

CVPIA Fiscal Year 2008 Annual Work Plan

November 2, 2007

Program Title

Land Retirement Program CVPIA Section 3408(h)

Responsible Entities

Staff Name	Agency	Role
Stephen Lee	Reclamation	Co-Lead
Beatrice Olsen	FWS	Co-Lead
Steve Laymon	BLM	Project Site Coordinator

Program Goals and Objectives for FY 2008

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.

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 years of monitoring required to evaluate the potential biological and physical impacts of land retirement will be completed. Reports 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 land management plan with upland restoration implementation techniques, will be published and 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 400 acres of the remaining are 2,630 acres left to restore at Atwell Island. Information on restoration techniques conducted at both sites will be reported by the Denver Reclamation Technical Services Center (TSC) and the Land Retirement Team.

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. Installation of Wildlife Friendly Farming Units will continue via a partnership with the Westside Resource Conservation District.

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 FY2007 for approximately 700 acres of targeted acquisitions in the 8000-acre Atwell Island site.

C. 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 final report of the

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 listed.

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. 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's 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 2007 Accomplishments

A. Land Acquisitions in FY 2007. 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.

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 2007. Successes at the Atwell Island site are being adapted to future plantings. In 2007, 475 acres were planted with three seed mixes in configurations that can be used for future kit fox artificial burrows. The limited rainfall produced less prominent floral displays than previous years. Wildlife surveys resulted in important findings of populations of endangered Tipton's 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 9500 observations. BLM developed plant and animal lists and a photo-illustrated flora for the Atwell Island project area.

C. Reports in FY 2007. 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 2007. 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. 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. 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.

Task, Cost, Schedule and Deliverables Table

Task or Subtask Number	Name of Activity	FTE's	Description of Activity	Completion Date	Total Cost	Funding Source RF	Funding Source WRR
1.1	Program Management						
1.1.1		.67	BOR co-lead for the LRP. Budget is handled through the BOR. Office is located in Fresno BOR SCCAO Area Office. Travel is done with GSA vehicles. Monitoring of physical and biological impacts of retired land and preparation of final rep	9/30/2008	140,000	140,000	\$0
	<u>Subtotal Costs</u>				140,000	140,000	0
1.2	Program Support						
1.2.1		.75	FWS co-lead and has office space in Fresno SCCAO BOR office. Monitoring of physical and biological impacts of retired land and preparation of final reports for BO compliance.	9/30/2008	116,250	116,250	
	<u>Subtotal Costs</u>				116,250	116,250	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>						
	Restoration Actions			9/30/2013	403,750	403,750	
			Restoration at Atwell Island for upland habitat is performed with funds from the IA with BLM. 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.				
	<u>Subtotal Costs</u>				403,750	403,750	0
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	200000	200000	
			Focused studies of restoration techniques and physical impacts of land retirement. Ties directly to Performance Goals of Drainage Source Reduction.		1200000	120000	

Task or Subtask Number	Name of Activity	FTE's	Description of Activity	Completion Date	Total Cost	Funding Source RF	Funding Source WRR
	<u>Subtotal Costs</u>				320,000	320000	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.	9/30/2008	See Sec. 1.5		
	<u>Subtotal Costs</u>				0	0	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
	-	-					
1.13	Modeling		GIS mapping and analysis -Land Retirement Demo Project data storage and management. Ties to Performance and Progress Goals of Land Acquisition, Drainage Reduction and Acres Protected and Restored. Used for analyses and reporting of monitoring data required by the Biological Opinion for the Land Retirement Demo Project.			20,000	
	<u>Subtotal Costs</u>				20,000	20000	0
	-	-					
	Total Costs				1,000,000	1,000,000	0
	Service Funding				116,250	116,250	
	Reclamation				480,000	480,000	

Task or Subtask Number	Name of Activity	FTE's	Description of Activity	Completion Date	Total Cost	Funding Source RF	Funding Source WRR
	Funding						
	BLM Funding				403,750	403,750	

Budget Breakdown Table

Task	Agency	FTE	Direct Salary and Benefits Costs	Contract Costs	Misc. Costs	Admin Costs	Total Costs
1.1 Program Management	FWS						
	BOR	.67	140,000				140,000
1.2 Program Support	FWS	.75	116,250				116,250
	BOR						
1.4 Restoration Actions	FWS						
	BLM			403,750			403,750
1.5 Evaluations, Studies, Investigations, Research	FWS						
	BOR	0.25	55,000	265,000			320,000
1.13 Modeling	FWS						
	BOR	0.1	20,000				20,000
FWS Total Costs			116,250				
BOR Total Costs			215,000				
Total			331,250	668,750			1,000,000

Five Year Budget Plan

DRAFT CVPIA 5-Year Budget Plan FY 2009 – 2013

(\$ Thousands)

Funding Source	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Total
W&RR	50,000	500,000	500,000	500,000	500,000	2,050,000
RF	500,000	500,000	500,000	500,000	500,000	2,500,000
State						
Other (identify)						
Total	550,000	1,000,000	1,000,000	1,000,000	1,000,000	4,550,000

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.