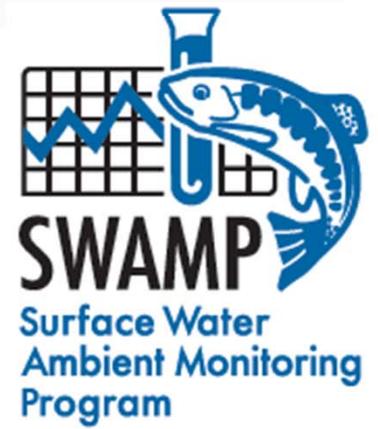


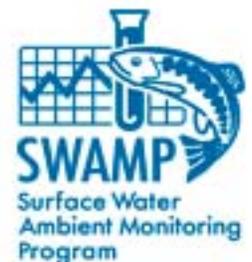


Bioaccumulation Strategy



Bioaccumulation Strategy

- “Strategy for Coordinated Monitoring, Assessment, and Communication of Information on Bioaccumulation from Aquatic Ecosystems in California”
- Fulfilling BOG role as a Council workgroup
- Promote efficient use of bioaccumulation monitoring resources across the state



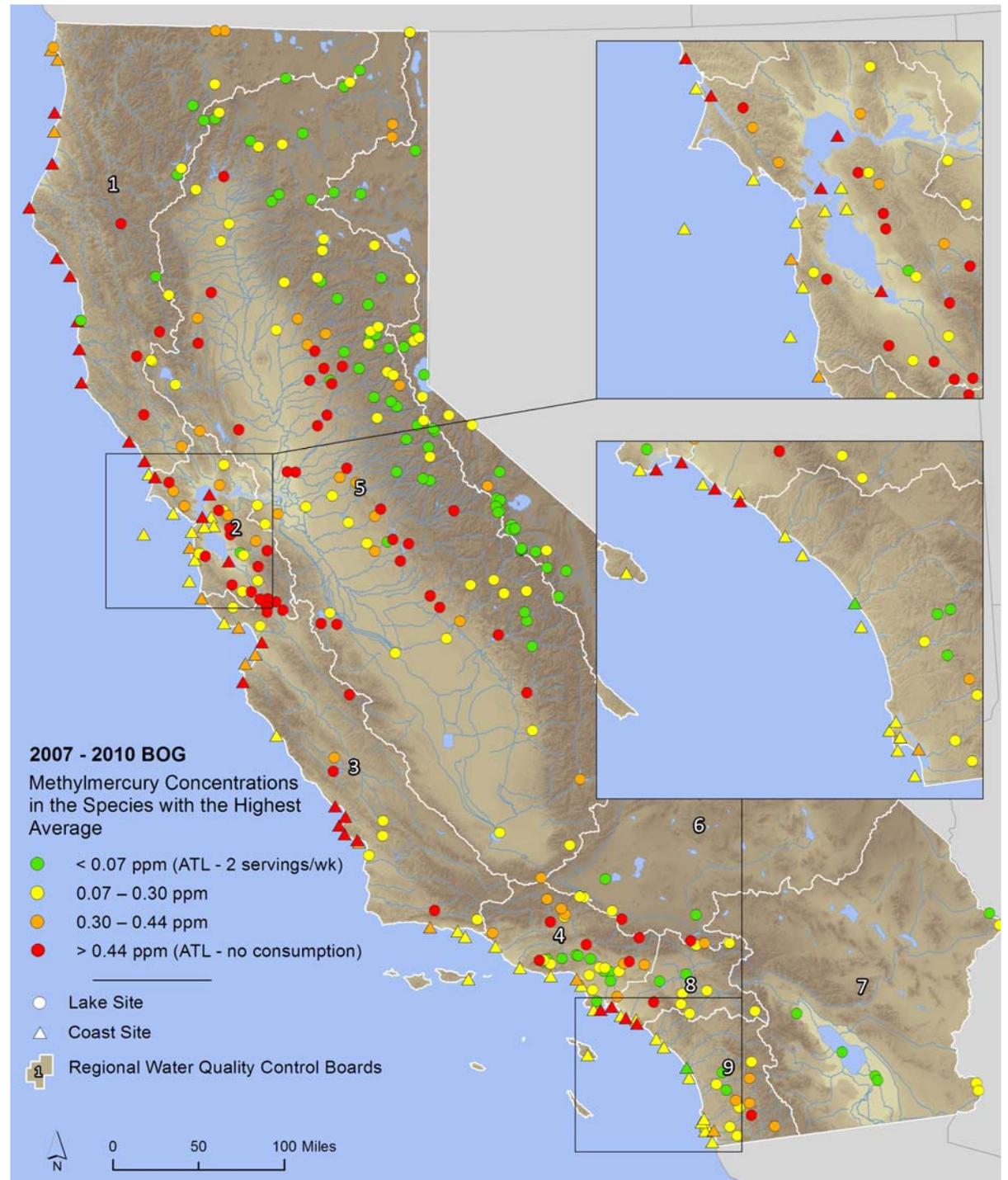
Bioaccumulation Strategy

- Brief written document
- Overarching vision of what needs to be done to address bioaccumulation problems in California
 - SWAMP role is to do **some** of the work that is needed
- Audience: the Council, BOG (narrow and broad), SWAMP, other programs



1) Background: Bioaccumulation Monitoring in California

- Recent Accomplishments
 - Statewide sport fish surveys
 - Unprecedented coordination
 - Annual reports and fact sheets
 - Safe eating guidelines
 - Safe to Eat Portal
 - Centralized database
 - First statewide study of impacts on aquatic life



2) Bioaccumulation Monitoring in California: Problem Statement

But areas for improvement remain

- **Data** – many water bodies not monitored sufficiently, others not at all – trends – CECs – biotoxins – drivers of bioaccumulation – beneficial uses
- **Coordination** – insufficient coordination of monitoring (including QA), data management, assessment, reporting, peer review

