

## II. Executive Summary

### a. Project Title and Applicant Name:

City of Sacramento Fish Screen Replacement Project (Phase 2)  
City of Sacramento, Department of Utilities  
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b. Project Description and Primary Biological/Ecological Objectives: The City of Sacramento (City) is currently conducting an engineering feasibility study and environmental analysis associated with the replacement of the fish screens at the Sacramento River Water Treatment Plant (SRWTP) on the Sacramento River and the E.A. Fairbairn Water Treatment Plant (FWTP) on the lower American River (LAR). The screens need to be replaced to be consistent with current California Department of Fish and Game (CDFG) and National Marine Fisheries Service (NMFS) criteria. The project consists of three phases: 1) development and evaluation of alternatives including environmental documentation and engineering feasibility studies; 2) final design and construction; and 3) monitoring and evaluation. Phase 1 is currently in progress. This proposal seeks partial funding under the Category III 1998 funds for Phase 2, for the final design component of the Sacramento River fish screen facilities.

Replacement of the fish screens at the SRWTP will benefit CALFED priority species (i.e., chinook salmon, steelhead, and Sacramento splittail) in an area of the Sacramento River designated as critical habitat for winter-run chinook salmon.

c. Approach/Tasks/Schedule: Task 1 (Prepare Draft Final Design Report) will begin after execution of the contract, and is anticipated to be completed by December 1999. Task 2 (Review of Draft Final Design) will be completed by March 2000. Task 3 (Prepare and Distribute Final Design Report) will be completed by April 2000. Task 4 (Prepare Progress Reports) will be completed quarterly.

d. Justification for Project and Funding by CALFED: The SRWTP is an excellent candidate for fish screen improvement projects under 1998 Category III funding because of the potential for direct, immediate benefit to multiple high-risk fish species. The replacement screens could be designed to meet diversion needs through the year 2030, potentially providing long-term benefits as well. The project is consistent with CALFED ERPP objectives, as described in section "e" of the Project Description (see the CALFED ERPP Volume II, Sacramento River Ecological Zone, page 151 and pages 160-165). CALFED funding will leverage and expedite the construction and implementation of the improved fish screen.

e. Budget Costs and Third Party Impacts: The cost for Phase 2 is estimated to be \$654,500. Task 1-\$540,000. Task 2-\$5,000. Task 3-\$50,000. The cost of Task 4 is included in the other tasks. A 10% contingency has been included in the cost. The U.S. Bureau of Reclamation

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previously approved a 50% cost share of Phase 1 the project under P.L. 102-575, Title XXXIV, Section 3406 (b) (21). The total cost of final design of Phase 2 for this project is estimated to be \$1,400,000. The City is proposing that CALFED Category III cost-share approximately 50 percent of final design.

No adverse impacts to third parties are anticipated.

f. Applicant Qualifications: Staff of the City of Sacramento Department of Utilities operate and maintain the City's two water treatment plants (SRWTP and FWTP) as well as 29 water production wells and ten water storage tanks. The Department staff has years of experience and participation in the design and construction of many improvements to these facilities. The City of Sacramento has demonstrated local leadership and commitment to community-based planning through their efforts with the Sacramento Area Water Forum. The City's progress to date on the Fish Screen Replacement Project, as well as their co-sponsorship of the Water Forum is evidence of their capability and qualifications to successfully implement and oversee the proposed project.

g. Monitoring and Data Evaluation: Screen performance would be evaluated, in a subsequent phase of the project, through an Ecological and Biological Monitoring Plan to determine whether the screen meets hydraulic performance criteria under various river flow and pumping rates, and debris loading/fouling levels. Additional studies would be performed to estimate the relative degree of fish losses that would occur at the screen under different screen hydraulics dictated by different river flows, pumping rates, and debris-accumulation levels.

h. Local Support/Coordination with other Programs/Compatibility with CALFED Objectives: CALFED's "Summary of Technical Team Reports Stressors and Example Restoration Actions" dated June 5, 1997, identifies an example restoration action titled, "Assess feasibility, prioritize, install, upgrade, and maintain fish screens in order to decrease entrainment" as consistent with Category III funding.

The project is consistent with CALFED ERPP objectives, as described in section "e" of the Project Description (see the CALFED ERPP Volume II, Sacramento River Ecological Zone, page 151 and pages 160-165). The project is also consistent with the goals of the Central Valley Project Improvement Act and the Anadromous Fish Restoration Program.