
PART I - ADMINISTRATIVE

Section 1. General administrative information

Title of project

Securing Wildlife Mitigation Sites - Oregon, South Fork Crooked River

BPA project number: 20113

Contract renewal date (mm/yyyy): Multiple actions?

Business name of agency, institution or organization requesting funding

Oregon Department of Fish and Wildlife

Business acronym (if appropriate) ODFW

Proposal contact person or principal investigator:

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NPPC Program Measure Number(s) which this project addresses

7.1, 7.6.A, 7.6.B, 7.6.C, 7.7, 7.8, 11.3A, 11.3D

FWS/NMFS Biological Opinion Number(s) which this project addresses

Other planning document references

1. Oregon Trust Oregon Trust Agreement Planning (OTAP) Project
 2. BPA Wildlife Mitigation Program Final EIS
 3. BPA Watershed Management Program Final EIS
 4. Assessing OTAP Project Using GAP Analysis
 5. USFS Status of the interior Columbia Basin: summary of scientific finding
 6. CTUIR Wildlife Mitigation Plan for the John Day and McNary Dams, Columbia River Basin
 7. CTWSRO Integrated Resource Management Plan
 8. ODFW District Wildlife Management Plans
 9. Wy Kan Ush Me Wa Kush Wit, CRITFC
 10. CBFWA Guidelines for Enhancement, Operations, and Maintenance for Wildlife Mitigation Projects
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Short description

Maintain enhanced wetland, shrub-steppe, and riverine/riparian habitats on a 2,000-acre eased property on the South Fork of the Crooked River

Target species

Lesser scaup, great blue heron, Canada goose, spotted sandpiper, yellow warbler, black-capped chickadee, western meadowlark, sage grouse, mink, and mule deer

Section 2. Sorting and evaluation

Subbasin

Upper Columbia Subregion, Deschutes River Subbasin

Evaluation Process Sort

CBFWA caucus	Special evaluation process	ISRP project type
Mark one or more caucus	If your project fits either of these processes, mark one or both	Mark one or more categories
<input type="checkbox"/> Anadromous fish <input type="checkbox"/> Resident fish <input checked="" type="checkbox"/> Wildlife	<input type="checkbox"/> Multi-year (milestone-based evaluation) <input type="checkbox"/> Watershed project evaluation	<input type="checkbox"/> Watershed councils/model watersheds <input type="checkbox"/> Information dissemination <input checked="" type="checkbox"/> Operation & maintenance <input type="checkbox"/> New construction <input type="checkbox"/> Research & monitoring <input type="checkbox"/> Implementation & management <input type="checkbox"/> Wildlife habitat acquisitions

Section 3. Relationships to other Bonneville projects

Umbrella / sub-proposal relationships. List umbrella project first.

Project #	Project title/description
9705900	Securing Wildlife Mitigation Sites - Oregon
20116	Securing Wildlife Mitigation Sites - Oregon, Horn Butte
20114	Securing Wildlife Mitigation Sites - Oregon, Ladd Marsh WMA Additions
	Securing Wildlife Mitigation Sites - Oregon, McKenzie River Islands
	Securing Wildlife Mitigation Sites - Oregon, E.E. Wilson WMA Additions
	Securing Wildlife Mitigation Sites - Oregon, Multnomah Channel
	Securing Wildlife Mitigation Sites - Oregon, Ruthton Point (Mitchell Point)
	Securing Wildlife Mitigation Sites - Oregon, Trout Creek Canyon
20115	Securing Wildlife Mitigation Sites - Oregon, Irrigon WMA Additions
20112	Securing Wildlife Mitigation Sites - Oregon, Wenaha WMA Additions
	Juniper Canyon and Columbia Gorge Wildlife Mitigation Project
20140	Tualatin River National Wildlife Refuge Additions

9802200	Acquisition of Pine Creek Ranch
20090	Securing Wildlife Mitigation Sites - Oregon, Logan Valley
20134	Acquire Oxbow Ranch - Middle Fork John Day

Other dependent or critically-related projects

Project #	Project title/description	Nature of relationship
9705900	Securing Wildlife Mitigation Sites - Oregon	Umbrella project; explains intent for mitigation planning, coordination, and implementation by Oregon wildlife managers within Oregon. Identifies priority projects with specific budgets that will help meet mitigation objectives.
0	ODFW Deschutes Subbasin Umbrella Proposal	Umbrella project; explains management intent for anadromous and resident fish and wildlife in the Deschutes River Subbasin.
9565	Assessing Oregon Trust Agreement Using GAP Analysis	A mitigation planning tool used to analyze and rank potential mitigation projects within the basin.
9284	Oregon Trust Agreement Planning Project	A mitigation planning tool that includes methods for assembling a trust agreement and a list of potential mitigation projects.
9206800	Implementation of Willamette Basin Mitigation Program - Wildlife	A mitigation proposal focusing on land acquisition/easement, enhancement, and management of lands in the Willamette Basin. Similar in function as Coalition's umbrella project.

