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## PART I - ADMINISTRATIVE

### Section 1. General administrative information

#### Title of project

Securing Wildlife Mitigation Sites - Oregon, Irrigon Wma Additions

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**BPA project number:** 20115

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

#### **Business name of agency, institution or organization requesting funding**

Oregon Department of Fish and Wildlife

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**Business acronym (if appropriate)** ODFW

#### **Proposal contact person or principal investigator:**

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#### **NPPC Program Measure Number(s) which this project addresses**

11.3A, 11.3D

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

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#### **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**

Protect and enhance wetland, grassland, and shrub-steppe habitats adjacent to Irrigon Wildlife Management Area (WMA)

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**Target species**

mallard, Canada goose, mink, western meadowlark, spotted sandpiper, California valley quail, yellow warbler, and downy woodpecker

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**Section 2. Sorting and evaluation**

**Subbasin**

Lower Mid-Columbia Subregion - Mainstem

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**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 checked="" 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
20113	Securing Wildlife Mitigation Sites - Oregon, South Fork Crooked River
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***

<b>Project #</b>	<b>Project title/description</b>	<b>Nature of relationship</b>
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.
20551	ODFW Mainstem Subbasin Umbrella Proposal	Umbrella project; explains management intent for anadromous and resident fish and wildlife in and along the Columbia and Snake Rivers.
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***

<b>Year</b>	<b>Accomplishment</b>	<b>Met biological objectives?</b>
1993	Created a list of potential wildlife mitigation projects throughout Oregon	
1997	Compiled more comprehensive prioritized list of mitigation sites; identified Irrigon WMA area as priority area	
1998	FY99 proposal to acquire 62-acre parcel was approved and recommended	

1998	Began landowner negotiations for acquisition of land adjacent to the Irrigon WMA	
1998	Developed partnerships with Pheasants Forever and Ducks Unlimited to help facilitate project objectives	

**Objectives and tasks**

<b>Obj 1,2,3</b>	<b>Objective</b>	<b>Task a,b,c</b>	<b>Task</b>
1	Assess Habitat Conditions/Develop Management Plans	a	Assess existing habitat conditions on the 62-acre parcel adjacent to the Irrigon WMA; identify restoration needs and opportunities
		b	Develop Restoration Plan
		c	Develop Operations and Maintenance Plan
		d	Develop Monitoring and Evaluation Plan
2	Restore Habitat Values – Implement Restoration Plan	a	Alter livestock grazing practices
		b	Implement noxious weed control
		c	Plant native grasses, shrubs, and trees
		d	Secure public access
3	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
4	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**

<b>Obj #</b>	<b>Start date mm/yyyy</b>	<b>End date mm/yyyy</b>	<b>Measureable biological objective(s)</b>	<b>Milestone</b>	<b>FY2000 Cost %</b>
1	8/1999	12/2000	Assessment of existing		80.00%

			conditions; development of Restoration Plan, O&M Plan, and M&E Plans		
2	10/1999	1/2003	Restore wildlife habitats; Provide enhancement credit HUs		10.00%
3	10/1999	12/2004	Maintain protection and enhancement credit HUs		5.00%
4	10/1999	12/2004	Habitat/Biological monitoring		5.00%
				<b>Total</b>	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**

Habitat restoration - 2003

O&M - ongoing, the NPPC's Wildlife Program requires BPA to provide adequate O&M funding to sustain the project as long as the hydrosystem operates (NPPC Measure 11.2C.1)

M&E - ongoing to ensure mitigation goals are achieved

**Section 5. Budget**

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

***FY2000 budget by line item***

<b>Item</b>	<b>Note</b>	<b>% of total</b>	<b>FY2000</b>
Personnel	for 0.125 FTE	%23	5,799
Fringe benefits	@38%	%9	2,204
Supplies, materials, non-expendable property	fence, weed control, sign, and other materials	%8	2,000
Operations & maintenance	included in personnel line item	%0	0
Capital acquisitions or improvements (e.g. land, buildings, major equip.)		%0	
NEPA costs		%28	7,000
Construction-related support		%0	
PIT tags	# of tags:	%0	
Travel		%4	1,000

Indirect costs	@35.5%	%25	6,391
Subcontractor	Umatilla Co. Weed Control (O&M)	%4	1,000
Other	M&E costs included in personnel line item	%0	
<b>TOTAL BPA FY2000 BUDGET REQUEST</b>			<b>\$25,394</b>

