Hellsgate Big Game Winter Range Wildlife Mitigation Project

Annual Report

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ABSTRACT

The Hellsgate Big Game Winter Range Wildlife Mitigation Project (Hellsgate Project) was proposed by the Confederated Tribes of the Colville Reservation (CTCR) as partial mitigation for hydropower's share of the wildlife losses resulting from Chief Joseph and Grand Coulee Dams. At present, the Hellsgate Project protects and manages 57,418 acres (approximately 90 miles²) for the biological requirements of managed wildlife species; most are located on or near the Columbia River (Lake Rufus Woods and Lake Roosevelt) and surrounded by Tribal land. To date we have acquired about 34,597 habitat units (HUs) towards a total 35,819 HUs lost from original inundation due to hydropower development. In addition to the remaining 1,237 HUs left unmitigated, 600 HUs from the Washington Department of Fish and Wildlife that were traded to the Colville Tribes and 10 secure nesting islands are also yet to be mitigated.

This annual report for 2008 describes the management activities of the Hellsgate Big Game Winter Range Wildlife Mitigation Project (Hellsgate Project) during the past year.

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Introduction

The Hellsgate Big Game Winter Range Wildlife Mitigation Project (Mitigation Project) was proposed by the Colville Confederated Tribes (CCT) as partial mitigation for wildlife losses that resulted from construction of and inundation by Chief Joseph and Grand Coulee Dams. Currently the CCT have not been fully mitigated for terrestrial wildlife losses from Grand Coulee and Chief Joseph Hydropower projects in the Columbia Basin. This project, funded by the Bonneville Power Administration (BPA) is administered within the CCT Fish and Wildlife Department in cooperation with Bureau of Indian Affairs (BIA), Northwest Power Planning Council (NPPC), and others to address those wildlife losses.

The focus of the Mitigation Project is the protection, restoration, and enhancement of critical habitats for the benefit of wildlife populations and the Colville Tribal Membership on lands purchased and managed for mitigation on the Colville Indian Reservation. At present, the Mitigation Project protects and manages 57,418 acres for the biological requirements of wildlife; most are located adjacent to or near the Columbia River (Lake Rufus Woods and Lake Roosevelt) and surrounded by Tribal land, ranging from shrub-steppe to coniferous forests. These Management Areas contain a wide diversity of vegetative types and habitats for a variety of wildlife. In addition, the CCT have set aside special management areas (Hellsgate Reserve, Omak Lake Reserve, other Tribal lands, and Agency Butte) surrounding certain Mitigation Project Management Areas to conserve and protect big game winter range and sharp-tailed grouse habitat.

Bonneville Power Administration, through the Colville Tribes' Mitigation Project, began mitigation for wildlife losses in 1992 by purchasing land with BPA funds. An accounting system had to be devised to calculate losses/gains for mitigation. The United States Fish and Wildlife Service (USFWS) developed a protocol known as Habitat Evaluation Procedure (HEP). Habitat Evaluation Procedures document the non-monetary value of fish and wildlife resources. (U.S. DOE. 1980) (U.S. Department of the Interior 1980) This methodology was accepted by BPA and involved Wildlife Managers to assess the losses from all Federal Hydropower Projects. Habitat Evaluation Procedures are based on ecological principals and the assumption that habitat for selected wildlife species can be described as a numerical value known as a Habitat Suitability Index (HSI). This value is derived from an evaluation of the ability of key habitat components to supply the life requisites for selected species of fish and wildlife. Evaluation and monitoring involves repeating HEP studies for the target species at specified time intervals and comparing changes. Habitat Evaluation Procedure studies are carried out on each new acquisition (baseline data) to determine existing habitat values, and then repeated over time to document (monitoring) results for mitigation crediting issues. HEP methodology takes into account yearly habitat losses and/or gains.

The Mitigation Project provides:

- Protection of project lands for wildlife
- Operation and maintenance for acquired lands
- Enhancement/ restoration of wildlife species and habitats on those lands
- Monitoring and evaluation of vegetation and wildlife habitats and species

The Mitigation Project lands are evaluated for baseline conditions and species composition. Data are used to develop and implement site-specific management plans to protect and enhance wildlife habitat for the life of the Mitigation Project. Continuing coordination with BPA and other agencies is always needed and conducted. The Wildlife Mitigation Project's life of 99 plus years is expected and will provide a wildlife heritage for many generations. Success can only be assured with continuous funding by BPA to meet their responsibility of mitigation.

Description of the Wildlife Mitigation Project Management Areas

Location

The Colville Tribes' Wildlife Mitigation Project Management Areas are located in Southern Okanogan and Ferry Counties in North-Eastern Washington State on the Colville Indian Reservation (see Figure 1 below). The majority of the lands managed by the Mitigation Project are situated along or near the Columbia River.

Figure 1. Current Wildlife Mitigation Management Areas on the Colville Reservation.

Climate

The general climate of the Project lands is semi-arid with seasonal extremes yet mostly moderate temperatures. Seasonal temperature extremes regulate the plant species that will naturally occur in the area. In Management Areas that are in close proximity to Lake Roosevelt or Lake Rufus Woods, temperature extremes in winter are moderated by the presence of the large bodies of water. The average annual precipitation increases from 10 inches annually on the west side to 16 inches annually on the east side of the Reservation, less during the current drought. The difference in rainfall totals is mostly the result of the rain-shadowing effects of the Cascade Mountain Range. Most of the annual precipitation falls in the winter months as snow, or in

spring as rain. Recent drought effects can be seen within the landscapes in the form of evaporated lakes, dry creek beds, vegetation die-off, and concentrations of wildlife near available water.

Geology and Soils

Glaciers, at one time or another, covered most of northern Washington leaving large deposits of glacial till, sand, and gravel over parent granitic continental crust.(Alt and Hyndman 1984) The area was disturbed further by lava flows and the changing course of the Columbia River. The texture and depth of these deposits support distinctive vegetation associations. These distinctive soils were classified and mapped by the Soil Conservation Service (U.S. Department of Agriculture 1980) (now called the Natural Resource Conservation Service) for Ferry and Okanogan Counties. The soils have unique properties separating them from other soil associations and, as a result, different plant compositions. The distinct boundaries from one soil to another and characteristic vegetation allowed Project personnel to map the different habitat types. Soil names with descriptions and vegetation associations for soil polygons within a management area are described in the corresponding Site-Specific Management Plan.

Project Goals

The overall goal for this project is to fully mitigate for all wildlife losses caused by the development of the Grand Coulee and Chief Joseph hydropower projects. When the Grand Coulee and Chief Joseph Hydropower Projects were constructed, mammal and bird populations were greatly impacted, not only by direct population loss, but also through the loss of land base and the critical habitats it contained (U.S. DOE. 1986, U.S. DOE. 1992). This loss of land and populations prevent mammal and bird populations from achieving their previous (pre-dam) populations. Other land uses resulting from hydropower development such as agriculture, logging, and urbanization further altered the remaining habitat.

In order to mitigate for habitat and species losses due to hydropower development, there became a need to acquire the management rights to enough suitable land, which with proper management and enhancement could begin to compensate for the lost habitat value and ecological function. Wildlife populations could then have a better chance of approaching the pre-dam levels. This, in turn, will provide benefits, both consumptive and non-consumptive, to the Tribes and other residents of the area affected by the losses. The Mitigation Program follows the Tribes' Holistic Goal for resource management (Appendix A) and also the Tribes' Integrated Resource Management Plan (IRMP). The following wildlife objectives are taken from the Tribe's IRMP:

- **Wildlife Objective 1.** Acquire the management rights to enough property to mitigate/compensate for lost wildlife habitat due to original construction and operation of Grand Coulee and Chief Joseph Dams.
- **Wildlife Objective 2.** Protect and enhance acquired properties to attain and maintain their habitat values (HUs).
- **Wildlife Objective 3.** Define the desired wildlife target species, habitats and management direction for the various project lands and implement actions to accomplish this (Site-specific management Plans).

