## Work Plan for Fiscal Year 2004

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

## II. Responsible Entities

	Agency	Staff Name	Role
Co-Lead	USFWS	John Thomson	Program Manager
Co-Lead	USBR	Chuck Solomon	Program Manager

## III. Program Objectives for FY 2004

The objectives for the Habitat Restoration Program (HRP) were originally listed in the CVPIA Habitat Restoration Program Draft Project Plan (September 2000, revised in August 2003). These objectives are listed below. They reflect priorities for 2004, as well as the overall goals of the program.

- A. Protect and restore native habitats impacted by Central Valley Project (CVP) that are not specifically addressed in the Fish and Wildlife Restoration Activities section of the CVPIA. The focus in 2004, 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, 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. 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. 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.

The goals of the HRP are integrated with those of the CALFED Ecosystem Restoration Program (ERP). Accordingly, the above objectives have been included in the CALFED Ecosystem Restoration Program Draft Stage 1 Implementation Plan, and are complementary to other goals listed in this plan. The above goals would also help address the objectives of the CALFED Multi-Species Conservation Strategy and the CVPIA Biological Opinion.

#### IV. Status of the Program.

The HRP is a continuing program which commenced in FY1996. As stated in the Final CVPIA Programmatic Environmental Impact Statement, the estimated annual costs of the program are \$1.5 million. As of August 2003, the Program has funded 63 projects located throughout the Central Valley with a total budget of approximately \$18,000,000. In accordance with the CVPIA Biological Opinion, 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. Projects funded through the HRP have contributed to implementing actions recommended in recovery plans for the following species: California Red-legged Frog, upland species of the San Joaquin Valley, valley elderberry beetle, riparian brush rabbit, vernal pools species, and Gabbro soil plants.

Approximately 91,000 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 surveys for listed species, genetic research, and construction of a captive reproduction facility for the listed riparian brush rabbit. Other projects include funding habitat restoration at Colusa National Wildlife Refuge (NWR) and Sacramento River NWR. Although these projects are only a few years old, the habitat has responded favorably to restoration efforts. Preliminary monitoring results have indicated that additional permanent wetland habitat restored at Colusa NWR has been actively used by giant garter snakes since spring 2000. Riparian species planted on 200 acres at Sacramento River NWR experienced approximately a 70 percent survival rate over the first three years.

Surveys for giant garter snakes, 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. A comprehensive GIS historic trend analysis is providing valuable information in developing annual priorities and in establishing long-term qualitative goals for the Habitat Restoration Program.

Because the Central Valley Project impacted upland habitats throughout the Valley, it is appropriate for the HRP to focus on these communities, since they are not addressed by other programs established by the CVPIA. Riparian and aquatic habitats and the species that depend on these habitats benefit from projects implemented through CVPIA programs such as the Anadromous Fish Restoration Program, San Joaquin River Riparian Habitat Restoration Program, and Gravel Replenishment and Riparian Habitat Restoration Program). The HRP and Land Retirement Programs, however, are the only CVPIA programs that specifically address upland terrestrial habitats and associated listed species.

## V. FY 2003 Accomplishments

Ten conservation actions were funded in FY03 at a cost of \$1,285,215. Three of these actions provided additional funding to continue projects that were initiated in previous years. These ongoing projects included continued monitoring of giant garter snakes at Colusa NWR, trapping and surveying for giant garter snakes at San Luis NWR, and continuing riparian brush rabbit captive propagation and recovery program activities, including trapping, monitoring and genetic and physical assessments.

The seven new actions that were new to the HRP in Fiscal Year 2003 are as follows:

- (1) Funds (\$10,000) were provided as part of '03 Program Management expenditures (public outreach) to the Western Section of the Wildlife Society to assist HRP managers in hosting a workshop entitled, *Opportunities for Endangered Species Recovery and Habitat Restoration in California's Central Valley*. The successful two day workshop was held on April 2-3 of this year and was attended by approximately 150 individuals from varying conservation interests.
- (2) Funds (\$130,000) were provided to the American River Conservancy to design and construct a new pond for potential California red-legged frog breeding habitat below Spivey Pond on Weber Creek in El Dorado County. The goal of the project is to increase critical reproductive habitat within 2 years of the proposal's acceptance and provide an aggressive and adaptive strategy for increasing California red-legged frogs through natural colonization.
- (3) Funds (\$473,585) were provided to The Nature Conservancy (TNC) to contribute (approximately 20%) towards the acquisition of a perpetual conservation easement on approximately 2865 acres in the northeastern edge of San Joaquin County in the Cosumnes River watershed. This ranch has a high density of vernal pools and associated listed species, and is part of TNC's Vernal Pool Grassland Focus Planning Area. The property also has strong project connectivity values due to its proximity to Howard Ranch, an easement acquired by TNC in 1999.
- (4) Funds (\$96,000) were provided to the Endangered Species Recovery Program at California State University, Stanislaus, to conduct demographic monitoring of Palmate-bracted bird's beak at Alkali Sink Ecological Reserve in Fresno County.. This monitoring will determine population stability and effects of road disturbance. The study will also bank seeds from Springtown Alkali Sink and the Sacramento NWR.
- (5) Funds (\$40,000) were provided to the Cottonwood Creek Watershed Group to perform "start up" work on California red-legged frogs in the Cottonwood Creek watershed. This preliminary effort will complete aerial photographs of potential habitat areas in the watershed and begin obtaining landowner permission to conduct surveys for California red-

- legged frogs on private lands. The Cottonwood Creek watershed has been identified as a "core area" in the California red-legged frog recovery plan.
- (6) Funds (\$70,000) were provided to ECORP Consulting to survey/trap southern water snakes on Willow Creek and Humbug Creek, tributaries into the American River above Lake Natoma. This project will help establish baseline data regarding the status of this invasive reptile, which may pose a threat to the recovery of the giant garter snake.
- (7) Funds (\$52,800) were provided to the Endangered Species Recovery Program and California State University, Stanislaus, to conduct population surveys and perform pylogenetic analysis of the Buena Vista Lake Shrew in the southern San Joaquin Valley. This survey and analysis will assess populations and help determine the genetic variability within and among the geographic subpopulations of the species. This data could have importance when determining the species listing status.

#### 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.
  - 1.1.1 GGS monitoring, Colusa NWR Staff at Colusa NWR will coordinate on a daily basis with USGS BRD biologist during field surveys.
  - 1.1.2 GGS surveys, San Luis NWR San Luis NWR biologists and technicians will survey for ggs on refuge lands.
  - 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 processe 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 (USFWS) For projects in which the USFWS is lead, appraisal reviews for any proposed fee title or conservation easement acquisitions will be completed in coordination with the USFWS's Realty Office.
- 2.4 Appraisal Review (USBR) Appraisal review and archaeological review will be completed by the USBR on all projects for which the USBR is lead.
- 3. Continue recovery actions for the Riparian Brush Rabbit in accordance with the Recovery Plan of Upland Species of the San Joaquin Valley, the Draft Controlled Propagation and Reintroduction Plan, the CVPIA and CALFED Biological Opinions, and the USFWS Policy Regarding Controlled Propagation of Species Listed Under the Endangered Species Act. The tasks below are proposed to be implemented through the Habitat Restoration Program as they are a continuation of priority activities previously funded by USBR and the USFWS. As part of the ongoing captive breeding program, individual rabbits are expected to be translocated to breeding enclosures during November 2003.
  - Security funding at the beginning of the fiscal year is a priority to continue these recovery activities. Specific tasks proposed for FY04 include:
- 3.1 Controlled Propagation
  - (1) trap individuals, evaluate population status and individuals' potential fitness for captive propagation, and move selected brush rabbits from the Paradise Cut population into confinement at the captive propagation site;
  - (2) monitor confined and individuals determined unsuitable for breeding purposes through radio-telemetry and periodic livetrapping; and
  - (3) physically(examination of phenotypic traits) and genetically assess progeny in confined populations for translocation;
- 3.2 Recovery
  - (1) locate, design, oversee, and participate in construction of pens for temporary confinement of rabbits at the Christman Island release site;
  - (2) translocate and release rabbits to the Christman Island release site; and
  - (3) monitor translocated rabbits and evaluate success of releases.
- 4. Giant Garter Snake Monitoring/ Colusa NWR. Initiate the fourth year of monitoring giant garter snake use of restored habitat on the Zumwalt Tract,