Section 4. Objectives, tasks and schedules

Past accomplishments

Year	Accomplishment	Met biological objectives?
1993	Created a list of potential wildlife mitigation projects throughout Oregon	
1997	Compiled more comprehensive prioritized list of mitigation sites; identified South Fork Crooked River area as priority area	
1998	FY99 proposal for \$20,000 to ease and enhance 2,000-acre parcel was approved and recommended	

1998	Began landowner negotiations for conservation easement of parcel along the South Fork Crooked River	
1998	Developed partnerships with Confederated Tribes of the Warm Springs Reservation, BLM, and The Nature Conservancy to help facilitate project objectives	

Objectives and tasks

Obj 1,2,3	Objective	Task a,b,c	Task
1	Maintain Habitat Values - Implement Operations and Maintenance Plan	a	Conduct habitat enhancement activities as necessary to maintain habitat values
		b	Maintain fences and gates
		c	Maintain informational signs
2	Measure Effectiveness of Restoration Plan - Implement Monitoring and Evaluation Plan	a	Evaluate changes in habitat conditions using HEP survey methods, plant survey methods, and photo points
		b	Compare noxious weed infestation levels to pre-control survey
		c	Conduct biological monitoring to assess species response

Objective schedules and costs

Obj #	Start date mm/yyyy	End date mm/yyyy	Measureable biological objective(s)	Milestone	FY2000 Cost %
1	12/1999	12/2004	Maintain protection and enhancement credit HUs		67.00%
2	12/1999	12/2004	Habitat/Biological monitoring		33.00%
0					
				Total	100.00%

Schedule constraints

Difficult landowner negotiation efforts and inadequate or untimely fund acquisition could delay project implementation. Severe weather conditions could delay field activities.

Completion date

O&M - ongoing, the NPPC's FWP requires BPA to provide adequate O&M funding to sustain the project as long as the hydrosystem operates (NPPC 1994, Measure 11.2C.1)
M&E - ongoing to ensure mitigation goals and objectives are met

Section 5. Budget

FY99 project budget (BPA obligated): \$15,000

FY2000 budget by line item

Item	Note	% of total	FY2000
Personnel	for 0.125 FTE	%42	5,799
Fringe benefits	@38%	%16	2,204
Supplies, materials, non-expendable property	fence, weed control, sign, and other materials	%7	1,000
Operations & maintenance	included in personnel line item	%0	0
Capital acquisitions or improvements (e.g. land, buildings, major equip.)		%0	
NEPA costs		%0	
Construction-related support		%0	
PIT tags	# of tags:	%0	
Travel		%4	500
Indirect costs	@35.5%	%24	3,374
Subcontractor	Crook Co. Weed Control (O&M)	%7	1,000
Other	M&E costs included in personnel line item	%0	
TOTAL BPA FY2000 BUDGET REQUEST			\$13,877

Cost sharing

Organization	Item or service provided	% total project cost (incl. BPA)	Amount (\$)
undetermined at this time	Opportunities will be investigated	%0	
		%0	
		%0	
		%0	
Total project cost (including BPA portion)			\$13,877

Outyear costs

	FY2001	FY02	FY03	FY04
Total budget	\$13,000	\$13,000	\$13,000	\$13,000

Section 6. References

Watershed?	Reference
<input type="checkbox"/>	Beak Consultants, Inc. 1993. Audit of wildlife loss assessments for federal dams on the Columbia River and its tributaries. Prepared for the NPPC, Portland, OR.
<input type="checkbox"/>	BPA. 1993. OR Trust Agreement Planning Project: Potential mitigation to the impacts on OR wildlife resources associated with relevant mainstem Col. R. and Willamette R. hydroelectric projects. BPA, U.S. Dept. of Energy, Portland, OR. DOE/BP-299-1. 53pp.
<input type="checkbox"/>	BPA. 1997a. Watershed management program final environmental impact statement. DOE/EIS - 0265. BPA, Portland, OR.
<input type="checkbox"/>	BPA. 1997b. Wildlife mitigation program final environmental impact statement. DOE/EIS - 0246. BPA, Portland, OR.
<input type="checkbox"/>	BPA. 1997c. Wildlife mitigation program record of decision. DOE/EIS - 0246. BPA, Portland, OR.
<input type="checkbox"/>	Northwest Power Act. 1980. Pacific Northwest electric power planning and conservation act, with index. BPA, U.S. Dept. of Energy. 40 pp.
<input type="checkbox"/>	Northwest Power Planning Council. 1994. Columbia Basin Fish and Wildlife Program. NPPC 94-55. NPPC, Portland, OR. January 1994.
<input type="checkbox"/>	ODFW 1997. Assessing OTAP Project Using GAP Analysis. In fulfillment of Project Number 95-65, Contract Number DE-BI179-92BP90299. Prepared for: BPA; Project Cooperators: USFWS, CTUIR, CTWSRO, BPT, Oregon Natural Heritage Program, Portland, OR.
<input type="checkbox"/>	Rasmussen, L. and P. Wright. 1990a. Wildlife impact assessment, Bonneville Project, Oregon and Washington. Prepared by USFWS for U.S. Dept. of Energy, BPA, Portland, OR. 37pp.
<input type="checkbox"/>	Rasmussen, L. and P. Wright. 1990b. Wildlife impact assessment, McNary Project, Oregon and Washington. Prepared by USFWS for U.S. Dept. of Energy, BPA, Portland, OR. 46pp.
<input type="checkbox"/>	Rasmussen, L. and P. Wright. 1990c. Wildlife impact assessment, John Day Project, Oregon and Washington. Prepared by USFWS for U.S. Dept. of Energy, BPA, Portland, OR. 47pp.
<input type="checkbox"/>	Rasmussen, L. and P. Wright. 1990d. Wildlife impact assessment, The Dalles Project, Oregon and Washington. Prepared by USFWS for U.S. Dept. of Energy, BPA, Portland, OR. 34pp.

