First Triennial Audit Report: Implementing the Comprehensive Monitoring Program Strategy

Jon B. Marshack, D.Env.
Monitoring Council Coordinator

CALIFORNIA

WATER QUALITY MONITORING COUNCIL

Senate Bill 1070

- Required formation of
  California Water Quality Monitoring Council
  - Memorandum of Understanding between
    - California Environmental Protection Agency
    - California Natural Resources Agency
- Develop recommendations – December 2008
  - Maximize efficiency and effectiveness of existing water quality data collection and dissemination
  - Ensure collected data available to decision makers and public
- Comprehensive Monitoring Program Strategy – December 2010

SB 1070 – Triennial Audit

- Commencing December 1, 2008, the Secretary of Cal/EPA shall conduct a triennial audit of the effectiveness of the monitoring program strategy
- The audit shall include, but need not be limited to, an assessment of:
  - Extent to which the strategy has been implemented
  - Effectiveness of the monitoring and assessment program and the Monitoring Council with regard to:
    - Tracking improvements in water quality
    - Evaluating the overall effectiveness of programs administered by the Water Boards and of state and federally funded water quality improvement projects
- The Secretary of the Cal/EPA shall consult with the Secretary of the [Natural] Resources Agency in preparing the audit, consistent with the MOU

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Triennial Audit Report Outline

- Goals
- Achievements
- Challenges
- Unaddressed Mandates
- Sustainability
- Next Steps & Recommendations
  - Focus of cover letter

Triennial Audit Report Outline

💧 Goals

💧 Achievements

💧 Challenges

💧 Unaddressed Mandates

💧 Sustainability

💧 Next Steps & Recommendations

    💧 Focus of cover letter

Goals

1. Water quality and associated ecosystem monitoring is more efficient and effective through coordination among governmental agencies and non-governmental organizations
   a. Data gaps are identified and filled
   b. Redundant monitoring is minimized
   c. Quality control measures are in place to ensure that data are useable – of known and documented quality
   d. Data from multiple sources can be combined to enable broader assessments

Goals

2. Agency decision makers, regulators, resource managers, legislators, and the public have ready access to the integrated services of monitoring and assessment, including quality controlled data, needed to make decisions

   a. Monitoring data are turned into meaningful assessment information

   b. Monitoring and assessment efforts are designed to address management questions

   c. Monitoring data and assessment information are readily accessible

Goals

3. Water quality improvement projects financed by the state provide specific information necessary to track project effectiveness with regard to achieving clean water and healthy ecosystems

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Achievements

1. Formation of six theme-specific interagency workgroups
   a. Safe Drinking Water Workgroup
   b. Safe to Swim Workgroup
   c. Bioaccumulation Oversight Group
   d. Wetland Monitoring Workgroup
   e. Healthy Streams Partnership
   f. Estuary Monitoring Workgroup
   g. (Ocean and Coastal Workgroup – scoping)

Achievements

2. Formation of a data management workgroup
   - To provide recommendations on data management, GIS and web development

3. Formation of Water Quality Monitoring Collaboration Network
   - Provides regular web-based seminars for agency personnel, citizen monitors and others
   - Foster information exchange
   - Encourage broader use sound monitoring, assessment, reporting, and data management tools and methods

Achievements

4. Involvement of program staff
   from numerous agencies and organizations

5. Public release of six question-based,
   easy to use My Water Quality portals

   a. Is it safe to swim in our waters?

   b. Is it safe to eat fish and shellfish from our waters?

   c. Are our aquatic ecosystems healthy?

      i. Wetlands

      ii. Streams and rivers

      iii. Estuaries

      iv. Rocky intertidal habitats (tide pools)

   d. (Is our water safe to drink? – mockup approved)

Achievements

6. Increased visibility and credibility of participating monitoring programs

Achievements

7. Developed consistent monitoring, assessment, reporting, and data management tools
   a. Wetland and riparian area mapping
   b. Rapid wetland assessment (CRAM)
   c. California Aquatic Resources Inventory
   d. Data management and visualization
      - CEDEN, EcoAtlas, Estuary Monitoring Workgroup tools
   e. Partnering with SWAMP for scientifically validated
      i. Monitoring protocols
      ii. Quality assurance procedures
      iii. Data quality documentation
      iv. Data management

Achievements

8. SWAMP Strategy updated to reflect leadership
   a. Healthy Streams Partnership
   b. Bioaccumulation Oversight Group
   c. Source of monitoring and assessment methods, quality assurance, and data management tools
9. Wetland and Riparian Area Monitoring Plan
10. State-federal partnership for wetland monitoring and assessment
11. Initial bioaccumulation monitoring and assessment strategy

Achievements

12. Wetland Workgroup assisting in development of wetland and riparian area protection policy

13. First comprehensive statewide survey of contaminants in sport fish in California waters

14. First statewide advisory on eating fish from lakes and reservoirs

15. First statewide integrated multi-metric assessment of watershed health

16. SWAMP methods and procedures are being incorporated into Water Board regulatory programs

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Challenges

1. Lack of formal support from Agency Secretaries for Monitoring Council's strategy
2. Limited support from departmental and program managers
   a. Inconsistent workgroup leadership
   b. Restricts participation in workgroup and portals
   c. Workgroup-developed tools have no agency home
   d. Uneven awareness and use of workgroup-developed tools by state agencies and others

