

SALTON SEA ADVISORY COMMITTEE MEETING

August 17, 2005

9:30 – 3:30

Sacramento, CA

Welcome and Introductions

Mike Chrisman, Secretary for Resources, welcomed the Advisory Committee members and led introductions of those present (see attached list).

Updates from the Resources Agency

Mr. Chrisman noted that the third series of public outreach meetings is scheduled for September 13 through September 15. These meetings provide a forum for local input into the Ecosystem Restoration Plan process and Committee members are encouraged to attend. A newsletter and brochure are also being prepared and will be distributed to the public shortly.

Public Comments

No public comments were provided.

QSA Update

Larry Purcell, San Diego County Water Authority (SDCWA), Steve Robbins, Coachella Valley Water District (CVWD), and Bruce Wilcox, Imperial Irrigation District (IID), provided an update on the progress on Quantification Settlement Agreement implementation.

- **IID/SDCWA Water Transfer**—IID anticipates transferring 30,000 acre-feet to SDCWA this year. IID and SDCWA are working to resolve the approach regarding third party impacts through the process identified in the transfer agreement (as amended). The QSA Joint Powers Authority has budgeted \$10 million for mitigation actions in 2005, the majority of which is anticipated to be used for marsh habitat mitigation. IID has assumed the lead role on the preparation of the Habitat Conservation Plan (HCP) and anticipates beginning the work on the HCP shortly. A Committee Member suggested that the State and IID consider a collaborative process for preparation of the HCP, and suggested that the Contra Costa Natural Communities Conservation Plan process be used as an example.
- **Coachella Canal Lining Project**—The Coachella Canal Lining Project is on schedule and is anticipated to be completed in early 2007.
- **All-American Canal Lining Project**—A lawsuit was recently filed on the All-American Canal Lining Project by three non-governmental agencies. The

International Boundary and Water Commission is continuing to work with the Republic of Mexico to address Mexico's concerns regarding the project.

- **Pending QSA Litigation**—There are a several pending lawsuits on the QSA. One suit has been decided, and is currently on appeal. The remainder of the lawsuits are on hold pending the outcome of the appeal.

Discussion of Process for Ecosystem Restoration Plan

Gwen Buchholz, CH2M HILL, provided an overview of the process for development of the Ecosystem Restoration Plan (ERP) and programmatic Environmental Impact Report (PEIR). Development of the ERP and PEIR was initiated in 2004 with the collection of background information. Many of the data gaps and unresolved issues identified in this initial effort are in the process of being resolved through focused studies and the efforts of the Working Groups. A range of alternatives are being developed, and screening criteria will be developed in coordination with the Working Groups and Advisory Committee to focus the final range of alternatives. Sections of the ERP and PEIR will be provided to the Working Groups and the Advisory Committee for review as they become available.

Update on Project Schedule

Gwen Buchholz provided an update on the project schedule. The ERP and PEIR are anticipated to be released to the public in February 2006. A member of the public suggested that the Financing Plan be added to the project schedule.

Working Group Updates

Gwen Buchholz, David Christophel, CH2M HILL, and Darryl Hayes, CH2M HILL, provided updates on the development of the alternatives and the progress of the various Working Groups.

Inflow, Salinity, and Modeling

Ms. Buchholz provided an overview of the progress of the Inflows/Modeling Working Group. The Working Group has finalized the inflow assumptions for the No Action Alternative and the methodology to project the range of future inflow conditions. The Working Group has also initiated discussions on projecting future salt loads and development of the model. The Committee discussed the No Action Inflow and Future Inflows in more detail, as summarized below:

- **No Action Inflows**—The No Action Alternative inflows account for a variety of water management actions that may affect inflows to the Salton Sea including the QSA, wastewater treatment and power plants in Mexico, and the CVWD Water Management Plan. An Advisory Committee member suggested that future climate changes be included in the No Action Alternative inflows.

- **Methodology to Project Range of Future Inflows**—The methodology to project the range of future inflows incorporates a stochastic approach to determining hydrologic variability and future uncertainty for each inflow source. A report will be prepared describing the inflow methodology and analysis, and will be distributed to the Working Group and the Advisory Committee for review.

Habitat Components

Mr. Christophel provided an update on the progress of the Habitat Working Group. The Working Group held its second meeting on August 9, 2005. Various topics were addressed including habitat goals and conservation objectives, quantification of existing habitat, status of the bird habitat modeling, and overall restoration approach and opportunities.

The Working Group discussed consistency with the intent of the project legislation, and specifically, the intent of the term “historic.” It was noted that the Working Group agreed that the project should not strive to recreate a point in time; rather, alternatives should be developed to optimize species abundance and diversity. Comparison to historic levels of species abundance and diversity will provide a baseline to evaluate project performance. The Working Group will continue the discussion of “historic levels” at its next meeting. The Working Group is also refining estimates of the current habitat at and around the Sea, and is in the process of reconciling acreage of seasonal freshwater marsh habitat.

