
**Beaver Lake Management Unit
Betzler Add-on**



Prepared By:

Ray D. Entz, Bart George, and Matthew Berger
Kalispel Natural Resource Department

Prepared For:



Division of Fish and Wildlife
P.O. Box 3621
Portland, Oregon
97208-3621

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EXECUTIVE SUMMARY

In 2018, the Kalispel Natural Resource Department (KNRD) continued to mitigate the wildlife habitat losses as part of the Albeni Falls Wildlife Mitigation Project by acquiring the Betzler property (40 acres) adjacent to the Beaver Lake management unit. It is the Tribe's intent to manage this property as part of ongoing acquisitions to mitigate wildlife losses from Albeni Falls hydropower facility and include this Site Specific Management Plan as an Appendix to the Idaho Conservation Plan for the Kalispel Tribe.

This plan presents the management activities that will take place to protect, operate and maintain, and in some areas enhance wildlife habitat on Kalispel acquired lands in Idaho.

Habitat Evaluation Procedures (HEP) was not applied to measure baseline habitat conditions. Instead as per the agreement between the Kalispel Tribe and the Bonneville Power Administration a ratio of 2.5 HU's per acre acquired will provided to the BPA. This procedure provides the standard loss estimator in all hydroelectric loss statements submitted to the Northwest Power Planning Council (NPPC). Bonneville Power Administration requires an accounting on a project-specific basis for increased detail and accuracy. The Betzler acquisition provides 100 Habitat Units (HU's). Monitoring through UWMEP will provide a means to establish data that will provide baseline composition and abundance information for avian, small mammal, and amphibian populations as well as additional vegetative composition detail for specific habitat types. These data will also serve as the means for evaluating the success and/or failure of management activities.

These lands acquired by the Kalispel Tribe with Bonneville Power Administration (BPA) funding, will be managed to benefit wildlife habitat with associated species, populations, and guilds.



INTRODUCTION

This plan addresses the management actions that will be conducted on the Betzler acquisition which is now part of the Beaver Lake Wildlife Management Unit (see Figure 1. below) that provides protection, mitigation, and enhancement for wildlife species affected by the construction and operation of the Federal hydroelectric facilities on the Columbia River System. This property will be used for wildlife habitat and provides BPA with credits for partial mitigation of wildlife losses due to the construction of Albeni Falls Dam.

This property was acquired in 2017 to become an addition to the Beaver Lake Wildlife Management Unit (See Area Map below). This property and the other acquired lands for mitigation lie within the State of Idaho to address protection, restoration and enhancement of the natural resources contained on the property with emphasis on wildlife benefits.

The Kalispel Tribe of Indians, supported by BPA funding will manage this land under this document for restoration, protection, and management of wildlife habitat and species and be included in the Tribes' management plan for acquired lands located in Idaho. A general vicinity map of Kalispel Tribe's managed lands in Idaho is located in Figure 1 below. The former Betzler acquisition is now part of Beaver Lake Wildlife Management Unit.



