischer Compliance LLC

Presenter: [Richard Cunningham](#) – Fischer Compliance LLC

Presenter: [Sam Rose](#) – Sam Rose Consulting

Track Lead: [Chris Ewers](#) – Ewers Engineering, Inc.

Collection Systems Leadership

10:15 AM – 11:05 AM



Updating your Sewer System Management Plan



Location: A7-A8

Lead Presenter: [Mary A. Cousins \(she/her/hers\)](#) – Bay Area Clean Water Agencies (BACWA)

Presenter: [Richard Cunningham](#) – Fischer Compliance LLC

Presenter: [James E. Fischer, Jr.](#) – Fischer Compliance LLC

Presenter: [Sam Rose](#) – Sam Rose Consulting

Track Lead: [Chris Ewers](#) – Ewers Engineering, Inc.

Collection System Leadership

1:55 PM – 2:45 PM



Preparing your SSMP and Workforce for Audits by Regulators



Location: A3-A4

Lead Presenter: [James E. Fischer, Jr.](#) – Fischer Compliance LLC

Presenter: [Richard Cunningham](#) – Fischer Compliance LLC

Track Lead: [Tara Randall \(she/her/hers\)](#) – HDR





Collection System Front Line

MISSION:POSSIBLE

A SUSTAINABLE WATER FUTURE AGAINST ALL ODDS

★ Favorite  Facebook  Tweet  Print ✕

Updating your Sewer System Management Plan

 Thursday, April 11, 2024  10:15 AM – 11:05 AM  Location: A7-A8 

Lead Presenter(s)

MC

Mary A. Cousins (she/her/hers)

Regulatory Program Manager
Bay Area Clean Water Agencies (BACWA)
Oakland, CA

Presenter(s)



Richard Cunningham

Collection System Subject Matter Expert
Fischer Compliance LLC
Sacramento, California



James E. Fischer, Jr.

Principal
Fischer Compliance LLC
Sacramento, California



Sam Rose

Collection System Subject Matter Expert
Sam Rose Consulting
Sacramento, California

151 Views

WDR Compliance:

Best Practices and Tips for Capitalizing on Requirements



1. Management Survey ←
2. What Has Changed ←
3. Best Practices/Tips ←

WDR Compliance:

Best Practices and Tips for Capitalizing on Requirements



Team (>150 years experience)



Richard Cunningham



James Fischer



Sam Rose

Guide for Developing and Updating of Sewer System Management Plans (SSMPs)



WDR Compliance:

Best Practices and Tips for Capitalizing on Requirements

Guide for Developing and Updating of Sewer System Management Plans (SSMPs)



2024

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Current

WDR Compliance:

