

PROJECTID: 29005

**VALIDATE OCCURRENCE AND ASSESS ABUNDANCE OF WILDLIFE SPECIES**

Sponsor: Colville Confederated Tribes

Subbasin: Okanogan

FY03 Request: \$194, 136

5YR Request: \$534,908

Short Description: Verify, monitor, and inventory wildlife species presence and abundance in this project area as indicated by the species list cited in "Wildlife-Habitat Relationships in WA/OR" (Johnson, D. and Thomas A. O'Neil, 2000)

**Response to the questions concerning objectives, tasks and methods (probabilistic sampling procedures for site selection, data collection protocols, and sampling frequency and intensity)...**

Project Objectives:

Objective 1: Conduct comprehensive wildlife species inventory.

To validate occurrence of those species on the lists compiled by Johnson and O'Neil, for this project area, and amend that list as additional species are verified.

After review of many site selection sampling procedures, sampling frequency and intensity, and data collection protocols, those being developed and utilized by the USGS in cooperation with the National Park Service, are most applicable to this project. There is a great deal of

Inventory protocol information available and due to the encompassing nature of this study, methodology for each particular taxa (amphibians, reptiles, birds, small mammals, etc.) and in some cases, for particular species, will have to be researched, adopted, and possibly modified to fit our study. The NPS provides the most complete, extensive compilation of survey design and protocols for inventories of this nature. Specifically for amphibians, the USGS Amphibian Research and Monitoring Initiative (ARMI) Protocols outline site selection and survey methods well suited to this project. These protocols are not yet available on the internet, but will be made available soon, along with the other protocols being implemented by the NPS, <http://www.nature.nps.gov/im/monitor/> <http://www.nature.nps.gov/im/monitor/protocoldb.cfm> As stated, the design and methods being developed and used by the NPS to meet their nation-wide objective of 90% of the vertebrate species within parks being documented, will serve us well as a template for good survey design of an inventory. Design #1 and #2 as described in The Design of Sampling Schemes for Inventory and Monitoring of Biological Resources in National Parks, available at the above website, are the best fit for our needs. However, Methodology described in the "Monitoring and Evaluation Plan For The Albeni Falls Wildlife Mitigation Project (BPA Project# 1999206100 and 19910600) for Land Birds, Waterfowl, Bald Eagles, and Small Mammals will be employed if there is a good fit with this project's survey design. Survey methods employed depend largely on the list of species to be surveyed. Additionally, there is an intent on the part of CBFWA to develop a basin-wide Research Monitoring and Evaluation Plan that can be adapted for specific

project survey needs. Should that become available, that document may provide methods of sampling that may be utilized in this project for specific species or taxa. This will truly be a compilation of survey methods that will be brought in from other published sources, that are scientifically sound in currently in practice.

YEAR1- The presence/not detected and abundance surveys will focus first on Federal and Washington State listed ESA species and Tribal target species. The listed species are available in the Final Draft Okanogan /Similkameen Subbasin Summary, on page 60 (table-22) and in Appendix F. The CCT target species are those identified in the “Wildlife Habitat Impact Assessment-Chief Joseph Dam Project, Washington” (U.S. Dept. of Energy, Bonneville Power Administration, 1992, pp. 24-25).

YEAR2- Survey to verify and amend the IBIS-Okanogan County amphibian and reptile lists provided by Johnson and O’Neil. Perform Abundance surveys on those species present.

YEAR3- Survey to verify and amend the IBIS-Okanogan County bird list provided by Johnson and O’Neil. Perform Abundance surveys on those species present.

YEAR4- Survey to verify and amend the IBIS-Okanogan County mammal list provided by Johnson and O’Neil. Perform Abundance surveys on those species present.

Objective 2: Determine those species potentially extirpated or at risk for extirpation.

For a one month period at the conclusion of each year of species assessment, compare the verified lists and abundance estimates with historical and museum records, modern literature and local resident interviews to determine species potentially extirpated or at risk of extirpation in the project area.

Objective 3: Create GIS data layers of all species detected and areas of high abundance.

This objective is strongly linked to both the “Hellsgate Big Game Winter Range Operation and Maintenance Project #199204800” and the proposed “Characterize and Assess Wildlife Habitat Types and Structural Conditions for the Okanogan Subbasin (within Colville Reservation boundaries) # 29019.

YEAR5- A comprehensive library of GIS layer maps will be produced and made available, depicting species-specific, site-specific, and habitat-type results of the completed wildlife presence detected and abundance surveys.

The development of GIS layers will serve as a guide for selection of properties for partial mitigation and protection. The layers will also provide a guide for those departments that use or impact the natural resources of this region. Especially important will be the identification of ESA and tribal priority species so that negative impacts to their habitats, breeding territory, food source, nesting/bedding areas, etc. can be minimized. The

wildlife department can advise policy makers on management decisions for subsistence and cultural harvest. Forestry can better decide upon riparian protection and harvest practices based on what wildlife is present. Range department can manage for the reduction of negative impact to species never before acknowledge. The applications of the resulting lists and measures of abundance, and the programs to which they can be applied are numerous.

**Response to the question concerning the budget.**

Five years and a total of \$534, 908 have been allocated to complete this project. This project area, the portion of the Okanogan subbasin that falls within the Colville Reservation boundary encompasses 344,146 acres. Over 50% of that landbase is in private ownership and will not be surveyed. For the remaining amount of land and the personnel and equipment requested, this budget is adequate to meet the project needs.

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Period: 12 month period starting from the date that the contract is signed.

Salaries	Rate	Hours	Totals
Wildlife Biologist II	\$18.75	2080	\$ 39,000.00
Wildlife Biologist I	\$17.01	2080	\$ 35,382.00
Wildlife Technical (9 mo)	\$10.45	1560	\$ 16,302.00
Clerical Support	\$10.45	520	\$ 5,434.00
			<b>\$ 96,117.00</b>
Indirect @ 42.1%			\$ 40,465.00
Fringe			\$ 21,554.00
			<b>\$ 158,136.00</b>
 <u>Supplies and Materials</u>			
Field (traps, nets, camera, tags, gear, ATV, snowmobile, etc.)			\$ 20,500.00
Office (laptop, printer, software)			\$ 3,500.00
 <u>Telephone</u>			 \$ 1,500.00
 <u>Travel and Training</u>			 \$ 3,000.00
 <u>Vehicle Expense</u>			 \$ 7,500.00
GSA (lease, gas, mileage)			36,000.00
			<b>\$ 194,136.00</b>
<b>Grand Total Expenses</b>			<b>\$ 194,136.00</b>