- Colusa National Wildlife Refuge and describe habitat use of this area restored in 1999. This project has been funded since 1997 through this program.
- 5. Project Funding and Implementation. As part of efforts to better integrate implementation of CVPIA and CALFED programs consistent with the CALFED Implementation Memorandum of Understanding, the HRP expects to identify projects through the CALFED ERP's proposal solicitation and review process. Therefore, the HRP cannot identify all of the projects that the program will support in 2004 until the ERP's process is complete. Projects will be identified for funding based on their contribution to the program objectives and consistentcy with the priorities listed below. Some of the specific projects may be a continuation of previously funded projects, others will be new to the program. Project prioritization will also be closely coordinated with the USBR's Central Valley Project Conservation Program.

# Program Objectives for 2004:

- a) Protect and restore grassland, alkali sink, and alkali scrub habitat located in the Central Valley, with emphasis on the Tulare Basin, to secure habitat linkages for San Joaquin kit fox, blunt-nosed leopard lizard, Tipton kangaroo rat, Buena Vista lake shrew and others dependent upon this habitat complex.
- b) Protect and restore serpentine and other unique topo-edaphic habitats supporting endemic species and ecosystems, such as the bay checkerspot butterfly, particularly in Santa Clara County.
- c) Protect vernal pool habitats throughout the Central Valley in order to contribute towards the recovery of federal and state listed vernal pool invertebrates as well as plants and other species of concern.
- d) Restore and protect the riparian upland habitat mosaic throughout the Central Valley. Targeted species to benefit from these activities include, but are not limited to, giant garter snake, valley elderberry longhorn beetle, riparian brush rabbit, riparian woodrat, California red-legged frog, and neotropical migratory birds.
- e) Protect oak woodland habitats found in association with other habitat types listed above and in the Central Valley.

# Additional Funding Needs.

Implementation of additional projects which meet the above priorities will be initiated as funding allows. Priority will be given to activities to protect and restore existing habitat which will benefit priority habitat types and federally listed species. Property that is under high threat of conversion and need for protection will receive the highest priority.

The proposal for controlled propagation of the riparian brush rabbit is currently ongoing peer review and actual estimated expenses may be modified for the Habitat Restoration Program or be covered under other non-CVPIA programs.

# B. Schedule and Deliverables

		Start	Complete	
#	Task	Date	Date	Deliverable
1	Program Management	10/01/03	09/30/04	A revised FY2004 Annual Work Plan: a draft FY2005 AWP; and final grants, cooperative agreements, and contracts for projects supported by the HRP.
1.1	Program Management (USFWS)	10/01/03	09/30/04	Final grants, cooperative agreements, and contracts for USFWS-led projects.
1.1.1	GGS Monitoring/CNWR	02/03	09/04	CNWR staff support of GGS monitoring
1.1.2	GGS Summary/SLNWR	02/03	09/04	Field surveys by refuge biologists and technicians
1.2	Program Management (USBR)	10/01/03	09/30/04	Final grants, cooperative agreements, and contracts for USBR-led projects.
1.3	Technical Support (USBR)	10/01/03	09/30/04	Technical comments on proposals and ongoing projects for USBR-led projects.
1.4	Contracting Support (USBR)	10/01/03	09/30/04	Final grants, cooperative agreements, and contracts for USBR-led projects.
2	Environmental Documentation and Appraisal Review	10/01/03	06/01/04	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)	10/01/03	06/01/04	Final NEPA and ESA documents for USFWS-led projects.
2.2	Environmental Documentation (USBR)	10/01/03	07/01/04	Final NEPA and ESA documents for USBR-led projects.
2.3	Appraisal Review (USFWS)	11/01/03	06/01/04	Completed reviews for all appraisals to ensure they meet Federal guidelines for USFWS-led projects.
2.4	Appraisal Review (USBR)	11/01/03	08/01/04	Completed reviews for all appraisals to ensure they meet Federal guidelines for USBR-led projects.
3	Controlled Propagation			

		Start	Complete			
#	Task	Date	Date	Deliverable		
3.1		1/04	9/04	Bimonthly progress reports on the controlled propagation efforts starting January 2004 through September 2004. Draft annual report on controlled propagation will be delivered by November 30, 2004. Final report by January 15, 2005.		
3.2	Recovery Actions	5/04	9/04	Constructed pens for temporary confinement of rabbits at the Christman Island release site. Monitoring report on released rabbits.		
4	Monitoring Giant Garter Snakes at Colusa NWR	2/04	9/04	Draft and final reports on results of monitoring by December 2004 and January 2005, respectively		
5	Project Funding and Implementation	01/15/04	09/30/04	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 - Additional Funding Needs.

