

Science Program: December 2000

The long-term goal of the Science Program of CALFED is to establish a body of knowledge relevant to CALFED actions and their implications that is – both in perception and reality – unbiased, relevant, and authoritative, integrated across program elements, and communicated to the scientific community, CALFED agency managers, stakeholders, and the public.

The Science Program's implementation strategy began with hiring a lead scientist in August 2000. Guided by the ROD, roles of the lead scientist are to identify the role of science in CALFED and establish the level of world-class science called for in the ROD. The lead scientist will establish the roles of committees, identify and hire key Science Program staff, and communicate the role of science in CALFED to CALFED staff, agencies, stakeholders and universities. To assure the quality of science, CALFED will look outside the program for ideas and peer review. Traditional scientific mechanisms will be incorporated. To clarify the scientific discussions, five approaches of science will be focused on: adaptive management, monitoring programs, interdisciplinary resolution of critical unknown facts and integrating those resolutions into the knowledge system as well as use of technical panels to evaluate and characterize critical issues. Results of the science will be communicated to both the scientific and general public communities.

Staffing for the Science Program is beginning. CALFED has hired a program manager and assigned an assistant program manager. The staff has worked diligently to get the Science Program moving forward in meeting its other goals. Some specific accomplishments include:

An important goal of the Science Program is to incorporate peer review into all scientific activities. Accomplishments to date include establishing a process to incorporate peer review into the project selection for the CALFED Science Program and working with ERP staff to refine the competitive grants program for 2002. The Science Program also worked with ERP staff in defining scientific gaps left after the FY2000 proposals selection process, and suggested subject areas in need of directed studies. In order to facilitate adaptive management it was suggested that 20-25% of restoration funding should be spent on restoration-relevant science. Restoration science is necessary if CALFED's restoration efforts are to progressively become more effective as the program proceeds.

Formation of the several boards, panels and oversight committees required in the ROD are on schedule, including identifying potential members and their roles. In particular, the Science Program has begun working closely with the Interim Science Board of ERP, and the Agency Stakeholder Ecosystem Team as an initial approach to building a Science Coordination Committee and the CALFED Science Board. The Science Program will also begin regular participation in meetings of the South Delta Improvements Team, a similar team for the North Delta and the ERP staff meetings.

Technical advisory groups are being established (or existing groups are being used) to advise CALFED Programs on science issues related to Delta issues, progress in studies of

re-directed effects from mercury contamination and Upper Yuba River studies. Exciting progress is being made by the technical panel (chaired by Bruce Herbold) defining measures to evaluate the impacts of employing the Environmental Water Account. Similarly scientific studies evaluating the implications of different management strategies for the Delta Cross Channel gates are beginning to yield useful results (Ron Ott's studies). A technical workshop designed to identify the state of knowledge with regard to the Sacramento Splittail is planned for January, during the FWS's comment period on the listing of that species. A technical workgroup is being formed to advise on Suisun Marsh hydrodynamic modeling issues (Larry Smith is facilitator). The Lead Scientists is working with agency leaders to help establish a common blueprint for Suisun Marsh.

One of the important assignments of the Lead Scientist is to develop a system-wide, coordinated monitoring program. This means coordinating existing programs and filling-in the gaps where programs do not exist. With regard to the former, the Science Program has worked with the Interagency Ecological Program to explicitly define the role of IEP in CALFED. We have defined a "special relationship" wherein collaboration with IEP is necessary for CALFED success and CALFED will play a role in directing IEP goals. The Science Program Manager will be an IEP coordinator and the Science Program will be represented on the management team. The role of partnerships will be expanded in IEP activities to add flexible elements that are of need to CALFED. It is recognized, however, that IEP is not the only entity doing CALFED science, nor is the CALFED mission the only mission for IEP.

The Science Program has targeted establishing partnerships among agencies, universities and stakeholder groups as critical to advancing coordinated monitoring and development of a watershed-wide indicator system. A first step is the initiation of a Bay-Delta Science Consortium. This would be a multi-agency, multi-university consortium of shared field centers and co-located centers of excellence around which partnerships can develop. Charter members of the Consortium have begun regular meetings and 10 core principles have been drafted.

Wetlands and riparian system monitoring are obvious gaps in the regional monitoring system. The Science Program is working at coordination of the numerous entities presently developing watershed monitoring plants (CMARP's Terrestrial/Amphibian Monitoring Plan, SFEI cooperative Goals Project, Bodega Bay's Indicators Studies, etc.). The Goal is to have selected aspects of Watershed Monitoring Program collecting data by Fall, 2001. A comprehensive plan for aquatic monitoring is nearing completion (authored by Randall Brown) as is a second phase plan for general indicator development (authored by Anitra Pawley).

Finally, the CALFED Science Conference in early October 2000 was attended by more than 500 scientists who listened to more than 100 presentations relating to science and Bay-Delta issues. By all accounts the conference was highly successful. The conference illustrated the successful integration of science into the CALFED Program. Next year's Science Conference will be partnered with to the State of the Estuary Conference in San Francisco. Work has begun on that endeavor.

PUBLIC PARTICIPATION: The public participated in the Science Program through meetings, discussions and talks with or for the Agency/Stakeholder Ecosystem Teams, the Federal-State Management Team, Bay Area Conservation and Development Commission, CALFED Science Conference, Dept. Water Resources Environmental Specialists Annual Conference, Technical Committee for Dredge Re-use. Discussions with numerous key individuals from agencies and stakeholders are an on-going activity.

FISCAL INFORMATION: Although no money was specifically allocated to Science Program in 2000, science funds from other programs were used. Planned activities for 2001 are to begin implementing the five elements of science by supporting critical work, both within the Science Program and in other CALFED programs. USGS, Cal. Resources Dept. and CALFED operational funds were patched together to fund the staff of the Science Program up to this point (August – December, 2000). That funding will continue in 2001 under some combination of these sources. A formal budget for the Science Program activities for 2001 has been proposed, but no firm funding exists at present.