Draft CVPIA Fiscal Year 2011 Annual Work Plan

January 31, 2011

Program Title

Land Retirement Program CVPIA Section 3408(h)

Responsible Entities

Staff Name	Agency	Role
Stephen Lee	USBR	Lead
Steve Laymon	BLM	Project Site Coordinator

Program Goals and Objectives for FY 2011

The Land Retirement Program (LRP) goals are:

A. Performance Goals

1. Reduce agricultural drainage volume.

Reduction of agricultural drainage is achieved by retiring drainage impaired farmland and changing the land use from irrigated agriculture to restored upland habitat. During 2010 the Land Retirement Demonstration Project reduced the production of agricultural drainage on retired demonstration project lands by over 3,700 acre-feet.

2. Demonstrate upland wildlife habitat restoration.

a. Monitoring physical and biological impacts of retiring land.

The U.S. Fish and Wildlife Service's Biological Opinion for the CVPIA Land Retirement Demonstration Project (LRDP) required five years of monitoring to assess the biological and physical impacts of land retirement. During 2009, a draft report summarizing the findings for the Demonstration Project Site in the Atwell Island Water District in Kings and Tulare Counties was completed. The report recommends that BLM continue to acquire, manage and restore the retired lands at the Atwell Island Site as upland wildlife habitat.

b. Atwell Island Project Activity Plan.

The Draft Atwell Island Project Activity Plan, a BLM land management plan for the Atwell Island Project, was completed in June 2009. The management plan contains a detailed description of the resource management strategy for the project. BLM is programming outyear funding to accomplish operation and maintenance of the project with agency resources.

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 1,900 acres left to restore at Atwell Island. BLM has developed success criteria for restoration of retired agricultural land at the Atwell Island Project. Restoration sites with greater than 15% native plant cover and greater than 1% native shrub cover are considered successful. Over 70% of the restoration projects attempted by BLM to date have met or exceeded the success criteria. Information on restoration techniques will be reported by the Land Retirement Team. Additional restoration and recovery

actions at Atwell Island, such as the development of San Joaquin kit fox escape burrows/dens will also be established with coordination with appropriate agencies.

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 FY2009 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 for the Land Retirement Demonstration Project. Reports documenting five years of monitoring at two demonstration project sites in the Westlands Water District and the Atwell Island Water District were completed in 2005 and 2009, respectively.

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 Tranquility 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 sites 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 rats have been observed using these restored areas. At the Tranquillity site, a unique San Joaquin Valley Native Plant Nursery with over 100 species was established to demonstrate the ability to 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 conducted 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 2010 Accomplishments

A. Land Acquisitions in FY 2010. Land acquisition at Atwell Island focused on the inclusions within the project area. Appraisals were completed for 200 acres of land. Offers were accepted for 30 acres, and offers have been made on an additional 190 acres as of this date. Willing sellers have been identified for an additional 280 acres and preliminary work on those parcels is in progress. 9,306 acres have been acquired to date for the Land Retirement Demonstration Project at both the Tranquillity and Atwell Island Project Sites in Fresno, Kings and Tulare Counties.

B. Restoration accomplishments for FY 2010. Successful habitat restoration techniques have been developed at the Atwell Island project site. In 2010, 400 acres were planted with seeds of local desert adapted native plants for a total of 3,088 restored acres to date. An excellent response of annual flora was observed at the restoration sites in the spring of 2010. 48 of 64 restoration sites had a shrub component and more than 15% native vegetative cover. A contract was awarded for collection of seed from native plants in the project vicinity. A contract was also awarded to grow out several species that are rare in the wild. Past wildlife surveys at the site have 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 woolystar. The Atwell Island wildlife sighting database now contains over 18,000 field observations. BLM has developed plant and animal species lists and a photo-illustrated flora documentation for the Atwell Island project area that is available on the project website.

C. Reports in FY 2010. A draft report documenting ecological restoration of retired lands at the Atwell Island Demonstration Project was completed. 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. Complete restoration to upland habitats found in the San Joaquin Valley could take many years to achieve, but the program's work has restored approximately 400 acres per year and continues to adapt techniques to achieve desired habitat values. Information is available on the CVPIA Land Retirement website at www.usbr.gov/mp/cvpia/3408h/index.html.

D. Partnerships in FY 2010. Due to the funding limits for this program, developing partnerships with farmers, non-governmental organizations (NGO), 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 in Fresno County (Tranquillity Site). 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 Natural Resource Conservation Service (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; California State Park – Allensworth State Historic Park; United States Department of Agriculture (USDA)-NRCS; USDA Forest Service (Trails Unlimited); AmeriCorp National Civilian Community Corps, AmeriCorp Vista, and the Kern National Wildlife Refuge.