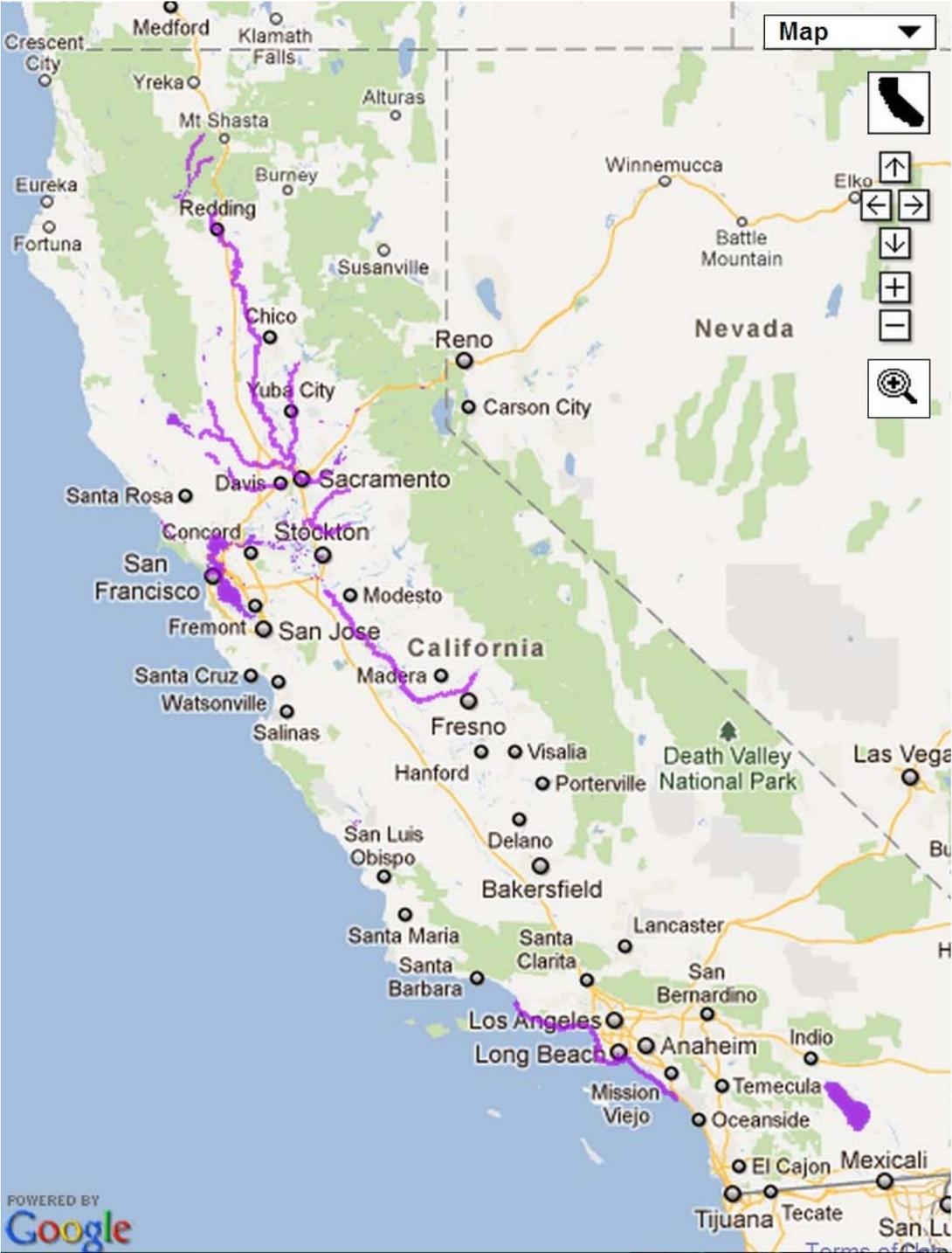


2) Bioaccumulation Monitoring in California: Problem Statement

- **Synthesis, assessment, and reporting** – safe eating guidelines, interpretation of patterns, coordination on thresholds
- **Understanding of sources and fate**
- **Access to data and information** for scientists, regulators, and the public
- **Coordinated and effective communication** of important information
- **Science to support control plans**



Existing Consumption Advisories



3) Goals and Objectives

1. Conduct **coordinated, long-term statewide monitoring and assessment** to generate the data needed to support exposure reduction and water quality protection and restoration (TMDLs, etc.)
 - a. Conduct monitoring needed to support **advisory development**
 - b. Provide periodic **statewide assessments** of California water bodies that policy makers need to track general status
 - c. Conduct the **trend monitoring** needed to track effectiveness of specific cleanup actions
 - d. In support of control efforts, conduct the studies needed to **identify the most important sources and pathways**



3) Goals and Objectives

2. **Communicate** to the public and provide **public access** to information on fish contamination that the public can use to reduce their exposure to contaminants and participate in management processes in an informed manner
 - a. Develop **safe eating guidelines** for all water bodies where they are needed and communicate these guidelines effectively
 - b. Maintain and refine the “**safe to eat**” **portal** as one form of access to fish contamination information



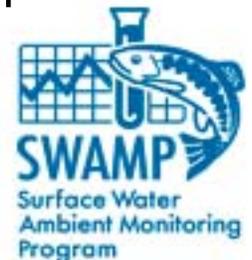
4) Recommendations