PART II - NARRATIVE

Section 7. Abstract

This project, one of many proposed by the Oregon Wildlife Coalition, is considered an ongoing acquisition and enhancement project under the *Securing Wildlife Mitigation Sites - Oregon* project (Umbrella Project 9705900) as it was recommended for FY1999 funding. This proposal explains the management objectives for wildlife and wildlife habitat as they relate to the proposed project and describes the link between this project and others proposed under the Coalition's umbrella project.

The overall goal of this project is to protect and enhance wildlife and fish habitat values associated with 2,000 acres of alkaline wetlands, shrub-steppe, riparian wetland, and salt desert scrub habitat along and in the headwaters area of the South Fork Crooked River. Black greasewood and Great Basin Wild Rye, some of the most threatened vegetation species in the eco-region, occur on the site. The 2,000-acre site is part of a privately owned 185,000-acre ranch that extends from Paulina to the Glass Butte area in central Oregon. The 185,000-acre ranch is almost completely surrounded by Bureau of Land Management (BLM), Prineville District land. There also are some private and Division of State Land (DSL) lands in the area. The landowner, who has grazing rights on about 265,000 acres of adjacent and nearby BLM and DSL lands, is not interested in selling any portion of the ranch; however, he expressed interest in a conservation easement with a land management entity for the purpose of wildlife habitat enhancement. In response to the landowner's interest, the Oregon Wildlife Coalition submitted a proposal in 1998 requesting FY99 BPA dollars to fund easement and enhancement of the 2,000-acre South Fork Crooked River tract. The Council approved the proposal in September 1998.

As described in the FY99 proposal, enhancement activities to occur include: 1) altering agricultural and grazing practices that are degrading habitats and negatively affecting water quality and quantity, 2) control of noxious weeds, 3) riparian area fencing, and 4) the development of alternative water sources for downstream areas. Opportunities to enhance wetlands by doing some minor diking was also recognized. Although not yet implemented, these enhancement activities are expected to help restore wetland, riparian, and upland habitats to more natural vegetative states and improve water quality and quantity. About 800-1,000 protection and enhancement HUs are expected by the year 2004 from easement and enhancement of the 2,000-acre site. Habitat credits will likely be used to offset BPA's wildlife debt at The Dalles hydroelectric facility.

In this FY2000 proposal, the Oregon Wildlife Coalition is requesting funds to: 1) implement operation and maintenance (O&M) activities to maintain achieved habitat values on the 2,000-acre tract, and 2) implement monitoring and evaluation (M&E) activities to ensure the wildlife mitigation goals and objectives are met. Proposed O&M activities include use of agriculture and grazing to maintain certain habitat characteristics where consistent with mitigation goals and objectives, control of noxious weeds, and the maintenance of fences and gates, water control structures, and informational signs.

Key habitats and cover types provided by the area include wetland, riverine/riparian, and shrub-steppe habitats. This project will help achieve the wildlife mitigation goal of fully mitigating for wildlife losses caused by the construction and operation of the hydropower system in the Columbia River Basin as outlined in the NPPC's Wildlife Program (NPPC 1994, Section 11.1). Wetland, riverine/riparian, and shrub-steppe habitat types are high priority habitat types in the Lower Mid-Columbia River Subregion (NPPC 1994, Table 11-2). This project will benefit a variety of wildlife species, including all the target species associated with The Dalles hydroelectric project (i.e., lesser scaup, great blue heron, Canada goose, spotted sandpiper, yellow warbler, black-capped chickadee, western meadowlark, and mink).

Results of project restoration and enhancement activities will be monitored and evaluated using Habitat Evaluation Procedures protocols for the above mentioned mitigation target species, as well as for plant communities determined at a later time to be indicative of habitat quality. Photo monitoring, as well as biological monitoring of certain wildlife species and plant communities, will occur to measure changes in habitat quality and corresponding species responses.