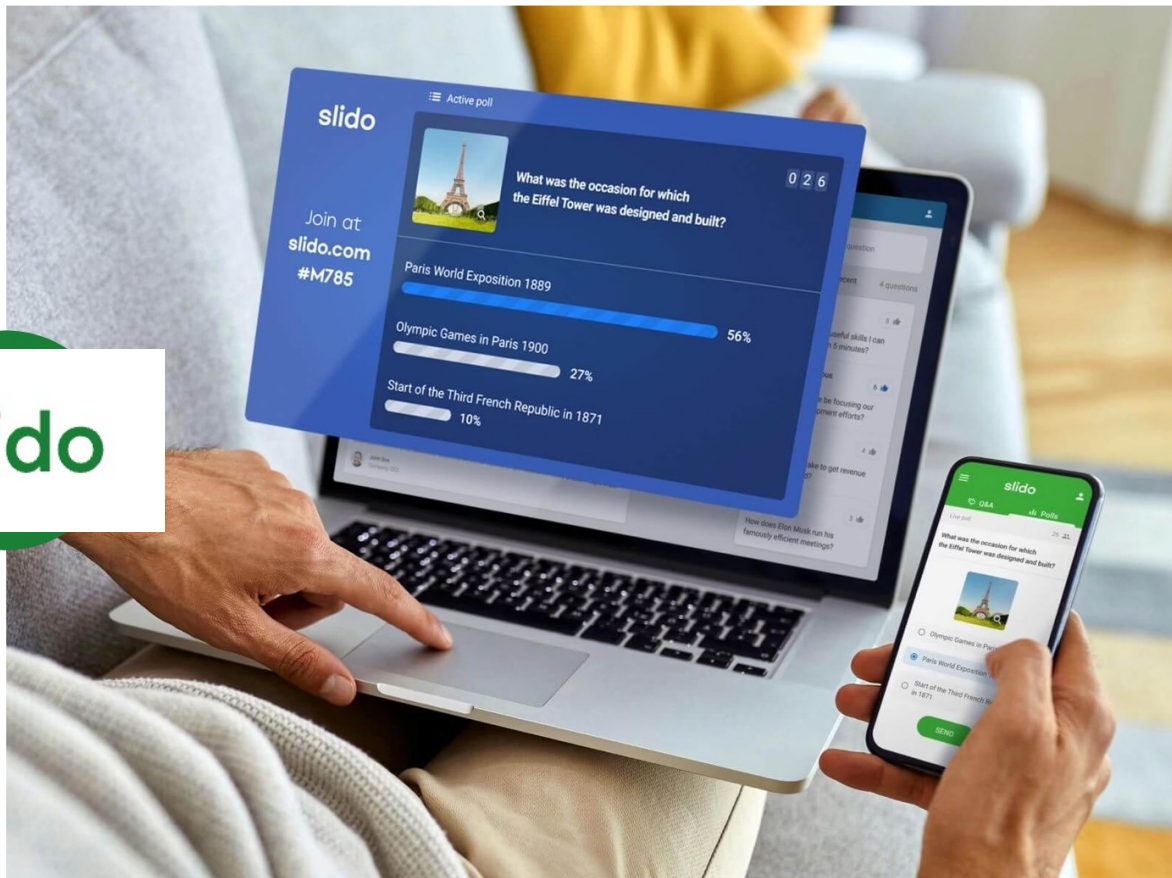
Best Practices and Tips for Capitalizing on Requirements

Guide for Developing and Updating of Sewer System Management Plans (SSMPs)



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1. Management Survey



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2. What Has Changed?

STATE WATER RESOURCES CONTROL BOARD
1001 I Street, Sacramento, California 95814
ORDER WQ 2022-0103-DWQ
STATEWIDE WASTE DISCHARGE REQUIREMENTS
GENERAL ORDER FOR SANITARY SEWER SYSTEMS

This Order was adopted by the State Water Resources Control Board on December 6, 2022.
This Order shall become effective **180 days after the Adoption Date of this General Order**, on June 5, 2023.
The Enrollee shall comply with the requirements of this Order upon the Effective Date of this General Order.

This General Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, protect the Enrollee from liability under federal, state, or local laws, nor create a vested right for the Enrollee to continue the discharge of waste.

CERTIFICATION

I, Jeanine Townsend, Clerk to the Board, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the State Water Board on December 6, 2022.

AYE: Chair E. Joaquin Esquivel
Vice Chair Dorene D'Adamo
Board Member Sean Maguire
Board Member Laurel Firestone
Board Member Nichole Morgan


NAY: None

ABSENT: None

ABSTAIN: None

Courtney Tyler for
Jeanine Townsend
Clerk to the Board

Appendix 1 (Key Regulatory Changes for Sewer System Management Plan Development/Updates)



2006 WDR (rescinded)	2022 WDR (current)	2022 Changes	Key 2022 Changes for SSMP Development/Updates
1. Goal Provision D.13(i)	1. Goal and Introduction Att. D-6, Spec. 5.2	Many	<ul style="list-style-type: none">• Implementation of SSMP as “living document”• Enforcement of development, update, and implementation• Narratives for regulatory context, assets, updated sewer map(s)

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11. Communication Program Provision D.13 (xi)	11. Communication Program Attachment D-6	Few	<ul style="list-style-type: none"> Enhanced communications procedures (public/owners/operators connected to sewers)



