

Work Plan for Fiscal Year 2007

I. **Program Date.** March 1, 2007

II. **Program Title.** Habitat Restoration Program CVPIA Section 3406(b)(1) other

III. **Responsible Entities**

	Agency	Staff Name	Role
Co-Lead	USFWS	Caroline Prose	Program Manager
Co-Lead	USBR	John Thomson	Program Manager

IV. **Program Objectives for FY 2007**

The first two objectives stated below for the Habitat Restoration Program (HRP) were originally listed in the Central Valley Project Improvement Act (CVPIA) HRP's Draft Project Plan (September 2000, revised in August 2003). The third objective originated in FY 2006. All objectives reflect priorities for Fiscal Year 2007 (FY 2007), as well as the overall goals of the program. Meeting these objectives is accomplished through funding conservation actions most likely to improve conditions for federally listed CVP impacted species, recognizing that a balanced set of actions is needed. The program has, however, placed emphasis on certain kinds of activities considered more effective and critical to species' protection and recovery than others. Accordingly, program funds are applied to proposals in the following order of priority:

(1) Fee Title/Easement Acquisition and Habitat Restoration (approximately 60-70% of funds): Protection of species or existing habitats impacted by the CVP through the purchase of fee title or conservation easements on lands where threats to these lands are significant. Restoration of CVP-impacted habitats where restoration actions will markedly improve conditions for CVP-impacted species.

(2) Studies/Surveys (approximately 20-30% of funds): Research addressing status, habitat needs, and behavior of CVP-impacted species that will facilitate species recovery.

(3) Outreach/Planning/Other (approximately 5-10% of funds): Public outreach and education, formulation of land management plans, and other activities that generally contribute to improving conditions for CVP-impacted species and habitats.

Our objectives for FY 2007 are as follows:

A. Protect and restore native habitats impacted by the CVP that are not specifically addressed in the Fish and Wildlife Restoration Activities section of the CVPIA

The focus in 2007, as in years past, 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 on direct and indirect loss of habitat from CVP facilities and use of CVP water). Habitat loss and fragmentation due to urbanization and agriculture conversion are the primary impacts of CVP construction, as analyzed and documented in recent biological opinions related to CVP water operations, as well as the Programmatic Environmental Impact Statement (PEIS) for the CVPIA. These habitats include riparian, wetlands (*e.g.*, seasonal, permanent), foothill chaparral, alkali desert scrub, grassland, conifer forest, valley-foothill hardwood, vernal pools, and serpentine.

Determining the scope of these habitat losses in the Central Valley is essential to directing program activities. Accordingly, in FY 2002, the HRP contracted with the California State University Department of Geography and Planning and the Geographical Information Center to develop a set of historic natural vegetation maps (based on trend analysis) for the Great Central Valley of California (GCV). Developing these maps has assisted Program Managers in defining restoration priorities. Although it is not meant to show a linear relationship between the construction of the CVP and habitat loss, this trend analysis can be used as one of many tools in developing program priorities related to affected habitats.

The table shown below indicates the findings of this habitat trend analysis, using the defined habitat types throughout the Central Valley.

Valley-wide Land Cover Changes				
LAND COVER	1900 (baseline)	1945	1960	Present
	acres	acres	acres	acres
urban/agriculture	0	6,346,459	8,169,169	9,690,262
riparian	1,021,584	368,989	246,429	132,586
wetlands	2,040,766	793,907	544,645	133,261
aquatic	241,168	141,974	89,627	261,683
grassland	7,085,483	3,946,049	3,283,692	3,198,301
valley/foothill hardwood	1,165,114	873,315	805,828	852,767
alkali desert scrub	1,755,724	1,545,084	1,120,461	431,196
chaparral	3,469	3,467	3,293	11,254
other floodplain habitat	1,424,137	718,201	474,355	
TOTAL	14,737,445	14,737,445	14,737,499	14,711,310

B. Stabilize and improve populations of native species impacted by the CVP that are not specifically addressed in the Fish and Wildlife Restoration Activities section of the CVPIA

Focus will be given to federally listed, proposed, or candidate species, other non-listed State and Federal species of special concern including migratory birds and other native wildlife species associated with the habitat types listed in “A” 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.