BEAVER-EATON LAKES WILDLIFE AREA

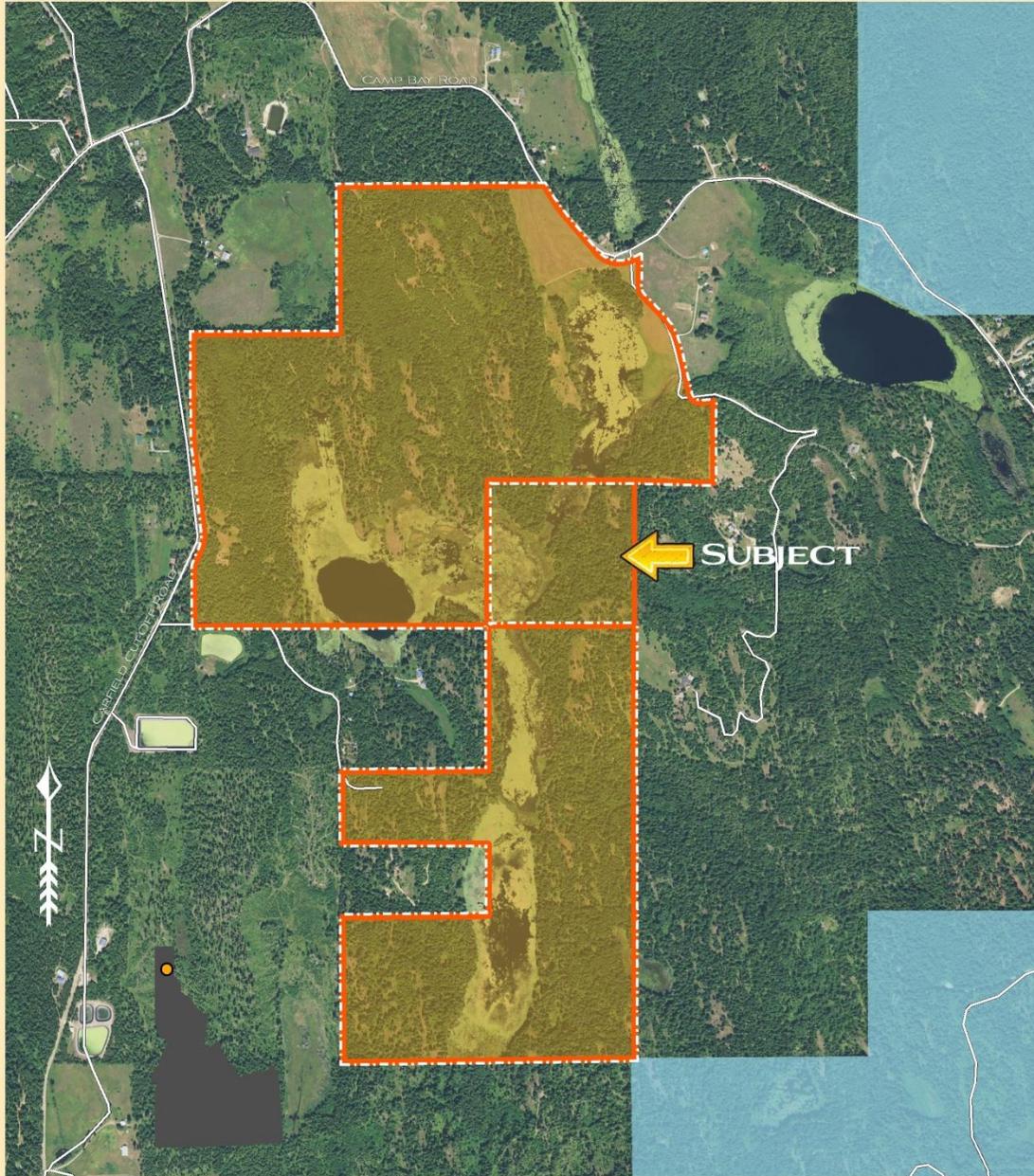


Figure1. Project Area general vicinity map.



The purpose of this Management Plan is to outline baseline habitat conditions and management strategies that would be employed in the management of these Kalispel mitigation lands over time. This plan after review will be added as an Appendix to the Idaho Conservation Plan for the Kalispel Tribe.

Project Scope

The Tribe followed an extensive process to formulate and prioritize wildlife resource goals. The KNRD provided guidance in identifying on-site opportunities. To prioritize specific goals, the Albeni Falls Interagency Work Group (AFIWG) and the Columbia Basin Fish and Wildlife Authority (CBFWA) Wildlife Caucus were consulted for the Albeni Falls mitigation sites. From this consultation process, the Tribe identified the primary goal for the area:

“Protect and restore riparian deciduous forest and freshwater wetlands to mitigate losses resulting from reservoir inundation and operations at Albeni Falls and Box Canyon Dams.”

Indicator target species benefiting from management will include mallard, breeding and wintering bald eagle, Canada goose, black-capped chickadee, yellow warbler, pond breeding amphibians, white-tailed deer, muskrat, and beaver. Additional plant and animal community data will give the Tribe a better understanding of ecosystem health and will aid the Tribe in deciding which management actions produce the desired results.

The construction of Box Canyon Dam in 1952 and Albeni Falls Dam in 1954 inundated approximately 9,000 acres of wetlands once used by the Tribe and area residents. Fluctuations in water levels both above and below the dams impacted riparian habitat and precluded the re-establishment of riparian plant communities. Habitat impacts have occurred for 40 years and caused cumulative wildlife impacts. These factors have resulted in both direct and indirect impacts to wildlife. Other limiting factors impairing wildlife habitat quantity, quality and function include habitat conversion and land use practices such as farming, grazing, and residential and recreational development.

The Project Areas are intended to partially mitigate wildlife habitat losses due to construction and inundation by Albeni Falls Dam. The Betzler property containing 40 acres for wildlife mitigation was purchased by the Kalispel Tribe with BPA funding and contributes 100 Habitat Units (HUs). Any additional HU's realized through passive restoration activities outlined in this Plan will be credited to BPA. Vegetation and wildlife populations/guilds will be monitored (Upper Columbia United Tribes UWMEP Monitoring and Evaluation Program) to determine habitat function and an appropriate approach to adaptive management.