**Cost sharing**

Organization	Item or service provided	% total project cost (incl. BPA)	Amount (\$)
Pheasants Forever	Has committed to donate volunteers and funds to assist with habitat restoration; no dollar amount verified at this time	%0	
Ducks Unlimited	Has expressed interest in assisting with restoration activities; no dollar amount;	%0	
other undetermined at this time	Other opportunities will be investigated	%0	
		%0	
<b>Total project cost (including BPA portion)</b>			<b>\$25,394</b>

**Outyear costs**

	FY2001	FY02	FY03	FY04
<b>Total budget</b>	\$17,000	\$17,000	\$15,000	\$12,000

**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"/>	Prose, B., Farmer A., and Olson R. 1986. Cost-effectiveness of easement and fee title acquisition for mitigating wildlife habitat losses. USDI, USFWS, Portland, OR, 28pp.
<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.

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## 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* umbrella project (Project Number 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.

In this FY2000 proposal, the Oregon Wildlife Coalition is proposing to: assess habitat conditions on the 62-acre parcel of interest, 2) identify needs and opportunities, 3) develop management plans (restoration, operations and maintenance, and monitoring and evaluation), and 3) implement some restoration activities. A proposal to acquire the 62-acre parcel was submitted in 1998 for FY99 BPA funds. The Council approved the proposal in September 1998.

The overall goal of this project is to acquire, enhance, and maintain lands adjacent to the ODFW's Irrigon Wildlife Management Area (WMA) for the benefit of wildlife. Habitat protection and enhancement will be achieved by developing and implementing

restoration activities on the 62-acre parcel. The project site is bounded by the Irrigon WMA to the north and east, by a small 20-acre strip of private land to the west, and by Highway 730 to the south. The parcel is primarily grazed pasture and wetland. The pasture has clumps and stringers of Russian olive, willow, sagebrush, and a few other miscellaneous shrubby plant species. The pasture is over-grazed, but restoration is possible. Willow and Russian olive dominate wetland areas. Drying occurs in some wetlands as summer progresses. The wetland areas are important to resting waterfowl enroute to northern breeding grounds. The property of interest is very appealing since it is adjacent to the existing Irrigon WMA.

Restoration of the property will include the removal of approximately 4,420 feet of fence (along the Irrigon WMA boundary) and the removal of cattle. Exotic species (e.g., scotch thistle, yellowstar thistle, knapweed, purple loosestrife) will be controlled with herbicides. Herbicide spraying will occur twice during the spring and once during the fall. Exotic Russian olive trees will also be removed. Native shrub and tree species (e.g., willow, cottonwoods, mock orange, elderberry, hawthorn, and chokecherry) will be planted where determined to be effective. Existing agricultural lands will then be allowed to return to natural shrub-steppe habitat. Noxious weed control will need to continue to facilitate the restoration of the shrub-steppe habitat. Other likely operations and maintenance (O&M) activities include fence repair, and the re-seeding and re-planting of native vegetation. Funds to conduct most restoration activities, O&M, and monitoring and evaluation (M&E) will be requested in out-years. Restoration activities will help restore the site to more natural conditions. Eliminating the grazing would increase resident waterfowl nesting and upland game use (primarily pheasant and quail). Water quality and quantity in the wetlands will be improved.

Key habitats and cover types provided by the area include shrub-steppe, grassland, and wetland 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 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 most of the target species associated with the lower four Columbia River hydroelectric projects (i.e., great blue heron, Canada goose, spotted sandpiper, California quail, yellow warbler, black-capped chickadee, western meadowlark, mallard, and mink). A gain of about 40 Habitat Units is expected from the project.

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.

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 Number 0705900). 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 Irrigon WMA area. For more information on the OWC's GAP Analysis project see the *Securing Wildlife Mitigation Sites – Oregon* umbrella project proposal.

This project is a high priority because of the opportunity it provides to protect and enhance lands adjacent to an existing ODFW Wildlife Management Area. Although the site has been degraded by past livestock grazing practices and infestations of noxious weeds and exotic plant species, the wetland areas are particularly important to resting waterfowl.