C. Establish Measurable Outcomes Related to Biological Objectives.

At this time, the HRP does not have identified and quantifiable performance goals in place. Therefore, in FY 2007, the HRP Program Managers will continue to pursue establishment of “Measurable Outcomes.” This objective will seek to better quantify the relationship of the HRP to CVP impacts, and to refine assessment of whether HRP actions are addressing those impacts. Specifically, this objective will:

- 1) Identify quantitative targets for measurable outcomes (acquisition and restoration) adequate to meet the intent of section 3406(b)(1) “other” within a defined “mitigation area.” This task will include:
 - (a) finalizing the examination of acres/ habitats that have already been acquired or restored by implementation of the HRP (Fish and Wildlife Service [USFWS] and Bureau of Reclamation [USBR] will complete);
 - (b) determining more precisely the amount of habitat protection, restoration, and management that is necessary to recover federally listed species to the point where protection under the Endangered Species Act is no longer necessary. To determine these results, we will fund an outside party to conduct a GIS analysis, using data in draft and final recovery plans for target Central Valley listed species;
 - (c) comparing the results in (a) with the results in (b) (USFWS and USBR will complete); and
 - (d) determining how much more habitat needs to be acquired and/or restored by the HRP to recover target listed species (USFWS and USBR will complete).

- 2) Refine data related to project connectivity. Identify and record actual spatial location (parcel #) of all past projects on GIS based maps. Integrate data with other existing GIS data bases (*i.e.* Central Valley Joint Venture) and note project connectivity needs in conjunction with other past and ongoing programs.

V. Status of the Program.

A. Progress Toward Meeting Objectives

Since the HRP commenced in FY 1996, it has consistently funded many important projects for federally listed CVP-impacted species; maintained excellent leveraging of funds; greatly improved and refined species and habitat priorities and focus of the program; and sustained a low over head rate.

The HRP has funded 84 projects with a total budget of \$21,977,865 (about \$22 million). In accordance with the *Biological Opinion on Implementation of the CVPIA and Continued Operation and Maintenance of the CVP* (USFWS 2000), and various water contract renewals (*e.g.*, *Implementation of the CVPIA and Continued Operation and Maintenance of the CVP* (USFWS 2004); *Interim Renewal of Specific CVP Water Service Contracts from March 2001 to February 2002* (USFWS 2004); and *Interim Water Contract Renewal for March 1, 2004 through February 28, 2006* (USFWS 2004) the USFWS and USBR annually request that adequate funding be allocated to the HRP to protect and enhance ecosystems of listed species and support recovery of listed species. The HRP typically receives approximately \$1.5 million annually, although the Final CVPIA Programmatic Environmental Impact Statement (PEIS) estimated that annual costs of the program would be \$2 million (USFWS and USBR 1999). A variety of actions funded through the HRP have contributed to implementing actions recommended in recovery plans for numerous species including the following: San Joaquin kit fox, giant kangaroo rat, blunt-nosed leopard lizard, California red-legged frog, giant garter snake, bay-checkerspot butterfly, valley elderberry longhorn beetle, riparian brush rabbit, riparian woodrat, vernal pools species, and Gabbro soil plants.

Over 95,000 acres of habitat for listed, proposed, and candidate species and species of special concern have been protected through acquisition of fee title or conservation easement. Habitats protected include vernal pool, riparian, alkali scrub, foothill chaparral, valley-foothill hardwood, and grassland. Additionally, the HRP has funded listed species surveys, genetic research, and construction of a captive reproduction facility for the critically endangered riparian brush rabbit. Other projects include funding habitat restoration at the Colusa National Wildlife Refuge (NWR) and Sacramento River NWR, and giant garter snake survey and trapping efforts at the Colusa NWR, San Luis NWR, and Grassland Water District. These efforts contribute to the recovery of CVP impacted listed species. For example, riparian restoration projects include high density elderberry plantings. These plantings are likely to raise baseline conditions for the valley elderberry longhorn beetle. Riparian vegetation at several locations (*e.g.*, Llano Seco) has experienced about an 80% survival rate since being planted for restoration. In addition, wetland restoration at Colusa NWR has resulted in increased populations of giant garter snake, according to ongoing surveys funded by the HRP.

Surveys for the San Joaquin kit fox, giant garter snake, California red-legged frog, yellow-billed cuckoo, riparian brush rabbit, Buena Vista lake shrew, and riparian woodrat, have provided valuable data on the distribution of these species and their habitat requirements. This information will be used to contribute towards the recovery of these species.

