

# INITIAL FISHERIES AND IN-STREAM HABITAT MANAGEMENT AND RESTORATION PLAN FOR THE LOWER AMERICAN RIVER

## EXECUTIVE SUMMARY

This document, the **Initial Fisheries and In-stream Habitat Management and Restoration Plan for the Lower American River** (FISH Plan) articulates a broadly-shared understanding regarding the management and restoration actions that are most important to undertake to improve conditions for priority fish species in the lower American River (LAR). It constitutes a single blueprint for enhancement of lower American River fisheries and in-stream habitat. The FISH Plan was developed by the Fisheries and Instream Habitat (FISH) Working Group (FWG) of the Lower American River Task Force, and approved in October 2001. (See pages 1-1 and 1-2 for a list of FWG member organizations.)

This FISH Plan serves as the aquatic habitat management element (HME) of a multi-agency River Corridor Management Plan (RCMP) that was funded by CalFed in January 2000. It also is intended to serve as the Habitat Management Plan (HMP) for the lower American River, as required under the Sacramento Area Water Forum Agreement, consistent with the mitigation described and certified in the Water Forum Agreement Environmental Impact Report (EIR) and adopted Mitigation, Monitoring, and Reporting Plan (MMRP). Significantly, the FISH Plan provides a local-stakeholder established framework for CalFed Ecosystem Restoration Program Plan implementation. **Chapter 1 of the FISH Plan (Introduction)** provides further details concerning the context in which the plan was developed.

The goals of the FISH Plan are to:

- Increase and maintain viable populations of naturally spawning fall-run chinook salmon and steelhead;
- Achieve and maintain a viable population of splittail;
- Restore or maintain an appropriate distribution and abundance of other native fish species; and
- Maintain American shad and striped bass populations of sufficient abundance to sustain these fisheries, consistent with restoring native species.

For further details concerning the desired outcomes, goals, and objectives of the FISH Plan, please see **Chapter 2 (Goals and Objectives)**.

**Chapter 3, Current Status of Lower American River Ecosystem**, describes the existing condition of lower American River fish and aquatic habitat. It is a summary of the detailed *Aquatic Resources of the Lower American River: Baseline Report (Baseline Report)*, which the FWG developed as the foundation upon which to formulate recommendations for how to improve lower American River fish and aquatic habitat. **Chapters 4 and 5, Conceptual Models of Lower American River Ecosystem Structures, Functions, and Processes and Conceptual Models of Restoration Processes** respectively, describe the way in which the FWG understands the lower American River ecosystem and related restoration processes to function. If the above-mentioned *Baseline Report* served as the foundation for developing FISH Plan recommendations, these conceptual models can be thought of as the framing for them; the understanding of lower American River systems that is reflected in these conceptual models

informed the development of selection criteria for recommendations to be included in the FISH Plan.

**Chapter 6, Recommended Management and Restoration Actions**, includes both a description of the selection process and the recommendations themselves. The recommendations address the following topics:

- The lower American River flow management plan, including water temperature management considerations;
- Levees and bank protection;
- Fish stranding;
- Harvest of fish and wildlife;
- Contaminants;
- Aquatic, riparian, and wetland habitat;
- Artificial propagation of fish;
- Natural floodplain and flood processes;
- Coarse sediment supply;
- Other potential management actions; and
- Monitoring and evaluation actions.

As can be seen in Chapter 6, the FWG and Technical Subcommittee (TSC) also prioritized FISH Plan recommendations, reflecting their understanding of which recommendations would be most beneficial for the priority fish species.

**Chapter 7, Lower American River Science-Based Management Framework**, describes in conceptual terms the vision of a science-based management framework for determining the results of the actions in the RCMP and guiding decisions about adjusting goals, and subsequent actions as necessary. The overall goal of the science framework is to reduce, to the extent possible, the uncertainties inherent in the management of lower American River fish and aquatic habitat resources. The following five objectives will guide work toward this goal:

1. Detect changes;
2. Understand system interactions;
3. Predict trends;
4. Inform interested parties/stakeholders; and
5. Improve resource management.

This chapter also describes the four primary components of the science framework, structural considerations, and the adaptive management process. Within the adaptive management process are guidelines for the development of an ecological and biological monitoring and evaluation plan encompassing both river-wide management actions and individual projects. This material will be expanded in a refined draft of the FISH Plan anticipated to be completed during fiscal year 2001/2002.

**Chapter 8, FISH Plan Implementation Strategy**, discusses administrative and financial arrangements for implementing FISH Plan recommendations, as well as strategies for overcoming potential implementation challenges and related technical assistance needs. A summary matrix is presented (Table 8-1) that shows, for each recommendation, likely lead agencies, potential funding sources, cost and time estimates, and current funding status.

The draft FISH Plan was incorporated into the RCMP for use in briefing elected officials and other interested parties on these documents during July and August, 2001. Comments were then sought from interested parties on both documents. This version of the FISH Plan incorporates relevant comments received during this review process.

