

Draft CVPIA Fiscal Year 2009 Annual Work Plan

December 1, 2008

Program Title

Land Retirement Program CVPIA Section 3408(h)

Responsible Entities

Staff Name	Agency	Role
Stephen Lee	USBR	Co-Lead
Vacant	USFWS	Co-Lead
Steve Laymon	BLM	Project Site Coordinator

Program Goals and Objectives for FY 2009

The Land Retirement Program (LRP) goals since its inception and continued to present are:

A. Performance Goals

1. Reduce agricultural drainage volume.

Through the development of land management plans, acres acquired will be identified for removal from irrigated agriculture, thus reducing the agricultural drainage volume. The Atwell Island Project Activity Plan delineates areas where retired lands contribute to this goal. Retired lands in Fresno County (Tranquillity site) converted to upland habitat also contribute to reduction of agricultural drainage volume.

2. Demonstrate upland wildlife habitat restoration.

a. Monitoring physical and biological impacts of retiring land.

Pursuant to the Service's Endangered Species Act Biological Opinion September 1999 for the CVPIA Land Retirement Program Demonstration Project (LRDP), the five-year of monitoring results report of the biological and physical impacts of land retirement for both the Tranquillity and Atwell Island sites will be distributed and posted on the CVPIA Land Retirement website.

b. Atwell Island Project Activity Plan Publication.

The Atwell Island Project Activity Plan, a BLM land management plan with upland restoration implementation techniques, prepared with Land Retirement Team input, will be published. The corresponding NEPA documents for land management activities at Atwell Island will be done by BLM.

c. Upland Habitat Restoration.

BLM will continue restoration activities with native San Joaquin Valley plants on an average of 400 acres per year of the remaining 2,310 acres left to restore at Atwell Island. Information on restoration techniques conducted at both sites will be reported by the Land Retirement Team. Additional restoration and recovery actions at Atwell Island, like the development of San Joaquin kit fox escape burrows/dens will also be established per coordination with appropriate experts.

d. Native Plant Nursery Facility.

At the Tranquillity site the native plant nursery and seed processing will continue with additional weed control restoration research trials and site maintenance through March 2009. Seed produced will be planted in Wildlife Friendly Farming Units via a partnership with the Westside Resource Conservation District

through September 2009.

B. Progress Goal

1. Acquire land and CVP water. The LRP will continue to purchase land from willing sellers within the Demonstration Project areas. The focus will be to complete realty processes begun in FY2008 for approximately 700 acres of targeted acquisitions in the 8000-acre Atwell Island site. [BLM is the responsible agency for land acquisition.](#)

Supporting Documents for the above stated goals and objectives.

1. CVPIA language: Title 3408 (h) (1) The Secretary is authorized to purchase from willing sellers land and associated water rights and other property interests identified in paragraph (h) (2)...and to target such purchases to areas deemed most beneficial to the overall purchase program, including the purposes of this title and agricultural wastewater management activities developed pursuant to recommendations specific to water conservation, drainage source reduction, and land retirement contained in the San Joaquin Valley Drainage Report (September 1990).

2. The San Joaquin Valley Drainage Program (September 1990) which recommended retirement of 75,000 acres in the San Joaquin Valley by 2040.

3. The CVPIA ROD committed to completion and use of a 15,000 acre Land Retirement Demonstration Study that would “provide guidance for future implementation of the overall retirement program, better providing for its adaptive management” and resulting in a more effective and efficient overall retirement program.

4. The program prepared an action-specific Land Retirement Demonstration Project NEPA document (EA/FONSI, 1999) and consulted with the FWS for endangered species.

5. The Demonstration Project’s Biological Opinion (U.S. Fish and Wildlife Service, 1999 Formal Section 7 Consultation) provided metrics for monitoring and reporting. A five year report (1999-2004) was completed in FY 2005 for the Fresno County lands that assessed the biological and physical impacts of land retirement.

6. The SJV Recovery Plan for Upland Species 1998 had similar performance criteria for land retirement.

Status of the Program

A. Land Retirement Program Objectives and Initiation of LRDP

The FWS Biological Opinion required that land retirement impacts be monitored before a large-scale program was implemented. An EA for the 15,000 acre Land Retirement Demonstration Project (LRDP) was approved in 1999 to study the physical and biological impacts. The ROD for the CVPIA PEIS further committed to completion and use of the demonstration project that would “provide guidance for future implementation of the overall retirement program, better providing for its adaptive management and resulting in a more effective and efficient overall retirement program”.