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Legally Responsible Official	Designation of LRO Spec. 5.1 (pg. 18)	Major	<ul style="list-style-type: none">• Legally Responsible Official must have authority to ensure compliance, authority over management of the entire sewer system, and authorized to make managerial decisions governing operations, capital improvements, and ensuring long-term environmental compliance.• Legally Responsible Official must possess recognized degree/certificate for O/O of sewer systems and/or professional training and experience demonstrated through extensive knowledge, training, and experience



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SSMP Development and Implementation Provision D.11 (pg. 9)	SSMP Development and Implementation Spec. 5.2 (pgs. 18-19)	Major	<ul style="list-style-type: none"> Agencies must develop and implement an SSMP (ensuring adequate funding/management, matching size, scale and complexity, procedures for management, operation, maintenance, prioritization of system repairs and maintenance, implementation of current standard industry practices through available equipment, technologies, and strategies)."



Appendix 1 (Key Regulatory Changes for Sewer System Management Plan Development/Updates)



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Legally Responsible Official	Designation of LRO Spec. 5.1 (pg. 18)	Major	<ul style="list-style-type: none"> Legally Responsible Official must have authority to ensure compliance, authority over management of the entire sewer system, and authorized to make managerial decisions governing operations, capital improvements, and ensuring long-term environmental compliance. Legally Responsible Official must possess recognized degree/certificate for O/O of sewer systems and/or professional training and experience demonstrated through extensive knowledge, training, and experience
SSMP Development and Implementation Provision D.11 (pg. 9)	SSMP Development and Implementation Spec. 5.2 (pgs. 18-19)	Major	<ul style="list-style-type: none"> Agencies must develop and implement an SSMP (ensuring adequate funding/management, matching size, scale and complexity, procedures for management, operation, maintenance, prioritization of system repairs and maintenance, implementation of current standard industry practices through available equipment, technologies, and strategies)."
Certification of System Management Plan + Updates Provision D.14 (pg. 15)	Certification of SSMP and Updates Spec. 5.3 (pg. 19)	Major	<ul style="list-style-type: none"> Legally Responsible Official must certify/upload SSMPs to CIWQS.



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1. What Has Changed?



Appendix 1 (Key Regulatory Changes for Sewer System Management Plan Development/Updates)



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SSMP Updates Provision D.14 (pg. 15)	Six-Year SSMP Update Spec. 5.5 (pgs. 21)	Minor	<ul style="list-style-type: none"> Agencies must update their SSMPs and include a summary of revisions based on Audit findings <u>every 6 years</u> (vs. every 5 years under 2006 WDR).
N/A	System Resilience Spec 5.6 (pg. 22)	N/A	<ul style="list-style-type: none"> Agencies must include and implement system-specific procedures to proactively prioritize O/M, condition assessments, and repair/rehabilitation.

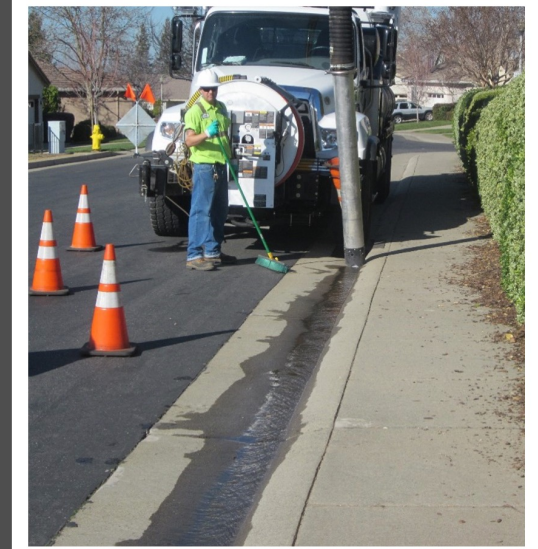


WDR Compliance:

Best Practices and Tips for Capitalizing on Requirements



1. What Has Changed?
2. **Best Practice Tips**



2. Best Practice Tips

Regulatory Requirements

An SSMP is developed specifically for an agency and the size and complexity of the sewer system.