Section 8. Project description

a. Technical and/or scientific background

The development of the hydrosystem inundated wildlife habitats and affected many species of wildlife (NPPC 1994). The Northwest Power Act of 1980 established and charged the NPPC with the task of developing a comprehensive fish and wildlife program to protect, mitigate, and enhance fish and wildlife habitat in the Columbia Basin (Northwest Power Act, Section 4(H)(1)(A); NPPC 1994, Section 2). The Northwest Power Act also authorized and obligated BPA to fund implementation of mitigation projects consistent with the NPPC's FWP mitigation goals and objectives.

Hydrosystem impacts were assessed in the mid-1980s. These impacts have been independently audited and verified (Beak 1993) and were amended into the NPPC's FWP as unannualized construction losses (NPPC 1994, Section 11.3A.1). Wildlife impact assessments (Rasmussen and Wright 1990a, 1990b, 1990c, 1990d) estimated the loss of HUs as a result of the construction of each of the lower four Columbia River hydroelectric projects. Riparian/riverine, shrub-steppe, wetland, island, and forest habitats were lost as a result of inundation. An estimated the 2,330 HUs were lost as a result of the construction of The Dalles hydroelectric facility (Rasmussen and Wright 1990d).

In 1992, the Oregon Trust Agreement Planning (OTAP) Project was initiated by the Oregon Wildlife Coalition (OWC) to create a list of potential wildlife mitigation opportunities by priority and to attempt to determine the costs of mitigating for wildlife losses in Oregon. Using Council and OWC developed criteria, this project resulted in a prioritized list of 287 potential mitigation sites and cost estimates for general habitats within the mitigation area (BPA 1993). For more information on the OTAP Project see

the Oregon Wildlife Coalition's *Securing Wildlife Mitigation Sites – Oregon* umbrella project proposal (Project 9705900). The OTAP was later refined in 1995 using GAP Analysis techniques. The primary goal of the project was to prioritize and depict the contribution of each proposed mitigation site to target species and habitats as well as overall biodiversity in the state and/or eco-region within which it is found. From the results of this project (ODFW 1997), Oregon wildlife managers cooperatively identified and ranked a short list of higher priority sites, one of which was the South Fork Crooked River area. For more information on the OWC's GAP Analysis project see the *Securing Wildlife Mitigation Sites – Oregon* umbrella project proposal.

This project in the South Fork Crooked River area is a high priority because it will protect and enhance the headwaters area and several miles of the South Fork Crooked River. This area provides important habitat for many different wildlife species. Most wetlands and riverine headwaters in the vicinity are not managed for wildlife. Black greasewood and Great Basin Wild rye grass, some of the most threatened vegetation species in the eco-region, occur on site.

Portions of the area of interest are currently grazed by cattle and irrigated for hay production. There are some intrusions of exotic species and noxious weeds (e.g., Russian thistle, bull thistle, cheatgrass). Restoration of the property will entail alteration of current grazing and agricultural practices which are currently degrading the wetland and scrub habitats on the site. Some noxious weed control will occur. There may be opportunities to enhance wetlands by doing some minor diking. A cost/benefit analysis of fencing and providing alternative water sources will be conducted. Although some portions of the site are degraded, the wetland, riparian and upland habitats are used by a variety of wildlife species including antelope, eagles, waterfowl, and shorebirds. There are resident trout and bass in the South Fork Crooked River.

If this project was not funded, O&M and M&E programs for the 2,000-acre parcel would not be developed and implemented. The beneficial effects of enhancement activities on site and on surrounding ranch lands would be compromised. The overall quality of wildlife habitat on the site would decline if O&M does not occur. Subsequently, fewer Habitat Units would be generated and mitigation goals and objectives would not be achieved on the site. Wildlife species diversity and richness on site may decline as habitat values diminish over time due to the lack of mitigation maintenance. By not implementing a M&E Program, the effectiveness of enhancement efforts could not be systematically measured, and a correlation between enhancement and gains in HUs/species response could not be determined. The lack of a M&E Program would also limit adaptive management efforts. Also, the conservation easement agreement with the landowner would be breached because of the failure to maintain wildlife habitat in a manner that ensures the continued benefits to wildlife and wildlife habitats.

Implementation of the South Fork Crooked River project will help the Council meet their wildlife mitigation objectives and provide partial mitigation for losses associated with the construction of the lower four Columbia River hydroelectric facilities, specifically The Dalles Dam. The South Fork Crooked River project will maintain the protection and

enhancement of wetland, riverine/riparian, and shrub-steppe habitats, all of which are considered high priority habitat types (NPPC 1994, Table 11-2). The project will maintain protection and enhancement HUs for lesser scaup, great blue heron, Canada goose, spotted sandpiper, yellow warbler, black-capped chickadee, western meadowlark, and mink – all of The Dalles mitigation target species.

b. Rationale and significance to Regional Programs

The South Fork Crooked River project is consistent with the NPPC's FWP goal to achieve and sustain levels of habitat and species productivity as a means for fully mitigating wildlife losses caused by construction and operation of the federal and non-federal hydroelectric system (NPPC 1994, Section 11.1). The project is also consistent with the specific principles outlined in Section 11.2D.1 of the FWP:

Least costly way to achieve the biological objective

Perpetual protection of wetland, riverine/riparian, and shrub-steppe habitats will be provided by enhancement activities on the 2,000-acre project site. Proposed operation and maintenance and monitoring and evaluation costs for FY2000 are about \$14,000.