- **Wildlife Objective 4.** Manage project lands to maintain current and enhanced habitats for the life of the project (or in perpetuity) for wildlife benefits.

Other management actions necessary to meet the above objectives follow the Mitigation Program's annual Scope of Work and are summarized below:

- To manage, protect, and enhance wildlife habitats and associated wildlife species using adaptive management based on sound ecosystem techniques and principals.
- To continue operation and maintenance activities on Project lands.
- To monitor and evaluate management actions over the life of the Hellsgate Project, insuring objectives are being met.
- To coordinate with BPA and other agencies and programs when Project activities take place.

Land Acquisition

The Wildlife Mitigation Project was designed to mitigate the wildlife losses from the construction and inundation of Grand Coulee and Chief Joseph Dams (U.S. DOE. 1992, U.S. DOE. 1986). The acquired mitigation lands, Habitat Suitability Index Models (HSI) used, and acquired baseline Habitat Units (HUs) are summarized in Appendix B, Table 1. An additional habitat units and 10 secure Canada goose nesting islands are needed to offset the original construction and inundation losses. When the original losses are adequately mitigated, the Management Areas will need to be maintained, by active management, for the life of the hydropower projects to ensure that no more losses will occur. Funding for operation and maintenance, enhancements, restoration, monitoring and evaluation will be provided by the Bonneville Power Administration through the NPPC planning efforts. When acquired, new lands will be evaluated for the existing wildlife habitat values. HEP studies will be conducted to obtain baseline information and set up monitoring methodologies. When additional properties are acquired, it is necessary to secure and protect them from activities that would degrade the habitat values. Some examples would include: the removal and exclusion of livestock; prevention of damage to or theft of structures and equipment; and the prevention of illegal garbage dumping. Protection activities continue throughout the life of the project in order to maintain and/or enhance the areas when necessary and feasible. Our management style after disturbances, such as grazing, agricultural production, controlled burning and/or wildfire, consists of observing the property for at least two years before attempting enhancement or restoration efforts, excluding noxious weed control efforts that may be increased during the critical green up time after a fire. This gives us the opportunity to see what occurs or recovers naturally. It can point the way to future enhancements and may prevent implementing costly artificial recovery efforts.

Land acquisitions under the Hellsgate Big Game Winter Range project started in 1992 with the acquisition of 4,814 acres of land dedicated to the management of wildlife (U.S. DOE. 1995). This was made possible through a short-term Memorandum of Agreement (MOA) between BPA and the Washington Wildlife Coalition of which the Colville Confederated Tribes were a member. BPA provided \$45 million over a five-year period to finally start addressing habitat losses that have occurred since the inception of the Columbia River Hydropower System. The

Colville Tribes were approved to use \$9.1 million of the \$45 million. This money was used to acquire some of the current lands in the CCT Mitigation Project and can be reviewed in the Final Draft Colville Tribes Wildlife Mitigation Expenditures and Crediting Report (Berger and Judd 2002). Over the course of five years, 1993-1998, the CCT acquired an additional 16,450 acres of critical wildlife habitat through fee title acquisition. An additional 2,388 acres of quality sharp-tailed grouse habitat were added under a 50-year lease with the Tribes to protect the best remaining habitat of its type for sharp-tailed grouse on the Colville Reservation. Grazing leases on allotments within this area (Agency Butte unit) are paid annually to prevent grazing on this area to protect Sharp-tailed Grouse. The Colville Tribes also agreed to include 1,927 acres in and around the Berg unit to cover additional HUs (20% of H. Kuehne property) agreed upon as per the 1995 MOA with BPA.

During 2005, the Colville Tribes and BPA enacted a new MOA that governs the uses and management of new mitigation lands acquired through the Mitigation Program. After the signing of the new MOA, the Mitigation Project added to the total acres it manages with the addition of the Boot Mountain, White Lakes, and Tumwater Management Areas (a.k.a. Joy Properties and Tribal Lands). This acquisition consisted of 18,812 acres and was completed in September 2005. The "HEP Team," contracted by the Columbian Basin Fish and Wildlife Authority, working along with Mitigation Personnel, completed the HEP study in August. The evaluation species selected for this study were: mule deer, sharp-tailed grouse, bobcat, yellow warbler, Lewis' woodpecker, and sage grouse. These focal species represent numerous species that would inhabit the differing habitats acquired. Using the HSI models developed for each of these focal species, the corresponding amount of HUs were tabulated. Past land use on these areas subjected them to season-long grazing with little management. Shrubs (mostly sagebrush) have become the dominant overstory in areas that should successional be native grasslands. Occasional wild fires have swept through these areas, reducing some of the dense stands of shrubs. In areas with little livestock disturbance, there are larger areas of intact grassland habitat. Riparian habitats are also impacted by the livestock practices. Protection of riparian areas is a focus of management along with noxious weed control.

The Rattlesnake Canyon Management Area was enrolled into the Colville Tribes Wildlife Mitigation Project in late September 2006. A Conservation Easement was signed and approved by Michael Marchand, Chairman of the Colville Business Council, and Raymond Fry, Superintendent of Bureau of Indian Affairs, Colville Indian Agency. With this easement in place, 10,293.33 acres were assigned to the Colville Tribes' Wildlife Mitigation Project for protection and management for the benefit of wildlife. This acquisition allowed BPA to credit 7,421 HUs toward their obligation for original construction and inundation losses that occurred during the development of the Columbia River Hydropower System. (Appendix B, Table 2) Continuing operational and secondary losses that occur each year, continuously, have not yet been assessed and may become substantial. A Site-Specific Management Plan for the Rattlesnake Canyon Management Area is required by the MOA between the Colville Tribes and BPA within 18 months of acquisition. This plan will highlight the areas that need restoration, enhancement, noxious weed control plans, and other important topics like access, forest, and cultural resource management.

Both the Redthunder Management Area and one of the parcels of the Jacobsen Ranch were bought in 2007. The Redthunder MA was purchased from the Redthunder Family. The parcels were in Tribal Trust status and owned by Tribal members. The acreage totals 1,355 and habitat units that were measured equaled 1,256.7. This management area was considered in conjunction with another acquisition that has since dissolved due to lack of agreement during negotiations with the land owner as to land value. Redthunder MA, as a stand along MA, is not as effective as it would be joined with the other property. It is the desire of the Mitigation Project that the Colville Tribes buy the (Short's) property, and then allow the Mitigation Project to trade other lands managed for mitigation (i.e. Jacobsen) for the Short property.

The Jacobsen Ranch was originally around 2,200 acres of contiguous parcels when the Mitigation Project asked the Tribal Council for approval to purchase it with BPA dollars. The response was that it was not a high priority for them. The parcels returned to the priority list in late 2006 when the parcels were in the process of becoming sub-divided for housing. This area had been providing fair to good wildlife habitat and had then become in jeopardy of losing much of the wildlife value. The parcels appraised at a level far above the original asking price when the Mitigation Project began an interest in them. When approval from BPA and the Tribal Council was reached, the entire property value was nearly three times the amount that the Tribes' had asked for in that budget year. It was then decided that the property would be divided into parcels which would be bought in three phases. Phase 1 was completed in 2007 when 1,457 acres were purchased and 1,294.5 HU's were credited. As stated before, this property is not highly desirable for wildlife management. It is a parcel that will be traded for more suitable habitat in the near future.

