

# BIOSTIMULATORY/BIOINTEGRITY POLICY UPDATE

## **Biostimulatory/Biointegrity Stakeholder Group Meeting**

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# PROJECT SCOPE

Amendment to the Inland Surface Waters Enclosed Bays and Estuaries (ISWEBE) Plan to:

- Establish a framework to control eutrophication and support biological integrity in all waterbodies
- Focus on wadeable streams

Likely Key Components:

- Narrative biostimulatory water quality objective
- Indicators and thresholds for biostimulatory substances and conditions
- Biological integrity assessment methods
- Implementation approaches

# BENEFICIAL USES AFFECTED BY BIOSTIMULATORY SUBSTANCES & CONDITIONS

## Aquatic Life Uses

- Cold Freshwater Habitat (COLD)
- Warm Freshwater Habitat (WARM)
- Spawning, Reproduction, and/or Early Development (SPAWN)
- Rare, Threatened or Endangered Species (RARE)
- Fish Migration (MIGR)
- Wildlife Habitat (WILD)
- Estuarine Habitat (EST)
- Marine Habitat (MAR)

## Human Uses

- Water Contact Recreation (REC-1)
- Non-Contact Water Recreation (REC-2)
- Municipal and Domestic Supply (MUN)
- Shellfish Harvesting (SHELL)
- Commercial and Sportfishing (COMM)
- Tribal Tradition and Culture (CUL)
- Tribal Subsistence Fishing (T-SUB)
- Subsistence Fishing (SUB)
- Navigation (NAV)

# WATER QUALITY OBJECTIVE

## Policy elements:

- A narrative **biostimulatory** water quality objective (WQO) that applies to all waterbodies
- A suite of primary and supporting **indicators** to measure biostimulatory conditions in wadeable streams
  - Examples: nutrient concentrations, biointegrity indices, algal biomass measures
- Corresponding **numeric thresholds** for each indicator to protect against eutrophication

## Policy options under consideration:

- Which indicators and thresholds are most appropriate for California streams?
- How will multiple indicators be assessed?
- Should there be a narrative and/or numeric WQO for bio-integrity?
- If no biointegrity WQO, what will trigger bio-integrity assessments?

# IMPLEMENTATION

## Implementation approaches being considered include:

- Approaches to treat constrained channels differently.
- Watershed-based causal assessment and source control options
- Watershed-based credit trading
  - Example: point to non-point trading
- *Will constrained channels be addressed prior to or during implementation actions?*
  - *Example: different thresholds and/or a process for determining site-specific thresholds*
- *Will there be a phased approach to implementation focusing on less developed waterbodies?*
- *What would the watershed approach look like and how will it integrate with existing regulatory programs?*

# AMENDMENT TO THE ISWEBE PLAN (Phase 1)

## BIOSTIMULATORY

### ALL WATERBODIES

Narrative Water Quality Objective for Biostimulatory Substances & Conditions

Approach to Derive Numeric Thresholds from Narrative Objectives

### WADEABLE STREAMS

Numeric Thresholds Based on Biointegrity Goals

Numeric Thresholds Based on Human Use Goals

Implementation Approaches to Control Eutrophication

## BIOLOGICAL INTEGRITY

### ALL WATERBODIES

TBD: Narrative Objective?

### WADEABLE STREAMS

Biological Integrity Assessment Methods: CSCI & ASCI

Causal Assessment (Stressor ID) Methods

Implementation Approaches to Protect Biological Integrity

# PROJECT TIMELINE

TASK	TARGET DATE
Detailed Work Plan for Policy Development	December 2018
Stakeholder Advisory Group Meetings	October, 2018 Jan/Feb 2019 Ongoing through policy development
Science Panel Meetings	December 12-13, 2018, March 2019 (tentative) Possible meeting after release of draft Policy
Draft Policy Provisions	Summer 2019
Scientific Peer Review	TBD: possible winter 2019
Public Review Draft	TBD: possible spring 2020
Board Workshops	TBD: possible spring 2020
Response to Comments	TBD: possible summer 2020
Board Consideration of Adoption	TBD: possible fall 2020

QUESTIONS?