Restoration of the heavily grazed pasture and wetlands habitats on the 62-acre parcel will include the removal of approximately 4,420 feet of fence currently located along the Irrigon WMA boundary and the removal of cattle from the site. Vegetation management

will include the removal of Russian olive trees and other exotic species (scotch thistle, yellowstar thistle, purple loosestrife). Native herbaceous, shrub, and tree species will be planted where determined to be effective. The property will be managed similarly to the adjacent Irrigon WMA property to replicate natural systems as much as possible.

If this proposed project was not funded, there would be 1) a decrease in both the overall quality and quantity of wildlife habitat on the site, 2) a decrease of native wildlife and plant species diversity, and 3) an increase in invasive non-native plant and wildlife species. Fewer Habitat Units would be generated and mitigation goals and objectives would not be achieved on the site. Without enhancement and maintenance activities, habitat conditions for many wildlife will diminish resulting in a loss of food availability, cover, nesting sites, etc. Failure to fund enhancement, O&M, and M&E activities might not foreclose all future options on the 62-acre parcel, but it would effect the maintenance and enhancement efforts already in place on the adjacent Irrigon WMA lands. Shrub-steppe habitats are becoming increasingly rare in the local area. The Irrigon WMA, Wanaket Wildlife Mitigation Project site, Horn Butte and a few federal military facilities make up the vast majority of larger patches of these endangered habitats in Oregon. Most of the habitat has been lost to irrigated agriculture as a result of cheap and abundant Columbia River reservoir water as well as fertile soil. This project is a unique opportunity to restore shrub-steppe habitat.

Implementation of the Irrigon WMA Additions 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. The Irrigon project will maintain the protection and enhancement of wetland and shrub-steppe habitats, both of which are considered high priority habitat types (NPPC 1994, Table 11-2). The project will maintain protection and enhancement HUs for great blue heron, Canada goose, mallard, spotted sandpiper, yellow warbler, black-capped chickadee, western meadowlark, and mink – most of the mitigation target species for the lower four Columbia River hydroelectric facilities.

#### **b. Rationale and significance to Regional Programs**

The Irrigon WMA Additions project is consistent with the NPPC's Wildlife Program 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

Acquisition of the 62-acre property was proposed in the FY99 proposal. Acquisition and subsequent enhancement will provide permanent protection of habitat values. Project costs will be shared by ODFW by using existing Irrigon WMA staff and equipment. According to a study that compared various mitigation methods, fee title acquisition and subsequent management is generally more cost-effective than easement (Prose et al.

1986). The Oregon Trust Agreement Planning (OTAP) Project (BPA 1993) has similar conclusions.

#### Have measurable objectives

Wildlife and wildlife habitat will benefit from the Irrigon WMA Additions project. Benefits will be quantified as Habitat Units (HUs), the unit of measure used in Habitat Evaluation Procedures. The project is expected to generate about 40 protection and enhancement HUs by the year 2004. Species response will also be measured using various biological monitoring protocols.

#### Protect high quality native habitat and/or species of concern

This property contains diverse habitats including open meadows, brushy clumps and lowlands, permanent and seasonal wetlands, and upland areas with sagebrush. The site provides habitat for almost all of the mitigation target species associated with the four lower Columbia River hydroelectric facilities. A key element of the parcel is the standing water, which is used by migrating waterfowl during early spring. These wetlands produce invertebrates that rearing ducklings and goslings forage upon in late spring and early summer. Sites with similar habitat types and components can be found on the Irrigon WMA and Umatilla Wildlife Refuge. Habitats on the wildlife area and refuge are in much better condition since they are managed specifically for wildlife. The site has been degraded by commercial grazing operations (about 60% of the property is agricultural land), the site can be restored with rest and enhancement. The grasslands, which are the result of heavy grazing, would be expected to return to shrub-steppe habitat if the project was implemented. Despite degraded habitat conditions, the site provides habitat for several species of concern including: bald eagle (Federally Threatened), long-billed curlew (State Sensitive, Vulnerable), western burrowing owl (State Sensitive, Critical), loggerhead shrike (State Sensitive, Vulnerable), and painted turtle (State Sensitive, Critical).

#### Mitigate losses in-place in-kind

Mitigation would be on-site (it is about a quarter mile from the John Day Pool) and in-kind (restoration of naturally occurring wetland and shrub-steppe habitats). Mitigation would address target species' losses.