Equipment and Facilities

The major facilities used by project personnel include an office at the CCT Fish and Wildlife Department building in Nespelem and also one in Inchelium. These offices provide suitable workspace and computer stations; however planning projections forecast a need for additional storage and field office space located on Project property. The tractors and equipment are semi-adequate; however more habitat acquisition and enhancement efforts will require more equipment to meet project objectives. Project equipment is maintained by personnel to ensure safe operation, although some equipment such as tractors and farm implements are over ten years old and, size-wise, they are at the minimum end of our operational needs. They need to be evaluated for replacement/upgrade to a more suitable size and operational level. Increased lands and personnel will result in a need for additional Project vehicles. The Project makes use of available government surplus equipment when possible, and/or leases equipment rather than outright purchase. BPA is presented with an equipment inventory list each year with status and location.

Methods and Materials

A Scope of Work (SOW) and budget are developed each year for the Mitigation Project. Management activities follow the objectives and tasks of the SOW. The project outline is posted on the BPA Pisces website (Project # 199204800).

Operation and Management of Project Lands

Management responsibilities and activities have increased each year since start up in 1993. This is largely due to the increases in project land base. Current management activities include the following activities.

Boundary Fencing

The Tribes agreement with BPA includes protecting lands within the mitigation program from damage that may occur due to domestic livestock impacts. To address this issue, all Management Area boundaries are fenced and maintained to prevent livestock trespass from occurring. Some of these Management Areas were formally working cattle ranches and contain interior and exterior fencing. The rest of the mitigation lands are not fenced and subject to unauthorized livestock trespass. To protect these lands for wildlife they need to be fenced. In addition, restoration efforts need to be protected until the ecosystems recover. The fencing goal for the project is to construct and/or replace at least 15 miles of boundary fence annually and maintain existing fences. Including the Redthunder and Jacobsen land acquisitions of 2007, the Mitigation Project has approximately 280 miles of boundary fencing that the project maintains annually. We have concentrated on repairing existing fences as the land base changes from year to year depending on funding from BPA for acquisitions. Any new fence lines (i.e. Rattlesnake Canyon MA, Redthunder MA) will need to be surveyed by the Colville Tribal History and Archeology Department to insure protection of cultural sites before construction can begin.

Constructing new and maintaining existing fence lines protects critical winter range for mule and white-tailed deer as well as elk using these areas. Fencing that excludes unmanaged livestock grazing from Project lands also protect sharp-tailed grouse nesting, rearing, and wintering habitat. Eliminating livestock, which are known vehicles of weed seeds, can help eliminate the spread of noxious weeds and allow the natural and desired vegetation to cover mitigation lands thus reducing the impacts from erosion.

In 2008, the Wildlife Mitigation Project solicited RFP's for a fencing contract to complete approximately five miles of boundary fence creating the northern boundary of the Boot Mountain Mitigation Area to comply with the MOA between the Colville Tribes and BPA. The contract was drafted and routed through the Tribal contracting process. A field trip was conducted and bids were collected. The contract was awarded to Rybec Enterprises and work started in late September. Work proceeded until the contracted amount of fence was finished in late November. A total of \$54,450 was expended for the approximate five miles of completed fence through contracts (Figure 2). Westside Project Personnel fencing efforts were concentrated on the Graves and Boot Mountain Management Areas and also the Berg Ranch and Agency Butte Management Areas. Approximately 6 miles of new/replaced fence were completed within these Management Areas.

Figure 2. This map shows the locations of new fence lines that were constructed around the Boot Mountain Management Area by contract and with Project Personnel.

The Eastside Project Personnel had numerous breaks and thus a lot of their time involved repairing existing fence lines. In addition to fallen trees and rotten posts, the elk herds in the area cause many breaks. There are a lot of old fence lines in the Eastside Management Areas that need full replacement. These fences are in very remote areas and take longer to reconstruct or build. Approximately 2.4 miles were completed on the Western boundary of the Northern portion of the Rattlesnake Canyon MA (Figure 3). Many other fences around the Simons Ranch MA were reconstructed and tied into the new boundary of the Rattlesnake Canyon MA (since they share borders on much of the Simon perimeter).

Figure 3. Map showing the new fence construction on the boundary of Rattlesnake Canyon MA.

The Eastside Personnel are required to pickup their supplies from the Berg Ranch Management Area west of Nespelem. This is a distance of over sixty miles on curvy roads. Approximate

drive time with a loaded trailer can be three hours. These supplies are not left on site due to security issues. The Mitigation Project is looking into a potential area on Tribal land closer to the Eastside Personnel that is suitable for storing heavy equipment, fencing supplies, cattle guards, pesticides, ATVs, and other shop tools. There is a possibility to use some Tribal property, with power on-site, to build a pole-type shop that would be able to store these materials and could be secured to prevent theft and/or destruction of Mitigation Property. In Budget year 2009, the Mitigation Project will be looking for additional storage space (i.e. shop space) to store Project equipment. There may also be the possibility of additional office space that may be available to the Project. It is not feasible to continue to taxi tractors, fencing supplies, and ATVs to the Berg Ranch each day.

Livestock Trespass

Livestock trespass occurred on several management areas during the year, Bridge Creek, Bergs, Graves, Boot Mountain, White Lakes, Tumwater, Simons, Sand Hills, William's Flat, and Kuehne Ranch, Rattlesnake Canyon, Redthunder, and Jacobsen Management Areas. In each case, project personnel removed the livestock and either made fence repairs or secured gates to the property. Livestock operators were usually notified. The pattern of trespass seems to occur in the spring when livestock are turned out on rangelands and in the fall when they are trying to get back to winter feed lots. Most of the neighboring ranches comply with preventing and/or removing their livestock when trespass occurs, but other land users habitually leave gates open and/or cut fences. Cattle guards are now being installed in areas where gates are routinely left open. Another source of trespass occurs when winter blow down causes trees to fall across fence lines. A large part of the annual budget is spent in controlling trespass livestock by maintaining adequate fence lines.

Noxious Weed Control

The Wildlife Mitigation Project practices integrated weed management to combat undesirable plant species on Management Areas. The Mitigation Project only uses technologies and/or methods for noxious weed control that are acceptable and approved by the Colville Tribes. Noxious Weed control is required by contract with BPA as well as required by Tribal, County, State and Federal regulations. Project personnel associated with noxious weed control with the exception of tech positions have obtained and maintain current pesticide applicators licenses for noxious weed control. Control of at least 1600 acres of noxious weed infestations (usually access roads, farm roads, and trails in and around mitigation lands) is conducted annually. The following control methods are used; hand pulling, mechanical (mowing, disking, etc.), biological control agents, and as a last resort chemicals to control weeds.

In the past, Quad-County Weed Control Program (USDA/WSU) and the Colville Confederated Tribes funded a seasonal Bio-Control Biologist to work on the Reservation conducting noxious weed control. The Bio-Control Biologist released numerous populations of Bio-agents and monitored those populations on specific sites. Many of the sites were on mitigation lands on the western half on the reservation. Biological control agents such as *Larinus minutus* were released on mitigation lands to control different knapweeds (*Centaurea* spp.). *Mecinus janthinus* weevils were released to control Dalmatian Toadflax (*Linaria genistifolia*) on some management areas. These efforts take time and may not show results for numerous years. The bio-agents are

monitored annually to assess their effectiveness and abilities to control large areas. When necessary, these populations may be relocated to other areas for control.

