

## **Problem Statement**

California lacks a committed long-term program to provide the monitoring information needed to support management of bioaccumulative pollutants in California water bodies

1. California lacks a central agency or group with the responsibility and authority to compile and manage data across programs.
2. There is no mechanism for design and coordination of consistent monitoring.
3. Data management across programs and agencies is uneven and inconsistent.
4. There are no standard agreed upon data protocols.
5. Quality assurance processes are absent, unclear, or inconsistent.
6. Lack of peer review

Xx add synthesis and reporting

Xx add internal coordination of communication (e.g., press releases)

## **Goals**

1. Ensure that the monitoring information needed to support management of bioaccumulative pollutants in California water bodies is available to managers and stakeholders (note: this doesn't mean that SWAMP has to DO all of the monitoring)
  - a. Function as the forum for statewide coordination of bioaccumulation monitoring and assessment and provide a mechanism for cooperation among state and federal agencies, non-governmental organizations, and research institutions

## **Recommendations**

Continuing ambient assessment for all water body types is needed  
Consistent procedures for monitoring, data management, assessment, and reporting  
Coordinated quality assurance/quality control (QAQC) plan.  
Consistent quality control and metadata requirements.  
Coordinated and integrated data management program.  
Employ the My Water Quality data portal as a communication tool.  
Peer review

## **Steps in Strategy Development**

1. Develop a draft strategy
2. Present strategy to the Council for review
3. Identify additional members and get them to participate with the Council's help
4. Decide on workgroup organization and processes
5. Review charter with expanded workgroup
6. Review draft strategy with expanded workgroup
7. Finalize strategy
8. Start implementing strategy

## **Beneficial Uses Addressed**

Fishing  
Aquatic Life (includes wildlife)

Table 1. Objectives and assessment questions for the SWAMP that pertain to bioaccumulation monitoring.

FISHING BENEFICIAL USE SUPPORT – *we adopted these back in 2006*

**D.1. Determine the status of the fishing beneficial use throughout the State without bias to known impairment**

- D.1.1 What is the extent and location of water bodies not supporting any fishing beneficial use?
- D.1.2 What is the extent and location of water bodies partially supporting the fishing beneficial use?
- D.1.3 What is the extent and location of water bodies fully supporting the fishing beneficial use?
- D.1.4 What is the proportion of water bodies in the State and each region falling within the three levels of support of the fishing beneficial use?

**D.2. Assess trends in the fishing beneficial use throughout the State**

- D.2.1 Are water bodies improving or deteriorating with respect to the fishing beneficial use?
- D.2.2 Have water bodies fully supporting the fishing beneficial use become impaired?
- D.2.3 Has full support of the fishing beneficial use been restored to previously impaired water bodies?

**D3. Evaluate sources and pathways of factors impacting the fishing beneficial use**

- D3.1 What is the relative importance of different pollutant sources and pathways in terms of impact on the fishing beneficial use on a regional and statewide basis?

**D4. Evaluate the effectiveness of management actions in improving the fishing beneficial use**

- D4.1 How is the fishing beneficial use affected by remediation, source control, or pollution prevention actions and policies regionally and statewide?

AQUATIC LIFE BENEFICIAL USE SUPPORT – *parallel to the fishing ones – we haven't adopted these*

**A.1. Determine the status of aquatic life use support throughout the State without bias to known impairment**

- A.1.1 What is the extent and location of water bodies with limited support of the aquatic life beneficial use?
- A.1.3 What is the extent and location of water bodies fully supporting the aquatic life beneficial use?
- A.1.4 What is the proportion of water bodies in the State and each region in each level of support of the aquatic life beneficial use?

**A.2. Assess trends in support of the aquatic life beneficial use throughout the State**

- A.2.1 Are water bodies improving or deteriorating with respect to the fishing beneficial use?
- A.2.2 Have water bodies fully supporting the aquatic life beneficial use become impaired?
- A.2.3 Has full support of the aquatic life beneficial use been restored to previously impaired water bodies?

**A.3. Evaluate sources and pathways of factors impacting the aquatic life beneficial use**

- A.3.3 What is the relative importance of different pollutant sources and pathways in terms of impact on the aquatic life beneficial use?

**A.4. Evaluate effectiveness of management actions improving the aquatic life beneficial use**

- A.4.1 How is the aquatic life beneficial use affected by remediation, source control, or pollution prevention actions and policies regionally and statewide?

## What Monitoring Needs to Be Done Going Forward

Beneficial Use	Objective	Lakes and Reservoirs	Coast and Bays and Estuaries	Rivers and Streams	Wetlands
<b>Fishing</b>	Status	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Applicable
	Trends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Applicable
	Sources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Applicable
	Management effectiveness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Applicable
<b>Aquatic Life</b>	Status	?	?	?	<input type="checkbox"/>
	Trends	?	?	?	<input type="checkbox"/>
	Sources	?	?	?	<input type="checkbox"/>
	Management effectiveness	?	?	?	<input type="checkbox"/>

## What and Who Going Forward - Strawman

Beneficial Use	Objective	Lakes and Reservoirs	Coast and Bays and Estuaries	Rivers and Streams	Wetlands
<b>Fishing</b>	Status	<p><b>Periodically repeat probability survey SWAMP/USEPA?</b>            SWAMP separate survey every 10 yr?</p> <p><b>Periodic census of popular/targeted lakes (every 10 yr)</b>            Coordinate with:            TMDL parties            FERC            DWR            USACE            Etc.            SWAMP fill gaps</p>	<p><b>Census every 10 yr</b>            RMP?            Bight            SWAMP            Others?</p>	<p><b>Census every 10 yr</b>            TMDL parties?            SWAMP            Others?</p>	
	Trends	<p><b>Higher frequency monitoring at selected lakes – lakes subject to management actions or reference lakes (every 5 yr at a minimum)?</b>            TMDL parties            SWAMP jump start and fill gaps</p>	<p><b>Higher frequency monitoring at selected locations?</b>            RMP            Bight?            SWAMP fill gaps</p>	<p><b>Higher frequency monitoring at selected locations?</b>            TMDL parties?            SWAMP jump start and fill gaps</p>	
	Sources	TMDL Parties	TMDL Parties	TMDL Parties	
	Management effectiveness	See Trends above TMDL Parties	See Trends above TMDL Parties	See Trends above TMDL Parties	

<b>Aquatic Life</b>	Status	<b>Address through translators (e.g., BAFs) from sport fish to other species</b>	Same	Same	?
	Trends	Same	Same	Same	?
	Sources	TMDL Parties	TMDL Parties	TMDL Parties	?
	Management effectiveness	See Trends above	See Trends above	See Trends above	?