

September 12, 2005
Work Plan for Fiscal Year 2006

I. Habitat Restoration Program CVPIA Section 3406(b)(1) other

II. Responsible Entities

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

III. Program Objectives for FY 2006

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 is new for the HRP. All objectives reflect priorities for Fiscal Year 2006 (FY 2006), as well as the overall goals of the program.

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 2006, 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). These habitats include riparian, aquatic (riverine, estuarine, and lacustrine), alkali desert scrub, wetlands (including vernal pools), foothill chaparral, valley-foothill hardwood, serpentine, and grassland.

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 resident fish and 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.

In FY 2006, the HRP will 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 past (pre-1992) impacts of the CVP (within a defined “impact area”) that are not specifically enumerated in the fish and wildlife restoration section 3406(b)(1) of the CVPIA. These “other” impacts are primarily those other than anadromous fish and waterfowl.
- 2) Identify quantitative targets for measurable outcomes (including restoration, enhancement, and preservation) adequate to meet the intent of section 3406(b)(1) “other” within a defined “mitigation area.”

IV. Status of the Program

A. Progress Toward Meeting Objectives

Since the HRP commenced in FY 1996, it has funded 67 projects with a total budget of \$20,477,865 (about \$20.5 million). In accordance with the CVPIA Biological Opinion, the U.S. Fish and Wildlife Service (USFWS) and U.S. Bureau of Reclamation (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 receives \$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 the following species: San Joaquin kit fox, giant kangaroo rat, blunt-nosed leopard lizard, California red-legged frog, giant garter snake, bay-checkerspot butterfly, valley elderberry beetle, riparian brush rabbit, riparian woodrat, vernal pools species, and Gabbro soil plants.

About 98,000 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 federally listed 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.

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) Fragmentation and loss of core habitat areas continue to limit expansion of base populations. Migration corridors and home ranges for species, such as the San Joaquin kit fox, California red-legged frog, 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.
- 3) Certain land management practices, such as over-grazing or under-grazing, continue to pose a threat to species dependent on vegetation management. Species such as San Joaquin kit fox, vernal pool plant species, tiger salamander, and others, are dependent on land use practices that decrease predation vulnerability while also providing adequate habitat components for foraging and breeding.
- 4) Targeted species and habitats continue to be impacted by the degradation of water and air quality. Water quality issues related to nutrient flow and residual pesticides, limit habitat availability for aquatic species such as the giant garter snake. Air quality issues, such as atmospheric nitrogen deposition, may also be contributing to the decline of listed plant species by increasing the density and vigor of non-native ground covers.

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 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 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 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.

V. FY 2005 Accomplishments

Described below are the nine conservation actions that the HRP funded in FY 2005. We have 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.

Nine conservation actions were funded in FY 2005 at a cost of \$1,355,814 (does not include costs for Program Administration). Two of these actions provided additional funding to continue projects that were initiated in previous years.

The seven actions that were new to the HRP in FY 2005 are as follows:

- (1) Funds (\$12,216) were provided to the San Luis National Wildlife Refuge Complex for the planning phase of restoring floodplain and vernal pool habitat on the 1,905-acre refuge-owned Sno-Bird Ranch in Merced County. Species that would benefit include the vernal pool tadpole shrimp, fairy shrimp, and Colusa grass. The requested amount of \$72,860 could not be provided this FY due to timing issues. We hope to fund the remaining amount in FY06.
- (2) Funds (\$45,813) were provided to Entrix, Inc. for a study which would help obtain distribution information on Sierra Nevada populations of the California red-legged frog; obtain DNA for downstream studies of Sierra Nevada California frog genetics in the context of the role of the CVP Folsom Dam Pond facility in species recovery; and obtain distribution information on other special status species such as the yellow-legged frog and western pond turtle in Placer and El Dorado counties.
- (3) Funds (\$154,006) were provided to the University of California in Davis for 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. The requested amount of \$163,867 could not be provided this year due to funding constraints. We hope to fund the remaining amount in FY06.
- (4) Funds (\$460,476) were provided to the California Department of Fish and Game, Wildlife Conservation Board, for a fee title acquisition of 754 acres of vernal pools and Butte County meadowfoam on the Stone Ridge Ranch property in Butte County.

