Technical Support for Freshwater Biological Objectives in California

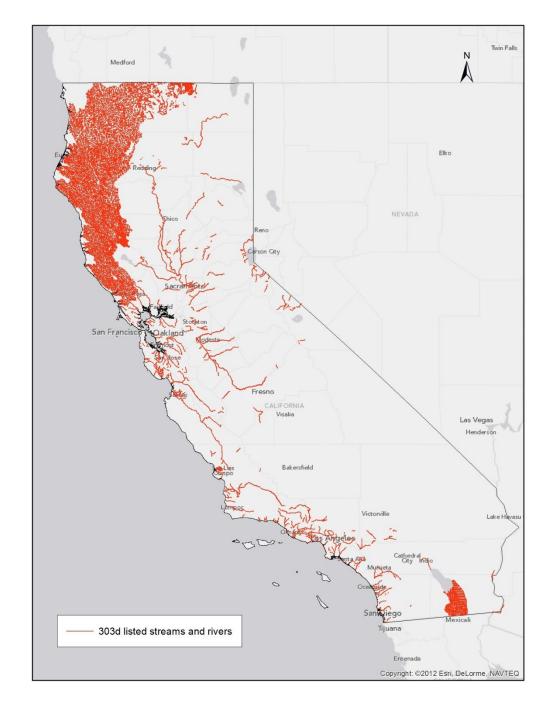
SCCWRP
California Dept Fish and Wildlife
US Geological Survey

The SWRCB Directive

- Over 26,000 California stream miles are impaired
 - Uneven among Regions
- Almost all impairments are for chemistry
 - Why not measure the biology directly?
- "The SWRCB will have biological objectives in three years"
 - Asked SCCWRP to help support the technical foundation for policy development

The SWR

- Over 26,000 California stre
 - Uneven among Regions
- Almost all impairments are
 - Why not measure the biolog
- "The SWRCB will have bid
 - Asked SCCWRP to help sup development



The SWRCB Directive

- Over 26,000 California stream miles are impaired
 - Uneven among Regions
- Almost all impairments are for chemistry
 - Why not measure the biology directly?
- "The SWRCB will have biological objectives in three years"
 - Asked SCCWRP to help support the technical foundation for policy development

The Goal For Today

- This SCCWRP project is near completion
 - Make you aware of our progress

- Will effect all of our member agencies
 - If it hasn't already
- Discussion will help focus our next investment
 - What are the largest hurdles for transition to management?

SWRCB's Bio-Objective Development Philosophy

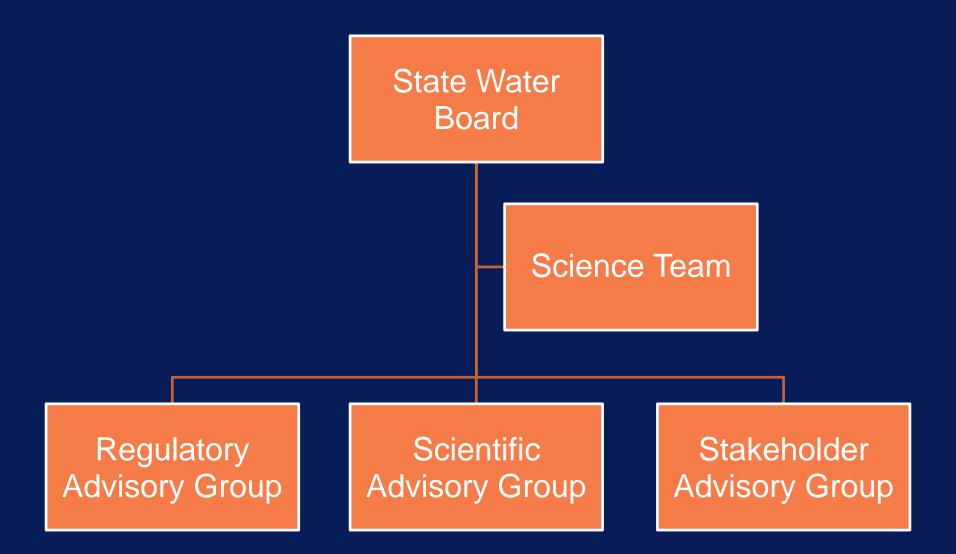
- All waterbodies should have biological objectives
 - Start with perennial wadeable streams
- Desire multiple indicators
 - Start with benthic macroinvertebrates
- Biological objectives need numeric endpoints
 - Perhaps several
- Requires statewide consistency with regional flexibility

8-Step Development Process

- Reference condition
- Scoring tools development
- Stressor identification
- Information management
- Implementation Plan Development
- Rulemaking
- Outreach
- Training and standardization

Technical Elements

Advisory Committee Structure



8-Step Development Process

- Reference condition
- Scoring tools development
- Stressor identification
- Information management
- Implementation Plan Development
- Rulemaking
- Outreach
- Training and standardization

Technical Elements

CTAG Had a Great Discussion on Biological Objectives

SWRCB described their regulatory options

 LACSD identified key impediments to adoption

I'd like to summarize their key points

Policy Goals

- Establish consistency
 - Biological assessment methods
 - Methods for interpreting assessment data
 - Endpoints for reasonable protection of beneficial uses

- Identify streams in good biological condition
 - protect them from degradation
- Identify streams not in good condition
 - restore them to good or "best attainable" condition

Current Regulatory Options

- Add narrative objectives and numeric translators to an existing statewide plan
 - Inland Surface Waters Plan

- Amend existing 303(d) listing policy
 - New listings based solely on biological impairments
- Create a new Policy for Water Quality Control

Key Impediments

- How to treat modified streams
 - Definition? "Best attainable"?
- Improved stressor identification
 - More tools for diagnosing stressors
 - Improved certainty, link to positive outcomes
- Implementation specificity
 - Access and training to the CSCI scoring tool
 - Applicability screening
 - # samples/time