#### Protect or enhance natural ecosystems and species diversity over the long-term

Proposed enhancement activities will restore degraded grassland areas to native shrub-steppe habitats. Wetland areas also impacted by past grazing practices will also be restored to more natural conditions. A variety of wildlife species including waterfowl, upland birds, and neo-tropical birds, will benefit from improved habitat conditions over time. Lands will be protected from future habitat degradation as it will be managed for wildlife as part of the Irrigon WMA.

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

This project would add 62 acres to the Irrigon WMA. The WMA is currently 940 acres and is managed exclusively for wildlife and wildlife oriented recreation. The WMA is

immediately adjacent to the mainstem Columbia River. Management of the 62-acre site will complement the wildlife management goals on the greater Irrigon WMA area.

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

A use agreement would need to be signed between BPA and ODFW giving ODFW responsibility for management of the property for wildlife habitat and recreational use. Volunteers will be used for fence removal and habitat rehabilitation projects. Both Ducks Unlimited (DU) and Pheasants Forever (PF) have expressed interest in the project. Pheasants Forever has committed to donating volunteer time and funds to assist with enhancement activities. Existing WMA staff and equipment will be used to offset project costs. Management of the site will be coordinated with other management activities on the Irrigon WMA.

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 conservation easement, enhancement, operations and maintenance and monitoring and evaluation components of the Irrigon 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

The FY99 proposal proposed to acquire the 62-acre parcel. Local and regional support is being gained for the acquisition. In-lieu taxes will be paid by ODFW, the managing entity, to offset the lost county tax revenue.

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

Before enhancement occurs, the 62-acre site will be incorporated into ODFW's Irrigon WMA, thus becoming public land. Acquisition and enhancement of the site will provide permanent protection of wildlife habitat and complement the management of adjacent wildlife habitats on the WMA.

Other

The Irrigon WMA Additions 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 Irrigon WMA Additions 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 Mainstem Subbasin Umbrella**

This umbrella explains the management intent for anadromous fish, resident fish, and wildlife in and along the mainstems of the Columbia and Snake Rivers. 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 Irrigon WMA Additions project falls within the geographic area of the Mainstem 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 Irrigon WMA 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 laid 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 Irrigon project is an on-going project since FY99. Many important events led up to the Oregon Wildlife Coalition's proposal of the Irrigon project.

During the mid-1980's, 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 (Project Number 9705900).

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 (OTAP) Project and the Assessing OTAP Process Using GAP Analysis project identified the Irrigon WMA 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. For FY99, 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 Irrigon WMA Additions project was one of these individual projects.

**e. Proposal objectives**

**Objective 1: Assess Habitat Conditions/Develop Management Plans**

Tasks - Assess existing habitat conditions of Wenaha project area; Identify restoration needs and opportunities; Develop Restoration Plan, Operation and Maintenance Plan, and Monitoring and Evaluation Plan

**Objective 2: Restore Habitat Values - Implement Restoration Plan**

Tasks - Alter livestock grazing practices; Implement noxious weed control; Plant native grasses and shrubs; Secure public access

**Objective 3: Maintain Habitat Values - Implement Operations and Maintenance Plan**

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

**Objectives 4: 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: Assess Habitat Conditions/Develop Management Plans**

**Task a - Assess existing habitat conditions on the Irrigon WMA project area; identify restoration needs and opportunities**

Methods:

- Conduct Habitat Evaluation Procedures to estimate existing wildlife values and to estimate future changes in wildlife values and benefits resulting from enhancement actions.
- Conduct surveys (i.e., T&E species, toxics, cultural) to fulfill NEPA requirements.
- Based on HEP and other survey results, identify restoration needs and opportunities

**Task b - Develop Restoration Plan**

Methods:

- Develop mitigation goals and objectives that address the findings of Objective 1, Task a.
- Develop management strategies to achieve mitigation goals and objectives for the Irrigon WMA site.
- Refine timelines and budgets for Restoration Plan implementation

### **Task c - Develop Operations and Maintenance Plan**

#### Methods:

- Identify management activities needed to maintain enhance habitat values through time.
- Develop timeline and budget for O&M activities.

### **Task d - Develop Monitoring and Evaluation Plan**

#### Methods:

- Identify needs and opportunities for monitoring and evaluation.
- Identify variables to be monitored and evaluated.
- Review available M&E methodologies (e.g., HEP, species surveys, plant community surveys) and select techniques that will best meet objectives. Select photo point sites.
- Select and define success criteria.
- Develop M&E protocol (with timeline and budget).