Table 1. FY 2011 Activities and Costs

AWP Activity Number	Type of Activity	# of FTE's	Activity Name & Description	NMFS OCAP RPA#	Performance Metric	Performance Target	Complete this FY? Y/N	Total Project Cost	FY2011 Anticipated Funding			
									Restoration Fund	Water and Related Resources	State or Other Sources*	Total All Sources
1.1	**Program Management**											
1.1.1		0.5	USBR lead for the LRP. Program Management is handled through the USBR SCCAO Office. Priority - High				N	$100,000	$100,000	$0	$0	$100,000
						Subtotal Funding		$100,000	$100,000	$0	$0	$100,000
						Reclamation		$100,000	$100,000	$0	$0	$100,000
						Service		$0	$0	$0	$0	$0
1.2	**Program Support**											
1.2.1		0	FWS co-lead (position is currently vacant). FWS provides program support for resource management and restoration.				Y	$0	$0	$0	$0	$0
						Subtotal Funding		$0	$0	$0	$0	$0
						Reclamation		$0	$0	$0	$0	$0
						Service		$0	$0	$0	$0	$0
1.3	**Technical Support**											
1.3.1			Project coordinator with BLM. **All BLM costs are included in Sec 1.4.**				N	$0	$0	$0	$0	$0
						Subtotal Funding		$0	$0	$0	$0	$0
						Reclamation		$0	$0	$0	$0	$0
						Service		$0	$0	$0	$0	$0
1.4	**Land Acquisition and Restoration Actions**											
1.4.1			Land Acquisition and Restoration at Atwell Island site. 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. Priority - High		Acres of land Acquisition; Acres of restored lands	700 (land acquisition); 400 (restoration)	N	$400,000	$400,000	$0	$0	$400,000
						Subtotal Funding		$400,000	$400,000	$0	$0	$400,000
						Reclamation		$400,000	$400,000	$0	$0	$400,000
						Service		$0	$0	$0	$0	$0

AWP Activity Number	Type of Activity	# of FTE's	Activity Name & Description	NMFS OCAP RPA#	Performance Metric	Performance Target	Complete this FY? Y/N	Total Project Cost	FY2011 Anticipated Funding			
									Restoration Fund	Water and Related Resources	State or Other Sources*	Total All Sources
1.5	**Evaluations, Studies, Investigations, Research**											
1.5.1			Focused studies of restoration techniques and physical impacts of land retirement. Ties directly to Performance Goals of Drainage Source Reduction. **Costs included in Sec 1.4.**		Acre-feet of retired drainage lands	6000 (retired drainage lands)	N	$0	$0	$0	$0	$0
						Subtotal Funding		$0	$0	$0	$0	$0
						Reclamation		$0	$0	$0	$0	$0
						Service		$0	$0	$0	$0	$0
1.6	**Land, Water, and Conveyance Acquisitions**											
1.6.1			Land Acquisition - 700 acres remain to be purchased fee title at the Atwell Island Demo Project to complete land acquisition. Ties directly to the Progress Goal of land acquisition. **Costs included in Sec 1.4.**		Acres of land Acquisition	700 (land acquisition)	N	$0	$0	$0	$0	$0
						Subtotal Funding		$0	$0	$0	$0	$0
						Reclamation		$0	$0	$0	$0	$0
						Service		$0	$0	$0	$0	$0
1.7	**Outreach and Public Involvement**											
1.7.1			Synthesis Document on Restoration Techniques, Website and database. Ties directly to Performance Goal of Drainage Reduction and Restoration of retired lands. Priority - High **Costs included in Sec 1.4**.		Acre-feet of retired drainage lands; Acres of restored lands	6000 (retired drainage lands); 400 (restoration)	N	$0	$0	$0	$0	$0
						Subtotal Funding		$0	$0	$0	$0	$0
						Reclamation		$0	$0	$0	$0	$0
						Service		$0	$0	$0	$0	$0
	TOTAL FUNDING								**$500,000**	**$0**	**$0**	**$500,000**
	Total Funding Breakdown by Agency:											
	Reclamation								**$500,000**	**$0**	**$0**	**$500,000**
	Service											

Table 2. Budget Breakout

Task	Agency	FTE	LABOR		CONTRACTS		USBR Only Misc. Costs	Total Costs
			Direct Salary and Benefits Costs 1/	FWS Only Overhead Assess: 22% of Direct Salary and Benefits Costs 2/	Contract, Grant, and Agreement Costs	FWS Only Overhead Assess: 6% Contract Costs 2/		
1.1 Program Management	FWS		$0	$0	$0	$0		$0
	USBR	0.5	$100,000		$0		$0	$100,000
1.2 Program Support	FWS	0	$0	$0	$0	$0		$0
	USBR		$0		$0		$0	$0
1.3 Technical Support	FWS		$0	$0	$0	$0		$0
	USBR		$0		$0		$0	$0
1.4 Restoration Actions	FWS		$0	$0		$0		$0
	USBR		$0		$400,000		$0	$400,000
Administrative Total - FWS			$0	$0		$0		$0
Contracts, Grants and Agreements Total - FWS					$0			$0
FWS Total Costs		0	$0	$0	$0	$0		$0
Administrative Total - USBR			$100,000				$0	$100,000
Contracts, Grants and Agreements Total - USBR					$400,000			$400,000
USBR Total Costs		0.5	$100,000		$400,000		$0	$500,000
TOTAL ALL		**0.5**	**$100,000**	**$0**	**$400,000**	**$0**	**$0**	**$500,000**

1/ For FWS only: The FWS develops a bio-rate which is the combination of both the salary/benefit and related administrative costs. The FWS simple definition reads, "It is an average $$ rate that is developed and used for estimating project costs. It i

2/ FWS assesses an O/H Burden charge of 6% on all contracts/agreements related to budget object codes starting with 25, 41, and 32, and a charge of 22% on costs under all other budget object codes.

Table 3. CVPIA 3-Year Budget Plan FY 2012 – 2014

Year	Description of Activities	Requested RF Funding	Requested W&RR Funding
2012	Completion of land acquisition and upland habitat restoration at Atwell Island Project Site.	$500,000	$500,000
2013	Completion of land acquisition and upland habitat restoration at Atwell Island Project Site.	$500,000	$500,000
2014	Completion of land acquisition and upland habitat restoration at Atwell Island Project Site.	$500,000	$500,000

Note: The FY 2012 – 2014 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 five 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.