

**Bonneville Power Administration
Fish and Wildlife Program FY99 Proposal**

Section 1. General administrative information

**Rasor Ranch Acquisition/Crab Creek Watershed
Restoration Project**

Bonneville project number, if an ongoing project 9116

Business name of agency, institution or organization requesting funding
U.S. Fish & Wildlife Service, Columbia National Refuge

Business acronym (if appropriate) USFWS/CNWS

Proposal contact person or principal investigator:

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Subcontractors.

Organization	Mailing Address	City, ST Zip	Contact Name
U.S. Bureau of Reclamation	P.O. Box 815	Ephrata, WA 98823	Bill Grey
U.S.D.A. Natural Res. Cons. Service	316 W. Boone, Suite 450	Spokane, WA 99201	Ivan Lines
Ducks Unlimited Inc.	3074 Gold Canal Dr.	Rancho Cordova, CA 95670-6116	Andy Engilis
Washington Department of Fish & Wildlife	1550 Alder St. NW	Ephrata, WA 98823	Matt Monda

NPPC Program Measure Number(s) which this project addresses.

NMFS Biological Opinion Number(s) which this project addresses.

Other planning document references.

The project involves the acquisition of 4,285 acres of land. It is being submitted jointly as a watershed and wildlife mitigation project. The Natural Resource Conservation Service (NRCS) has designated this as a high priority Wetland Reserve Project and has committed funds (\$1.7 million) in 198 to purchase a conservation easement on 1,297 acres of converted wetlands along 4.5 miles of Crab Creek. The U.S. Bureau of Reclamation (USBR) will purchase the residual amount, above the easement fee, for the 1,297 wetland acres and an additional 1,328 acres of adjacent shrub-steppe habitat. A fair market appraisal of the land should be completed by late January 1998. NRCS has committed an additional \$500K for wetland restoration. Only the remaining 1,660 acres of adjacent shrub-steppe habitat would need to be acquired through the project. This is a high priority project for Ducks Unlimited (DU), U.S. Fish and Wildlife Service (USFWS), and the Washington Department of Fish and Wildlife.

Subbasin.

McNary/Chief Joseph/Grand Coulee - Crab Creek Watershed

Short description.

Protect and enhance the Crab Creek watershed and its fish, wildlife, water, archaeological, geological and educational resources through partnerships, acquisition, and management of the 4,285 acre Rasor Ranch.

Section 2. Key words

Mark	Programmatic Categories	Mark	Activities	Mark	Project Types
X	Anadromous fish		Construction	X	Watershed
+	Resident fish	+	O & M		Biodiversity/genetics
+	Wildlife		Production		Population dynamics
	Oceans/estuaries		Research	+	Ecosystems
	Climate	+	Monitoring/eval.		Flow/survival
	Other	+	Resource mgmt		Fish disease
			Planning/admin.		Supplementation
			Enforcement	+	Wildlife habitat en-
		+	Acquisitions		hancement/restoration

Other keywords.

Section 3. Relationships to other Bonneville projects

Project #	Nature of relationship

Section 4. Objectives, tasks and schedules

Objectives and tasks

Obj 1,2,3	Objective	Task a,b,c	Task
1	Acquire Razor Ranch	a	Obtain funding (1,660.82 acres)
		b	Purchase
2	Evaluate conditions	a	Conduct inventories: instream, riparian, upland vegetation, noxious weeds
		b	Complete evaluation reports
3	Develop restoration plans	a	Work with USBR, NRCS, WDFW, DU and other appropriate local, state and federal entities
		b	Wetland Restoration Plan
		c	Riparian restoration plan
		d	Upland restoration plan
4	Implement restoration projects	a	Implement above plans
		b	Manage as part of CNWR

Objective schedules and costs

Objective #	Start Date mm/yyyy	End Date mm/yyyy	Cost %
1	1/1998	9/1999	45.00%
2	5/1998	10/1998	0.00%
3	2/1998	2/1999	0.00%
4	4/1999	9/1999	55.00%
			TOTAL 100.00%

Schedule constraints.

NRCS purchases easement from private landowner; then USBR purchases land with and without easement from land owner; then BPA purchases land and USFWS manages the land and works with NRCS and DU to restore wetland, riparian, and upland habitats.

Completion date.

Project will require watershed funds through FY99. All O&M and enhancement costs will be covered under the wildlife program which requires BPA to provide adequate O&M funding to sustain the project as long as the hydro system operates (NPPC 11.3C.1).