The program continues to emphasize the importance of partnering. The level of project partnering is considered during proposal ranking. Since the program began implementation in 1996, at least 85 percent or more of HRP projects have received substantial funding from numerous conservation partners, including The Nature Conservancy, Ducks Unlimited, River Partners, local land trusts, State and Federal agencies, and CALFED.

Program Managers have continued to improve and refine the focus of the HRP. Last year managers developed a GIS based, “Project Priority Area Map” is available via the web to project proponents. This map will help direct conservation actions into high priority areas while also assisting applicants in developing a competitive proposal. Managers have also developed and updated a “High Priority Species List” to accompany the project map. This list is also available on the HRP website and will help guide project actions.

Finally, the low overhead rates used by the HRP (see Table D, “CVPIA Program Budget”) continues to allow the Program Managers to provide more “on-the-ground” funding of projects and less program administration and overhead costs.

B. Limiting Factors

While it is evident that funded actions of the HRP benefit species impacted by the CVP, certain biological factors continue to limit recovery of species and habitats targeted by the program:

- 1) Habitat loss, fragmentation, and degradation of core habitat areas continue to limit expansion of base populations. Dispersal corridors and home ranges for species, such as the San Joaquin kit fox, valley elderberry longhorn beetle, and giant garter snake, are still being reduced by land development and conversion.
- 2) The introduction and spread of invasive/exotic species remains a threat to species impacted by the CVP. Non-native species, especially in riparian/aquatic areas, displace targeted species by limiting availability of native habitats and by direct predation on listed species. An example of a highly invasive species is giant reed grass which crowds out native plants along riversides and stream channels, and reduces habitat for wildlife such as the least Bell's vireo.
- 3) Certain land management practices, such as inappropriate grazing, continue to pose a threat to species dependent on vegetation management. Species such as San Joaquin kit fox, vernal pool plant species, giant kangaroo rat, and others, are dependent on land use practices that decrease competition and predation while also providing adequate habitat components for foraging and breeding.
- 4) Targeted species and habitats continue to be impacted by the degradation of water quality. One example is related to nutrient flow and residual pesticides (*e.g.*, pesticide drift), which limit habitat availability for aquatic species such as the giant garter snake and anadromous fish species, and be detrimental to the health of all fish and wildlife species.
- 5) Basic survey and status data for some listed species are missing, in part due to inaccessibility to certain areas (*e.g.*, private lands). Some species for which more specific status information is needed are the Tipton kangaroo rat, Fresno kangaroo rat, valley elderberry longhorn beetle, and Buena Vista Lake shrew.

- 6) More research is needed for some listed species in order to better understand basic information needed for their recovery. One example of research that is needed, which the HRP funded in FY 2006, is on how pollination ecology interacts with population genetics to control reproductive success of five federally listed plant species.

C. Integration with Other Programs

The HRP is highly integrated with the CVP Conservation Program (CVPCP). The CVPCP was established during USBR's section 7 consultation with the USFWS (USFWS 2000) regarding CVP contract renewals, and fulfills essentially the same objectives as the HRP. For this reason, the CVPCP and HRP solicit and evaluate proposed projects under a single integrated process. Decisions related to expenditure of funds, defining goals and objectives, public outreach, *etc.* are guided by a multi-agency Technical Team that considers the interrelated goals of both programs.

Projects proposed for funding by the HRP are annually coordinated with the Bay-Delta Authority Ecosystem Restoration Program (ERP). The HRP also coordinates, when applicable, its activities with other CVPIA programs, such as the Anadromous Fish Restoration Program [section 3406 (b)(1)], San Joaquin River Riparian Habitat Restoration Program [section 3406 (b)(1)], and Land Retirement Program [section 3408 (h)]. Program Managers for the HRP also coordinate with the Central Valley Joint Venture and the USFWS's Recovery Program, through participation in meetings and through project partnering.

VI. FY 2006 Accomplishments

Described below are the 12 conservation actions that the HRP funded in FY 2006. We identified the specific projects and the species which would benefit from each project. As described above, the identification of measurable outcome variables for monitoring and assessing implementation of HRP actions, based on affected habitats and species, are being worked on, and are not completed at this time. The projects below are therefore not described in the context of the measurable outcome objectives and guidelines discussed in Sections IV and V.

Twelve conservation actions were funded in FY 2006 at a cost of \$1,240,868. Two of these actions provided additional funding to continue projects that were initiated in previous years. Program administration and overhead costs totaled \$349,370.

