Agenda Item: 4.1
Meeting Date: September 13, 2006

BAY-DELTA PUBLIC ADVISORY COMMITTEE

DELTA REGIONAL ECOSYSTEM RESTORATION IMPLEMENTATION PLAN

Summary: This is a status report on the Delta Regional Ecosystem Restoration Implementation Plan (DRERIP). The purpose of DRERIP is to refine the existing ecosystem restoration approach based on the current state of knowledge and to guide long-term CALFED Ecosystem Restoration Program (ERP) implementation in the Delta.

Recommended Action: This is an information item only.

Background

The CALFED ERP and its associated planning documents outline broad programmatic actions and targets for species recovery and habitat restoration (including the restoration of ecological processes). However, a more refined set of actions is needed to support future implementation of ERP in the Delta. In addition, as the CALFED Program evolves and we learn more about the Delta ecosystem, there is a continuing need to adjust, refocus, and prioritize Program efforts to be more effective.

DRERIP involves the development and utilization of three sets of adaptive management planning tools to carry out the overall DRERIP approach for refining actions:

1. Species Life History and Ecosystem Conceptual Models;
2. Process for Evaluating Actions; and
3. Priority Setting Process.

DRERIP is currently engaged in developing the species life history and ecosystem conceptual models. The conceptual models will articulate our current understanding of how the system works and how it may respond to specific actions. The conceptual models serve two main objectives: 1) Document our current scientific knowledge about Delta species and ecosystem processes; and 2) Serve as tools that can be used for evaluating ERP actions in the Delta region. New actions may also be brought to light by the conceptual models.

DRERIP species life history conceptual models will be developed by individuals with expertise and experience with the respective species. Species experts are currently

being tasked with developing life history models for the four runs of Chinook salmon, Central Valley steelhead, Sacramento splittail, striped bass, and white sturgeon. Life history models for Delta smelt, longfin smelt, and green sturgeon are ready for peer review. The next set of DRERIP species life history models to be developed will be consistent with the species to be covered by the Bay-Delta Conservation Plan (BDCP). However, the DRERIP list covers nearly 70 species in all.

The ecosystem conceptual models will be developed by teams of experts interacting through a combination of workshops and follow-up meetings. The first DRERIP Ecosystem Conceptual Model Development Workshop was held on August 30 - 31, 2006. The teams of experts focused on overall Delta hydrodynamics with submodels on water operations, and structures, as well as overall Delta aquatic food-web with submodels on invasive vegetation and toxicity. The draft conceptual models will be refined after the workshop, and are scheduled to be completed by December 2006. These conceptual models will provide a basis for the other ecosystem conceptual models that will focus on Delta habitats, processes and stressors. The DRERIP Adaptive Management Planning Team (AMPT) anticipates that a second conceptual model development workshop will be held near the end of October 2006.

The scientific evaluation process is designed to clarify and categorize potential Delta ERP actions and targets in light of current scientific knowledge and understanding. The DRERIP process envisions a scientific evaluation of potential Delta actions and targets using a consistent and transparent approach that considers the positive (worth) and negative (risk) consequences of actions, their reversibility, and information value for adaptive management. The process will involve a close examination of proposed actions and targets so that they are not pursued on a de facto basis and so that the scientific rationale for each action and target is well understood and documented. Scientific evaluation helps to inform prioritization and project selection but does not, in and of itself, constitute prioritization.

Once actions and targets have been evaluated from a scientific adaptive management perspective, a process for prioritizing the actions can occur. The DRERIP AMPT will finalize a recommended process for setting priorities which will be approved ERP implementing agency managers.

Relationship to Other Delta Efforts

As the CALFED Program nears the end of Stage 1 and prepares to make critical decisions regarding Stage 2, there is a renewed interest and focus on the Delta. DRERIP is one of several efforts currently underway to plan for the Delta's future management. Other efforts include the Delta Vision process, Delta Risk Management Strategy (DRMS), BDCP, Comprehensive Monitoring, Assessment, and Research Program (CMARP III), investigation of the pelagic organism decline (POD), and development of indicators and performance measures.

The tools being developed for DRERIP are designed to aid future decision-making regarding the longer-term conservation and restoration of the Delta, and will also be useful for the activities of these other programs. DRERIP and the AMPT may be able to serve as a forum for integration and collaboration of science and policy for planning in the Delta.

Schedule

The schedule for conducting and completing DRERIP products is as follows:

Convene experts to develop initial ecosystem models	August 2006
Complete recovery ("R") fish species and ecosystem conceptual models	December 2006
Complete Actions evaluation	March 2007
Priority setting	June 2007
Complete Plan	December 2007

List of Attachments

None. Additional information on DRERIP can be found at:
http://www.delta.dfg.ca.gov/erpdeltaplan/

Contacts

Brad Burkholder   Phone: (209) 948-7068
Staff Environmental Scientist
Department of Fish and Game

Darcy Jones   Phone: (916) 445-5244
Staff Environmental Scientist
CALFED Science Program