

California's Surface Water Ambient Monitoring Program

SWAMP Bioassessment Program UPDATE

California Aquatic
Bioassessment Workgroup
October 20, 2015



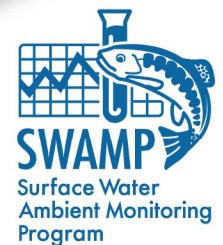
Lori Webber

SWAMP Coordinator

State Water Board

916-341-5556

lori.webber@waterboards.ca.gov



Presentation Overview

- **Why we exist**
- **Long term vision**
- **Who we are**
- **What we do**
- **What's happened since CABW 2014**
- **What's coming**



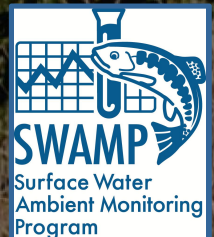
Why We Exist

Federal Clean Water Act

“ ... restore and maintain chemical, physical and **biological** integrity of the Nation’s waters.” [CWA Section 101(a)]

Porter-Cologne Water Quality Control Act

Water quality defined as “chemical, physical, **biological**, bacteriological, radiological, and other properties and characteristics of water which affect its use.” [Water Code, Section 13050(b)]

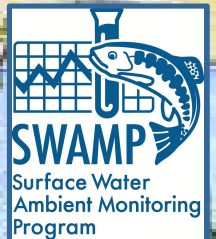




Long Term Vision

Measures of ecological integrity are fully integrated into California's water resource management programs. California prioritizes this information to measure, protect and restore its waterbodies.

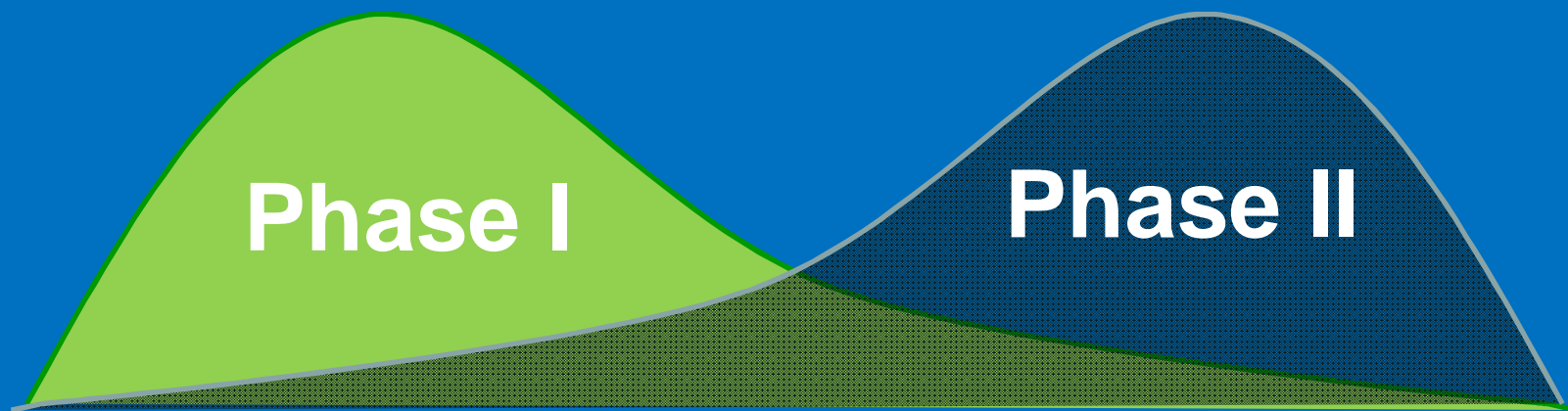
Multiple waterbodies and indicators
Multiple programs and agencies



Moving from Phase I to Phase II

Phase I - *developing the capacity to conduct reliable ecological assessments (emphasis on BMIs in wadeable streams)*

Phase II - *expanding the universe of scope and tools and fostering implementation in Water Board programs and elsewhere*



Phase II Objectives

- Utilize bioassessment data in the Water Boards Integrated Report
- Healthy Watersheds Partnership - integrate bioassessment data with other datasets to improve watershed assessment and management

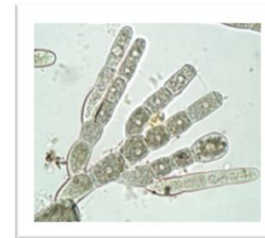
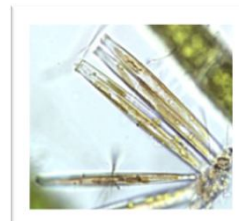


Who We Are - State Agency Lead Staff

- **Dr. Pete Ode**, CDFW (Lead Scientist)
- **Dr. Betty Fetscher**, San Diego Water Board (Lead Scientist, Algae)