B. Land Retirement Program Actions

In 1997, Interior via the CVPIA Land Retirement Program (LRP) solicited offers for voluntary land retirement from willing sellers, within the drainage-impacted area. Over 80 applications amounting to 55,000 acres were received by 2002, far exceeding available funding. In 1999, the

CVPIA Land Retirement Demonstration Project was established pursuant to the Biological Opinion. This 15,000 acres project had provisions for approximately 7,000 acres targeted for retirement in western Fresno County (Tranquillity project area), 1,600 acres in southeastern Kings County and approximately 6,400 acres in southwestern Tulare County (Atwell Island project area). From 1993 to date, the CVPIA Land Retirement Program has acquired 9203 acres. The Atwell Island Project Site is managed by BLM; Reclamation manages the Tranquillity site.

C. Demonstration Project Establishment

The Land Retirement Demonstration Project was established at Tranquillity in the Westlands Water District and at Atwell Island Water District in the Tulare Basin. The metrics, derived from the 1999 Biological Opinion performance criteria, included selenium contaminant levels in biota and physical parameters such as groundwater levels, water quality and soil chemistry. The Habitat Restoration Study plots were laid out in 1999 on 800 acres, such that twenty 10-acre plots were each located in the center of a 40-acre block with the 30-acre remainder as a buffer planted in barley. At Atwell Island, block size was reduced to 10 acres installed in 2001. At both study sites, four treatments were replicated five times in a randomized block design.

D. Monitoring Demonstrates Benefits of Land Retirement. Demonstration Project results clearly show that retiring land from irrigated agriculture has physical and biological benefits and that these results are applicable to the majority of San Joaquin Valley acres with similar characteristics. The shallow groundwater table declined in response to land retirement by 1 to 2 feet per year. This result is important as the shallow groundwater beneath the project sites is highly saline water with high concentrations of selenium and boron. The decline insures that any wildlife contact is highly unlikely. Land retirement has not resulted in increased levels of bio-accumulated selenium. Selenium concentrations in vegetation, invertebrates and mammals have not changed significantly over the study period to date and are below concentrations of concern to EPA and USFWS at both study sites. Land retirement led to increased diversity of wildlife. Bird species diversity and abundance increased across all treatments immediately following restoration efforts and included special status species. Selenium in the top foot of soil decreased over 5 years.

At Atwell Island where BLM has done restoration activities, a number of sensitive San Joaquin Valley wildlife species, including kit fox, loggerhead shrikes, burrowing owls and Tipton kangaroo rat have been observed using these restored areas. At Tranquillity, a unique San Joaquin Valley Native Plant Nursery with over 100 species was established that will amplify limited SJV native seed stock, help determine species for restoration strategies and cost efficient cultivation. The USDA Natural Resources Conservation Service Plant Materials Center did research to grow some of these with mechanical means. Additional trials focused on weed competition control, the major challenge in successful upland habitat restoration.

FY 2008 Accomplishments

A. Land Acquisitions in FY 2008. Land acquisition at Atwell Island focused on the

inclusions within the already acquired acres. Letters were sent to all landowners of record for parcels within the Atwell Island Water District in either Tulare or Kings Counties. Changes in BLM Realty positions have delayed the acquisition process in 2008, but should pick up in 2009 as these positions are filled. Of the 9,203 acres acquired at both the Tranquillity and Atwell Island Project Sites to date, 8,345 acres are retired from irrigated agriculture and have reduced drainage volume.

B. Restoration accomplishments for FY 2008. Successes at the Atwell Island site are being adapted for future plantings. In 2008, 320 acres were planted for a total of 2,344 restored acres. In 1995 prior to acquisitions 4,619 acres of the Project area were being farmed and irrigated. More than half of this land has been retired during the past 13 years and today approximately 1,965 acres is being farmed, primarily with alfalfa (1,395 acres) and oats (495 acres).

The limited rainfall produced less prominent floral displays than previous years. Wildlife surveys resulted in important findings of populations of endangered Tipton Kangaroo-rat, Burrowing Owls, Coast Horned Lizards, San Joaquin Valley Coachwhips, Swainson's Hawks and a sensitive plant, Hoover's Woollystar. The Atwell Island wildlife sighting database now contains over 18,000 field observations. BLM developed plant and animal lists and a photo-illustrated flora for the Atwell Island project area.