An Advisory Committee member noted that the Habitat Working Group is making progress, but various outstanding issues still need to be addressed by the Group.

Barriers and Other Infrastructure Components

Mr. Hayes provided an update on the progress of the Alternatives Working Group and an overview of the infrastructure components of the Gulf of California, Evolving Sea, and Multiple Concentric Rings alternatives.

- **Gulf of California or Pacific Ocean Alternative**—Mr. Hayes noted that a large volume of water would need to be imported/exported to reduce and stabilize the Sea’s salinity around 40 parts per thousand. A number of prior studies are available on this alternative; however, most have not addressed the presence of the biosphere reserve in the area of the Colorado River delta and considered higher inflows into the Salton Sea. To reduce impacts to the biosphere, the conveyance pipelines and canals will be longer and and/or with slightly modified pipeline alignments than discussed in previous studies. This alternative will require several pump stations. A variety of biological, water quality, and other environmental concerns also exist with this alternative.

It was noted that this alternative has substantial challenges to overcome potential environmental impacts due to the size of the conveyance facilities, intakes and discharges into the Gulf of California, and coordination with the Republic of Mexico. A member of the public noted that many members of the local community prefer this alternative because it is the only alternative that maintains the entire Sea along with its existing shoreline. At this time, the State has not initiated discussions with the Republic of Mexico specifically on this alternative.

A Committee Member requested that comparisons to similar facilities, such as size or capacity, be provided when discussing the extent of infrastructure facilities. For example, the conveyance facilities for the Gulf of California configuration would be about twice as long as the All American Canal.

- **Evolving Sea**—The Evolving Sea alternative does not meet the elevation and salinity control criteria; however, it is being considered as an alternative that does not include a barrier. This alternative is a modified No Action Alternative and might be considered the “most cost-effective, technically feasible, alternative” that is called for in the legislation. This alternative would likely be constructed in phases, with habitat and air quality management components being phased in over time.

The Committee Members briefly discussed the legislative requirements and it was noted that this alternative does not meet the requirements of stable elevation and salinity or an alternative that supports fish and wildlife in the Salton Sea. Secretary Chrisman reinforced the need to use screening criteria to provide a transparent decision-making process to retain or screen out alternatives.

A Committee Member noted that a hypersaline Sea would continue to provide habitat for some species.

- **Multiple Concentric Rings**—This alternative has been formulated to be similar to, although slightly different than, the Cascade Concept. Air quality, habitat, and infrastructure components have been incorporated into this alternative, similar to the other “barrier” alternatives under consideration. With regard to air quality management, all of the alternatives conservatively assume that air quality management actions would occur on 100 percent of the exposed lands. However, a Committee Member noted that this may not be necessary due to the configuration of the alternative. Currently, the Department of Water Resources (DWR) is working with the Imperial Group to better understand the Cascade Concept.

Mr. Hayes noted that the infrastructure configurations are conceptual at this time. The final alternatives will be defined for specific habitat features as defined by the Habitat Working Group. An infrastructure report describing the engineering features of the various configurations will be prepared. Final alternatives including all features will be developed following the identification of habitat concepts for each configuration.

Methods to Develop Screening Criteria

Ms. Buchholz provided an overview of the process to developing screening criteria. Initial criteria were provided in the presentation for discussion purposes only. Screening criteria will also be discussed at the September meeting, and the overall goal is to have a rough list of criteria from the Advisory Committee in September.

Comments on the criteria should be sent via e-mail at saltonsea@water.ca.gov, or the project's e-mail reflector at Salton_Sea@water.ca.gov. E-mails sent to the reflector are distributed to a broad group.

Project Objectives

Ms. Buchholz provided an overview of initial project objectives. The following suggestions on the project objectives were noted by Committee Members:

- **In-Sea Habitat, "Historic Levels"**—Objectives based on the project legislation should be taken verbatim from the legislation. Specifically, an objective should be: "restoration of long-term stable aquatic and shoreline habitat for the *historic levels* and diversity of fish and wildlife that depend on the Salton Sea." There was discussion regarding the meaning of "historic levels," and it was noted that the Working Group is addressing this issue. One Committee Member suggested that 1999 should be used as the historical basis. It was noted that during 1999 the inflows were high that year and a detailed bird count was completed.
- **1998 Federal Legislation**—It was suggested that the project objectives be expanded to include local economics and recreational objectives. It was also suggested that the objectives identified in the Salton Sea Reclamation Act of 1998 (Public Law 105-372) be included in this project.
- **Salton Sea Ecosystem**—The project objectives should address the overall Salton Sea ecosystem and not be limited to the Sea itself.
- **Compliance with Basin Plan**—Compliance with the Basin Plan and the Porter-Cologne Water Quality Control Act should be added to the objectives.
- **Recreational and Economic Opportunities**—The objective should be revised to "enhance recreational and economic opportunities." It was suggested that text from the project legislation be used verbatim.
- **Cultural Resources**—Preservation of tribal, cultural, and heritage values should be added.