GENERAL SITE DESCRIPTION

The Betzler parcel is a 40 acre parcel located in Section 14 of Township 56 North, Range 1 West in Bonner County, Idaho (see Figure 2. Below). The property is about 17 miles southeast of Sandpoint, Idaho by public road, and travel time is approximately 30 minutes. The area is frequently referred to as the Sagle peninsula. The property can be divided into 2 cover types; 1) Emergent Wetland 17 acres and 2) Mixed Conifer forest 23 acres.





Figure2. Aerial View Betzler Property.

Climate

In Bonner County, summers are warm to hot in the valleys and much cooler in the mountains. Winters are generally cold. Valleys are cooler than the lower slopes of the adjacent mountains due to the drainage of cold air. Annual precipitation is 32 inches and occurs in the winter months as snow with a resulting deep snow pack. In the valleys, summer precipitation falls in the form of isolated showers and thunderstorms. The mean temperature for winter is 25.9° F with some lows of below 0° F. The mean temperature for summer is 59.8° F with highs of over 100° F. The total annual precipitation is about 27 inches with about 9-11 inches, or 30-40 percent, occurring from April through September. Growing seasons also fall in this time frame and the average seasonal snowfall is about 72 inches.



Soils

The importance of soils to wetland establishment and function cannot be overlooked. Soils in the area are described as Pywell-Howell Complex, which is a clay layer of impermeable soil that hold water on top of it creating a wetland. The upland soils are very productive and produce forest stands of significant value.

Historic and Present Habitat Condition

Management activities planned for this unit as part of the Beaver Lake Management Unit are noxious weed control, restore native wetland vegetation, and maintain healthy forest stands. The area does not directly benefit fish species however the wetland areas do support native amphibians on this site.

METHODS

General

The evaluation of current habitat quality and quantity as well as the potential for restoration and/or enhancement required the use of multiple tools. Baseline conditions for both the vegetative and animal communities were assessed through the use of plot and transect data collection to describe community composition and distribution across the Project Area. Enhancement recommendations were derived by the use of comparative analysis. Remote sensing imagery (aerial photography) was compared to detect former vegetation and hydrologic composition prior to habitat alteration. Although completely undisturbed reference sites are virtually non-existent for comparison of composition and function, a limited number of predominantly undisturbed sites served as additional references toward which Tribal management actions should strive to achieve.

Monitoring and Evaluation

Several methods were employed to determine the baseline condition of wildlife guilds and vegetation. Baseline conditions for small mammals, neo-tropical migratory birds, migratory waterfowl, and vegetative characteristics for each representative habitat were collected in 2006. The data for the mitigation areas will be compared to the reference sites in order to provide the managers with information crucial to the function of each habitat type. In future years, comparisons will be made to determine habitat progress toward meeting the goals and objectives for the project. The Upper Columbia United Tribe's (UCUT) Wildlife Monitoring and Evaluation Plan (UWMEP), a modified monitoring plan from the Albeni Falls Wildlife Monitoring and Evaluation Plan which is contained in the Kalispel Tribe Wildlife Management Plan for Washington mitigation projects (Berger, 2009). This comprehensive M&E Plan was developed in response to the Independent Scientific Review Panel (ISRP) questions regarding project monitoring and adaptive management. The M&E Plan was revised and implemented in order to determine project success as compared to reference site conditions for the various habitats types under modification. This M&E Plan was also expanded regionally to include all wildlife mitigation projects for the five member tribes of UCUT.

RESULTS AND DISCUSSION

Management Objectives and Tasks

Goals

The goal of habitat conservation is to conserve the full range of species, natural communities, habitats, and ecological processes that are characteristic of an area. The initial goal of habitat management within each Conservation Unit (CU) is to ensure continued and/or enhanced use by targeted wildlife species.

Objective 1. Determine baseline plant and animal community composition, abundance and distribution.



Strategy 1.1. Determine baseline habitat availability by cover type.

In 2000, the Columbia Basin Regional Habitat Evaluation Team conducted habitat evaluation baseline surveys on adjacent lands bordering this parcel. This parcel has only one habitat type - grassland/meadow. Habitat values can be derived from the previous HEP survey as the habitat is similar and composed of the same vegetation. The objective of using the Habitat Evaluation Procedure (HEP) is to document the quality and quantity of available habitat for selected wildlife species. Follow-up HEP will determine additional HU's over time to be credited to BPA.