## **Objective 2: Restore Habitat Values – Implement Restoration Plan**

### **Task a - Alter livestock grazing practices**

#### Methods:

- Implement strategy for altering livestock grazing practices. Strategy 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.
- Coordinate livestock strategy with adjacent landowners.

### **Task b - Implement noxious weed control**

#### Methods:

- Implement weed control strategy for project site. Strategy 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.
- Obtain necessary equipment and herbicides to accomplish weed control. This will involve investigating options for borrowing/renting equipment. Needed equipment will likely include backpacks, All Terrain Vehicles, and tractor-mounted spray units.
- Apply herbicides. Applications may be made 2-3 times per growing season depending on the target species' life cycles, growth tendencies,, and success of initial application.
- Consult and coordinate with Umatilla County Weed Control.

### **Task c - Plant native grasses, shrubs, and trees**

#### Methods:

- Implement native vegetation planting strategy for project site. Strategy 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.
- Obtain planting stock. This will likely involve collecting planting stock and/or seeds from the site or a similar site, and propagation of stock and seeds.
- Obtain necessary equipment to accomplish seeding and planting. This will involve investigating options for borrowing/renting equipment. Grasses are seeded with a harrow or broadcast seeds. Shrubs are planted as cuttings or bare-root stock.
- Seed and plant native species in areas identified in planting strategy.

### **Task d - Secure public access**

#### Methods:

- Identify public access issues on and adjacent to the project site.
- Remove about 4,420 feet of fence between parcel and existing WMA lands
- Coordinate with adjacent landowners to ensure access to site is secured. This may involve the development of an access agreement between the management entity and adjacent landowners.

## **Objective 3: 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 as a management tool, and native vegetation planting and seeding.

### **Task b - Maintain fences and gates**

#### Methods:

- Repair fences and gates to protect project site from livestock trespass and to regulate visitor access. Maintenance will likely include repairing support structures, splicing wires, tightening wires, and

replacing stays. About 0.75 miles of fence will require repair each year (\$100/mile of fence).

- Coordinate repairs with adjacent landowners. This will involve discussions of public access needs and issues between the management entity and adjacent landowners, and the development of an public access agreement that addresses the various access issues.
- Report any trespass violations to County law enforcement.

#### **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 4: 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.

#### **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., neotropical 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. Equipment will probably be stored at existing Irrigon WMA storage facilities. ODFW will have sufficient office 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 similar to what was 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 facilitate and oversee project implementation. With FY2000 funds, staff will focus on assessing habitat conditions and the development of management plan. Some initial restoration work will be done, and O&M and M&E will begin. In out-years, personnel will focus on restoration and then O&M and M&E. It is likely that existing ODFW staff will facilitate the implementation of the Irrigon WMA Additions. Only a small portion of the staff's salary will be BPA-funded, most will be derived from ODFW programs.

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 restoration, O&M, and M&E activities. The ODFW Irrigon WMA Manager has provided the following estimates for site enhancement: fence removal (about \$750), exotic species control (about \$600/yr.), and the planting of native species (about \$2,000, but less if volunteers were involved). Estimated O&M costs for the site are: fence repairs (about \$75/yr., based on \$100/mile of fence expense) and exotic species control (about \$600/yr).

NEPA

It is likely that cultural resources are present on the project site. These issues may result in slightly higher NEPA costs compared to projects of similar size and scope.

#### 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 and seed propagation.

## **Section 9. Key personnel**

### **Dave Harcombe**

Current Employer: ODFW

Title: Northeast Oregon Wildlife Habitat Program Manager

Current Responsibilities: Responsible for the management and maintenance of Bridge Creek WMA, Wenaha WMA, Willow WMA, Irrigon WMA, and Power City WMA.

Education: B.S. Wildlife Management, Oregon State Univ. 1965

Experience: 18 years with ODFW

Previous Employment: 13 years in the private plant nursery business

Areas of Expertise: restoration of upland habitats; waterfowl, deer, elk

Relevant Job Accomplishments: Facilitated addition of 70 acres to Wenaha WMA; currently is implementing Russian olive control measures on WMA land

Anticipated Irrigon Project Duties: Project manager; facilitate project implementation.

### **Bill Wirth**

Current Employer: ODFW

### **Ron Bramlett**

Current Employer: ODFW

### **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 in 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 Irrigon 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!**