

**CENTRAL VALLEY PROJECT IMPROVEMENT ACT  
DRAFT PROJECT PLAN  
(b)(1) "other" PROGRAM**

Prepared by U.S. Fish and Wildlife Service and  
U.S. Bureau of Reclamation  
September 17, 1997

# DRAFT PROJECT PLAN

- I. Project Title:** CVPIA Section 3406(1 )(I)"Other" Program
- II. Responsible Entities:** Fish and Wildlife Service - Marie Sullivan  
Bureau of Reclamation - Chuck Solomon
- III. Background**

While many of the actions required by the CVPIA address anadromous fish and migratory waterfowl, subsection 3406(b)(1) of the CVPIA requires that, "... the Secretary shall make all reasonable efforts consistent with the requirements of this section [Sec. 3406. Fish, Wildlife and Habitat Restoration] to address other identified adverse environmental impacts of the Central Valley Project ....". This provision allows for establishment of the (b)(1) "other" Program, and its purpose, to protect, restore, and mitigate for past fish and wildlife impacts of the CVP not already addressed by the CVPIA.

Over the last half-century, the biological resources of the Central Valley Basin have been significantly altered with the development of the CVP, the State Water Project, and many local water development projects. These projects have cumulatively resulted in the inundation of thousands of acres of upland, seasonal wetland, and riparian habitats by reservoirs; further impacts to wetland, riparian, and aquatic habitats downstream of reservoirs due to changes in timing and extent of river flows; and the conversion of upland and seasonal wetland habitats to agricultural use and/or municipal and industrial development. Construction of the CVP alone included 17 storage dams, 3 diversion dams, 1,437 miles of canals, 54 pumping plants, and 243 miles of drains, pipelines and tunnels. These facilities have contributed to the alteration of over 600 stream miles (Bureau of Reclamation, Army Corps of Engineers, 1991), inundation of over 100,000 acres of bottomland wildlife habitat (Department of Interior 1980), and the loss of an estimated 250,000 acres of wetland habitat (Fish and Wildlife Service 1989). Despite the loss in fish and wildlife habitat quality and quantity throughout the Central Valley, the opportunity still exists through this and other programs to improve the biodiversity of the Central Valley.

The geographic boundary and the scope of the (b)(I)"other" Program include the areas and species that were directly or indirectly affected by construction or operation of the CVP, in addition to natural resources which were subject to secondary impacts from the use of CVP project water. Direct effects pertain to impacts attributed to CVP facilities such as storage or diversion dams, canals, or pumping plants. Indirect effects are

attributed to changes in the ecosystem which are a result of these structures. For example, degradation of wetland and riparian habitat downstream of a CVP dam due to a change in hydrologic conditions or changes in surface and groundwater from an altered flooding regime. Secondary impacts occur within a service area and are attributed to alteration in habitat, primarily from development which receives CVP water.

#### **IV. Objectives**

##### Biological

- A. Protect and restore native habitats impacted by CVP that are not specifically addressed in the Fish and Wildlife Restoration Activities section of the CVPIA. Initial focus will be on habitats known to have experienced the greatest percentage decline in habitat quantity and quality since construction of the CVP, where such decline could be attributed to the CVP (based upon direct and indirect loss of habitat from CVP facilities and use of CVP water). These habitats include riparian, aquatic (riverine, estuarine, and lacustrine), alkali desert scrub, wetlands (including vernal pools), foothill chaparral, valley-foothill hardwood, and grassland.
  
- B. Stabilize and improve populations of native species impacted by CVP that are not specifically addressed in the Fish and Wildlife Restoration Activities section of the CVPIA. Initial focus will be given to federally listed, proposed or candidate species, other non-listed State and Federal species of special concern including resident fish and migratory birds, and other native wildlife species associated with the habitat types listed above. Examples of the latter include native herptofauna associated with riparian and/or valley-foothill hardwood habitat throughout the Central Valley, native raptor species dependent upon valley-foothill hardwood and grassland for nesting and foraging, and neotropical species that use riparian corridors for migration, nesting, and foraging.

More specific objectives to be addressed in prioritization of projects are listed in Section VI.

#### **V. Types of Actions -**

The following types of activities will be emphasized under (b)(1) "other" through the prioritization and planning process discussed in Section VI:

- Implement habitat restoration, maintenance, and protection in partnership with

willing landowners of agricultural and municipal lands.

- Coordinate and participate with ongoing State and Federal habitat restoration activities including, but not limited to, the CALFED processes, existing Department of Fish and Game operations, Category III expenditures, and other CVPIA provisions such as the Land Retirement Program and the Anadromous Fish Restoration Program.
- Partnerships with other agencies and the public including watershed conservancies, conservation groups, water districts, non-profit entities and private landowners to assure the greatest overall program benefit.
- Studies will be performed where appropriate; however, they will generally receive a lower priority than implementation actions unless the study is a necessary precursor to an implementation action.

Initial focus will be given to funding the following types of projects:

- Acquire areas of existing habitat through purchase, lease, or easements for special status species impacted by the CVP.
- Maintaining, restoring, and enhancing priority habitats and habitat for priority species.
- Performing studies necessary to determine appropriate species and habitat-specific actions.