The 10 actions that were new to the HRP in FY 2006 are as follows:

- (1) Funds (\$93,272) were provided to CSU Sonoma for a Sacramento Valley-wide study that focuses on how the reproductive success of five vernal pool plant species can be improved, which would ultimately help prevent the extinction/decline of these species due to threats from invasive grasses. Species to be benefited are hairy orcutt grass, Sacramento orcutt grass, Crampton's tuctoria, Greene's tuctoria, and Colusa grass.

- (2) Funds (\$93,272) were provided to the Point Reyes Bird Observatory for a study in Stanislaus County that would entail developing a map of suitable least Bell's vireo habitat; monitoring the presence and abundance of the least Bell's vireo; monitoring least Bell's vireo productivity; and assessing brown-headed cowbird impacts in restored areas.
- (3) Funds (\$118,893) were provided to Eric Hansen Associates for a study in Merced and Fresno counties that will increase the likelihood of identifying new populations of giant garter snakes northeast of the San Joaquin River. The study will be conducted within the Stevinson and Merquin Water Districts (SMWD) plus an additional ± 22 km (13.8 miles) of the East Side Canal corridor extending southeast from the SMWD to the Merced National Wildlife Refuge, and the Los Banos Creek corridor south of the SMWD.
- (4) Funds (\$60,210) were provided to CSU Chico for a study that would use genetic material collected from Eric Hansen's study to explore the genealogical relationships of giant garter snake populations across the range of the species and, if appropriate, delineate genetically based on distinct population segments.
- (5) Funds (\$84,000) were provided to the Tulare Basin Working Group to write the Southern San Joaquin Valley Conceptual Area Protection Plans (CAPPs) for Units 2 and 3 properties in the Tulare Lake Basin area in Tulare County. Species to be benefited include vernal pool fairy shrimp, blunt-nosed leopard lizard, Tipton kangaroo rat, and San Joaquin kit fox.
- (6) Funds (\$24,803) were provided to Sequoia Riverlands Trust for a project that would entail completing a long-term Management Plan for the 324-acre Kaweah Oaks Preserve in Tulare County. Species to be benefited include the valley elderberry longhorn beetle and willow flycatcher.
- (7) Funds (\$294,887) were provided to Ducks Unlimited for restoration of natural hydrology to support vernal pool and vernal pool-alkali meadow complex habitats on about 431 acres on Tracts G & H of the Sacramento National Wildlife Refuge in Glenn County. Species to be benefited include palmate-bracted bird's beak, hairy orcutt grass, Greene's tuctoria, Hoover's spurge, vernal pool tadpole shrimp, conservancy fairy shrimp, vernal pool fairy shrimp, and Swainson's hawk.
- (8) Funds (\$238,958) were provided to River Partners for restoration of 300 acres of fallow floodplain lands on the San Joaquin National Wildlife Refuge in Stanislaus County. Species to be benefited include valley elderberry longhorn beetle, riparian brush rabbit, riparian woodrat, least Bell's vireo, western yellow-billed cuckoo, and Swainson's hawk.
- (9) Funds (\$8,818) were provided to Environmental Science Associates for a study entailing baseline research, GIS mapping, and predictive modeling that will to aid in recovery of Gabbro Soils/Pine Hill listed plant species in El Dorado County. Species to be benefited include Pine Hill flannelbush, Pine Hill ceanothus, Stebbins morning glory, and Layne's butterweed.

- (10) Funds (\$33,908) were provided to the Bureau of Reclamation for fee title acquisition of 192 acres of grassland/alkali scrub habitat on Atwell Island in Tulare County. Species to be benefited include Tipton kangaroo rat and San Joaquin kit fox.

The two continuing actions for FY 2006 are as follows:

- (1) Funds (\$12,216) were provided to the San Luis National Wildlife Refuge Complex for the continuation of the planning phase of floodplain and vernal pool habitat restoration on the 1,890-acre refuge-owned Sno-Bird Ranch in Merced County. Species that would benefit include the vernal pool tadpole shrimp, vernal pool fairy shrimp, Conservancy fairy shrimp, longhorn fairy shrimp, and California tiger salamander.
- (2) Funds (\$64,800) were provided to the University of California in Davis for the continuation of a study to characterize the diversity of vernal pool vegetation in relation to habitats; document the affiliation of special status species to particular plant communities; and create guidelines for the conservation and restoration of vernal pool diversity. Various vernal pool species would be benefited throughout the Sacramento Valley.