C. Reports in FY 2008. Complete restoration to upland habitats found in the San Joaquin Valley could take many years to achieve, but the program's work has restored portions of the land and continues to adapt techniques to achieve desired habitat values. Selenium toxicity to wildlife was a concern on drainage impaired farmlands retired from irrigated agriculture in the San Joaquin Valley. Water, soil, and biota monitored on LRDP lands comply with the Fish & Wildlife Service Biological Opinion requirements. Monitoring results are used to inform decisions regarding large scale land retirement as a means to address agricultural drainage problems in the San Joaquin Valley. Information is available on the CVPIA Land Retirement website at www.usbr.gov/mp/cvpia/3408h/index.html.

D. Partnerships in FY 2008. Due to the funding limits for this program, developing partnerships with farmers, non-governmental organizations, other agencies and educational groups has been pursued from the beginning of the Land Retirement Program. A partnership with the Westside Resource Conservation District has enabled wildlife units to be planted on the DOI lands at Tranquillity. Critical to the success of the restoration activities at Atwell Island was the partnership BLM developed with cooperating farmers to carry out restoration activities. Other efforts by BLM and FWS centered on the continued efforts with the Tulare Lake Basin Working Group and the assistance provided to help establish Tulare Basin Wildlife Partners, an NGO which will be a cooperator on the project. A partnership with NRCS is instrumental in establishing adjacent wetland habitat in the former Ton Tache basin. BLM's community partnerships included the Tulare County Audubon Society; Alpaugh School District; Citizens for a Better Alpaugh; State Park Service – Allensworth SHM; USDA-NRCS; USDA Forest Service (Trails Unlimited); and the Kern NWR.

Table 1. FY2009 Task, Cost, Schedule and Deliverables Table

Task or Subtask Number	Name of Activity	FTE's	Description of Activity	Completion Date	Total Cost	Funding Source Restoration Fund	Funding Source Water & Related Resources
1.1	Program Management						
1.1.1		.53	USBR co-lead for the LRP. Budget is handled through the USBR SCCAO Office. Monitoring of physical and biological impacts of retired land and preparation of final report. Priority - High	9/30/2008	\$100,000	\$100,000	\$0
	<u>Subtotal Costs</u>				\$100,000	\$100,000	\$0
1.2	Program Support						
1.2.1		.50	The USFWS co-lead position is currently vacant . FWS provides support for monitoring of physical and biological impacts of retired land and preparation of final reports for BO compliance.	9/30/2008	\$100,000	\$100,000	\$0
	<u>Subtotal Costs</u>				\$100,000	\$100,000	\$0
1.3	Technical Support						
1.3.1		1	Project coordinator with BLM. BLM costs are included in an Inter-agency Agreement through Sept.30, 2009. All BLM costs are included in Sec 1.4.	9/30/2008	See Sec. 1.4		
	<u>Subtotal Costs</u>						
1.4	Land Acquisition and Restoration Actions						
			Land Acquisition and Restoration at Atwell Island for upland habitat is performed with funds from the Inter-Agency Agreement with BLM. The land acquisition target is 700 acres to complete land acquisition for the Atwell Island Project. The restoration target is 400 acres per year. Ties directly to performance goal of acres protected and restored. Habitat restored for upland species including threatened and endangered Tipton's Kangaroo Rat and San Joaquin Kit Fox. Techniques include prescribed burning followed by native plant seeding, topographic development, planting shrubs, trees and wildlife crops. Partnerships have been developed with the local community, other conservation agencies and NGO's, and academic institutions. Priority - High	9/30/2013	\$250,000	\$250,000	\$0
	<u>Subtotal Costs</u>				\$250,000	\$250,000	\$0