Section 5. Budget

FY99 budget by line item

Item	Note	FY99
Personnel		\$25,000
Fringe benefits		
Supplies, materials, non-expendable property		
Operations & maintenance		
Capital acquisitions or improvements (e.g. land, buildings, major equip.)	Purchase 1660.82 acres of shrub-steppe (\$350K); restoration (\$400K)	\$750,000
PIT tags	# of tags:	
Travel		
Indirect costs		
Subcontracts		
Other		
TOTAL		\$775,000

Outyear costs

Outyear costs	FY2000	FY01	FY02	FY03
Total budget	\$200,000	\$200,000	\$75,000	\$75,000
O&M as % of total	75.00%	75.00%	50.00%	50.00%

Section 6. Abstract

The USFWS is proposing to acquire the remaining shrub-steppe uplands of the Razor Ranch under a cooperative effort with NRCS, USBR and DU. The purchase would link WDFW and USFWS lands to the west with USFWS lands to the east and include approximately 5 miles of Lower Crab Creek stream bottom and adjacent riparian and upland habitats within the Crab Creek Watershed. Objectives would include: the removal of farming and livestock operations from damaged wetland, riparian, and upland areas, wetland, riparian and upland restoration, noxious weed control, fencing and compatible wildlife oriented public use and education. BPA watershed funds in conjunction with BPA wildlife funds would be used for partial purchase, restoration, and future outyear funding

The project will benefit a rich and diverse group of fish, wildlife and plant species. The Crab Creek watershed supplies habitats for at least 20 animal and plant species that are listed as sensitive, threatened, or endangered. The property provides important migratory waterfowl, shorebird and other migratory bird habitats as well as year-round habitats for resident fish and wildlife species.

Currently the stream suffers from the effects of dredging and channelization and the adjacent wetlands suffer from draining for and from agricultural practices. The uplands suffer from grazing impacts. Retiring this land from farming and grazing, and restoration of the wetland, riparian and upland habitats will be an instrumental first step in restoring this property and the Lower Crab Creek Watershed.

Previous enhancement activities by NRCS, USFWS, WDFW, USBR and DU indicates that the watershed responds well to treatment and this property could be restored within two years for the wetland/riparian habitats and within 3-5 years for the upland component. A baseline evaluation should be accomplished within the first season and monitoring should be easily accomplished following restoration activities.

Section 7. Project description

a. Technical and/or scientific background.

The Crab Creek watershed, located in the heart of the Columbia River Basin, starts with its headwaters in Lincoln County, WA and terminates at the confluence of Crab Creek and the Columbia River near the town of Smyrna, WA in Grant County. Crab Creek is said to be the longest creek of this size class in the United States. Historically, Crab Creek was an ephemeral stream, but with the advent of the Columbia Basin Irrigation Project and subsequent conversion of a large portion of this high desert ecosystem to irrigated agriculture, Crab Creek has now become a perennial stream. Due to the Irrigation Project there is a marked difference in the nature and problems of this large watershed between its upper and lower reaches. With the large size of this watershed, the differences in the nature and problems, the recent discovery of chinook salmon redds in Lower Crab Creek, an opportunity to acquire over 4.5 miles of lower Crab Creek stream bottom and adjacent riparian and upland habitats, and strong Congressional interest, we will focus on the lower part of this watershed.

We propose to acquire and restore a part (1,685 acres) of the 4,200 acre Rasor Ranch through Bonneville Power Administration fish and wildlife mitigation funds. The remaining acres of this ranch will be purchased by the USBR and restored by NRCS, DU, WDFW and USFWS.

The Rasor Ranch is currently owned by Mr. Steve and Linda Rasor, P.O. Box 519, Royal City, WA 99357, and is for sale. Approximately 1,297 wetland/riparian acres have been appraised by NRCS for inclusion into their Wetland Reserve Program (WRP) when the property received a 97% ecological project ranking. NRCS has a \$1,500/acre cap in

eastern Washington and has allocated \$1,945,000 for land acquisition and \$531,000 for restoration. USBR is currently finalizing a Department of Interior “fair market” appraisal on the entire 4,285 acres and will purchase the residual, if any, on the 1,297 WRP easement and an additional 1,328 adjacent acres. Crab Creek Wildlife Management Area lies to the west of the property and Columbia NWR lies to the east. This acquisition will create almost continuous public ownership and protection on over 95% of the lower Crab Creek.

There are significant fish, wildlife, plant, archaeological, and geological resources on this property as well as tremendous educational and wildlife oriented public use opportunities.

Resource Value of Acquisition

The 4,285 acre Rasor Ranch is located on Crab Creek between Corfu and Smyrna, WA. IT is bisected by Lower Crab Creek Road with approximately $\frac{3}{4}$ of the property to the north . The ranch is one of the largest parcels, over 4.5 miles of Crab Creek bottom, and is one of a very few private homesteads remaining on lower Crab Creek. Numerous seeps and drainages flow and create pothole wetlands on its cliffside flanks. Habitat diversity ranges from canyon creek bottom wetland/riparian areas to cliff faces and shrub/steppe uplands.

Resources

Crab Creek Watershed supplies a rich diversity of habitats for over 250 wildlife species including several that are listed as sensitive, threatened, or endangered. Sage Grouse and Ferruginous Hawk traditionally used the upland areas, and Loggerhead Shrike occurs in high densities. The creekside area provided a riparian corridor for Yellow Warbler, Lewis and Downy Woodpeckers, but these species are seldom found now in the area and probably do not occur on the Rasor Ranch due to land management practices that include clearing and creek alterations. Mule deer, Mourning Doves, Spotted Sandpiper, and California Quail still occur but in reduced numbers. The riparian shrub and forest components have been eliminated due to channelization and altered flow regimes.