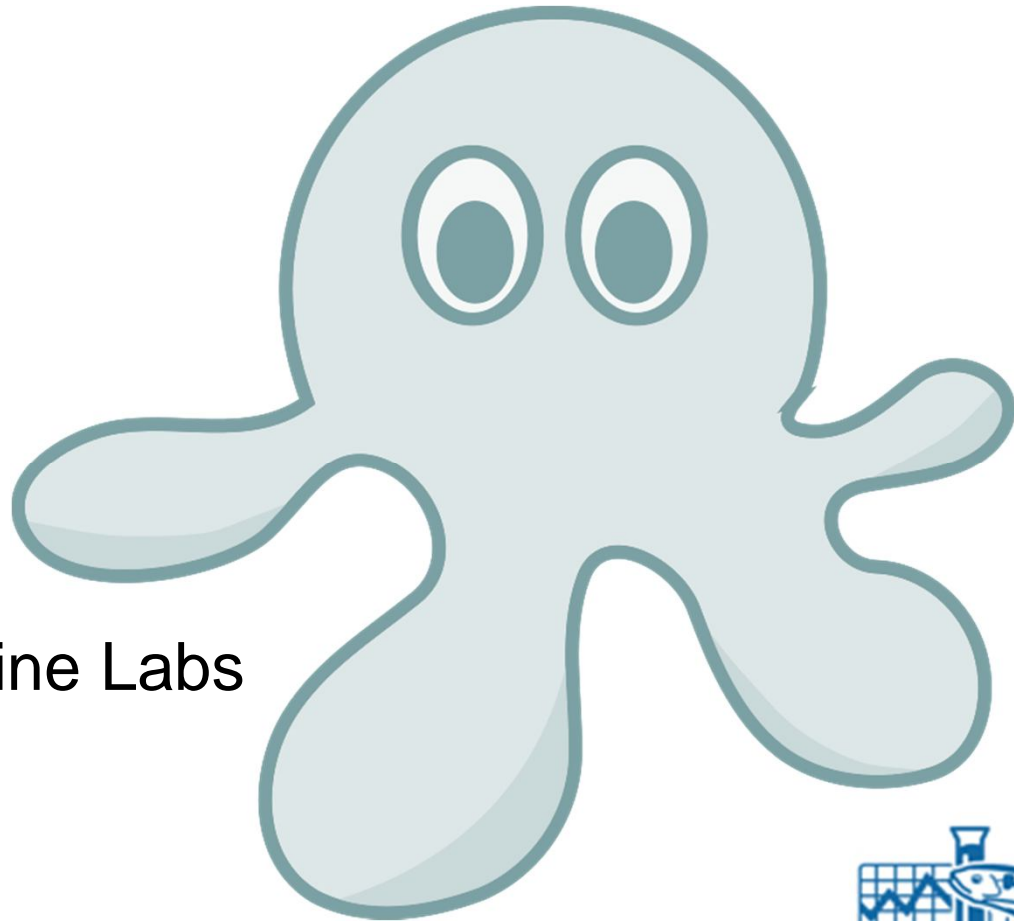
State Water Board Staff

- **Calvin Yang**, (Bioassessment Coordinator)
- **Toni Marshall** (SWAMP IQ Unit)
- **Marc Petta** (SWAMP IQ Unit)
- **Candice Heinz** (SWAMP IQ Unit)



Who We Are - Program Support

- USEPA
- CDFW
- Water Boards
- SCCWRP
- CSU Chico
- CSU San Marcos
- Moss Landing Marine Labs
- CSU Long Beach
- UC Davis



What We Do – Program Elements

- **Core Monitoring Programs**
 - Reference Condition Management Program (RCMP)
 - Perennial Streams Assessment (PSA)
- **Infrastructure**
 - SOPs, QA/QC, data management
 - Interpretive tools: CSCI, IBIs, Causal Assessment
- **Research and Development**
 - Improved data interpretation tools
 - Multiple waterbodies/multiple indicators



What We Do - Partnerships

*Through **collaboration** and **coordination** with many partners we are able to accomplish much more than SWAMP itself.*



What We Do - Policy Development

Our data support development of statewide policies.

- **Bio-integrity**
- **Nutrients**
- **Wetlands**
- **Climate Change**



What's Happened Since CABW 2014

- 2015 monitoring season
- College of Bioassessment
- New IQ unit at State Board
- New SOPs
- CSCI automation – moving forward
- New Bioassessment website
- CSCI Map
- CSCI Technical Memo
- Partnership with private timber
- Flow ecology research
- Non-perennial streams



What's Coming

- CSCI fact sheet
- Ongoing needs assessment
- Ten-year Strategy
- New SOPs
- Algae Work Group
- Tools for non-perennial streams
- Statewide algae scoring tools
- CSCI automation tool





QUESTIONS ?

