



***March 6, 2015***

**Bay Area Regional Implementation Workshop**

**New Statewide Permit  
for  
Drinking Water System Discharges  
To Surface Waters**

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# Intent of Presentation

- **Higher-level discussion**
  - **Overview and highlights of new permit**
  - **How to make new permit serve your needs**
  - **Opportunities for further collaboration among local utilities**

# Regulatory Compliance



*Drinking Water System water  
served to customers*

*Compliance with*  
**Safe Drinking Water Act**  
(Division of Drinking Water Permit)



# What is this New Permit?



*Drinking Water System Discharges  
To Waters of U.S.*

*Compliance with*

## **Clean Water Act**

**Nation Pollutant Discharge Elimination System  
(NPDES) Permit  
(Division of Water Quality)**



# Basic Water Quality Concerns from Drinking Water System Discharges

- **Toxicity – chlorine, metals and ambient pH**



- **Solids - sediment, turbidity, sand and trash**



# Basic Water Quality Concerns from Drinking Water System Discharges

- **Erosion, scour and hydro-modification**



# Overview of New Permit

- **Provides Clean Water Act regulatory coverage**
- **Provides Regulatory Exception to California Toxic Rule (not to Clean Water Act)**
- **Regulates through Best Management Practice Implementation**
- **Acknowledges MS4 NPDES storm water permits and discharges to land**
- **Acknowledges Small Systems**

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# Clean Water Act Regulatory Coverage

- **This NPDES Permit provides water systems with required Clean Water Act regulatory coverage for mandated discharges and emergency discharges**
  - **Does not interfere with local storm water authority (not a permit to discharge into a storm drain)**
  - **Does not set water quality requirements for discharges into storm drains**
  - **Does sets water quality requirements for discharge that enter waters of the U.S.**

# Types of Discharges Regulated Under Permit

- **Planned discharges that allow management practices to be put in place**
  - Direct to surface waters
  - Routed to storm drain systems
- **Emergency discharges**



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# Regulatory Exception to California Toxic Rule (CTR)

- **State Water Board grants water purveyors an exception to CTR**
- **To obtain regulatory exception:**
  - **Water system must have regulatory coverage under an NPDES Permit**
  - **Water system must be identified in NPDES Permit to have the regulatory exception**
  - **Exception does not apply to discharge of commingled storm water**

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# Best Management Practice-focused Permit



# Existing Management Practices

(distribution system flushing)



# Existing Management Practices

(ground water supply wells)





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# Coverage Under Existing MS4 Permits

**State Water Board not requiring the following to enroll in statewide permit:**

- **Water purveyors that are also municipal storm water permittees**
- **Water purveyors that have an established local agreement with MS4 permittee** (regional board concurrence needed)
- **Water purveyors whose discharges do not enter waters of the U.S.**

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- Regulates through Best Management Practice Implementation
- Acknowledges existing MS4 NPDES storm water permits and discharge to land
- **Acknowledges Small Systems**

# Small Systems and Transmission Lines

- **Acknowledges Difficulties Encountered by Small Drinking Water Systems**
- **State Water Board requires transmission facilities and systems of 1000 connections or more to enroll**
- **Encourages systems less than 1000 connections to enroll and obtain mandated Clean Water Act regulatory coverage**

# Addressing Local Costs

- **Field monitoring only (no lab analysis)**
- **Event monitoring for discharges with greater perceived threat**
- **Once-per-year representative monitoring**
- **Receiving water monitoring – Visual only**
  - **For direct discharges that are non-compliant only**
  - **No monitoring for emergency discharges or non-surface water discharges**
- **Annual reporting to State Board (statewide database)**
- **Non-compliance reporting when potential adverse impact to beneficial uses**
- **Pre-notification of large size discharges**
- **Post notification of emergency discharges**

# Promoting Multiple Uses of Good Quality Water Prior to Discharge



- **Ground water recharge**



- **Discharge to low impact development or reuse**



- **Incentive**

- Coverage serves as waste discharge requirements
- No monitoring for portions of discharges that do not discharge to surface waters (waters of the U.S.)

# Opportunity for Local Drinking/Storm Water Agency Collaboration

- **Address rapid conveyance of un-natural pulses to receiving waters during dry weather**
  - Route flows to green streets, parking lots, other low impact development (LID) infrastructure
- **Drought and conservation**
  - Difficult to view discharges as *de minimus* discharges in terms of needed water supply
  - Drinking water discharges may serve as conservation when routed to LID, especially those systems that overlay ground water basins and fractured bedrock
- **Integrated local water management**
  - Incentivized through CA Water Action Plan (Actions 2 & 10) and Proposition 1 funding incentives

# Proposition 1 Funding

- **Requires Storm Water Resource Plan**
  - **Think Outside the Box** regarding making storm water a resource, and the overlap with drinking water system discharge water reuse/beneficial use.
  - **How can the concept of “storm water as a resource” incorporate drinking water system discharges that typically enter storm drain, but instead routed to ground water recharge or reuse?**
  - **How can drinking water system discharges (that typically ends up in storm drain system) be used in a manner that provides a benefit to water supply elsewhere in your watershed?**



# For Further Information

## Contact

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# Additional Background Information

For Information Only

# TMDL Implementation

- Section K of Fact Sheet summarizes existing TMDLs that apply to water purveyors
- Los Angeles and San Diego Regional Water Board TMDLs directly and indirectly reference waste load allocations to water purveyors exclusively
- Permit Fact Sheet concludes that water purveyors are not a source of the pollutant impairment
  - Additional application monitoring to be evaluated

# Why an NPDES\* Permit?

*\*National Pollutant Discharge Elimination System*

- Clean Water Act requires pollutant source discharges to waters of the U.S. (fishable and swimmable waters) to obtain an NPDES permit
- In California, the State and Regional Water Boards issue NPDES permits
- Many water purveyors have local agreements with storm water NPDES permittees for regulatory coverage
- Others do not, or storm water permittees requiring separate permit

# Clean Water Act Requirements

- Section 122.44(d)(1)(i) states NPDES permits shall include appropriate effluent limitations:

*Limitations must control all pollutants parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines **are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality***

- For drinking water system discharges, pollutants of concern include chlorine, chlorine byproducts, pH, solids

# Toxicity Standards

Toxicity (i.e. chlorine, byproducts, metals)

- Regional Board Basin Plans contain narrative toxicity objectives which generally state:

*“all waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life;”*

- Specific language varies among Basin Plans.
- Federal regulations require effluent limits when a discharge has a reasonable potential\*

\* *causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a numeric or narrative objective within an applicable State water quality standard (40 Code of Federal Regulations 122.44(d)).*