The **SSMP** is, in essence, a **declaration** of how the **agency** will **operate** their collection **system**.

- The Water Board requires that the SSMP be evaluated for **compliance**, **implementation** and **effectiveness** while addressing **system resilience**.
- These concepts must be considered when developing each element.

Set Yourself Up for Success

2. Best Practice Tips

Compliance

- **Compliance** is the act of meeting regulations.
- This is the starting point for SSMP development, as all required items and elements must be incorporated and addressed.
- The description should include how this will be accomplished.
 - As agencies begin to develop their new SSMP, there will be cases where new procedures, work plans, and ordinances will need to be developed or updated to meet the requirements.
 - Compliance is the most fundamental aspect in the development of the SSMP.

2. Best Practice Tips

Compliance Example

3. LEGAL AUTHORITY

The Plan must include **copies or an electronic link** to the Enrollee's current **sewer system use ordinances, service agreements** and/or **other legally binding procedures** to demonstrate the Enrollee possesses the necessary legal authority to:

- The Legal Authority to prevent illicit discharges is addressed in Ordinance 2024-02, Section 3.1
- The Legal Authority to enforce Sewer ordinances is addresses in City Code 4.3.1 – Enforcement
- The City's Standard Specifications and Improvement Standards provide design, construction and inspection standards for all newly installed and repaired system components

2. Best Practice Tips

Implementation

- **Implementation** is actions or steps taken to accomplish tasks, goals and objectives.
- There needs to be a plan and schedule to carry actions out these actions.
- To implement a plan, a goal, the level of effort, resources, and timeline need to be determined.

Are We Doing What We Say We Are Doing?

2. Best Practice Tips

Implementation Example

Gravity Main Cleaning Program - The City takes a systematic, top-down approach to cleaning its gravity main system, which includes 60 miles of pipe.

- Program Goal:
 - Complete the gravity main cleaning cycle in four years
- Resources:
 - The District programs 3 month/year towards this task.
 - Two Staff
 - 1 Hydro-Vac
- Level of Effort:
 - $60 \text{ miles} / 4 \text{ Years} = 15 \text{ miles/year}$ or 79,200 feet/year
 - $15 \text{ miles} / 3 \text{ months} = 5 \text{ miles/month}$ or 26,400 feet/month

Program is reviewed annually to ensure staff if performing as described.

2. Best Practice Tips

Effectiveness

Effectiveness is the degree to which something is successful in producing a desired result.

- There must be a procedure or method to measure effectiveness so the degree to which something is effective can be determined.
 - A requirement of the internal audit is to measure the effectiveness of each element.
- A Key Performance Indicator (KPI) is a **measurable target** that indicates how plans and processes are working in terms of obtaining desired results.
 - KPIs provide focus for strategic and operational improvements,
 - Create an analytical basis for decision making and
 - Helps place focus on what matters most.

Did We Achieve the Desired Outcome?

2. Best Practice Tips

Effectiveness Example

Goal: Use hydraulic model to properly size system components to ensure sufficient capacity for the system today and into the future (50 year outlook)

- Effectiveness measured by:
- KPIs:
 - Number of capacity-related spills or surcharge condition during the audit period?
 - Has the system responded to rain events as indicated by the hydraulic model?
 - Has there been any zoning designation changes (residential, commercial, industrial)?
 - Rain event trends: Has there been changes in rain event occurrences, intensity and duration?

KPIs will help to determine the extent to which the hydraulic model is effective

2. Best Practice Tips

Resilience

Resilience is the ability to recover from or adjust to adversity or change and grow from disruptions.

- It is also quickly recovering from system failures.
- Resilience can be built through planning, preparing for, mitigating, and adapting to changing conditions.

Can We take a Punch and Get Back Up?