Have measurable objectives

Wildlife and wildlife habitat will benefit from the South Fork Crooked River project. Benefits will be quantified as Habitat Units, the unit of measure used in Habitat Evaluation Procedures. The project will maintain about 800 to 1,000 protection and enhancement HUs. Species response will also be measured using various biological monitoring protocols.

Provide riparian or other habitat that can benefit both fish and wildlife

Much of the 2,000-acre site is wetland and riverine/riparian habitat. These habitat types are very important to a variety of wildlife species. Proposed maintenance activities (i.e., fencing, noxious weed control) will ensure continued benefits to wildlife from improved water quality and quantity and from improved riparian and upland vegetation conditions. Resident trout and bass in the South Fork Crooked River will also benefit from maintained improvements.

Protect high quality native habitat and/or species of concern

The South Fork Crooked River project will protect wetland, riverine/riparian, and shrub-steppe habitats by maintaining enhanced habitats. O&M activities will maintain enhanced habitat values; improved habitat conditions will be protected from future threats. Although portions of the 2,000-acre site were previously degraded by grazing and agricultural practices, the area is used by a variety of species including many Federal and State listed species: bald eagle (Federally, Threatened), long-billed curlew (State Sensitive, Vulnerable), ferruginous hawk (State Sensitive, Critical), greater sandhill crane (State Sensitive, Vulnerable), western burrowing owl (State Sensitive, Critical), western sage grouse (State Sensitive, Vulnerable), American white pelican (State Sensitive, Vulnerable, and Oregon spotted frog (State Sensitive, Critical).

Mitigate losses in-place in-kind

The South Fork Crooked River will mitigate for target species losses off-site (e.g., it is about 135 miles from The Dalles hydroelectric facility) and in-kind (restoration of wetland, riverine/riparian, shrub-steppe habitats).

Help protect or enhance natural ecosystems and species diversity over the long-term

This project will protect and enhance wetland, riverine/riparian, and shrub-steppe habitats along a portion of the South Fork Crooked River in-perpetuity through conservation easement and enhancement of private land. Some of the most threatened vegetation species in the eco-region on the project site (e.g., Great Basin wildrye grass). The habitat types found on the property are remnants of what once occurred throughout the Columbia Basin, but have been lost to development of hydroelectric facilities and the resultant agricultural development. Operation and maintenance activities will occur to maintain enhanced habitat values through time. Lands will be protected from future habitat degradation threats over the long-term. Improved and maintained habitat conditions will enhance species diversity and help ensure the future viability of the many species that use these habitat types. In addition to the mitigation target species and the species of concern listed above, the South Fork Crooked River project will benefit other wildlife such as antelope, eagles, waterfowl, shorebirds, neo-tropical bird species, and amphibians.

Complement the activities of the region's state and federal wildlife agencies and Indian tribes

Most lands adjacent to the 185,000-acre ranch are owned and managed by the BLM. The federal land has been designated as Wilderness Study Areas (WSAs). The adjacent WSAs are the largest of such designations found in central Oregon. Operation and maintenance and monitoring and evaluation activities may occur in concert with BLM lands to complement BLM existing activities on these nearby lands.

Encourage formation of partnerships to reduce project costs/eliminate duplicative activities

Through conservation easement of private land, partnership with the landowner will exist. The Nature Conservancy will likely arrange and obtain the initial easement. Other partnerships with the Confederated Tribes of the Warm Springs Reservation in Oregon will occur. Existing staff and equipment will be used to reduce project costs. The project manager for this site will also facilitate other BPA wildlife mitigation activities in central Oregon. Only one-eighth time of a FTE position will be devoted to BPA mitigation, the remaining staff time will be funded by other agency program dollars. Thus personnel costs will be shared with the managing entity.

Do not impose on Bonneville the funding responsibilities of others

Under Section 4h of the Northwest Power Act, BPA is responsible for funding mitigation for the loss of wildlife habitat caused by development of the Columbia Basin hydrosystem. BPA accomplishes this mitigation by funding projects consistent with the Council's FWP. Certain enhancement, operation, and maintenance activities are reasonable for BPA to fund while other activities may be outside BPA's obligation. *CBFWA's Guidelines for Enhancement, Operation, and Maintenance Activities for*

Wildlife Mitigation Projects (CBFWA 1998) explains what activities are within BPA's funding responsibility. The acquisition/easement, enhancement, operations and maintenance, and monitoring and evaluation components of the South Fork Crooked River project are consistent with CBFWA's guidelines and do not impose on BPA the funding responsibilities of others.

