

2008 303(d)/305(b) Integrated Report

March 2009 Public Meeting

Proposed Agenda

- **Welcome, Introductions** 10 – 10:15
- **Staff Presentation** 10:15 – 11:30
- **Discussion/Comments** 11:30 – 12
 - ◆ topics for afternoon session
- **Lunch** 12 - 1
- **Discussion/Comments** 1 - 3

2008 303(d)/305(b) Integrated Report March 2009 Public Meeting

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Presentation Overview

- **Central Valley Water Board**
 - ◆ **Basin Plan(s)**
 - ◆ **303(d) List and TMDLs**
- **2008 303(d)/305(b) Integrated Report Development**
 - ◆ **Methodology**
 - ◆ **303(d) Listing Policy**
 - ◆ **Results Overview**
 - ◆ **Next Steps**
- **Detailed Description of Integrated Report Products**
 - ◆ **Fact Sheets**
 - **Decisions**
 - **“original” decisions**
 - ◆ **Category Lists**
 - ◆ **Downloadable/CD version**

California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board)

- **One of 9 California RWQCB's**
 - **Under State Water Board**
- **Duty is to protect water quality**
 - ◆ **Porter Cologne**
 - ◆ **Federal Clean Water Act**
- **Water Quality Control Plans (Basin Plans)**
- **Regulate discharges to surface and groundwater**

Basin Plans

- **Water Quality Control Plans**
 - ◆ Sacramento and San Joaquin Basins
 - ◆ the Tulare Lake Basin
- **Water Quality Standards**
 - ◆ **Beneficial Uses (BU's)**
 - (e.g. agriculture, freshwater habitat, drinking water)
 - “Tributary Rule” – BU's apply to upstream tributaries
 - ◆ **Water Quality Objectives (narrative or numeric)**
 - ◆ **Anti-degradation provisions**
- **Implementation Programs**

303 (d) List

- Clean Water Act requirement
 - ◆ California Submits to USEPA
- “Impaired” waterbodies or reaches –
 - ◆ Not meeting water quality standards
 - TMDL or other action required
 - ◆ State’s Water Quality Control Policy for Impaired Waters
 - TMDL development
 - De-listing
 - Revision of standards
 - List as being addressed by actions other than TMDLs in some cases
- 303(d) listing is an initial assessment

303(d) List (continued)

- Updated every “few” years
- Most recently updated in 2002, 2006, looking at draft “2008” list
- 2004 California Listing Policy
 - ◆ Consistent requirements, methodology
 - ◆ Process – State and Regional Board approval

Total Maximum Daily Loads (TMDLs)

- Addresses one or more Pollutant – Waterbody Segment Combinations
- Loading Capacity
 - ◆ How much of a pollutant can be discharged without exceeding standards
- Allocation of loading capacity among sources
 - ◆ Margin of safety
- Program of Implementation
 - ◆ Implementation, monitoring and reporting requirements for dischargers
 - ◆ Generally through existing programs (point source, irrigated lands)
- Usually adopted as Basin Plan Amendments
 - ◆ Exception when a single board action (permit adoption, etc.) can meet all the TMDL requirements

TMDL Development and Approval Process

- Basin Plan Amendments
 - ◆ Regulations
 - ◆ Approval by Regional Water Board, State Water Board, Office of Administrative Law, USEPA required
- Public Process
 - ◆ Meetings, workshops, Board hearings
 - ◆ Response to comments received
- Generally takes a few years for development and approval
 - ◆ TMDLs not requiring Basin Plan Amendments – 1 or 2 years, only require Regional Water Board and USEPA approval
- **Separate process from the 303(d) List**

2008 303(d)/305(b) Integrated Report

■ Integrated Report (IR)

- ◆ EPA Guidance
- ◆ 303(d) List Update + 305(b) Report on Overall State of Waters
- ◆ First Time Regions Implementing Listing Policy, EPA IR guidance (SWRCB did a 303d List and a separate 305(b) Report in 06)
- ◆ CalWQA database
 - Developed by SWRCB for statewide use
 - Hold info on waterbody segments, decisions, lines of evidence
 - Helps produce report products
 - links to supporting references