During fiscal years 1997 and 1998, this program will primarily fund activities developed as part of the Central Valley Project Conservation Program (CVPCP). The CVPCP is a long-term, adaptive management program to address the biological needs of special-status species, within areas potentially affected by the CVP. The CVPCP emphasizes projects which address high-priority needs of special status species identified during the section 7 consultations for interim renewal of a number of CVP water service contracts and the renewal of Friant water service contracts.

## **VI. Program Coordination and Development**

Mitigating for impacts to "other" species affected by the CVP will require development of partnerships, local involvement, public support, adaptive management, and flexibility. Prioritization of habitat types and species will be coordinated with technical experts on an annual basis. Development of specific actions to address priority habitats and species and their stressors will be coordinated with agencies, local organizations, and CALFED. Opportunities will be sought for the public to assist in planning and

implementing restoration actions.

When applicable, projects will be coordinated with other CVPIA programs including the Anadromous Fish Restoration Plan [3406(b)(1)]; the Spawning Gravel and Riparian Habitat Programs [3406(b)(13)]; the Ecological and Hydrologic Modeling effort 3406(g); the Land Retirement Program [3408(h)]; and the San Joaquin and Stanislaus River Planning efforts [3406(c)].

Projects will also be coordinated with other Federal, State, and private interests that have similar protection and restoration goals. For example, there are potentially many opportunities to develop joint partnerships through the Service's Private Lands Program, Natural Resource Conservation Service's Wetland Reserve Program, Reclamation's Wetland Program, Conservation Resource Management Plan projects, the Wildlife Conservation Board and other programs within the state provided that proposed activities meet the objectives of the (b)(1) "other" Program and are a priority as determined by Section VII below. When applicable, these relationships will be specified in each proposed action plan. However, in addition to meeting the goals and objectives of this Program, projects to be funded through the (b)(1) "other" Program must be ranked in accordance with the Program prioritization factors described below.

(B)(1) "other" projects will be collaborated with CALFED through a variety of means. Appointees from CALFED will be invited to participate in a technical team to develop priority habitat and species for the (b)(1) "other" Program. In addition, a (b)(1) "other" representative will participate in the CALFED Ecosystem Restoration Program to coordinate specific CALFED and CVPIA projects.

## **VII. Project Prioritization Factors**

The following factors will be used to focus the Program, prioritize projects, and select sites for protection, restoration, or mitigation.

### **A. Biological Resource Considerations**

**High Priority Habitat Benefit:** Project supports biologically functioning priority habitat listed in Section IV above.

**Special Status Species:** Project will benefit special status species including listed, proposed, or candidate species, other non-listed State and Federal species of special concern including resident fish and migratory birds, or other native wildlife species. Projects benefitting listed or proposed species should provide one or more of the following benefits with prioritization given in the ensuing order: avoidance of extirpation, listing, and loss of habitat for listed or proposed species.

**In-Kind Habitat:** Project site supports habitat or species that have been impacted directly or indirectly by the CVP.

**Magnitude of Benefits to Biological Resources:** Project has high biological benefit and addresses major limiting/constraining factors.

**Project Connectivity:** Project site is biologically and physically

connected to existing native habitat to allow for the natural "restocking" of desired species.

**Cumulative Benefits:** Project would provide cumulative benefits to native resources as it would complement existing project or management practices on adjacent lands.

**Ecosystem or Multiple Species Benefits:** Project has ecosystem, community, or multiple-species benefits with particular emphasis on specialists and/or keystone species.

**Biological Buffer Zone:** Project site is surrounded by a habitat buffer(s) which is only lightly or moderately impacted by human activities.

**Protection/Restoration of Natural Habitats and Habitat Values:** Protection of existing habitat that is "biologically functional" for native species will have a higher priority than restoration of degraded habitat.

**On-site Biological Compensation:** Project would restore or protect similar habitat type within close proximity to habitat impacted by CVP.

**Presence of Surface and Groundwater:** Project site has sufficient groundwater and surface water to support native vegetation which was historically supported on site. Lower priority will be given to those areas where hydrology is currently lacking and needs to be restored or supplemental water may need to be provided for successful restoration.

**Impact to Water Quality:** Project will benefit water quality for all uses.

**Mitigation of Adverse Impacts:** Long-term project benefits outweigh any short-term construction, operation, or maintenance impacts.

**Long-term Benefits:** Project has continuing or long-term benefits rather than one-time or short-term benefits.

## **B. Implementation Considerations**

**Project Costs:** The total cost, cost effectiveness, and ongoing operating and maintenance (O&M) costs should be considered when developing priorities. Program/projects with a greater cost effectiveness will generally be a higher priority than those with lower cost effectiveness.

**Technical Feasibility:** Project can be implemented using proven and

existing technology. Technical experts are available to assist in project design and implementation. The simpler the restoration techniques required to restore an area the better as less maintenance and monitoring is generally needed.

