

Section A5. Problem Definition/Background

Summary of Creation of SWAMP Program

Proposed mission statement for the SWAMP Program:

The mission of the SWAMP Program is to provide for an integrated evaluation of physical, chemical, and biological characteristics of ambient conditions within California's aquatic systems in relation to human health concerns, ecological condition, and designated uses. SWAMP data provide a basis for the establishment of effective State Water Resources Control Board (SWRCB) and Regional Water Quality Control Board (RWQCB) management policies that promote the protection, restoration, and wise use of California surface-water resources.

This section provides a background of the need for, and the creation of, the SWAMP Program. Most of the information in this section from this point forward is taken directly from the SWRCB Report to the Legislature from November 2000 entitled "Proposal for a Comprehensive Ambient Surface Water Quality Monitoring Program" (November 2000 Legislative Report), which is available from the SWRCB SWAMP Program staff.

California Assembly Bill (AB) 982 (Water Code Section 13192; Statutes of 1999) required the State Water Resources Control Board (SWRCB) to assess and report on state of California monitoring programs, and to prepare a proposal for a comprehensive surface water quality monitoring program. The passage of, and implementation of the requirements of, AB-982 ultimately provided for the administrative, political, financial, and technical means to create the SWAMP Program within the SWRCB. This was possible due to support from the California Legislature in Fiscal Year 2000-2001 provided in the Governor's Water Quality Initiative, which provided the authority and budget within the SWRCB for the formation of SWAMP.

The Porter-Cologne Water Quality Control Act and the federal Clean Water Act (CWA) direct the water quality programs to implement efforts intended to protect and restore the integrity of waters of the State. California Assembly Bill (AB) 982 (Water Code Section 13192; Statutes of 1999) requires the State Water Resources Control Board (SWRCB) to assess and report on the State monitoring programs and to prepare a proposal for a comprehensive surface water quality monitoring program. Ambient monitoring is independent of the water quality programs and serves as a measure of (1) the overall quality of water resources and (2) the overall effectiveness of Regional Water Quality Control Boards' (RWQCB's) prevention, regulatory, and remedial actions. Current monitoring and assessment capability at the SWRCB is limited and tends to be focused on specific program needs. This has led to a fragmentation of monitoring efforts resulting in gaps in needed information and a lack of integrated analyses.

The November 2000 Legislative Report contains the monitoring program proposal that is the basis of the SWAMP Program. It was designed to address a number of programmatic objectives focused on assessing the quality of the beneficial uses of the State's water resources. Some of these objectives are satisfied with the information produced by existing monitoring efforts within the SWRCB and other agencies. Each of the SWRCB and RWQCB's existing monitoring programs e.g., the State Mussel Watch Program (SMWP), the Toxic Substances Monitoring Program (TSMP), the Toxicity Testing Program (TTP), Coastal Fish Contaminants Project (CFCP) and fish/shellfish contamination studies, shall be incorporated to the extent and manner possible into SWAMP to ensure a coordinated approach without duplication. SWAMP shall also coordinate with other programs implemented in the State to assure that the ambient monitoring efforts are not duplicated.

However, in the November 2000 Legislative Report, the SWRCB proposed to restructure the existing water quality monitoring programs into a new program, the Surface Water Ambient Monitoring Program (SWAMP). The major activities planned for SWAMP when fully implemented, as proposed in the November 2000 Legislative Report, are described below.

1. The SWRCB will implement comprehensive environmental monitoring focused on providing the information the SWRCB and RWQCB's need to manage effectively the State's water resources. This will be an umbrella program that monitors and interprets data for each hydrologic unit at least one time every five years. This program shall focus on all waters of the State without bias to known impairment.

2. The program will have consistent monitoring methods with respect to sampling and analysis, data quality objectives, and centralized reporting requirements. Furthermore, the monitoring efforts implemented through SWAMP will be: adaptable to changing circumstances, built on cooperative efforts, established to meet clear monitoring objectives, inclusive of already available information, implemented using scientifically sound monitoring design with meaningful indicators of water quality, comparable methods, regular reporting, and data management.

3. The program will focus on spatial status and temporal trends in water quality statewide. To do this the program will determine the site-specific locations, the areal extent, and temporal trends in a number of measures of the quality of water, sediments, and biota that are widely applicable throughout the State depending on the type of water body being monitored. In watersheds, the program will implement a rotating basin framework. In coastal waters, a smaller amount of probabilistic monitoring will be completed.

4. The SWRCB will also develop a Water Quality Control Policy, and a means to implement the Policy, to provide listing/delisting criteria, an approach for setting priorities, minimum data needed to list water bodies, categories of acceptable data quality, and other factors that will allow consistent implementation of the CWA Section 303(d) requirements.

Additionally, the Federal Clean Water Act (CWA) requires the use and collection of ambient water quality information. Section 305(b) of the CWA requires that states and other jurisdictions receiving CWA grant funding submit a water quality report to USEPA every two years. The 305(b) report (SWRCB, 1999b) contains summary information about water quality conditions in rivers, lakes, estuaries, bays, harbors, wetlands, and coastal waters. States must also identify and prepare a list [Section 303(d) list] of waters that do not meet water quality standards after applying existing required controls (e.g., minimum sewage treatment technology). States are required to prioritize waters/watersheds and target high priority waters/watersheds for TMDL development. SWAMP data and findings will provide direct support for the 305(b) and 303(d) programs at the SWRCB and RWQCB's.

However, to date, funding has not been made available to fully implement the SWAMP program as laid out in the November 2000 Legislative Report, resulting in SWAMP primarily focusing on site-specific monitoring needs of each RWQCB, rather than monitoring which can answer questions of statewide trends.