This year, the Wildlife Mitigation Project added two new full time positions to manage the noxious weed control division. One position was assigned to the east side of the reservation, while the other was assigned to the west side. The two full time weed control positions were hired on late in the season limiting the amount of weed control that was done in 2008. Their duties were to monitor mitigation areas for infestations, record data and severity, apply desired control method to priority areas of known infestations, and monitor the areas post-treatment for success. Strict record keeping is also required to be preformed by these individuals for compliance for the Colville Tribes' codes, USDA, and BPA requirements.

Each Management Area has been divided into Monitoring/Management Sub-Units (see individual site-specific management plans). These units are roughly based on quarter sections (legal descriptions) and most are approximately 160 acres. This grid system has allowed the Mitigation Project to monitor each Sub-Unit independently as to the relative severity of the weed species and the amount of desirable species within that Sub-Unit. After the data for each grid have been entered into a database, the grid can then be mapped using GIS as to the severity of individual (or multiple) weed species through all mitigation properties. This system allows Mitigation Managers the ability to plan, monitor, manage, and account for weed control efforts throughout the areas. The result of basing the grid system on quarter sections is that legal descriptions for where actual or planned weed control efforts have or will occur are expedited. This system is in it's infancy but shows promising results, as our planning for subsequent years is based on this method. This system of indexing grids has allowed us to monitor incoming weeds, species of concern like aspen, and likely areas of winter habitat for wildlife using desirable forage like bitterbrush. Some examples are below.

Figure 4. Severity Index Map showing occurrence of bitterbrush in the Berg Ranch MA.

Figure 5. Severity Index Map showing occurrence of aspen stands in the Berg Ranch MA.

Figure 6. Severity Index Map showing occurrence of cheatgrass in the Berg Ranch MA.

Figure 7. Severity Index Map showing occurrence of Dalmatian Toadflax in the Berg Ranch MA.

Figure 8. Severity Index Map showing occurrence of Houndstongue in the Berg Ranch MA.

Figure 9. Severity Index Map showing occurrence of Ponderosa Pine in the Berg Ranch MA.

Monitor and Evaluation:

Recognizing the importance of M&E, the five Upper Columbia United Tribes (UCUT) pooled 2008-2009 monitoring resources to create the UCUT Wildlife Monitoring and Evaluation Program (UWMEP). The objective of this regional habitat and wildlife monitoring program is to determine outcomes of habitat protection and restoration projects in and proximate to the reservations and aboriginal lands of the five Tribes. (UWMEP Project Narrative 2009) Contract year 2009 is the last year that the Colville Tribes have allocated their M&E portion of their contract for the UWMEP project. In 2010, the Wildlife Mitigation Project will reinstate monitoring and evaluation strategies. The UWMEP project is soliciting for stand alone funding for the UCUT project.

Photo points have been installed in past years. They will be used to trace changes of the habitat structure over time and the effects of habitat manipulations that may take place. Due to the lack of monitoring and evaluation funding, no new photo points were installed this year. Desirably in the near future, more money will become available to collect this crucial data that needs to be done in order to modify management practices to achieve the best results.

No wildlife species surveys were conducted this year due to contract obligations.

Results and Discussion

Acquired lands thus far have had baseline habitat assessments to determine protection credits. To accomplish this, Mitigation Project lands were cover-typed using aerial photos, USGS topographic maps and field surveys. Project vegetation was classified into cover types (Figure 3) to facilitate use of the Habitat Evaluation procedures (US Department of the Interior, 1980). Baseline HEP surveys show a total of 34,582 Habitat Units are protected by project properties. The accuracy of this HU total is still being considered by the Colville Tribes, BPA, and the CBFWA HEP Team. The results of these assessments as described by HSI model, unit, and vegetative cover types for the Wildlife Mitigation Project lands are included in Appendix B, Table 1.

Several target species of wildlife were used to aid in evaluating the losses from hydropower development, and to determine the HEP values for each cover type. Target species represent guilds of species with similar habitat requirements which could be used to evaluate mitigation project lands and management effectiveness. The primary target species the Colville Tribes are using, and the guilds they represent, are below, following the figure. These are the same species that were used in the Chief Joseph and Grand Coulee Loss Assessments.

Figure 10. This graph shows the total amount of acres in each habitat type, as determined by HEP analysis that is managed by the Colville Tribes' Wildlife Mitigation Project.

Primary Target Species/Guilds

Mule deer, species benefiting include sharp-tailed grouse, downy woodpecker, northern oriole, burrowing owl, short-eared owl, Washington ground squirrel, upland sandpiper, golden eagle, badger, coyote, and cougar. (Ashley 1990)

Sharp-tailed grouse, species benefiting include mule deer, yellow warbler, downy woodpecker, northern oriole, burrowing owl, short-eared owl, Washington ground squirrel, upland sandpiper, golden eagle, badger, coyote, and cougar. (Ashley and Berger 1990)

Blue grouse, species benefiting include ruffed grouse, white-tailed deer, sharp-shinned hawk, Copper's hawk, goshawk, Pileated and black-backed woodpecker, western bluebird, boreal and Flammulated owl, small mammals. (Schroeder 1984)

Mourning dove, species benefiting include pheasant, quail, cottontail rabbit, western kingbird, meadowlark, northern harrier, Swainson's hawk, and meadow vole. (U.S.F.W.S. 1978)

Lewis and Downy woodpecker, species benefiting include ruffed grouse, white-tailed deer, sharp-shinned hawk, Copper's hawk, goshawk, Pileated and black-backed woodpecker, sapsucker, white-headed woodpecker, western bluebird, boreal and Flammulated owl, small mammals. (Sousa 1983)(Schroeder 1983)

Yellow warbler, species benefiting include hairy woodpecker, great blue heron, white-tailed deer, elk, turkey, red-tailed hawk, spotted frog, beaver, muskrat, raccoon, red-winged blackbird, long-toed salamander, meadow vole, tree frog, bats, and winter wren. (Schroeder 1983)

Canada goose, species benefiting include white pelican, Columbia River Tiger beetle, gulls, Caspian, forester's common and black terns, shorebirds, mallards, and common loon. (Sather-Blair and Preston 1985)

Mink, species benefiting include beaver, long-eared owl, flicker, pallid bat, western Pipistrelle bat, long-eared bat, lesser goldfinch, ash-throated flycatcher, yellow-billed cuckoo, great egret, black-crowned night heron, Sylvan hairstreak and Viceroy Butterfly, otter, water shrew and black bear. (Allen 1986)

Bald eagle, species benefiting include those listed under Canada goose and spotted sandpiper. (Peterson 1986)

Bobcat, species benefiting include yellow-bellied marmot, Pika, bushy-tailed woodrat, cotton-tailed rabbit, quail, golden eagle, and rattlesnake. (Bodurtha 1991)

Spotted sandpiper, species benefiting include osprey, snipe, bats, western toad, rubber boa, rattlesnake, raccoon, coyote, river otter, killdeer, bank swallow, merganser, coot, water shrew, common garter snake, leopard frog, and striped skunk. (Dorsey 1987)

Management has been a challenge for Mitigation Personnel because of the limited number of employees and the distances covered per day in meeting the SOW objectives. As new lands have been added to the Mitigation Program, we have not increased personnel significantly to meet the added responsibilities of protection required by contract. Other personnel from the Tribes' Fish and Wildlife Department, including numerous Summer Youth Program employees, have been utilized in order to meet contract objectives. Due to budget constraints project lands are only protected at this time. True mitigation has not been accomplished. A net gain of 35,819 HUs are necessary to offset the losses from the original construction and operation of Grand Coulee and Chief Joseph hydropower projects. In addition, these losses have occurred every

year over the entire life of the project. In the Colville Tribes' case, the HEP process, as described by the US Fish and Wildlife Service, is not fully adhered to. Mitigation of the hydropower losses did not begin until the early 1990's; almost 60 years of mitigation has been lost. This has led to further impacts to species and habitats. It is imperative that additional funding be allocated to the Colville Tribes to offset the losses incurred by the construction of and inundation by Grand Coulee and Chief Joseph Dams. Reversal of these losses can be accomplished in one of two ways: 1.) Additional land needs to be acquired and then managed to maintain wildlife habitats that were lost over the life of the projects (99 years) or preferably 2.) Funding to enhance existing mitigation lands needs to be increased to a level that the losses can be reversed and the habitats can be maintained for the life of the project.