Task or Subtask Number	Name of Activity	FTE's	Description of Activity	Completion Date	Total Cost	Funding Source Restoration Fund	Funding Source Water & Related Resources
1.5	Evaluations Studies Investigations Research		Contract for operation of native plant nursery stocked with native species that could be used to restore retired lands. Ties directly to Performance Goal of acres protected and restored.	9/30/2008	\$0	\$0	\$0
			Focused studies of restoration techniques and physical impacts of land retirement. Ties directly to Performance Goals of Drainage Source Reduction.		\$0	\$0	\$0
	<u>Subtotal Costs</u>				\$0	\$0	\$0
	Land - Water - and - Conveyance - Acquisitions		Land Acquisition - 700 acres remain to be purchased fee title at the Atwell Island Demo Project to complete land acquisition. These lands are privately owned lands within the project boundary. The government needs to acquire fee title to these lands to facilitate management of these lands as a unit. Ties directly to the Progress Goal of land acquisition.		See Sec. 1.4		
	<u>Subtotal Costs</u>				\$0	\$0	\$0
	Outreach and Public Involvement		Synthesis Document on Restoration Techniques, Website and database. Ties directly to Performance Goal of Drainage Reduction and Restoration of retired lands. Priority - High	9/30/2009	\$50,000	\$50,000	\$0
	<u>Subtotal Costs</u>				\$50,000	\$50,000	\$0
	Planning		Atwell Island Project Land Management Plan Finalization. Ties directly to Performance Goal of Acres Protected and Restored.	9/30/2008	See Sec. 1.4		
	<u>Subtotal Costs</u>				\$0	\$0	\$0
1.12	Monitoring		Monitoring of physical and biological impacts of retired land and preparation of final reports for BO compliance. Costs are part of 1.1 and 1.2 co-leads responsibilities and BLM. BOR is collecting water, soil, land use data, BLM and ESRP are collecting biological data and land acquisition data. Data is stored on databases located in the SCCAO and Bakersfield offices of the respective agencies.		See Sec. 1.1, 1.2, 1.4		
	<u>Subtotal Costs</u>				\$0	\$0	\$0
	Total Costs				\$500,000	\$500,000	\$0
	USFWS Funding				\$100,000	\$100,000	\$0

Task or Subtask Number	Name of Activity	FTE's	Description of Activity	Completion Date	Total Cost	Funding Source Restoration Fund	Funding Source Water & Related Resources
	USBR Funding				\$150,000	\$150,000	\$0
	BLM Funding				\$250,000	\$250,000	\$0
	Potential 15% funding cut		\$75,000 from task 1.2.1		\$75,000	\$75,000	\$0

Table 2. Budget Breakout Table

Task	Agency	FTE	LABOR			CONTRACTS		Misc. Costs	Total Costs
			Direct Salary and Benefits Costs	Overhead Costs on Salary & Benefits	FWS Overhead Assess: 22% of Direct Salary and Benefits Costs	Contract, Grant, and Agreement Costs	FWS Overhead Assess: 6% Contract Costs		
1.1 Program Management	FWS		0	0	0	0	0	0	
	BOR	.5	48,000	52,000	0	0	0	100,000	
1.2 Program Support	FWS	.5	82,000	28,000	0	0	0	100,000	
	BOR		0	0	0	0	0	0	
1.3 Technical Support	FWS		0	0	0	0	0	0	
	BOR		0	0	0	0	0	0	
1.4 Restoration Actions	BLM		0	0	0	250,000	0	250,000	
	BOR		0	0	0	0	0	0	
1.5 Evaluations, Studies, Investigations, Research	FWS		0	0	0	0	0	0	
	BOR		0	0	0	50,000	0	50,000	
FWS Total Costs		.5	0	0	0	0	0	100,000	
BOR Total Costs		.5	0	0	0	0	0	400,000	
TOTAL ALL		1	0	0	0	0	0	500,000	

Table 3. Three- Year Budget Plan FY 2010 – 2012

Year	Description of Activities	Requested RF Funding	Requested W&RR Funding
2010	Completion of land acquisition and upland habitat restoration at Atwell Island Project Site.	\$500,000	\$500,000
2011	Completion of land acquisition and upland habitat restoration at Atwell Island Project Site.	\$500,000	\$500,000
2012	Completion of land acquisition and upland habitat restoration at Atwell Island Project Site.	\$500,000	\$500,000

Note: The FY 2010 – 2012 Budget Plan provides estimates of capability only. The amounts are displayed are those that might be reasonably appropriated each year. These figures do not reflect the future Congressional Appropriations process. All of these estimates will be adjusted annually as RF collections are realized.

Funding levels of \$500,000 per year over the next six years will allow completion of the Land Retirement Demonstration Project which will result in a complete 8,000 acre restored upland habitat complex in the Tulare Lake Basin.