VII. Tasks, Costs, Schedules and Deliverables

A. Narrative Explanation of Tasks

1. **Program Management.** The USFWS and USBR Program Managers are responsible for co-managing this program. The tasks and sub-tasks associated with managing the program are divided among the agencies based on efficiencies as shown below.
 - 1.1 Program Management (USFWS) - The USFWS Program Manager is responsible for developing all grants and cooperative agreements for projects which the USFWS is lead. The Program Manager, in coordination with the USBR, is responsible for developing and implementing the overall program including outreach, coordinating with stakeholders, and identifying partnering funds. Project development and prioritization is closely coordinated with the USFWS's Endangered Species Program and the USBR's Central Valley Project Conservation Program.
 - 1.2 Technical Support, GIS Analysis to Develop Performance Goals and Targets (USFWS) – With funding from the USFWS, the Program Managers will select and hire an outside party to analyze information in various Central Valley recovery plans, to determine what is needed for species' recovery. The USFWS and BOR will then compare this information to what has already been protected and restored by the HRP, and a determine how much more habitat needs to be acquired and/or restored by the HRP to recover target listed species.
 - 1.3 Program Management (USBR) - The USBR Program Manager has similar responsibilities to the USFWS Program Manager. The Program Manager is also responsible for the full development and implementation of the USBR's Central Valley Project Conservation Program (CVPCP), which is complementary to, but independent of, the HRP and CVPIA.
 - 1.4 Technical Support (USBR) - The USBR's Area Office staff will provide

technical support in the development of individual projects for which the USBR is lead.

- 1.5 Contracting Support (USBR) - USBR contracting staff will process all contracts for projects for which the USBR is lead.

- 2. **Environmental Documentation and Appraisal Review.** Program Managers will coordinate with appropriate offices and divisions within their respective agencies to ensure that all necessary environmental documentation and appraisal reviews are completed for the projects they manage as described below.
 - 2.1 Environmental Documentation (USFWS) - USFWS Program Manager will coordinate with Habitat Conservation Division and Endangered Species Program staffs to complete all required NEPA, ESA, and cultural resource environmental documentation for the projects for which USFWS is the lead agency.
 - 2.2 Environmental Documentation (USBR) - USBR staff will complete all necessary NEPA and ESA environmental documentation for the projects which the USBR is lead.
 - 2.3 Appraisal Review (USBR) - Appraisal review and archaeological review will be completed by the USBR on all projects for which the USBR is lead.

- 3. **Project Funding and Implementation.** Through integration of the goals and objectives of the HRP with the goals and objectives of the CP, the HRP and CP will jointly identify all of the projects that the two programs will support in FY 2007. Projects will be identified for funding based on their contribution to the programs' objectives and consistency with the priorities listed below. Some of the specific projects may be a continuation of previously-funded projects, and others will be new to the programs.
 - 3.1 Project Funding and Implementation (USFWS) – USFWS staff will coordinate all project funding and implementation on USFWS-led projects and ensure goals and objectives of the HRP are met.
 - 3.2 Project Funding and Implementation (USBR) – USBR staff will coordinate all project funding and implementation on USBR-led projects and ensure goals and objectives of the HRP are met.

Program Priorities for FY 2007

For FY 2007, six priorities concerning species, habitats, and geographic locations were identified. These priorities reflect the most current evaluation of species needs and habitat trends, and are complementary to other on-going actions within the Central Valley and are shown in the table below:

Program Priorities for FY 2007	Examples of species to be benefited	Examples of high priority actions
(1) Serpentine soil	Bay checkerspot	Preservation of existing habitat and protection