Summary of Management Implications

The completion of Grand Coulee and Chief Joseph hydropower facilities brought cheap electricity and started the flow of irrigation water to a large portion of the Pacific Northwest. Consequently, it brought an end to a way of life and a culture that had existed continuously in the area for thousands of years. Grand Coulee Dam, and subsequently Chief Joseph Dam, abruptly stopped the movement of salmon to the Upper Columbia and destroyed critical habitat of deer and other species relied upon by the Native peoples. In 1980, forty years later, the Northwest Power Act made it possible to begin addressing the losses to wildlife caused by the construction and operation of Grand Coulee and Chief Joseph Dams. Over 40,000 acres of critical, low elevation wildlife habitat was lost on the Colville Reservation. Grand Coulee and Chief Joseph hydroelectric projects destroyed, essentially forever, in excess of 88,000 acres of critical low elevation wildlife habitat. These areas were largely composed of riverine, island, riparian, shrub-steppe, mixed and conifer habitats. These were habitats, rich in bio-diversity, which supported an abundance of wildlife species.

This project originally carried out the Operation and Maintenance (O&M) and the Monitoring and Evaluation (M&E) under the five-year wildlife mitigation agreement with BPA, now the Mitigation Project is part of the Intermountain Province Planning effort. Project lands are and will be managed to provide long-term protection and maintenance of big game winter range, primarily mule deer, elk, and other species using those habitats. Sharp-tailed and forest grouse habitats will also be managed the same way. In addition, habitat for a wide variety of species that are of cultural significance to the region and other Tribes will be protected, enhanced and managed in perpetuity provided BPA continues funding this project. The Project currently carries out the O&M and M&E activities identified in the annual Scope of Work, identified on the Pisces website. Enhancement efforts are on a small scale at present but will increase over time when site-specific management plans are completed and enhancement activities can be implemented. Long-term O&M and M&E activities are critical to the success of any wildlife mitigation efforts. Project lands are not pristine habitats and do not enjoy the benefits of "Wilderness Status." Therefore continuous management activities and associated funding are required for the life of the project. Existing conditions throughout the region very likely preclude management entities from ever being able to truly mitigate wildlife losses. However, this project and other similar ones around the basin provide partial mitigation leading towards fulfillment of the fish and wildlife program goal of full mitigation for wildlife losses due to hydropower projects on the Columbia River.

According to the Intermountain Province sub-basin summaries, the region's primary limiting factors for wildlife are habitat loss, fragmentation and isolation resulting from past and current land use practices. This project protects and maintains some of the few remaining portions of shrub-steppe and upland wildlife habitat that are still in fair to good condition in the region. Large areas of land are needed to protect large species with greater habitat requirements and the need for relatively undisturbed habitat. It is important that these areas be integrated into the Mitigation Project to suit the current and future needs of different species and communities while protecting them against the different kinds of environmental threats that exist today. The Colville Confederated Tribes are highly concerned about the loss of biodiversity in wildlife species and habitats throughout the Reservation due to past and current impacts. The Colville Tribes' Mitigation Project is designed to meet the overall goals of protecting and enhancing the diversity of species and habitats in both the short and long-term. In order to restore these altered habitats, the Project must: identify the causes that led to the current condition; establish goals for restoring the site; determine and employ suitable restoration methods; and monitor the effectiveness of procedures. This is predicated on stable funding from BPA.

The Wildlife Mitigation Project explores the dynamics and disturbance regimes of selected ecosystems with potential management activities related to various habitats, and also address habitat fragmentation, overgrazing, exotic species invasions, land conversions, urban development, altered fire regimes, meta-populations, and predation. A wide range of spatially diverse and temporally dynamic cover types exist on Wildlife Mitigation Areas. Large expanses of native grasslands have been changed through agriculture or livestock grazing to alien annual grasslands with altered fire regimes. Altered areas have undergone successional changes converting native grasslands to shrublands containing exotic species such as cheat grass and other noxious weeds. Open park-like woodlands have been converted through succession to dense conifer forest with decreasing fire return intervals. Populations of targeted management species are in decline over the entire Province.

Ecosystem management activities will be closely analyzed prior to implementation to help insure success while maintaining cost effectiveness. To have long-term success, the natural disturbance regime will need to be re-created, and, with management, allow successional changes toward a native habitat to occur. Restoration activities will include such activities as burning portions of shrub forest to allow the native grasses and forbs community to emerge and/or planting trees on disturbed open areas to speed up succession. Active management of the Management Areas is needed to offset lost habitat (i.e. sharp-tailed grouse nesting and brood rearing habitats.) To maintain certain HUs, succession must be managed at a stage that is the goal of the management. Monitoring the success of mitigation for wildlife losses will always need to be an aspect of the Wildlife Mitigation Project.

In addition to sound management, the Colville Confederated Tribes Business Council and the Natural Resource Department support this project and value the results produced thus far. The Forestry and Range Departments are assisting with a Tribal Land exchange to protect critical winter range and link separate land units. This would create one large, connected management unit that will contain more critical winter range than the numerous, small parcels that are not as

readily used, if at all, for winter range. The Colville Tribal Natural Resource Department further promotes wildlife habitat by managing areas adjacent to Mitigation Management Areas.

The Colville Tribes' Wildlife Mitigation Program is optimistic of the future of wildlife habitat and management within the Colville Reservation. Managing our wildlife areas, with full coordination between Big Game; Timber, Fish, and Wildlife; and Tribal Natural Resources, is one short-term goal that is nearly reached. The focus of the Colville's Wildlife Department is to further the science and management of not only the lands that exist within the bounds of the Reservation but also within the region.

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Appendix A. The Colville Tribes' Holistic Resource Management Goal

Confederated Tribes of the Colville Reservation

Holistic Goal

Temporary

Quality of Life

We want to maintain and build upon our unique culture, traditions, language, sovereignty and history; we want a healthy society, environment and economy; we will treat everyone with honor and respect, having the freedom to worship, live, work and play as we choose, accepting each others diversity/uniqueness.

We want to provide plentiful/affordable housing, meaningful/secure employment and educational opportunities. We want communities that are clean, self-sufficient, safe, wholesome and provide opportunities for family based recreation.

Forms of Production

We will support our quality of life through sustainable wealth from diverse income opportunities, without waste or sacrifice of tradition, culture and values; we will emphasize the importance of involving the membership in developing their communities; we will provide opportunities/infrastructure to increase understanding/awareness of our culture, traditions, language, sovereignty and history throughout our communities, schools and workplaces, continuously promoting honor, respect and diversity.

Future Resource Base

We are and continue to be a self-sustaining sovereign entity; having flourishing enterprises; having healthy productive landscapes including rangelands, croplands, forests, riparian areas, streams and lakes; tribal decisions will include protection of tradition, culture, and aesthetic values; we will continue to provide improved/enhanced opportunities to communities/schools/workplace to increase understanding and awareness of our culture, values, tradition, language, sovereignty and history.

The reservation remains as a rural life-style and the population is in balance with an effective water, mineral, and energy cycle with biodiversity resulting in an abundance of culture, medicinal and edible plants, clean air and water, springs and streams that flow year round, large trees, wildlife, fish and insects.