- (5) Funds (\$93,524) were provided to Ducks Unlimited for the restoration of the natural hydrology of 755 acres on Tracts AB and C of the Sacramento National Wildlife Refuge in Glenn County. Restoration would benefit vernal pool and vernal pool-alkali meadow complex habitats and their associated species including Hoover's spurge, palmate-bracted birds beak, vernal pool fairy shrimp, and vernal pool tadpole shrimp.
- (6) Funds (\$284,521) were provided to the Sequoia Riverlands Trust for a project in Tulare County that would: establish a rotational system of prescribed burning and livestock grazing; continue wetland and upland restoration; evaluate hydrology and soils to assess feasibility of vernal pool – grassland community mosaic; establish trial plantings of native bunchgrasses; provide systematic monitoring of restoration and management effects on plant and animal communities; and provide a 2-year study of effects of prescribed fire and grazing on vernal pool – grassland flora and fauna. Species that would benefit include the vernal pool fairy shrimp, Swainson's hawk, and western spadefoot toad.
- (7) Funds (\$144,334) were provided to the Tuolumne River Trust for the Dos Rios Working Landscape project in Stanislaus County to fund the first two phases (planning/surveying/ appraisal) pursuant to acquisition of a conservation easement on the 1,766-acre Dos Rios Ranch. The project would protect the riparian corridor, establish a riparian brush rabbit colony on site, provide habitat for the riparian woodrat, and protect floodplain values and compatible agricultural uses.

The two continuing actions for FY 2005 are as follows:

- (1) Funds (\$106,000) were provided to the Colusa NWR and USGS to continue monitoring giant garter snakes at the Colusa NWR in Colusa County. Identification of a significant population of snakes in the central portion of the refuge has led to implementation of best management practices and creation of a restored wetland area that benefit the snake.
- (2) Funds (\$64,800) were provided to an independent researcher to continue a study on Adaptive Vegetation Management on Serpentine Soils, which assesses grazing impacts to native serpentine plant species on Coyote Ridge in Santa Clara County. Developing this information and applying it in adaptive land management are priority tasks for recovery of the Bay checkerspot butterfly, Santa Clara Valley dudleya, Metcalf Canyon jewelflower, and other species.

VI. 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 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. A significant portion of the USBR's Program Manager salary is paid through CVPCP funding.
 - 1.3 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.
 - 1.4 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 of that the two programs will support in FY 2006. 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.

Program Priorities for FY 2006

For FY 2006, there are six priorities concerning species, habitats, and geographic locations as follows:

- 1) Serpentine soil and associated habitats supporting endemic species, such as the bay checkerspot butterfly and serpentine plants, in Santa Clara County. Serpentine habitat in the San Francisco Bay area has been severely reduced and fragmented by urban development and related activities in recent decades (Kruckeberg 1984; 57 **CFR** 59053 in USFWS 2000). In addition to the bay checkerspot butterfly, serpentine habitat supports such listed species as the Metcalf Canyon jewelflower, Santa Clara dudleya, and showy Indian Clover. To date, only one project has been funded in Santa Clara County by the HRP, yet CVP water is responsible for thousands of acres of development there, thus, much work is still needed to mitigate for this impact. For this habitat and geographic priority, the Programs are particularly interested in proposals that emphasize (a) preservation of existing habitat and protection from incompatible land uses; (b) restoration of degraded habitat by reintroduction of grazing, protection from overgrazing, etc.; (c) public outreach at parks and open space areas; (d) outreach to landowners with serpentine habitat regarding pesticide use, grazing, and conservation easements; (e) development of propagation techniques for listed plants and host and nectar plants of bay checkerspot butterfly; and (f) implementation of priority one and two tasks for serpentine species found in the *Recovery Plan for Serpentine Soil Species of the San Francisco Bay Area* (USFWS 1998a).
- 2) Grassland, alkali sink, and alkali scrub habitat located in the Central Valley that are core and satellite population areas and habitat linkages and corridors for the San Joaquin fox, and areas supporting blunt-nosed leopard lizard, Tipton kangaroo rat, giant kangaroo rat, Fresno kangaroo rat, Buena Vista lake shrew, federally listed plant species, and other species dependent upon this habitat complex. Through construction of the CVP alone, over 100,000 acres of bottomland wildlife habitat was lost (USFWS and USBR 2003). Additionally, only about 5% of historical grassland habitat and 2% of alkali scrub habitat are present in the Central Valley today (USFWS and USBR 2003), in part because of the CVP. Therefore, much mitigation of these habitats is still needed. Proposals should emphasize implementation of priority one and two tasks for upland species of the San Joaquin Valley found in the *Recovery Plan for Upland Species of the San Joaquin Valley, California* (USFWS 1998b).
- 3) Vernal pool habitats throughout the Central Valley supporting federally listed vernal pool invertebrates, California tiger salamander, and listed plant species including slender Orcutt grass, Greene's tuctoria, Colusa grass, Hoover's