Objective 2. Operate and maintain the WMU as part of the Washington Management Plan for the Kalispel Tribe.

Strategy 2.1. Reduce human-induced wildlife disturbance through access management.

Hunting, fishing, and trapping would be allowed on each WMU. Bag limits and season lengths follow Idaho regulations and are enforced by the Idaho Department of Fish and Game. Hunters and trappers are required to take whatever precautions are available to them to ensure public safety. Hunters may access each WMU by foot, even for the purpose of retrieving harvested game.

Mountain biking and cross-country skiing would be subject to seasonal restrictions, and allowed on existing roads and by permission only.

Horses would not be allowed access on any WMU. Dogs would be allowed throughout any WMU as long as they are leashed at all times.

Overnight camping, camp fires, and outdoor barbeques would not be allowed on any WMU.

Cutting of dead and downed trees for personal firewood use would be allowed on a limited basis and by permission only.

Commercial berry gathering and harvesting would not be permitted on any WMU.

Hiking would be subject to seasonal restrictions and allowed by permission only.

Task 2.1.1. Maintain, repair and replace entry gates and perimeter fencing on an as needed basis. This parcel is now part of the Upper Trimble Creek WMU 2 and any interior fencing will be removed. Perimeter fencing will be maintained to prevent livestock trespass.

Strategy 2.2. Control noxious weeds

Weed species, life cycles, abundance, and dispersion will dictate the mechanism(s) for elimination.

Strategy 2.3. Increase deciduous tree and shrub diversity where possible.

Task 2.3.1. Manage and maintain deciduous tree stands.

Where possible plant cottonwood and understory shrub species such as willow and red-osier dogwood on selected sites to speed up both increased plant density and mean height following years of cattle grazing and/or hay production.



Strategy 2.4. Practice sustainable forest management in a way that maintains biodiversity, productivity, and regeneration capacity does not apply to this acquisition.

Strategy 2.5. Implement controlled grassland burning.

Controlled burning will be used to promote native vegetation renewal and decrease fire hazards. It will be used as a management tool to increase disturbance in floodplain meadows and grasslands.

Strategy 2.6. Manage and maintain open water wetland habitat.

In areas where appropriate and designed, maintain open water habitat to increase wetland diversity and quality. Open water areas should not exceed 40 inches in depth to avoid colonization by bull frogs. Vernal ponds will be created at a later date to increase wetland and amphibian habitat.

Objective 3. Monitor and evaluate the effectiveness of management actions.

Strategy 3.1. Implement complete monitoring program.

Strategy 3.2. Conduct HEP updates every ten (10) years to determine the appropriate amount of habitat units to be credited to BPA.

Below is the budget for this addition to the Beaver Lake Management Unit (MU) showing the management activities that will be performed on the property. The actual total cost per acre is \$189.00 but this cost is reduced due to the fact that this acquisition is now part of Beaver lake MU where similar practices will be conducted.

Table 1. Betzler Addition Budget.

Item	Description	Total
Personnel		
Program Manager	.025 FTE	\$1,508
Biologist	.05 FTE	\$2,912
Bio-technician	.1 FTE	\$3,744
Benefits	35%	\$2,857
Annual Contract Needs		
Supplies, material, travel, etc.	Necessary O&M Items	\$250
Indirect Costs		
	16.05% of Annual Costs	\$1,809
Annual Subtotal		\$13,080
Strategy 1.1 Baseline Inventory		
Initial Data Collection	Stand and Wetland inventory	\$250
Strategy 2.1 Access Management		
Motorized Vehicle Control	Gates and signage	\$500
Strategy 2.2 Control Noxious Weeds		



Long Term Annual Maintenance	Annual Weed Control , 40 acres @ \$65/ac.	\$2,600
Strategy 2.3	Increase Deciduous Tree Density	
Shrub Plantings	1 acre @ \$100/acre/year	\$100
Strategy 2.4	Upland Forest Management	
Thinning	20 acres@\$200/acre	\$4,000
Strategy 2.5	Controlled Burning	
Prescribed burning	20 ac revolving 5 to 10 yr basis	\$100
Strategy 2.6	Wetland Habitat Management	
Create and/or Maintain	vernal ponds with associated species	\$0
Strategy 3.1	Monitoring and Evaluation	
M&E	UCUT/EWU Project	\$0
Total Improvements	Not Including Annual Costs Above	\$7,550
Annual Costs	Annual Costs/Acre	\$188



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