The inflow, habitat, water quality, elevation, and air quality management criteria were discussed in more detail as summarized below.

Inflow Criteria—The alternatives will respond differently under different inflows. Because future inflows are somewhat uncertain, a confidence interval or level will be selected to reflect a certain amount of risk. It was noted by a Committee Member that this confidence level should be considered both on an annual and seasonal or monthly time scale. To provide context for the confidence level chosen and the amount of risk assumed, it was also suggested that the Advisory Committee consider what constitutes failure of an alternative. It was also noted that some water elevation and salinity fluctuation should be considered. The Committee Members briefly discussed the level of detail for the current analysis, and it was noted that the analysis should provide enough detail and range of confidence levels to select an alternative that is feasible; however, detailed design considerations could be addressed as part of the project level analysis. Ms. Buchholz noted that documentation will be prepared describing the inflow analysis and results, along with the development of the confidence intervals. In addition, the Ecosystem Restoration Plan will define how each alternative will respond with a range of inflows including flood flows.

Habitat Criteria

Ms. Buchholz provided an overview of the habitat criteria. A Committee Member noted that some habitat types, such as river deltas and islands/snags, should be included and addressed in the criteria. It was also noted that the Habitat Working Group is considering whether or not all alternatives should include fresh and saline habitats. A Committee Member noted that, to the extent that eco-risks can be minimized in freshwater habitats, this habitat type should be included in all of the alternatives.

Water Quality Criteria

The need for water quality management under all the alternatives was discussed. It was noted by the Advisory Committee members that water quality management should be considered. Various Committee Members noted that water quality risks cannot be eliminated, but these risks should not be greater than what is acceptable to state and federal agencies under current regulations. The Committee discussed the possibility of using 'source control' measures, such as agricultural and urban best management practices, to reduce water quality issues.

Elevation Criteria

Ms. Buchholz noted that the project legislation, as amended, does not specify a target elevation for the Sea. A target elevation will assist in the analysis and screening of alternatives. A Committee Member suggested that the need for pumping be considered when selecting a target elevation.

Air Quality Management Criteria

Ms. Buchholz discussed several concepts to manage air quality from exposed areas of the Salton Sea as the water recedes. A Committee Member noted that air quality mitigation may not be needed for all of the exposed area.

Results of Recent Field Work

Harry Ohlendorf, CH2M HILL, provided an update on the soil, sediment, water and biota field sampling. Based on preliminary results, the selenium concentrations found in sediment and water were consistent with those found in prior studies. The selenium speciation study found that more than half of the selenium in the water column occurs in a dissolved organic form, which is the most bioavailable form. A report on the field sampling and data analysis is in preparation and will be distributed shortly.

Seismic Mapping of Lake Tahoe (Scripps)

Neal Driscoll, Graham Kent, and Rudy Murillo, Scripps Institute of Oceanography, provided an overview of the seismic mapping efforts at the Lake Tahoe basin and the potential benefit of similar mapping at the Salton Sea.

Summary and Action Items

The next two Advisory Committee meetings were identified as follows: September 20 at the Barbara Worth Resort in Holtville, and November 1 in Sacramento (at a location to be determined). Additional information will be provided via the Committee's e-mail reflector.

The Bureau of Reclamation will be asked to provide an update on the progress of their Feasibility Study at the next Advisory Committee meeting.

Handouts

Copies of the following presentations and related materials:

- Water Transfer Mitigation Update
- San Diego County Water Authority, Quantification Settlement Agreement Quarterly Report (Information), July 20, 2005
- Development of Ecosystem Restoration Plan and PEIR
- Status of Project Schedule
- Inflows/Modeling Working Group Update
- Habitat Working Group Update
- Alternatives and Infrastructure Working Group Update
- Development of Criteria to Define Alternatives
- Field Work and Sampling Update: Soil, Sediment, Water and Biota

ATTENDANCE

Advisory Committee Members or Alternates Present:

Fred Cagle, Sierra Club
Bart Christensen, State Water Resources Control Board
Michael Cohen, Pacific Institute
Kim Delfino, Defenders of Wildlife
Bill DuBois, California Farm Bureau Federation
Bob Ham, Imperial Valley Association of Governments
Leif Horwitz, U.S. Geological Survey
Rick Hoffman, Riverside County
Julia Levin, Audubon California
Debi Livesay, Torres-Martinez Desert Cahuilla Indians
Brad Poiriez, Imperial County Air Pollution Control District
Larry Purcell, San Diego County Water Authority
Jason Rhine, California Waterfowl Association
Steve Robbins, Coachella Valley Water District
Vincent Signorotti, Geothermal Energy Association
Mike Walker, U.S. Bureau of Reclamation
Dan Walsworth, U.S. Fish and Wildlife Service
Bruce Wilcox, Imperial Irrigation District