Address concerns over additions to public land ownership and impacts on local communities/consistency with local governments' comprehensive plans

Efforts to gain local and regional support for this project are being made. The site will remain in private ownership. The landowner will continue to pay taxes on the eased land. Implementation of O&M and M&E activities will occur in coordination with the landowner and possibly with BLM to ensure consistency with nearby management plans.

Use publicly owned land for mitigation or management agreements on private lands in preference to acquisition of private lands providing permanent protection or enhancement of wildlife habitat in the most cost-effective manner

The South Fork Crooked River project involves the permanent easement of private lands to provide wildlife values in-perpetuity. Proposed O&M and M&E activities will provide permanent protection and enhancement for wildlife.

Other

The South Fork Crooked River project is consistent with all known local, state, federal, and tribal laws. The project is covered under the BPA Wildlife and Watershed Programmatic EIS documents (BPA 1997b, BPA 1997c, BPA 1997a). The project is consistent with several other areas of the Council's FWP. Specifically, it is consistent with Section 7.6 of the FWP which calls for watershed based habitat restoration focusing on protecting of wild and natural populations.

c. Relationships to other projects

Securing Wildlife Mitigation Sites – Oregon

This umbrella project proposal describes wildlife mitigation planning and implementation strategies for Oregon. It includes a list of specific mitigation projects that have been identified by the Oregon Wildlife Coalition as high priority sites. While all the individual projects are stand-alone projects, they collectively relate to one another in that their aim is to achieve full mitigation for documented wildlife losses in Oregon. The umbrella proposal and the specific sites within the umbrella, including the South Fork Crooked River project, are sponsored by the Oregon Wildlife Coalition. Implementation of the umbrella will give the Coalition the flexibility to fund specific projects as they become available.

ODFW Deschutes Subbasin Umbrella

This umbrella explains the management intent for anadromous fish, resident fish, and wildlife in the Deschutes Subbasin. Management objectives for key species and strategies and actions that will be implemented to meet those objectives are described. This umbrella provides the link between fish and wildlife mitigation goals and objectives

at the subbasin level. The South Fork Crooked River project falls within the geographic area of this umbrella proposal.

Assessing Oregon Trust Agreement Planning Project Using GAP Analysis

The purpose of this project was to develop strategies for implementing wildlife mitigation in Oregon. The results of the Oregon Trust Agreement Planning Project were re-evaluated using refined criteria. Potential mitigation sites were prioritized and the contribution of each site to target species and priority habitats was assessed. The South Fork Crooked River area was identified as a high priority mitigation site. The results of the GAP Analysis project will continue to be used to identify, plan, and eventually implement priority projects throughout Oregon for the purpose of wildlife mitigation.

Oregon Trust Agreement Planning Project

Oregon's wildlife managers and tribes initiated this project as the means of achieving a trust agreement between Oregon and BPA for wildlife mitigation. A database containing information about potential mitigation sites and associated mitigation costs was compiled. This project lay the foundation for the GAP Analysis project.

Implementation of Willamette Basin Mitigation Program – Wildlife

The goal of this project is to cooperatively develop and implement measures to mitigate for wildlife habitat losses associated with the hydrosystem in the Willamette River Basin. Specific mitigation activities (e.g., mitigation planning, land acquisition) have been implemented within this project for several years. The project functions similarly to the *Securing Wildlife Mitigation Sites – Oregon* umbrella in that the planning, proposal, and implementation of specific mitigation activities is done in a coordinated manner under the project title.

d. Project history (for ongoing projects)

The South Fork Crooked River project is an on-going project since FY99. Many important events led up to the Oregon Wildlife Coalition's proposal of the project.

During the mid-1980s, at the Council's direction, BPA funded studies to assess the wildlife losses attributable to the construction of and inundation by each major hydroelectric facility. The Council reviewed these assessments and amended its FWP to specify the number of Habitat Units that would constitute adequate mitigation for wildlife losses at each dam. BPA was authorized to proceed with mitigation projects.

Over the next ten years, the project proposal and implementation process evolved. One important component of this process was the joining of Oregon's wildlife manager's (i.e., the Oregon Wildlife Coalition). The Oregon Wildlife Coalition (the Coalition) formed with the intent of planning and implementing wildlife mitigation for the State of Oregon in a coordinated manner. For more details on the specific events that have occurred to date, refer to the Oregon Wildlife Coalition's *Securing Wildlife Mitigation Sites - Oregon* umbrella proposal.

One of the Coalition's first efforts to plan and implement wildlife mitigation in a coordinated manner was the initiation of the Oregon Trust Agreement Planning (OTAP) Project (BPA 1993). This was Oregon's pre-mitigation planning effort to assess and prioritize mitigation needs and opportunities in the state. A couple of years after completing this project it became evident that more mitigation planning was needed. The Oregon Wildlife Coalition began to develop strategies to implement wildlife mitigation in Oregon. This involved initiating a project to reassess and build upon the findings of the OTAP Project. This project, *Assessing OTAP Process Using GAP Analysis* (ODFW 1997) provided information on potential mitigation and estimated their contribution to the mitigation of target species and priority habitats.