Enacted by Colville Business Council Resolution 1996-23 on January 18, 1996.

Appendix B. Tables Compiled for the Wildlife Mitigation Program 2006

Table 1. This table shows the number of Habitat Units (HUs) currently under management of the Wildlife Mitigation Program broken down by individual, species-specific, HSI models.

MODEL	Property	COVER TYPE	HSI-	Acres	Calc HU's	Total HU's
Mule Deer	W. Kuehne	Shrub-steppe	0.5	2,010	1,005.0	
	W. Kuehne	Conifer Woodland	0.5	594	297.0	
	H. Kuehne	Shrub-steppe	0.5	1,404	702.0	
	H. Kuehne	Conifer Woodland	0.5	591	295.5	
	Berg Brother's	Shrub-steppe	0.3	1,774	532.2	
	Berg Brother's	Grassland	0.2	3,108	621.6	
	Nespelem Bend	Shrub-steppe	0.4	257	102.8	
	Redford Canyon	Shrub-steppe	0.6	185	111.0	
	Friedlander	Conifer Forest	0.4	35	14.0	
	Sand Hills	Shrub-steppe	0.5	564	282.0	
	Sand Hills	Conifer Forest	0.4	836	334.4	
	Graves	Shrub-steppe	0.4	1863	745.2	
	Berg 20% Lands	Shrub-steppe	0.4	420	168.0	
	Berg 20% Lands	Grassland	0.3	160	48.0	
	Rattlesnake	Heavy Conifer Forest	0.24	1210	290.4	
	Rattlesnake	Open Conifer Forest	0.24	7620	1,828.8	
	Rattlesnake	Shrub-steppe	0.24	486.7	116.8	
	Rattlesnake	Rockland	0.24	847.3	203.4	
	Tumwater	Grassland	0.05	3059	153.0	
	Tumwater	Shrub-steppe	0.19	3600	684.0	
	Redthunder	Shrub-steppe	0.32	1164.19	372.5	
	Redthunder	P.Pine Savanna	0.54	132.6	71.6	
	Jacobson #2	Shrub-steppe	0.21	914	191.9	
	Jacobson #2	P.Pine Savanna	0.12	342	41.0	
	White Lakes	Grassland	0	2972	0.0	
	White Lakes	Shrub-steppe	0.37	404	1488	556.6
	Boot Mountain	Rockland	0.40	1846	740.6	

			12			
	Boot Mountain	Shrub-steppe	0.29 055	5114	1,485. 9	12,030.93
Sharp-tailed Grouse	W. Kuehne	Shrub-steppe	0.4	2,010	804.0	
	W. Kuehne	Agriculture	0.4	954	381.6	
	H. Kuehne	Shrub-steppe	0.6	1,404	842.4	
	H. Kuehne	Agriculture	0.05	895	44.8	
	Berg Brother's	Shrub-steppe	0.3	1,774	532.2	
	Berg Brother's	Agriculture	0.2	547	109.4	
	Berg Brother's	Grassland	0.4	3,108	1,243. 2	
	Hinman	Grassland	0.5	600	300.0	
	Hinman	Shrub-steppe	0.2	170	34.0	
	Agency Butte	Grassland	0.4	2,368	947.2	
	CCT Land Near Graves	Shrub-steppe	0.2	75	15.0	
	Graves	Grassland	0.4	700	280.0	
	Covington	Grassland	0.4	129	51.6	
	Berg 20% Lands	Shrub-steppe	0.4	420	168.0	
	Berg 20% Lands	Grassland	0.5	400	200.0	
	Rattlesnake	Shrub-steppe	0.04	487	19.5	
	Rattlesnake	Riparian Forest	0.01	22	0.2	
	Rattlesnake	Riparian Shrub	0.07	107	7.5	
	Tumwater	Grassland	0.47	3,059	1,437. 7	
	Tumwater	Shrub-steppe	0.05	3,600	180.0	
	Redthunder	Shrub-steppe	0.25	1,164	291.0	
	Redthunder	Macrophyllus Draws	0.14	39	5.4	
	Jacobson #2	Shrub-steppe	0.65	914	594.1	
	White Lakes	Grassland	0.05	2,972	148.6	
	White Lakes	Shrub-steppe	0.13	1,488	193.4	
	Boot Mountain	Rockland	0.11	1,846	203.1	
	Boot Mountain	Shrub-steppe	0.08 281	5,114	423.5	9,457.31
Mink	W. Kuehne	Riparian	0.3	147	44.1	
	H. Kuehne	Riparian	0.3	73	21.9	

	Berg Brother's	Riparian	0.2	41	8.2	
	Nespelem Bend	Riparian	0.5	75	37.5	
	Jacobson #2	Riparian	0.4	38	15.2	
	Friedlander	Riparian	0.2	25	5.0	
	Graves	Riparian	0.2	60	12.0	
	Berg 20% Lands	Riparian	0.4	20	8.0	151.90
Spotted Sandpiper	W. Kuehne	Shoreline	0.7	14	9.8	9.80
Canada Goose	H. Kuehne	Shoreline	0.25	26	6.5	
	Berg Brother's	Shoreline	0.2	20	4.0	10.50
Mourning Dove	W. Kuehne	Agriculture	0.6	954	572.4	
	H. Kuehne	Agriculture	0.5	859	429.5	1,001.90
Blue Grouse	W. Kuehne	Conifer Forest	0.9	1,052	946.8	
	W. Kuehne	Riparian Forest	0.9	8	7.2	954.00
Downy Woodpecker	H. Kuehne	Conifer Forest	0.8	1,604	1,283.2	
	Jacobson #2	Mixed Forest	0.08	132	10.6	
	H. Kuehne	Riparian Forest	0.8	200	160.0	
	Rattlesnake	Riparian Forest	1	21.9	21.9	1,475.66
Yellow Warbler	H. Kuehne	Riparian Shrub	0.3	43	12.9	
	Berg Brother's	Riparian Shrub	0.4	32	12.8	
	Agency Butte	Shrub-Wetland	0.05	20	1.0	
	CCT Land Near Graves	Shrub-Wetland	0.05	5	0.3	
	Graves	Riparian Shrub	0.4	107	42.8	
	Rattlesnake	Riparian Shrub	0.39	107.2	41.8	
	Jacobson #2	Riparian Shrub	0.8	31	24.8	
	Tumwater	Deciduous Shrub	0.33	150	49.5	
	White Lakes	Deciduous Shrub	0.33	11	3.6	
	Boot Mountain	Deciduous Shrub	0.67	27	18.1	207.58

Lewis' Woodpecker	Berg Brother's	Conifer Woodland	0.2	150	30.0	
	Redford Canyon	Conifer Woodland	0.5	30	15.0	
	Berg 20% Lands	Conifer Woodland	0.4	380	152.0	
	Redthunder	P.Pine Savanna	0.1	132.6	13.3	
	Jacobson #2	P.Pine Savanna	0.15	342	51.3	
	Rattlesnake	Open Conifer Forest	0.63	7620	4,800.6	
	Boot Mountain	Conifer Woodland	0.41 833	545	228.0	5,308.86
Bobcat	W. Kuehne	Rock	0.6	35	21.0	
	Nespelem Bend	Rock	0.6	184	110.4	
	Redthunder	Rockland	0.83	20	16.6	
	Berg 20% Lands	Rockland	0.6	127	76.2	
	Boot Mountain	Rockland	0.53 3	1846	983.9	1,208.12
Sage Grouse	Tumwater	Grassland	0.07	3059	214.1	
	Tumwater	Shrub-steppe	0.1	3600	360.0	
	Redthunder	Shrub-steppe	0.42	1164.19	489.0	
	White Lakes	Grassland	0	2972	0.0	
	White Lakes	Shrub-steppe	0.4	1488	595.2	
	Jacobson #2	Shrub-steppe	0.4	914	365.6	
	Boot Mountain	Rockland	0.1	1846	184.6	
	Boot Mountain	Shrub-steppe	0.1	5114	511.4	
	Rattlesnake	Shrub-steppe	0	486.7	0.0	2,723.35
White-tailed Deer	Rattlesnake	Riparian Forest	0.5	21.9	11.0	
	Rattlesnake	Riparian Shrub	0.3	107.2	32.2	42.84
					Total HU's	34,582.74

Table 2. Hellsgate Mitigation Project's noxious weed control efforts and approximated cost.

