

Status Report
Bolinas Ecosystem Restoration Project Technical Review Group

June 22, 2004

The Technical Review Group (TRG) has thus far commented on the draft Project Work Plan, the Management Objectives and Key Indicators, the Review of Existing Data, the Conceptual Models of how Bolinas Lagoon evolves and behaves as an ecosystem, the draft Adaptive Management Plan, and a variety of technical questions presented by the Project consultants. The TRG's comments on these matters are contained in two public reports dated 26 November 2003 and 25 March 2004. These reports are available on the Project web site at http://www.marinopenspace.org/os_bolinaslagoonmgtplan.asp.

The TRG commentary to date has raised three fundamental technical concerns.

The first is that the science and engineering for the project should proceed without any assumption that intervention into the Bolinas Lagoon ecosystem is needed. The technical work should focus on a definitive assessment of trends in ecosystem form and function. The TRG is concerned that an assumption of excessive sedimentation might bias the Project in favor of intervention. To help address this concern, the TRG recommended a number of changes to text and graphics in the draft Project reports, especially the conceptual models. The TRG also recommended that the Project managers consider renaming the Project to remove the term restoration, since it implies intervention.

The second concern is that existing data on the key physical factors controlling conditions in the system, namely water supply (tidal prism) and sediment supply (sedimentation rates), are inadequate to address the central questions about the Lagoon: is there net sedimentation for the system as a whole, and if so, is the rate of net sedimentation great enough to cause the Lagoon entrance to close during the next 50 years? To help address this concern, the TRG identified steps to establish adequate vertical and horizontal control for all measures of land and water heights within the ecosystem, plus a study of historical sedimentation trends for the system as a whole. Efforts are now underway to take these recommended steps. The TRG has provided expertise to the Project for establishing the needed vertical and horizontal controls through NOAA, and a special study to estimate sedimentation rates has been planned through the University of California at Berkeley.

The third concern is that the role of science is not fully recognized in the future adaptive management framework for Bolinas Lagoon. The TRG has suggested that Adaptive Management is a program of ongoing feedback between scientific monitoring and management responses to the monitoring results. The system of empirical observations of land heights, water heights, and sedimentation rates as described above will need to be augmented with regular measures of key ecological indicators. But the TRG has also recommended that the managers begin to plan how they will manage the data, assure its objective interpretation, and use the data in ongoing management decisions.

The TRG will be meeting with Project consultants in the near future to discuss the proposed lagoon modeling approaches.