spurge, and fleshy-owl's clover. Through construction of the CVP alone, about 250,000 acres of wetland habitat were lost (USFWS and USBR 2003). In fact, only about 6% of historical wetlands are present in the Central Valley today (USFWS and USBR 2003), in part because of the CVP. Numerous listed species of plants, invertebrates, and amphibians rely on vernal pools for their survival. Therefore, many more acres of wetlands, including vernal pools, still need to be mitigated. High priority actions include, but are not limited to, (a) protection, through fee title or easement acquisition, of existing vernal pool complexes supporting listed species; (b) research on vernal pool habitats, including response of listed species to various land uses, as well as contaminants; and (c) development of vernal pool management plans based on peer reviewed research findings. Proposals should emphasize implementation of priority one and two tasks for vernal pool species found in the *Draft Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon* (USFWS 2004).

- 4) Gabbro soils chaparral habitat in El Dorado County, supporting federally listed plant species. Conversion of gabbro soils habitat to urban and industrial uses, and impacts from the CVP, have extirpated occurrences of several listed plant species and degraded their habitat (USFWS 2002a). High priority tasks include (a) surveys to establish baseline conditions on protected lands within the Pine Hill Preserve (Preserve); (b) focused surveys on lands adjacent to, but outside of the boundaries of, the Preserve to determine whether these lands may be suitable for inclusion within the Preserve; (c) monitoring the response of each of the listed plants to different land treatments within the Preserve; and (d) implementation of other priority one and two tasks for Gabbro soils chaparral habitat species found in the *Recovery Plan for Gabbro Soil Plants of the Central Sierra Nevada Foothills* (USFWS 2002a).
- 5) Habitat protection and management activities in eastern Contra Costa County that will help conserve listed species located there. Priority will be given to conservation actions for (a) grassland habitats used by San Joaquin kit fox that provide regional linkage between Contra Costa County and areas outside the County; (b) chaparral/grassland/oak savannah matrix important for Alameda whipsnake feeding, breeding, dispersal, and movement; (c) grassland habitat that provides breeding, dispersal, and colonization opportunities for California tiger salamander; (d) aquatic breeding and upland movement/aestivation habitat for California red-legged frog; and (e) vernal pool habitat that supports listed crustaceans. Proposals should emphasize implementation of priority one and two tasks for Contra Costa County species found in the following recovery plans: *Recovery Plan for Upland Species of the San Joaquin Valley, California* (USFWS 1998b), *Draft Recovery Plan for Chaparral and Scrub Community Species East of San Francisco Bay, California* (USFWS 2002b), *Recovery Plan for the California red-legged frog (Rana aurora draytonii)* (USFWS 2002c), and

Draft Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon (USFWS 2004).

- 6) Riparian, aquatic and associated upland habitat mosaic (including oak woodlands) supporting supporting species such as the giant garter snake, valley elderberry longhorn beetle, riparian brush rabbit, riparian woodrat, California red-legged frog, and neotropical migratory birds, with a special emphasis on the southern Central Valley. In part because of the CVP, only about 13% of historical riparian habitat are present in the Central Valley today (USFWS and USBR 2003). As a result, riparian-dependent species are some of the most critically endangered species in the Central Valley, and include the California red-legged frog, riparian brush rabbit, and valley elderberry longhorn beetle. In addition, many listed species depend on oak woodland habitat including the California red-legged frog, California tiger salamander, and American peregrine falcon. As of 1990, it was estimated that there has been a decline of oak woodland of 24% in the San Joaquin Valley; 30% in the Tulare Basin; and 78% in the San Francisco Bay area (USFWS and USBR 2003). Proposals should emphasize implementation of priority one tasks for riparian upland mosaic species found in the following recovery plans: *Draft Recovery Plan for the Giant Garter Snake* (USFWS 1999); *Valley Elderberry Longhorn Beetle Recovery Plan* (USFWS 1984); *Recovery Plan for Upland Species of the San Joaquin Valley, California* (USFWS 1998b); *Recovery Plan for the California red-legged frog (Rana aurora draytonii)* (USFWS 2002c); *Final Recovery Plan, Southwestern Willow Flycatcher (Empidonax traillii extimus)* (USFWS 2002d); and *Draft Recovery Plan for the Least Bell's Vireo (Vireo bellii pusillus)* (USFWS 1998c).