Contract Year	Acres in Project	Approx. Acres Treated	Control Methods
1994	4,800	113	H
1995	9,600	100	H & C
1996	15,900	100	H, C, & B
1997	16,652	257	H, C, & M
1998	16,652	210	H, C, & M
1999	16,652	380	H, C, M, & F
2000	18,782	350	H, C, & M
2001	21,264	350	ALL
2002	23,574	400	H, C, M, & B
2003	23,574	450	ALL
2004	25,501	600	H, C, M, & B
2005	44,313	478	H, C, M, & B
2006	54,606	1000	H, C, M, B
2007	57,418	1600	H, C, M, B
2008	57,418	2700	H, C, M, B

Control Methods Defined

H = Hand Pulling

C = Chemical Applications

M = Mechanical (Mowing, Disking, etc.)

B = Biological Control (Bugs, Bacteria, etc.)

F = Prescribed Burns

*** Approximates do not include Biological control**

****Costs - Includes chemicals, equipment and materials**

Appendix C. Project Personnel

Project Biologist /Mgr. – This individual is a supervisory biologist overseeing the biological and operational aspects for this contract. The budget for this 3/4 time position is managerial in nature and provides guidance and direction as well as attendance to technical and policy level meetings. This position has evolved from previous contracts in order to address the growth of the mitigation program. This person: develops and implements comprehensive wildlife management plans; recommends and implements capital and operational budgets; makes recommendations that will lead to the sound conservation and management of the wildlife resources on the mitigation properties; prepares and submits final reports on completed projects and programs (including technical reports for use of staff and/or other concerned agencies); coordinates wildlife management and project activities with the CCT Fish and Wildlife Department and other agencies; prepares budgets and purchase orders for the project; and reviews and evaluates subordinates working for the project. This individual is also responsible for holding meetings, disseminating information, briefing citizen interest groups and advising the 3P Managers and the Colville Business Council about the mitigation process and the status of the mitigation project as well as working with the Intermountain and Columbia Cascade Province Planning effort for the Tribes.

Wildlife Biologist – These full time employees manage the biological aspects of the current land base purchased for Columbia River mitigation. They implement comprehensive wildlife management plans, recommends and implements capital and operational budgets, conducts wildlife and habitat surveys, collects data and makes recommendations that will lead to the sound conservation and management of the wildlife resources on the mitigation properties. These individuals also design and implement biological studies and data collection prior to implementing habitat restoration projects on mitigation lands as well as prepare and submit reports on completed projects and programs, including technical reports for use of staff and / or other concerned agencies. They also coordinate wildlife management and project activities with the Project Manager, Fish and Wildlife Department and other agencies and direct the use of complex computer programs and software that result in improved management of the wildlife resources and habitats on mitigation lands. These individuals also monitor and evaluate wildlife and habitat responses to management activities. They require minimum supervision and coordinate with the Project manager on a regular basis. The Project Biologists also assist the Project Manager with any duties delegated.

Weed Specialist – These employees (2 full time) are responsible for the day-to-day field operations of weed control portion of the Project. Their duties include the following: assist in the implementation of the overall annual and long-term work schedule; assist with wildlife habitat protection, restoration, and enhancement; directs, plans, report, and monitors the noxious weed control efforts for the project; plants wildlife food plots; and manipulates vegetation composition, density and form class. These positions are also responsible for the safe operation and maintenance of farm machinery and other types of heavy equipment as needed; assisting with the collection of biological data and monitors project activities to assess the success of management efforts; assisting with wildfire suppression on mitigation lands when needed; training and supervising the wildlife technicians in job tasks and responsibilities; and coordinating with the Project Manager in meeting objectives and tasks. A current restructuring

within the CCT's Fish and Wildlife Department may lead to new and/or different positions and/or titles.

Wildlife Technician III and IV –These employees (2 full time) are responsible for the day-to-day field operations of the Project. Their duties include the following: assist in the implementation of the overall annual and long-term work schedule; assist with wildlife habitat protection, restoration, and enhancement; directs and monitors the maintenance of existing physical improvements such as fences and buildings; prevents livestock trespass and removes trespass livestock; assist with implementation of noxious weed control; plants wildlife food plots; and manipulates vegetation composition, density and form class. These positions are also responsible for the safe operation and maintenance of farm machinery and other types of heavy equipment as needed; assisting with the collection of biological data and monitors project activities to assess the success of management efforts; assisting with wildfire suppression on mitigation lands when needed; training and supervising the wildlife technicians in job tasks and responsibilities; and coordinating with the Project Manager in meeting objectives and tasks. A current restructuring within the CCT's Fish and Wildlife Department may lead to new and/or different positions and/or titles.

Wildlife Technician I and II – These employees are $\frac{3}{4}$ time seasonal employees supervised by the Wildlife Technician IIIs, IV, Weed Specialists, or the Project Biologists. These positions are field work oriented. They implement management recommendations in the landscape, maintain fence boundaries, remove trespassing livestock, assist in biological data collection, store and maintain equipment, and assist supervisors when needed. A current restructuring within the CCT's Fish and Wildlife Department may lead to new and/or different positions and/or titles.

Appendix D. Summary of Expenditures 2008

A Summary of Expenditures was not available at the time of this report. Once available, a copy will be forwarded to Joe DeHerrera, COTR, BPA.

Appendix E. BPA Weed Control Reporting Form

ACTUAL 2008 Herbicide Application Form

NOTE: List all information by active ingredient and adjuvant used. Please do not list the common trade name of the herbicide.
Return completed form to your BPA Environmental Compliance Lead by February 8, 2009

Project Sponsor/person filling out form: Richard Whitney/Samuel Rushing

Email Address: Richard.whitney@colvilletribes.com

Mailing Address: P.O. Box 150, Nespelem, WA 99155

Phone Number: (509) 722-7622

BPA Project Number (1992-048-00)

Today's Date: 1/28/09

LOCATION		6th HYDROLOIC UNIT CODE (HUC)	ACTIVE INGREDIENT (see Note #1 below)	ADJUVANT USED (see Note#2 below)	RIPARIAN (See Note #3 below)			UPLAND (see note #4 below)		
Township, Range & Section (can be found in Pisces)	OR Latitude and Longitude				Estimate Number of Acres to be Treated	Estimate of Total Volume of Herbicide Only- Do not include adjuvant or water. Report amount in GALLONS. (see note #5 below)	Application Method- choose all methods that were used, e.g. spot treatment with hand wand, broadcast spray, etc. (see note #6 below)	Estimate Number of Acres to be Treated	Estimate of Total Volume of Herbicide Only- Do not include adjuvant or water. Report amount in GALLONS. (see note #5 below)	Application Method- choose all methods that were used, e.g. spot treatment with hand wand, broadcast spray, etc. (see note #6 below)
EXAMPLE: T2N, R5E, Sec. 10	30° 35' 40" 121° 45' 34"	170601020510	Clopyralid	Syl-Tac	4	5 gallons	Mechanized and Wicking	2	8 gallons	Mechanized, Spot
T30&31N, R29E, Sec. 6,5,32,33,28			Aminopyralid	Activator 90, Hi- light				175	0.169 gal	Mechanized, Spot