Fisheries/Steelhead: While there are no known steelhead spawning areas on the ranch, steelhead have recently been discovered spawning downstream.

Wildlife: The ranch’s wildlife resources have not been fully documented or surveyed, but species that have been observed in the area include mule deer, bobcat, mink, muskrat, beaver, American White Pelican, Trumpeter and Tundra Swan, various other waterfowl, Bald Eagle, Peregrine Falcon, Prairie Falcon, American Kestrel, Ring-necked Pheasant, California Quail, Sandhill Crane, Spotted Sandpiper, Mourning Dove, Downy Woodpecker, Lewis Woodpecker, Loggerhead Shrike, Western Meadowlark, Yellow Warbler, coyote and beaver. Other notable wildlife that used the area historically include Sage Grouse, Ferruginous Hawk, and possibly Columbia Sharp-tailed Grouse.

Select Plants of Particular Interest: The ranch has several thousand acres of shrub/steppe uplands comprised mainly of bunch grasses and big sagebrush. Plant species have not been adequately surveyed or documented.

Geological and Paleontological Resources: The ranch geological and paleontological resources have not been adequately surveyed or documented. The ranch lies within the cahnneled scabland formation of the Columbia Basin. Large rock escarpments of basalt form the walls of Crab Creek canyon.

b. Proposal objectives.

Our goal is to acquire and restore the ecosystem functions of the Crab Creek watershed through public protection and enhancement of its many rich and diverse resources. This will be accomplished by: 1) acquisition into public ownership; 2) cessation of harmful agricultural/ranching activities; 3) restoration; and 4) long term management as part of Crab Creek WMA and/or Columbia NWR.

The primary objective for fish resources would be the indirect benefits of protection and restoration on the protection of exiting downstream (both Crab Creek and the Columbia River) steelhead and salmon poulations and their spawning and rearing habitat.

The objective for the wetland/riparian/upland habitats of the property would be to protect and enhance the existing populations of both game and non-game species. This would be accomplished through the cessation of farming and grazing, prescribed burning, fencing, weed control, native plantings, and moist soil management. There is the potential to greatly increase mallard nesting and migratory waterfowl and other migratory bird use of this area.

Shrub/steppe habitat is in serious decline in the Columbia Basin. This project would protect and enhance over 2,500 acres of shrub/steppe habitat while enhancing the overall health of the watershed.

c. Rationale and significance to Regional Programs.

This project seeks to mitigate for losses that occurred due to construction and flooding of the Grand Coulee, Chief Joseph, and McNary dams. Habitats for Sage Grouse, mule deer, Western Meadowlark, California Quail, and Ring-necked Pheasant would be improved with the acquisition and improvement of shrub-steppe habitats. Wetland dependant species such as Mallard, Spotted Sandpiper, Canada Goose, Sandhill Crane, and mink would greatly benefit by the restoration of seasonal or semi-permanent wetlands. Riparian restoration would include benefits to anadromous salmonids, Mourning Dove, Yellow Warbler, Downy and Lewis Woodpecker, and several mammal species.

Current planning efforts of the Intermountain West Joint Venture as part of the North American Waterfowl Management Plan, include wetland restoration in the north Columbia

Basin, of which Crab Creek is the major stream. Restoration of shallow wetlands along the creek and management of moist soil will show immediate benefits as migration habitat for Pintails, a species that has had a steep decline in the Pacific Flyway. Mallard and other waterfowl nesting should improve significantly as well. The Rasor Ranch is in the most heavily used area of Crab Creek by Sandhill Cranes, and restoration of wetland habitat should improve conditions for cranes during their migratory stopovers.

Partners in Flight, a group formed to stop the decline of many species of "Neotropical Migratory Birds", has listed riparian and shrub steppe habitats as the two highest priorities in eastern Washington. The return of this portion of Crab Creek to riparian shrub and forest would be a first step in bringing back several species of neotropical migrant songbirds that have suffered population declines due to loss of breeding habitat.

d. Project history

e. Methods.

Land acquisition will be accomplished through funds provided by NRCS, USBR, and BPA. Detailed restoration plans all necessary permits will be developed and acquired in the first year of the project.

f. Facilities and equipment.

Existing facilities and equipment from CNWR will be used. DU will contract for design and specialized equipment needs as needed through cooperative agreements with USFWS and NRCS.

g. References.

Personal communications with agency personnel account for a majority of information provided.

Section 8. Relationships to other projects

This project intends to use funds provided as mitigation for projects involving the construction and flooding of Grand Coulee, McNary, and Chief Joseph Dams.

Section 9. Key personnel

Detailed accounts of personnel and services provided will be formulated during the restoration plan development. Personnel from USFWS, NRCS, USBR, WDFW, and DU will be involved.

Section 10. Information/technology transfer

Monitoring information will be shared with all interested public and private parties upon request.