and associated habitats in Santa Clara County	butterfly	from incompatible land uses; restoration of degraded habitat, protection and management of occupied and unoccupied serpentine grasslands; outreach to landowners, <i>etc.</i>
(2) Vernal pool habitats throughout the Central Valley	Vernal pool invertebrates, California tiger salamander, Colusa grass, slender Orcutt grass, <i>etc.</i>	Protection of existing vernal pool complexes in Zone 1 Core Areas; research on vernal pool habitats; development of vernal pool management plans.
(3) Remnant or restorable alkali sink, alkali scrub, and valley grassland habitat on the San Joaquin Valley floor	San Joaquin kit fox, blunt-nosed leopard lizard, Tipton kangaroo rat, Buena Vista Lake shrew, <i>etc.</i>	Protection of habitat through fee title or easement acquisition.
(4) Various habitat types in eastern Contra Costa and eastern Alameda counties	San Joaquin kit fox, Alameda whipsnake, California tiger salamander, vernal pool invertebrates, <i>etc.</i>	Conservation actions for grassland habitats used by kit fox; chaparral/ grassland/oak savannah matrix used by Alameda whipsnake; grassland habitat for California tiger salamander; vernal pool habitat for listed crustaceans, <i>etc.</i>
(5) Wetland and associated upland habitats in the San Joaquin Valley	Giant garter snake, Valley elderberry longhorn beetle, riparian brush rabbit, riparian woodrat, California red-legged frog, <i>etc.</i>	Protection and restoration of habitats; investigations of role of contaminants, water quality, and water management; establishment of refugia for species in flood zones.
(6) Listed gabbro soils plants within the Pine Hills Preserve	El Dorado bedstraw, Stebbins morning glory, Pine Hill ceanothus, <i>etc.</i>	Land acquisition and fuels management.

Opportunistic/Emergency Projects

HRP Program Managers will contact the CVPIA Program Coordinators as soon as possible during the fiscal year, when opportunistic or emergency projects that warrant funding considerations are identified that were not included or approved as part of the program’s work plan. The CVPIA Program Coordinators will provide further direction on a case-by-case basis.

B. Schedule and Deliverables

#	Task	Dates		Deliverable
		Start	Compleat	
1.	Program Management	10/01/06	09/30/07	A revised FY 2007 Annual Work Plan (AWP); a draft FY 2008 AWP; and final grants, cooperative agreements, and contracts for projects supported by the HRP.
1.1	Program Management (USFWS)	10/01/06	09/30/07	Final grants, cooperative agreements, and contracts for USFWS-led projects.
1.2	Technical Support, GIS Analysis to Develop Performance Goals and Targets (USFWS)	10/01/06	09/30/07	Measurable outcomes in relation to target Central Valley species' needs based on the various Central Valley recovery plans.
1.3	Program Management (USBR)	10/01/06	09/30/07	Final grants, cooperative agreements, and contracts for USBR-led projects.
1.4	Technical Support (USBR)	10/01/06	09/30/07	Technical comments on proposals and ongoing projects for USBR-led projects.
1.5	Contracting Support (USBR)	10/01/06	09/30/07	Final grants, cooperative agreements, and contracts for USBR-led projects.
2.	Environmental Documentation and Appraisal Review	10/01/06	06/01/07	Final NEPA and ESA documents required for obligation of program funds and appraisal reviews as required for each of the projects supported by the program.
2.1	Environmental Documentation (USFWS)	10/01/06	06/01/07	Final NEPA and ESA documents for USFWS-led projects.
2.2	Environmental Documentation (USBR)	10/01/06	07/01/07	Final NEPA and ESA documents for USBR-led projects.
2.3	Appraisal Review (USFWS)	11/01/06	06/01/07	Completed reviews for all appraisals to ensure they meet Federal guidelines for USFWS-led projects.
2.4	Appraisal Review (USBR)	11/01/06	08/01/07	Completed reviews for all appraisals to ensure they meet Federal guidelines for USBR-led projects.

#	Task	Dates		Deliverable
		Start	Comple	
3.	Project Funding and Implementation	01/15/07	09/30/07	Deliverables will be listed in the scopes of work for each of the projects supported by the HRP, including quarterly reports, draft and final planning documents, monitoring reports, and any environmental documents and appraisals necessary for project implementation.
3.1	Project Funding and Implementation (USFWS)	01/15/07	09/30/07	Quarterly reports, draft and final planning documents, monitoring reports, and any environmental documents and appraisals for USFWS-led projects.
3.2	Project Funding and Implementation (USBR)	01/15/07	09/30/07	Quarterly reports, draft and final planning documents, monitoring reports, and any environmental documents and appraisals for USBR-led projects.