T28N, R34E, Sec. 26,27,34			Aminopyralid	Activator 90, Hi- light				5	0.046 gal	Mechanized, Spot
T30N, R28E, Sec. 12			Aminopyralid	Activator 90, Hi- light				72	0.135 gal	Mechanized, Spot
T28N, R34E, Sec. 5,6			Aminopyralid	Activator 90, Hi- light				5	0.046 gal	Mechanized, Spot
T27&28N, R35E, Sec. 2,3,10,11			Aminopyralid	Activator 90, Hi- light				10	0.046 gal	Mechanized, Spot
T30N, R27E, Sec. 6,7,8,17			Aminopyralid	Activator 90, Hi- light				150	0.304 gal	Mechanized, Spot
T28N, R34E, Sec. 10,15,16			Aminopyralid	Activator 90, Hi- light				5	0.046 gal	Mechanized, Spot
T31&32N, R28E, Sec. 31,6,7,18			Aminopyralid	Activator 90, Hi- light				134	0.101 gal	Mechanized, Spot
T31N, R27&28E, Sec. 18,7,1,2,9			Aminopyralid	Activator 90, Hi- light				54	0.081 gal	Mechanized, Spot
T31N, R28E, Sec. 8,17,18			Aminopyralid	Activator 90, Hi- light				119	0.121 gal	Mechanized, Spot
T31N, R26E, Sec. 17			Aminopyralid	Activator 90, Hi- light				58	0.128 gal	Mechanized, Spot
T30N, R29E, Sec. 6			Aminopyralid	Activator 90, Hi- light				0.25	0.012 gal	Mechanized, Spot
T31N, R29E, Sec. 29			Ammonium Salt of Imazapic	N/A				1.78	0.083 gal	Mechanized, Boom
T31N, R29E, Sec. 29			Sulfosulfuron	N/A				1.4	0.018 gal	Mechanized, Boom

T31N, R29E, Sec. 20			Ammonium Salt of Imazapic	N/A				1.78	0.085 gal	Mechanized, Boom
T31N, R29E, Sec. 20			Aminopyralid	N/A				1.78	0.097 gal	Mechanized, Boom
T30N, R29E, Sec. 6			Aminopyralid	Activator 90, Hi- light				0.5	0.004 gal	Backpack
T28N, R33&34E, Sec 1,6			Aminopyralid	Hi-light				5	0.3 gal	Mechanized, Boom
T31N, R29E, Sec 28			Aminopyralid	Hi-light				2	0.097 gal	Mechanized, Boom
T31N, R29E, Sec 28			Aminopyralid	Activator 90 Hi-light				1	0.017 gal	Mechanized, Spot
T31N, R29E, Sec 28			Glyphosate	Activator 90, Hi- light				2.8	0.60 gal	Mechanized, Boom
T31N, R29E, Sec 28			Glyphosate	Activator 90, Hi- light				5	1.5 gal	Mechanized, Boom
T31N, R29E, Sec 28			Aminopyralid	Activator 90, Hi- light				5	0.304 gal	Mechanized, Boom

Appendix F. CCT Weed Control Reporting

**Mitigation Lands Weed Control For
2008
Chemical Control**

Date	Management Area	Township	Range	Section	Chemical	Species	Gal. Chem	Approximate Acreage
5/27/2008	Berg Ranch	30,31N	29E	6,5,32,33,28	Milestone	Kn,Th,Ht	0.169	175
5/28/2008	Sand Hills	28N	34E	26,27,34	Milestone	Kn,Dt,Rs	0.046	5
5/28/2008	Berg Ranch	30N	28E	12	Milestone	Kn,Th,Ht	0.135	72
6/2/2008	Williams Flat	28N	34E	5,6	Milestone	Kn,Ht	0.046	5
6/3/2008	Rattlesnake	27,28N	35E	2,3,10,11	Milestone	Kn,Rs,Dt	0.046	10
6/5/2008	Tumwater	30N	27E	6,7,8,17	Milestone	Th,Dt,Kn	0.304	150
6/16/2008	Sand Hills	28N	34E	10,15,16	Milestone	Kn,Ht	0.046	5
6/16/2008	Boot Mountain	31,32N	28E	31,6,7,18	Milestone	Th,Kn	0.101	134
6/17/2008	Boot Mountain	31N	27,28E	18,7,1,2,9	Milestone	Th,Kn	0.081	54
6/18/2008	Boot Mountain	31N	28E	8,17,18	Milestone	Th,Kn,Mu	0.121	119
6/19/2008	White Lakes	31N	26E	17	Milestone	Th,Kn	0.128	58
7/10/2008	Berg Ranch	30N	29E	6	Milestone	Ko,Kn	0.012	0.25
9/23/2008	Berg Ranch	31N	29E	29	Plateau	Cg	0.083	1.78
9/23/2008	Berg Ranch	31N	29E	29	Outrider	Cg	0.018	1.4
9/23/2008	Berg Ranch	31N	29E	20	Plateau	Cg	0.085	1.78
9/23/2008	Berg Ranch	31N	29E	20	Milestone	Cg	0.097	1.78
9/29/2008	Berg Ranch	30N	29E	6	Milestone	Ko,Kn	0.004	0.5
9/30/2008	Williams Flat	28N	33,34E	1,6	Milestone	Th,Ht,Kn	0.3	5
10/1/2008	Berg Ranch	31N	29E	28	Milestone	Ko,Kn	0.097	2
10/6/2008	Berg Ranch	31N	29E	28	Milestone	Ko,Kn	0.017	1
10/8/2008	Berg Ranch	31N	29E	28	Milestone	Ko,Kn	0.6	2.8
10/13/2008	Berg Ranch	31N	29E	28	Milestone	Ko,Kn	1.5	5
10/13/2008	Berg Ranch	31N	29E	28	Milestone	Ko,Kn	0.304	5
							Total	815.29

Species	
Knapweed	Kn
Thistle	Th
Dalmatian Toadflax	Dt
Rush	
Skeletonweed	Rs
Houndstongue	Ht
Mullen	Mu
Kocia	Ko
Cheatgrass	Cg

Biological Control

Site	Mecinus janithus	Larinus minutus
Berg Ranch	600	
Berg Ranch	400	
Berg Ranch	200	
Berg Ranch	200	
Berg Ranch	200	
Berg Ranch	200	
Graves Ranch	200	
Graves Ranch	200	
Graves Ranch	200	
Graves Ranch	200	
Graves Ranch	200	
Graves Ranch	200	
Boot Mtn.	400	
Boot Mtn.	200	
Boot Mtn.	200	
Boot Mtn.	200	
Boot Mtn.	200	

Boot Mtn.	200	
Agency Butte	1000	250
Agency Butte	600	
Agency Butte	400	
Agency Butte	200	
Agency Butte	200	
Agency Butte	200	
Total	7000	250
Grand Total	7250	

Estimated Acreage Controlled		1700
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Mechanical Control

Mgmt. Area	Acreage	Method
White Lakes	4.3	Mowing
Berg Ranch	150	Mowing
Tumwater	3.9	Mowing
Graves		
Boot Mtn.		
Agency Butte	7.9	Mowing
Williams Flat	12.5	Mowing
Kuehne		
Sand Hills	8.6	Mowing
Rattlesnake	19.5	Mowing
Total	206.7	

Total Weed Control	2721.99
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