2. Best Practice Tips

Resilience Example

- Bypass ports on force mains.
- Emergency generators for pump stations.
- Training
 - A competent workforce will get the job done better, reducing the chance for failures.
 - Training helps to ensure staff is competent and more are available for emergencies.
- Public Outreach.
- Performing a vulnerability assessment helps to identify and prioritize work and put the proper resources where they are needed and when they are needed.

2. Best Practice Tips

Resilience Example

Examples of **Resilience Indicators**:

- The number of occasions an eminent spill was discovered through routine maintenance activities.
- The number of occasions containment was implemented prior to a sewage discharge to surface water.
- The number of occasions overflow storage capacity was utilized that prevented a spill.
- The number of occasions when an alarm was received and staff were able to act and prevent a spill.
- The number of occasions staff found a better way of doing and made improvements to procedures.

**This is How We Demonstrate System
Resilience!**

2. Best Practice Tips

Summary

- When developing the SSMP, an agency must describe their plan to address each element. This is the agency's statement of what they will do to **comply** with each element.
- When this plan is carried out as described, it is **implemented**.
- If the desired results are realized, then the plan is **effective**.
- If safeguards are put in place to prevent or mitigate failures, omissions, oversights, then there is some level of **resilience** built in.

2. Best Practice Tips

No.	Action Items (CY2024-2025)	Target Date	Completed/Date
2024-1	Cat 4 / Non-Cat 1 Laterals Spills (<50 gallons) Due FEB 1	Jan 2024	
2024-2	SERP (review/update prior to completing Annual Report)	March 2024	
2024-3	Annual Report (draft/final/ upload by LRO) Due APRIL 1	March 2024	
2024-4	SERP (annual review/assess effectiveness/update) Due JUNE 5	May 2024	
2024-5	SSMP 3-Year Audit (initiate audit/draft report) 2024 (<u>check SWRCB Website with WDID</u>)	2024	
2024-6	SSMP 3-Year Audit (final report/certify/upload by LRO) Late 2024 or Early 2025 (<u>check SWRCB Website with WDID</u>)	2024/2025	
2025-1	2025 SSMP Update (initiate review/draft new SSMP) 2025/2026 (<u>check SWRCB Website with WDID</u>)	2025/2026	
2025-2	2025 SSMP Update (final report/certify/upload by LRO) 2025/2026 (<u>check SWRCB Website with WDID</u>)	2025/2026	
2025-3	Cat 4 / non-Cat 1 Laterals Spills (<50 gallons) – Due FEB 1	Jan 2025	
2025-4	SERP (review/update prior to completing Annual Report)	March 2025	
2025-5	Annual Report (draft/final/ upload by LRO) - Due APRIL 1	March 2025	
2025-6	SERP Annual Review/assess effectiveness/update Due JUNE 5	May 2025	

Annual Checklist

2. Best Practice Tips

Sanitary Sewer Systems General Order

Sewage is untreated or partially treated domestic, municipal, commercial and/or industrial waste (including sewage sludge), and any mixture of these wastes with inflow or infiltration of stormwater or groundwater, conveyed in a sanitary sewer system. A spill is a discharge of sewage from any portion of a sanitary sewer system due to a sanitary sewer system spill, operational failure, and/or infrastructure failure. Sewage and its associated wastewater spilled from a sanitary sewer system may threaten public health, beneficial uses of waters of the State, and the environment.

General Order Information

To provide a consistent, statewide regulatory approach to address sanitary sewer spills, the State Water Board adopted Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2022-0103-DWQ (Sanitary Sewer Systems General Order) on December 6, 2022. The Sanitary Sewer Systems General Order requires public agencies that own or operate sanitary sewer systems to develop and implement sewer system management plans and report all sanitary sewer spills to the State Water Board's online California Integrated Water Quality System (CIWQS) Sanitary Sewer System Database.