303(d)/305(b) Integrated Report Project Scope

- **Direct application of Listing Policy, existing Water Quality Objectives**
- **Listing Policy - All readily available data**
- **386 waterbody segments**
- **Over 2,000 Fact Sheets**
 - ◆ **303d listing decision for a waterbody- pollutant combination + one or more lines of evidence**

Data Sources

- **Listing Policy Requirements**
 - ◆ Solicitation of data
 - ◆ Evaluate data from all readily available sources
- **Data Solicitation**
 - ◆ Solicitation Letter Dec 06
 - ◆ Solicitation Period Dec 06 – January 07
 - ◆ 18 Submittals
- **Other Readily Available Sources**
 - ◆ Through January 2007
 - ◆ Irrigated Lands Program
 - ◆ SWAMP
 - ◆ CalFed studies
 - ◆ TMDL
 - ◆ NPDES
 - ◆ USGS NAWQA
 - ◆ FERC re-licensing

Water Quality Objectives

■ Numeric Objectives

◆ Basin Plan Objectives

- Include MCLs from DPH
 - Salinity
 - DO, pH, fecal coliform bacteria

◆ California Toxics Rule (CTR)

- CTR criteria are established standards – equivalent to WQOs

Water Quality Objectives

■ Narrative Objectives

- ◆ Toxicity, temperature
- ◆ “Evaluation Guidelines” to interpret
 - Listing Policy Requirements (Section 6.1.3)
 - Protective
 - Applicable
 - Scientifically-based and peer reviewed
 - Well described

Evaluation Guidelines

- **OEHHA Fish Contaminant Guidelines**
 - ◆ Mercury
 - ◆ PCBs
 - ◆ Organochlorine Pesticides
- **Aquatic Life Criteria (USEPA, DFG)**
 - ◆ Bacteria (E. Coli)
 - ◆ Pesticides
 - ◆ Ammonia
 - ◆ Temperature

303(d) List Development

- **Initial Screening of data**
 - ◆ Identify pollutant-waterbody segments for detailed assessment in fact sheets
 - ◆ Potential 303(d) list changes
 - Standards exceedances
 - Listed – now attaining standards

- **Fact Sheet Preparation**
 - ◆ Waterbody segment – pollutant combination
 - Assessments Identified in screening
 - ◆ Decision on 303(d) list changes
 - ◆ Lines of evidence (LOEs) for all data available
 - ◆ Also did fact sheets for all SWAMP data

303(d) List Development

- ◆ **Aggregation of data**
 - **Waterbody segmentation (Section 6.1.5.4)**
 - **Major tributaries**
 - **Land use**
 - **Many smaller waterbodies not divided**
 - **Segments being put into GIS maps**
 - **Available data used for averaging period (section 6.1.5.6)**
 - **Non detects with detection limits > criteria not used (section 6.1.5.5)**

303(d) List Development

- ◆ **Listing/de-listing decision recommendations**
 - **Listing Policy chapters 3 (listing) and 4 (delisting)**
 - **Listing Policy Binomial Test**
 - **Exceedance Frequencies Tables 3.1, 3.2, 4.1, 4.2**
 - **Weight of Evidence (Sections 3.11, 4.11)**
 - **If criteria or objectives contained explicit exceedance frequency**

303(d) List Development

■ Completion Dates

- ◆ Years TMDL targeted to bring before Regional Board
- ◆ Specific for listings with TMDLs being developed
- ◆ Approximate for TMDL Projects in Planning (2+ years out)
- ◆ 13 years out maximum
 - 2006 List – 2019
 - New in 2008 – 2021

■ Potential Sources

- ◆ Geography
- ◆ Pollutant

305(b) Categories

■ Waterbody Categories

- ◆ Overall beneficial use (BU) support from all pollutants assessed
- ◆ 303(d) Listed (Impaired)
 - Category 5 (TMDL required)
 - Category 4 (no TMDL required)
- ◆ Not Impaired
 - Category 1 (Fully Supporting all BU's)
 - Category 2 (Fully Supporting at least 1 BU)
 - Category 3 (insufficient information)