C. Summary of Program Costs and Funding Sources.

#	Task	Total Cost	Funding Sources
			RF
1.	Program Management (Total)	\$307,634	\$307,634
1.1	Program Management (USFWS)	\$198,234	\$198,234
1.2	Technical Support, Measurable Outcomes Task (USFWS)	\$42,400	\$42,400
1.3	Program Management (USBR)	\$50,000	\$50,000
1.4	Technical Support (USBR)	\$9,000	\$9,000
1.5	Contracting Support (USBR)	\$8,000	\$8,000
2.	Environmental Documentation and Appraisal Review (Total)	\$51,927	\$51,927
2.1	Environmental Documentation (USFWS)	\$24,427	\$24,427
2.2	Environmental Documentation (USBR)	\$17,500	\$17,500
2.3	Appraisal Review (USBR)	\$10,000	\$10,000
3.	Project Funding and Implementation	\$1,140,438	\$1,140,438
3.1	Project Funding and Implementation (USFWS)	\$484,938	\$484,938
3.2	Project Funding and Implementation (USBR)	\$655,500	\$655,500
Total Program Budget		\$1,500,000	\$1,500,000

Explanatory Notes: Total costs for each of the primary tasks shown in bold (for example, Task 1, Program Management) show the total for each of the sub-tasks shown in normal type directly below the primary task (for Task 1, Sub-tasks are 1.1 through 1.5).

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D. CVPIA Program Budget

#	Task	FTE ^a	Direct Salary and Benefits Costs	Contract Costs	Misc. Costs	Admin Costs	Total Costs
1.	Program Management (Total)	1.56	\$203,093	\$40,000	\$0	\$64,541	\$307,634
1.1	Program Management (USFWS)	1.06	\$162,487	\$0	\$0	\$35,747 ^b	\$198,234
1.2	Technical Support, GIS Analysis to Develop Performance Goals and Targets (USFWS)	0	\$0	\$40,000	\$0	\$2,400 ^c	\$42,400
1.3	Program Management (USBR)	0.32	\$30,303 ^d	\$0	\$0	\$19,697 ^e	\$50,000
1.4	Technical Support for NEPA Compliance (USBR)	0.10	\$5,455 ^d	\$0	\$0	\$3,545 ^e	\$9,000
1.5	Contracting Support (USBR)	0.08	\$4,848 ^d	\$0	\$0	\$3,152 ^e	\$8,000
2.	Environmental Documentation and Appraisal Review (Total)	0.34	\$36,688	\$0	\$0	\$15,239	\$51,927
2.1	Environmental Documentation (USFWS)	0.13	\$20,022	\$0	\$0	\$4,405 ^b	\$24,427
2.2	Environmental Documentation (USBR)	0.12	\$10,606 ^d	\$0	\$0	\$6,894 ^e	\$17,500
2.3	Appraisal Review (USBR)	0.09	\$6,060 ^d	\$0	\$0	\$3,940 ^e	\$10,000
3.	Project Funding and Implementation	0	\$0	\$1,106,499	\$0	\$33,939	\$1,140,438
3.1	Project Funding and Implementation (USFWS)	0	\$0	\$457,489	\$0	\$27,449 ^c	\$484,938
3.2	Project Funding and Implementation (USBR)	0	\$0	\$649,010	\$0	\$6,490 ^f	\$655,500
Total by Category		1.90	\$239,781	\$1,146,499	\$0	\$113,719	\$1,500,000

Explanatory Notes: Costs for each of the primary tasks shown in bold show the total for each of the sub-tasks shown in normal type directly below the primary task. Contracts and Administrative costs are estimates; actual costs will be determined subsequent to the proposal solicitation and review process. Projects needs are dependent upon the number, value and urgency of project proposals submitted after October 1, 2007 which exceed the current budget. ^a1 FTE = \$153,290 for USFWS; variable FTE rate applied to USBR estimates; ^bcalculated as 22% of the Direct Salary and Benefits Costs; ^ccalculated as 6% of Contract Costs; ^dcalculated as 61% of Total Costs; ^ecalculated as 39% of Total Costs; ^fcalculated as 1% of Contract Costs.

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VIII. Future Years Commitments/Actions

Some future and past actions may require maintenance and/or monitoring activities in future years. This is particularly relevant for any proposed restoration project or any multi-year survey requests. Property acquisitions (fee title or conservation easements) may require future funding for the development and/or implementation of management activities. Continuing activities should contribute towards the recovery of federal and state listed species and their habitat.