- [Statewide Sanitary Sewer Systems General Order – Effective June 5, 2023](#)

Quick Links

- [Electronic Sanitary Sewer System Service Area Boundary Map Specifications](#)
- [Sewer System Management Plan and Program Audit Due Dates Look Up \(search by WDID number\)](#)

Lookup Tool



2. Best Practice Tips

Lookup Tool

Sewer System Management Plan & Audit Required Due Dates Transition from General Order 2006-0003-DWQ to Reissued General Order

Search by Waste Discharge Identification (WDID) Number

Enter your Waste Discharge Identification (WDID) number in the search field to retrieve the required Sewer System Management Plan (SSMP) Update and Audit due dates for your system.

Sewer System Management Plan & Subsequent Update Due Dates					
System Name	WDID Number	Original Plan Required Due Date	Required Plan Update Due Date	Required Plan Update Due Date	Required Plan Update Due Date*



Audit Due Dates								
System Name	WDID Number	Original Required Plan Audit Due Date	Required Plan Audit Due Date	Required Plan Audit Due Date	Required Plan Audit Due Date	Required Plan Audit Due Date	Required Plan Audit Due Date	End of Required 3-Year Audit Period**



* Per Section 5.5 and Attachment E1, Section 3.11 of the General Order, Plan updates are due within six years after the required due date of the Enrollee's last Plan Update.

** Per Section 5.4 and Attachment E1, Section 3.10 of the General Order, the Audit Report is due within six months after the end of the required 3-year audit period.

2. Best Practice Tips

SAMPLE ANNUAL REPORT ATTACHMENT

To: State Water Resource Control Board
From: [Agency]
Date: [Date]
Subject: Data Discrepancies

Dear Water Board Staff,

I am writing to address discrepancies we have identified from our prior submittals of the Collection System Questionnaire (now the Annual Report due April 1 each year as required by the Reissued WDR).

Upon a thorough review of our historical data submitted into CIWQS since inception of the Sanitary Sewer Spill Reduction Program in 2007, we have discovered a number of inconsistencies between the numbers previously reported and our actual data. We understand the importance of providing accurate data, and thus, offer the following justifications for each change:

1. Entry:

The decrease in this figure is attributed to the departure of employees from the division. Presently, we have X employees with less than one year's experience, which accurately represents the current staffing level.

2. Journey:

The decrease in this figure is attributed to the departure of employees from the division. Presently, we have X employees with two or more years of experience, which accurately represents the current staffing level.

3. Supervisor:

The vacancy in this position is due to the retirement of the previous manager in [Date]. We are actively in the process of hiring a new manager, and in the interim, the sewer supervisor has assumed the responsibilities and is currently serving as the acting sewer manager. We anticipate having this vacancy filled within [months].

4. CWEA Grade III:

The certification holder who previously held the CWEA Grade III certification has retired, and there are currently no employees with this level of certification.

5. CWEA Grade IV:

The certification holder who previously held the CWEA Grade IV certification has retired, and currently we have one holder of this level of certification.

6. CSUS OWP Cert (Sac Cert. Program):

Five employees have successfully completed the "Operation and Maintenance of Wastewater Collection Systems, Volume 1" course, while one employee completed the "Operation and Maintenance of Wastewater Collection Systems, Volume 2" course. Additionally, one employee completed the "Manage for Success: Effective Utility Leadership Practices" course.

Annual Report (Sample Attachment)

2. Best Practice Tips

Final Recommendations

- Avoid WDR violations and enforcement
- Don't miss key annual deadlines!
- Prior to updating SSMP, conduct a comprehensive SSMP AUDIT to justify SSMP changes
- Start SSMP Audits early (no later than 3-4 months prior to deadline!)
- Train, train, train on your spill emergency response plan!
- Attend WDR training for your LRO(s), Supervisors, Managers

WDR Compliance:

Best Practices and Tips for Capitalizing on Requirements



for Legally Responsible Officials (LROs), Supervisors, and Managers

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2024 REISSUED WDR WORKSHOPS
for Legally Responsible Officials (LROs), Supervisors, Managers, and Data Submitters

INTERESTED IN ATTENDING OR HOSTING A TRAINING?

[CLICK HERE](#)



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