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	Complete	
1.	Program Management	10/01/05	09/30/06	A revised FY 2006 Annual Work Plan (AWP); a draft FY 2007 AWP; and final grants, cooperative agreements, and contracts for projects supported by the HRP.
1.1	Program Management (USFWS)	10/01/05	09/30/06	Final grants, cooperative agreements, and contracts for USFWS-led projects.
1.2	Program Management (USBR)	10/01/05	09/30/06	Final grants, cooperative agreements, and contracts for USBR-led projects.
1.3	Technical Support (USBR)	10/01/05	09/30/06	Technical comments on proposals and ongoing projects for USBR-led projects.
1.4	Contracting Support (USBR)	10/01/05	09/30/06	Final grants, cooperative agreements, and contracts for USBR-led projects.
2.	Environmental Documentation and Appraisal Review	10/01/05	06/01/06	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)	10/01/05	06/01/06	Final NEPA and ESA documents for USFWS-led projects.
2.2	Environmental Documentation (USBR)	10/01/05	07/01/06	Final NEPA and ESA documents for USBR-led projects.
2.3	Appraisal Review (USFWS)	11/01/05	06/01/06	Completed reviews for all appraisals to ensure they meet Federal guidelines for USFWS-led projects.
2.4	Appraisal Review (USBR)	11/01/05	08/01/06	Completed reviews for all appraisals to ensure they meet Federal guidelines for USBR-led projects.
3.	Project Funding and Implementation	01/15/06	09/30/06	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.

Schedule and Deliverables

To be determined based upon the number of high priority projects which are recommended for implementation through the CALFED proposal solicitation and review process and any directed actions proposed after the completion of the CALFED process.

C. Summary of Program Costs and Funding Sources.

#	Task	Total Cost	Funding Sources
			RF
1	Program Management (Total)	\$267,063	\$267,063
1.1	Program Management (USFWS)	\$201,063	\$201,063
1.2	Program Management (USBR)	\$50,000	\$50,000
1.3	Technical Support (USBR)	\$9,000	\$9,000
1.4	Contracting Support (USBR)	\$7,000	\$7,000
2	Environmental Documentation and Appraisal Review (Total)	\$53,927	\$53,927
2.1	Environmental Documentation (USFWS)	\$24,427	\$24,427
2.2	Environmental Documentation (USBR)	\$17,500	\$17,500
2.3	Appraisal Review (USBR)	\$12,000	\$12,000
3	Project Funding and Implementation	\$1,179,010	\$1,179,010
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 1.4)

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	\$204,806	\$0	\$0	\$62,257	\$267,063
1.1	Program Management (USFWS)	1.06	\$164,806	\$0	\$0	\$36,257 ^b	\$201,063
1.2	Program Management (USBR)	0.3	\$30,303 ^c	\$0	\$0	\$19,697	\$50,000
1.3	Technical Support (USBR)	0.1	\$5,455 ^c	\$0	\$0	\$3,545	\$9,000
1.4	Contracting Support (USBR)	0.1	\$4,242 ^c	\$0	\$0	\$2,758	\$7,000
2.	Environmental Documentation and Appraisal Review (Total)	0.4	\$37,901	\$0	\$0	\$16,026	\$53,927
2.1	Environmental Documentation (USFWS)	0.13	\$20,022	\$0	\$0	\$4,405 ^b	\$24,427
2.2	Environmental Documentation (USBR)	0.2	\$10,606 ^c	\$0	\$0	\$6,894	\$17,500
2.3	Appraisal Review (USBR)	0.1	\$7,273 ^c	\$0	\$0	\$4,727	\$12,000
3.	Project Funding and Implementation	0	\$0	\$1,112,274	\$0	\$66,736 ^d	\$1,179,010
Total by Category		1.96	\$242,707	\$1,112,274	\$0	\$145,019	\$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, 2006 which exceed the current budget. ^a1 FTE = \$155,477; ^bcalculated as 22% of the Direct Salary and Benefit Costs; ^ccalculated as 60.6% of the Total Costs; ^dcalculated as 6% of Contract Costs.

VII. 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.

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
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
		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
Total:			4.95	4.95	5.11	5.11

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.

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 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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