305(b) Categories

- **Conservative in determining Categories for unimpaired waterbodies**
 - ◆ **Needed adequate amount of data for correct parameters to determine full support**
 - ◆ **Resulted in more category 3, less in category 1 or 2**
 - ◆ **More accurate baseline**
- **305(b) categories do not effect listing decisions**

Draft Results: 303(d) List

- **441 proposed new listings**
 - ◆ **Each listing is a waterbody segment – pollutant combination exceeding standards**
 - ◆ **Number of new listings **NOT** indicative of temporal trends**
 - **Reflect increasing data availability**
 - ◆ **Toxicity, Mercury, Pesticides, Bacteria**
 - ◆ **Current (2006) list - 342 listings in R5, 2237 statewide**

Draft Results: 303(d) List

■ 23 de-listings

◆ Success stories

- Diazinon in the Sacramento River
- Metals in the Sacramento River
- Bacteria in Whiskeytown reservoir

◆ Correction of 1 erroneous listing from 06

■ Other miscellaneous changes

- ◆ Names
- ◆ extent of segments)
- ◆ documented in fact sheets

Draft Results: 305(b) Report

- **386 waterbody segments**
 - ◆ **268 Category 5**
 - (Impaired, needing TMDLs)
 - ◆ **5 Category 4 (A)**
 - (Impaired, not needing TMDLs – (TMDL already adopted for all impairments)
 - ◆ **91 Category 3**
 - (Not Impaired, insufficient info to determine full use support)
 - ◆ **22 Category 2**
 - (Not impaired, fully supporting at least one beneficial use)
 - Low Bacteria showing full support of water contact recreation Beneficial Use

Next Steps

- **Written Comment deadline – March 16**
- **Revised draft report, response to comments – early to mid April**
- **Regional Board hearing - April 23, 24**
- **State Water Board**
 - ◆ **Following adoption by all Regional Boards**
 - ◆ **Draft statewide 303(d) list**
 - ◆ **Consider changes requested for review, can consider other changes**
 - **Requests for review to SWRCB Within 30 days of RWQCB decisions**
 - ◆ **State Board Potential Adoption Hearing ~ Dec 09**
- **EPA – Early 10**
- **Solicitation of Data for Next Listing Cycle – late 09/Early 10**

Description of Integrated Report Products

◆ Appendix A (and E)

- TMDL Completion dates are estimates
- Potential sources – detailed source assessment during TMDL development

◆ Appendix F – Fact Sheets

- Links to fact sheets
- Categorized by decision>waterbody>pollutant
- “original decisions” – not changed from previous cycles
- Links take you to a fact sheet within a bigger file that contains all fact sheets for a waterbody segment

Description of Integrated Report Products

◆ Fact Sheets

- **Decision + one or more “lines of evidence” upon which the decision is based**
- **LOE’s usually data, can be other information**
- **Web links to data sources, standards and evaluation guidelines**
- **Decisions**
 - **List as being addressed by a TMDL (not new listing, moved from TMDL required)**
 - **“original” decisions – from previous listing cycles, “revised” are the new ones**

Description of Integrated Report Products

◆ **Category Lists (Appendix B-E)**

- **Categorize a waterbody segment according to level of Beneficial Use support.**
- **Category 2 – pollutants assessed in fact sheets for a waterbody, showing full support of Beneficial Uses**
- **Category 3 – Pollutants assessed in fact sheets for a waterbody, assessed and not showing impairment**
- **Categories 4, 5 – pollutants causing listed Impairments**

Description of Integrated Report Products

- ◆ **Miscellaneous Changes (Appendix G)**
 - Geographic extent
 - Name changes
- ◆ **References (Appendix H)**
 - Links for all references used
- ◆ **Downloadable/CD version**
 - Used to view the documents when not online.
 - Does not contain all the references, the links to references only work when online.





EPA Expectations for listing as being addressed by actions other than TMDL (waterbody Category 4b)

1. Identification of segment and statement of problem causing the impairment;
2. Description of pollution controls and how they will achieve water quality standards;
3. An estimate or projection of the time when WQS will be met;
4. Schedule for implementing pollution controls;
5. Monitoring plan to track effectiveness of pollution controls; and
6. Commitment to revise pollution controls, as necessary.