Challenges

3. Lack of participation by state organizations identified in the legislation – outreach needed
   a. California Coastal Commission
   b. State Lands Commission
   c. Department of Parks and Recreation
   d. Department of Forestry and Fire Protection
   e. Department of Pesticide Regulation

Challenges

4. Lack of participation by other relevant agencies and programs − outreach needed
   a. Lake and Streambed Alteration program | of the Department of Fish and Wildlife (CDFW)
   b. State Coastal Conservancy
   c. Shellfish protection and marine biotoxin programs of the Department of Public Health
   d. Division of Water Rights of the State Water Board
   e. California Department of Transportation
   f. Biogeographic Data Branch of CDFW
   g. Delta Science Program of the Delta Stewardship Council

Challenges

5. Lack of dedicated funding for the program – existing limited funding from State Water Board, USEPA, SFCWA
   a. Resources needed to initiate and sustain collaboration
      i. Staff time for workgroup meetings and monitoring, assessment, and reporting collaboration
      ii. Improving data management and access infrastructure
      iii. Portal development and maintenance
   b. Business plans developed by each workgroup could begin to answer this need

Challenges

6. Most data still siloed within departmental programs and offices – lack of commitment to sharing
   1. Largely inaccessible to others or to the public
   2. Inconsistent formatting
   3. Inconsistent documentation
   4. Inconsistent QA/QC
7. General lack of access to data generated by citizen monitoring groups
8. Insufficiently rapid access to data needed to make timely decisions

Challenges

9. Inconsistent use of indicators and assessment thresholds by departments and programs

10. Need for greater interaction between theme-specific Monitoring Council workgroups

11. Relevant statewide assessment endpoints and measures generally lacking

12. Commitment to data transparency lacking in some agencies and programs

13. Need for consistent base map (GIS layer) of California's water resources
    - No state steward for NHD and NWI

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Unaddressed Mandates

1. Monitoring Council recommendations to ensure state-financed water quality improvement projects track effectiveness with respect to achieving clean water & healthy ecosystems

2. Agreement, including schedule, with regard to the comprehensive monitoring of statewide water quality protection indicators – to provide a basic minimum understanding of the health of the state's waters

   - Assigned to State Water Board in coordination with the Monitoring Council

Unaddressed Mandates

3. Identify full costs of implementation of the comprehensive monitoring program strategy and proposed sources of funding for implementation

   ⬩ Assigned to State Water Board
   ⬩ Recommendations from the Monitoring Council

Unaddressed Mandates

4. The Secretaries for Cal/EPA and Resources will oversee implementation efforts:

    a. Direct their boards, departments, and offices to establish and cooperatively participate.

    b. Establish policies and procedures to ensure that water quality improvement projects track effectiveness

    c. Meet annually to review the Monitoring Council's progress and to identify additional opportunities

    d. Conduct a triennial audit of the completeness and effectiveness of the comprehensive monitoring program strategy recommended by the Monitoring Council

Unaddressed Mandates

5. Monitoring Council to review existing water quality monitoring, assessment, and reporting efforts and recommend specific actions and **funding and staffing levels** necessary to coordinate and expand those efforts, as needed, to create an ongoing assessment of the health of the state's waters and the effectiveness of programs to protect and improve the quality of those waters

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Sustainability

1. Lack of sustainable dedicated funding and management support for coordination and portal development
   a. Voluntary efforts of a few staff members
   b. One-time grants, budget redirections, and contracts
2. Some departmental funding
   a. SWAMP portion of Healthy Streams Partnership
   b. Bioaccumulation Oversight Group
   c. Coastal beach swimming safety
   d. Estuary Monitoring Workgroup leadership and portal development – limited term basis

Sustainability

3. To be successful, workgroup and portal development efforts must be blended into the normal way of doing business of government – satisfy existing departmental mandates

    a. Water Rights Decision 1641 interactive online Delta water quality report

    b. Environmental outcomes performance measures of the Water Board tied to My Water Quality

    c. Drinking water system public reporting through the Safe to Drink Portal (?)

    d. Tracking BDCP habitat restoration projects through EcoAtlas and Estuary Portal (?)

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Next Steps & Recommendations

1. Again request that agency secretaries approve comprehensive monitoring program strategy

2. Revisit MOU with agency secretaries

3. Increase outreach to agency/program managers

4. Identify monitoring, assessment and reporting mandates of governmental agencies and others that can be addressed by workgroup processes, tools, and portals

   a. Use these to increase participation, utilize tools, and fund portals

   b. Build around Delta

Next Steps & Recommendations

5. Develop business plans that identify key workgroup actions, necessary funding and potential funding sources to ensure sustainability

6. Develop recommendations for data formats and data transfer protocols to ensure that water resource data can be effectively shared between agencies and with other data providers and users

7. Develop proposal for legislation needed to advance implementation of the Monitoring Council's strategy