Both the Oregon Trust Agreement Planning Project and the Assessing OTAP Process Using GAP Analysis project identified the South Fork Crooked River area as a locale with priority wildlife mitigation needs and opportunities. For more information on these two Oregon wildlife mitigation planning efforts, refer to the Oregon Wildlife Coalition's *Securing Wildlife Mitigation Sites – Oregon* umbrella proposal.

Recognizing the benefits of addressing Oregon's mitigation needs and opportunities in a coordinated manner, the Oregon Wildlife Coalition developed and submitted a coordination and planning budget proposal in 1996 for FY97 BPA funds. This project was initiated in the fall of 1997. For the FY98 project proposal process, the Coalition proposed to identify a small group of potential mitigation projects throughout the state. This proposal had a small planning and coordination budget component. In 1997, the Oregon Wildlife Coalition further investigated potential mitigation sites and developed a short-list of priority sites. In 1998 for FY99 BPA funds, the Coalition submitted a more detailed *Securing Wildlife Mitigation Sites - Oregon* umbrella proposal that listed individual projects that would meet wildlife mitigation goals and objectives. The South Fork Crooked River project was one of these individual projects requesting FY99 BPA funds.

In the FY99 proposal, a 2,000-acre area of a larger private tract was identified in the headwaters area of the South Fork Crooked River as potential mitigation sites. As the proposal outlined, the 2,000 acres were to be eased and enhanced. A budget of \$20,000 was associated with the proposed conservation easement and enhancement. This project was approved for funding by the Council in September 1998. Efforts to implement this first approved phase of the South Fork Crooked River project began in 1998. During 1998, partnerships have developed that will help facilitate implementation of the project. The Nature Conservancy will likely take the lead in negotiating with the private landowners.

e. Proposal objectives

Objective 1: Maintain Habitat Values - Implement Operations and Maintenance Plan

Tasks - Maintain restored habitat conditions; Maintain fences and gates; Maintain informational signs

Objectives 2: Measure Effectiveness of Restoration Plan - Implement Monitoring and Evaluation Plan

Tasks - Evaluate overall habitat conditions using HEP survey methods, plant survey methods, and photo points; Compare noxious weed infestation levels to pre-control survey; Conduct biological monitoring to assess species response to enhancement

f. Methods

Objective 1: Maintain Habitat Values - Implement Operations and Maintenance Plan

Task a – Conduct habitat enhancement activities as necessary

Methods:

- Implement management activities needed to maintain habitat values through time. Needed activities will be based on the assessment of existing habitat conditions, restoration needs and opportunities, estimated changes in wildlife habitat values from the implementation of enhancement activities, and mitigation goals and objectives. Activities necessary to maintain habitat values may include noxious weed control, prescribed burning, use of livestock and agriculture as management tools, and native vegetation planting and seeding.
- Coordinate with landowner.

Task b - Maintain fences and gates

Methods:

- Repair fences and gates to protect project site from livestock trespass. Maintenance will likely include repairing support structures, splicing wires, tightening wires, and replacing stays. About one mile of fence will likely need maintenance each year.
- Coordinate with landowner.

Task c - Maintain informational signs

Methods:

- Maintain informational signs through repair, painting, and replacement. This will involve updating the information as necessary through the life of the project.

Objectives 2: Measure Effectiveness of Restoration Plan - Implement Monitoring and Evaluation Plan

Task a - Evaluate changes in habitat conditions

Methods:

- Take regular photographs at photo points to visually document changes in habitat conditions through time.
- Conduct Habitat Evaluation Procedures to gather data on wildlife habitat values. Target species used in the existing conditions assessment will be used.
- Compare before and after Restoration Plan implementation HEP data. Success criteria will be applied to help assess the effectiveness of the enhancement activities.
- Calculate Habitat Units gained.
- Identify shortcomings if any and re-evaluate the Restoration Plan (i.e., apply adaptive management principles). Specific strategies to achieve mitigation goals and objectives may be adjusted during this process.

Task b - Compare noxious weed infestation levels to pre-control survey

Methods:

- Evaluate changes in noxious weed infestations.
- Identify shortcomings if any and re-evaluate the weed control component of the Restoration Plan (i.e., apply adaptive management principles). Specific weed control strategies may be adjusted during this process.
- Coordinate with Wallowa County Weed Control.