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E. DRAFT CVPIA 5-Year Budget Plan for Capability During FY 2007 - 2011 (\$ millions)

Program Description and Section	Funding Source	Potential Priority Habitats for Major Project Activities ¹	FY 2007 (\$) (80% increase) ²	FY 2008 (\$) (80% increase) ²	FY 2009 (\$) (90% increase) ²	FY 2010 (\$) (90% increase) ²	FY 2011 (\$) (100% increase) ²	Total (\$)
CVPIA Habitat Restoration Program, Section 3406 (b) (1) "other": Conservation actions to address CVP impacts to species and habitats not otherwise addressed in the CVPIA. Actions include fee title and easement acquisitions, restoration, surveys/studies, captive breeding, management, and planning.	Restoration Fund, section 3407	Serpentine soil and associated habitats	2.95	2.95	3.11	3.11	3.29	15.41
		Grassland, alkali sink, alkali scrub						
		Vernal pools						
		Riparian upland habitat mosaic						
		Gabbro soils chaparral						
		Oak woodland						
(Non-CVPIA Program) CVP Conservation Program (CVPCP): Primary goal is to meet the needs, including habitat needs, of listed and special status species affected by the CVP. Funded because of section 7 requirements under the federal Endangered Species Act.	Annual Congressional Appropriations	Same as above	2.0	2.0	2.0	2.0	2.0	10.0
Total:			4.95	4.95	5.11	5.11	5.29	25.41

¹Major project activities cannot be listed in priority order by year because priorities for habitats and species change from year to year. Habitats listed are those that were determined to be priorities in the past. The results of the measurable outcomes analysis will provide the information needed to determine priorities for future years.

²The HRP currently receives \$1.5 million annually and the CVPCP receives about \$2.0 million annually.

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Future of the HRP with Potential 5-Year Funding Increases

Table E outlines the HRP funding capability for FY07 through FY11. Species and habitat priorities change from year to year, therefore it is impossible to list major project activities in priority order for these FYs. Nevertheless, potential future funding increases for these priorities can be addressed in general terms.

As discussed in “Section IV., C.” above, the HRP is in the process of pursuing the establishment of “measurable outcomes,” which includes assessing and documenting progress towards a mitigation target, and recommending further mitigation needs concerning fish and wildlife species, habitat type, type of action, and geographic area. Each year, top habitat priorities (and their associated listed species) are identified (*e.g.*, serpentine soils; grasslands, alkali sink and alkali scrub; vernal pools; riparian upland; gabbro soils chaparral; oak woodland). The measurable outcomes would presumably indicate which of these priority habitats and species have been mitigated and which have not. Over time, habitats and species priorities would then change depending on the success and completion of this mitigation. It is hoped that by the year 2011, some of the mitigation needs would have been met; unfortunately, it is doubtful all needs would have been met, due to the considerable acres of habitats that were adversely affected by the CVP. Consequently, it is anticipated that mitigation obligations would continue for many years into the future. However, with increased funding over time, the HRP could fund more priority habitat and species projects, and fulfilling mitigation obligations could be expedited.

As stated, the HRP receives \$1.5 million per year from the Restoration Fund. The CVP Conservation Program (CVPCP) receives about \$2 million per year. In FY03, the amount of funding available to the HRP and CVPCP was enough to fund what was requested by proposal applicants. However, in FY04, the HRP and CVPCP funded about only 60% of the entire amount of funding that was requested by proposal applicants, and in FY05, the HRP and CVPCP funded only about 30%. Therefore, the most recent trend is that the HRP and CVPCP are receiving more requests for funding than what is available. It is speculated that this is in part due to the on-going effort to keep improving outreach for proposals solicitation. Consequently, if this trend increases, it is expected that more funding would be needed in the future. It is, therefore, reasonable to expect that an 80% funding increase would be needed by FY07 and FY08; a 90% funding increase would be needed by FY09 and FY10; and a 100% funding increase would be needed by FY11. The additional funding would allow a greater number of priority projects to be funded, as well as the ability to focus on additional habitat and species priorities to meet mitigation needs. For example, from historical mapping research, we know that eight general habitat types were adversely impacted by the CVP: (1) riparian, (2) valley/foothill woodland, (3) wetland, (4) alkali desert scrub, (5) aquatic, (6) chaparral, (7) grassland, and (8) other floodplain habitat (*e.g.*, wetlands, grasslands, aquatic) (California State University, Chico 2003). Increases in funding would allow the HRP to focus on more of these habitats throughout a

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larger geographic range within a given year. If the HRP cannot obtain funding above \$1.5 million per year, then the HRP would continue to focus on only the top priority habitats and species that are identified each year.

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