Monitoring and Assessment

1. Promote enhanced general coordination of monitoring, assessment, and communication
2. Conduct monitoring to support advisory development
3. Continue performing statewide assessments
4. Conduct regional trend monitoring
5. Perform statewide studies to support pollution reduction
6. Perform source identification and mitigation studies

Communication

7. Support exposure reduction efforts
8. Enhance communication of bioaccumulation information



5) Implementing the Recommendations

1. Establish a functional expanded BOG
 - Meetings
 - Workshop
 - Forum for coordination
 2. Safe eating guidelines
 3. Statewide assessment
 4. Trends
 5. TMDL support
 6. Source identification
 7. Communication
- Review existing efforts
 - Assess needs
 - Develop plans to address needs



Bioaccumulation Strategy: Timeline

- BOG, Mike Connor review of draft Strategy: April
- Present Draft Strategy to Council: May 30
- Convene Bioaccumulation Workgroup meeting: July
 - Briefing on SWAMP activities
 - Review Strategy
 - Plan Workshop
- Finalize Strategy: Summer/Fall
- Begin implementation of Strategy: Fall/Winter
- Workshop on Methylmercury in California Lakes and Reservoirs: Spring 2013



Obstacles to Implementation

1. Funding

- SWAMP Bioaccumulation funds
- Safe eating guidelines
- Communication of safe eating guidelines
- Goal of identifying other funding sources

2. Participation



Highlights/Questions for the Council

1. Note the inclusion of aquatic life
2. General feedback on the direction this is taking
3. Format for Strategy document?
4. How to achieve and sustain active, broad participation?
5. How to acquire funding in the near-term and long-term?