Task c - Conduct biological monitoring to assess species response to enhancement

Methods:

- Implement selected biological monitoring techniques to complement standard HEP habitat monitoring. Techniques will likely include assessment of plant communities (a modified HEP technique) and the monitoring individual species responses (e.g., neo-tropical bird surveys, aerial deer counts).
- Analyze data to assess species response to enhancement activities.
- Identify inadequate species responses and possible causes for such occurrences.
- Re-evaluate the Restoration Plan and species response variables (i.e., apply adaptive management principles).

g. Facilities and equipment

No new facilities are anticipated to be necessary at this time. Existing facilities of the project implementers and cooperators will be used to minimize costs and to increase efficiency. It may be possible to store equipment on site with the permission of the landowner. The project managing entity will have sufficient office and storage space, secretarial services, equipment, and computers to carry out this project's proposed tasks.

h. Budget

This proposal contains a budget that is higher than that projected in the FY99 proposal (costs were estimated at \$1,000 for FY2000). Although operation and maintenance costs are the same as estimated in the FY99 proposal, the FY2000 proposal addresses the need for personnel and requests these associated costs.

Personnel:

This proposal includes a line item for personnel costs. It is assumed that a 0.125 FTE staff person will be adequate to oversee project implementation. The position will coordinate the implementation of O&M and M&E activities on the South Fork Crooked River as well as facilitate the implementation of other on-going or new BPA projects in the central Oregon. Existing personnel will likely be assigned to work on BPA mitigation to cost share personnel expenses.

Services, Supplies, Materials, Non-Expendable Property

Included in this line item are fence materials, herbicides, signs, office supplies (pens, paper, etc.), printing costs, communications (cellular phone), film, and film development needed to implement O&M and M&E activities.

Travel

Travel expenses include mileage, per diem, and limited travel to Portland to coordinate project management with the Oregon Wildlife Coalition and BPA. Vehicle rental expenses are not incorporated into this line item because it is assumed that existing agency vehicles will be used.

Indirect Costs

Indirect costs are assumed at a rate of 35.5% (ODFW's negotiated state/federal contract overhead rate).

Subcontractor

Contracting includes noxious weed control.

Section 9. Key personnel

Brian Ferry

Current Employer: ODFW

Title: District Wildlife Biologist, Prineville District

Current Responsibilities: oversees wildlife staff and programs for entire District

Education: B.S. Wildlife Management/fish management, Oregon State Univ. 1972

Experience: over 25 years with ODFW, 5 year as District Wildlife Biologist

Areas of Expertise: program oversight, coordination, species management

Anticipated South Fork Crooked River Project Duties: Provide assistance to project manager

Terry Luther

Current Employer: CTWSRO

Title: Fish and Wildlife Manager

Current Responsibilities: Responsible for the management and supervision of Fisheries and Wildlife Programs on and off the Reservation.

Education: B.S. Wildlife Science, Oregon State Univ. 1976

Experience/Accomplishments: Currently responsible for the management and supervision of the Fisheries and wildlife programs on and off the Reservation. This involves oversight of 18 different projects and contracts including two ceded areas offices in Hood River and John Day, Oregon. Other responsibilities include timber harvest impacts to fish and wildlife resources, development and implementation of integrated plans for fish and wildlife resources, FERC coordination, wildlife mitigation efforts, bull trout research, and spotted owl project monitoring

Anticipated South Fork Crooked River Project Duties: Provide assistance to project manager.

Patty O'Toole

Current Employer: CTWSRO

Title: Fish Biologist

Current Responsibilities: Responsible for the management and supervision of Fisheries and Wildlife Programs on and off the Reservation.

Education: B.S. Zoology (emphasis in Organismal Biology), Oregon State Univ. 1989

Experience/Accomplishments: Eight years in fisheries management; project planning and implementation (production, management, and habitat). Lead preparer for the Hood River Production Project Master Plan, Master Agreement and EIS. Contributor to IRMP I and II.

Anticipated South Fork Crooked River Project Duties: Provide assistance to project manager.

Susan Barnes

Current Employer: ODFW

Title: Columbia Basin Wildlife Mitigation Coordinator

Current Responsibilities: Coordinates Oregon's BPA wildlife mitigation efforts; facilitates the Oregon Wildlife Coalition; ODFW representative for CBFWA Wildlife Caucus

Education: B.S. Wildlife Management/Forestry, Univ. of New Hampshire 1991

Certifications: certified in Habitat Evaluation Procedures

Experience: 10 years wildlife experience

Areas of Expertise: Project development, coordination, and oversight; threatened and endangered species; NEPA

Previous Employment: Mason, Bruce & Girard, Inc. (environmental consulting firm); Self-employed environmental consultant (contractor with NPPC); Beak Consultants, Inc. (environmental consulting firm); U.S. Forest Service (Wildlife Biologist)

Anticipated South Fork Crooked River Project Duties: Indirectly oversee project implementation; coordinate the project within the Coalition's umbrella project proposal.

Section 10. Information/technology transfer

Information transfer and exchange will be accomplished via telephone, email, and fax communication. Reports and plans will be distributed to all participating and interested entities via BPA and the Internet. HEP Evaluations, management plans, and monitoring and evaluation reports will be publicly available. Info will also be transferred through the CBFWA Wildlife Caucus forum as well as between participating agencies and organizations at occasional meetings. The media (e.g., newspapers, agency magazines) may be used to convey info to the public. Quarterly and annual reports will be prepared for BPA.

Congratulations!