

Status of the Selenium TMDLs/ SSOs Newport Bay Watershed



Terri S. Reeder - PG, CHG, CEG

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Santa Ana Regional Water Quality Control Board

Outline for Discussion

- USEPA's 2002 Technical TMDLs
- Proposed Revisions to Se TMDLs
- Innovative Approaches
- Implementation and Compliance Schedule
- Cooperative Watershed Program
- Current Status of TMDLs/SSOs
- Next Steps



USEPA's 2002 Technical TMDLs

- TMDLs for San Diego Creek, Santa Ana Delhi Channel, and Newport Bay
 - Big Canyon Wash not included
- Numeric targets and allocations based on
 - CTR freshwater chronic criterion of 5 µg/L
 - National Toxics Rule (NTR) freshwater acute criterion of 20 µg/L
 - CTR saltwater chronic criterion of 71 µg/L
- Does not include an implementation plan or compliance schedule

➤ Board staff required to implement these TMDLs via permits and enforcement actions

Proposed Revisions to the Selenium TMDLs

- No off-the shelf treatment technologies for selenium removal
- Principle source is rising groundwater
- USFWS biological opinion issued on CTR
 - CTR criteria not sufficiently protective of sensitive species
- TMDLs should include
 - Big Canyon Wash
 - Implementation plan
 - Compliance schedule



Proposed Revisions to the Selenium TMDLs

- **Incorporates new data (Big Canyon)**
- **Revises impairment assessment (no finding of impairment for Newport Bay)**
- **Recommends tissue-based SSOs**
- **Proposes dry weather TMDLs**
- **Provides a compliance schedule and implementation plan**

➤ Cooperative effort between Regional Board staff and the NSMP

Innovative Approaches

- Tissue-based Selenium SSOs
 - Direct linkage to biotic effects
 - SSOs used as primary numeric targets in TMDLs
 - 5 ppm Se in freshwater fish tissue
 - 8 ppm Se in bird egg tissue
- TMDL Allocations
 - Range in water concentrations to meet tissue targets
 - Adjustments to allocations via a public participation process



TMDL Implementation Plan and Compliance Schedule

- Adaptive management
 - Cooperative Watershed Program
 - BMP Strategic Plan
 - Monitoring and Compliance Strategy
- Phased Compliance
 - 15 years for San Diego and Santa Ana Delhi watersheds
 - 20 years for Big Canyon Watershed

➤ ***Compliance must occur as soon as possible, but no later than...***

Cooperative Watershed Program

- Addresses rising groundwater
 - Primary source of selenium
 - Important source of nitrogen (nitrate)
- Implements regional BMPs
 - More efficient use of resources
 - Opportunities for offsets/trading
- Provides flexibility
 - Source control options
 - BMP testing and implementation
 - Special studies

➤ ***NPS Implementation and Enforcement Policy requires that specific regulatory alternatives be identified in case CWP fails***

Cooperative Watershed Program

Without this program:

- Very little flexibility in implementing TMDLs
 - NPDES permits/WDRs
 - Prohibitions
 - Enforcement Orders
- No cost-sharing mechanism/ No regional BMP approach
 - Increased implementation costs
 - Individual allocations, monitoring, reporting, studies
- Would require immediate compliance for point source discharges
- RB needs reasonable and effective alternative to USEPA's TMDLs

➤ ***Implementation of IRWD's full-scale Cienega ABMet® facility contingent upon partnership funding commitments***

Current Status of TMDLs

- Reconsideration of proposed fish tissue SSO
 - Stakeholder concerns that SSO is overly conservative
 - Target fish (sunfish) not present in all water bodies
 - SSO must protect most sensitive species
- Some remaining regulatory/legal issues
 - Approval of allocations approach
 - Determination of alternative regulatory approach per NPS enforcement policy
 - NPDES permit issues (local effects, effluent limits, compliance, etc.)

➤ ***Additional peer review necessary***

Next Steps

- Continue working with:
 - Stakeholders
 - NSMP
 - SWRCB staff
 - USEPA staff
- Need continued coordination to develop reasonable, practicable, and effective implementation

➤ ***Public Hearing for Consideration of Adoption of Newport Bay Watershed Selenium TMDLs/SSOs BPA mid-2011***

Questions?



Contact Information:

treeder@waterboards.ca.gov

951-782-4995