**Timeliness:** Project can be implemented in a timely fashion and there are no foreseen protracted delays.

**Partnership/Opportunities:** Cost-sharing funding is available and opportunities to partnership with other agencies, organizations, or landowners to provide the greatest possible benefit and most efficient use of program funds. There is community support for the project. This is a high priority consideration when all other factors are equal between competing proposed projects.

**Contribution to other CVPIA objectives:** Project has been coordinated with and contributes substantially to attainment of the goals and objectives of other provisions of the CVPIA.

**Implementation:** Legal, regulatory, technical, and financial obstacles to implementation have been evaluated and are not determined to be a hindrance to implementing the project in a timely manner. The presence of any non-native plants or wildlife in the project area have been determined to not be a significant hindrance to restoration activities being successful

### **VIII. Target Habitat Type/Acreage**

*A technical group comprised of agency, academia, and conservation representatives, etc. who have a broad knowledge of the habitat types of the Central Valley will develop target levels to determine when sufficient ecologically equivalent habitat has been restored and/or protected in accordance with the CVPIA. Final determination will take into account what is technically, economically, and socially feasible to restore or protect.*

### **IX. Budget**

This is a continuing program initially commenced in FY96. It will have a continuing Department of Interior budget of approximately \$1-\$2 million/year for project implementation .

### **X. Funding Sources - Including But Not Limited To:**

Federal - Reimbursable funds including the Restoration Fund within section 3407 of the CVPIA, Category 3 under the Delta/Bay Accord, CALFED



State - DFG, WCB, DWR as appropriate

Other - National Fish and Wildlife Foundation, private cost share Funding sources will be specified in each proposed project.

## **XI. Estimated Benefits of this Program**

Successful implementation of this program will: restore, protect, and mitigate for wetland, upland, and riparian habitats throughout the Central Valley Basin; provide an increase in fish and wildlife populations dependent on these habitats; and, assist in the maintenance of ecological functions and biodiversity of associated ecosystems. The program will serve to avoid possible future listings under the Endangered Species Act, possibly assist in the de-listing or down-listing of species dependent on these habitat types, and facilitate future Endangered Species Act compliance activities.

Each project proposal will specify how program objectives and benefits will be met.

## **XII. Measure of Success/Monitoring**

All actions undertaken within this program will be monitored for results. Each action proposal will contain a proposal for monitoring affects and will allow for program modifications as a result of monitoring to insure desired benefits. It may be necessary for local entities, including NRCS, BLM, and DFG to assist in the measurement of success of any action item.

## **References**

U.S. Army Corps of Engineers, 1991. Aerial Atlas: Collinsville to Shasta Dam.

U.S. Bureau of Reclamation. San Joaquin River Atlas.

U.S. Department of the Interior, Water and Power Resources Service. 1980. Draft Environmental Statement on the Reauthorization of the CVP and the Coordinated Operating Agreement for CVP-SWP.

U.S. Fish and Wildlife Service. June 1989. Wetlands of the California Central Valley: Status and Trends - 1939 to Mid-1980's. 29 pp

U.S. Water Resources Council. June 1971. Comprehensive Framework Study - California Region. Appendix 5: Water Resources.

## United States Department of the Interior

The Fish and Wildlife Service and the Bureau of Reclamation are accepting proposals from parties interested in participating in the Central Valley Project Improvement Act (b)(1) "other" program in fiscal year 1998. This program provides an opportunity to implement habitat restoration and protection projects to benefit fish and wildlife species and their associated habitats impacted by the construction, operation, and maintenance of the CVP.

### Eligibility Requirements:

- Target species or habitat must have been impacted directly or indirectly by construction, maintenance or operation of the CVP, including the use of CVP project water.
- Priority will be given to habitats known to have experienced the greatest percentage decline in habitat quantity and quality since construction of the CVP that could be attributed to the CVP including riparian, aquatic (lacustrine and riverine), alkali desert scrub, wetlands (including vernal pools), foothill chaparral, valley-foothill hardwood, and grassland.
- Priority wildlife species include federally listed, proposed or candidate species, other non-listed State and Federal species of special concern including resident fish and migratory birds, and other native wildlife species associated with a priority habitat.

### Submitted Proposals Should Contain

- Title of Project
- A detailed written legal description of the project location including size and a project map including local reference points.
- Detailed description of the proposed activities. When relevant include managing entity and who will be responsible for maintenance and monitoring.
- Surrounding land use activities to project area.
- Relationship between proposed activities and the CVP.
- Species to benefit from project activity, including federal and state status.

- Habitat requirements of target species.
- Describe any suitable habitat for the species of concern in the project vicinity.
- Existing condition of habitat within and adjacent to project area.
- Projected time frame for project implementation and completion.
- Cost estimate
- Other potential funding sources being considered and collaborators.
- Name of principal investigator(s), address, and phone number

Proposed project proposals should be submitted to:

U.S. Fish and Wildlife Service  
Central Valley Improvement Act (b)(1) "other" Program Manager  
3310 El Camino Ave., Suite 130  
Sacramento, California 95821-6340  
Phone: 916/979-2760 ext. 352, FAX 916/979-2770.