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.

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#	Task		Total Cost		RF	
1	Program Management (Total)	\$	269,769	\$	269,769	
1.1	Program Management (USFWS)	\$	153,169		\$153,169	
1.1.1	GGS Monitoring/CNWR	\$	6,600	\$	6,600	
1.1.2	GGS Survey/SLNW	\$	50,000	\$	50,000	
1.2	Program Management (USBR)	\$	46,000	\$	46,000	
1.3	Technical Support (USBR)	\$	7,500	\$	7,500	
1.4	Contracting Support (USBR)	\$	6,500	\$	6,500	
2	Environmental Documentation and Appraisal Review (Total)	\$	71,363	\$	71,363	
2.1	Environmental Documentation (USFWS)	\$	29,276	\$	29,276	
2.2	Environmental Documentation (USBR)	\$	17,500	\$	17,500	
2.3	Appraisal Review (USFWS)	\$	14,587	\$	14,587	
2.4	Appraisal Review (USBR)	\$	10,000	\$	10,000	
3	Riparian Brush Rabbit	\$	300,000	\$	300,000	
3.1	Controlled Propagation	\$	150,000	\$	150,000	
3.2	Recovery	\$	150,000	\$	150,000	
4	Giant Garter Snake Monitoring	\$	68,573	\$	68,573	
5	Project Funding and Implementation	\$	790,295	\$	790,295	
	Total Program Budget				\$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	Direct Salary and Benefits Costs	Contract Costs	Misc. Costs	Admin Costs	Total Costs
1	Program Management (Total)	1.89	\$236,216	\$0	\$0	\$33,553	\$269,769
1.1	Program Management (USFWS)	1.05	\$129,804	\$0	\$0	\$23,365	\$153,169
1.1.1	GGS Monitoring/CNWR	.04	\$5,412	\$0	\$0	\$1,188	\$6,600
1.1.2	GGS Summary/SLNWR	0.3	\$41,000	\$0	\$0	\$9,000	\$50,000
1.2	Program Management (USBR)	0.3	\$46,000	\$0	\$0	\$0	\$46,000
1.3	Technical Support (USBR)	0.1	\$7,500	\$0	\$0	\$0	\$7,500
1.4	Contracting Support (USBR)	0.1	\$6,500	\$0	\$0	\$0	\$6,500
2	Environmental Documentation and Appraisal Review (Total)	0.6	\$64,587	\$0	\$0	\$6,776	\$71,363
2.1	Environmental Documentation (USFWS)	0.2	\$24,725	\$0	\$0	\$4,551	\$29,276
2.2	Environmental Documentation (USBR)	0.2	\$17,500	\$0	\$0	\$0	\$17,500
2.3	Appraisal Review (USFWS)	0.1	\$12,362	\$0	\$0	\$2,225	\$14,587
2.4	Appraisal Review (USBR)	0.1	\$10,000	\$0	\$0	\$0	\$10,000
3.0	Riparian Brush Rabbit		\$0	\$300,000	\$0	\$0	\$300,000
3.1	Controlled Propagation		\$0	\$150,000	\$0	\$0	\$150,000
3.2	Recovery		\$0	\$150,000	\$0	\$0	\$150,000
4	Giant Garter Snake Monitoring/CNWR		\$0	\$65,620	\$0	\$2,953	\$68,573
5	Project Funding and Implementation	0.0	\$0	\$754,732	\$0	\$35,563	\$790,295
	Total by Category	2.4	\$300,803	\$1,120,352		\$78,845	\$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, 2003, which exceed the current budget.

# VII. Future Years Commitments/Actions.

Some actions planned for FY04 may require maintenance and/or monitoring activities in future years. This is particularly relevant for any proposed restoration projects 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.