SECTION 49 – Table of Contents

49 Lake Rufus Woods Subbasin Inventory of Existing Programs – Terrestrial

49.1 Current Management Directions

Within the Lake Rufus Woods Subbasin, fish and wildlife resources are co-managed by the State of Washington and the Colville Tribes outside of the boundaries of the Colville Indian Reservation and by the Colville Tribes within the boundaries of the reservation. Other state and federal agencies, including, but not limited to, the U.S. Fish and Wildlife Service (USFWS), U.S. Forest Service (USFS), U.S. Army Corps of Engineers (USACE), Environmental Protection Agency (EPA), the Natural Resources Conservation Service (NRCS), and the Washington Department of Ecology (WDOE) are involved in programs that affect the land or water that provide habitat for fish and wildlife. A complete list of state, federal, and Tribal entities that are involved in management of fish and wildlife or their habitats is included in section 2.4.1, along with a description of each agency's management direction.

The Natural Resources Department of the Colville Tribes has management and regulatory authority that includes, but is not limited to, the following areas: fish and wildlife management, enforcement, land use activities, water rights and adjudication, development permitting, hydraulics permitting and shoreline protection (for example, Confederated Tribes of Colville Reservation (CTCR) Shoreline Management Act). CTCR/Bureau of Indian Affairs uses the Colville Reservation Forest Plan, Integrated Resource Management Plan, Code of Federal Regulations, and others to manage land, fish, and wildlife on the Colville Reservation. It is the mission of the Fish and Wildlife Division, "To provide subsistence, cultural opportunities and economic benefits for the Tribal Membership through sustainable ecosystem management. We accept our responsibility to manage, protect, and enhance tribal natural resources and to provide multiple products and services for the tribal membership on the reservation and on accustomed and traditional lands." The current management direction is to maintain viable populations (numbers and distribution of reproductive individuals) of native and desired nonnative species of fish and wildlife, and their supporting habitats, while providing sufficient numbers to meet cultural, subsistence and recreational needs.

49.1.1 Local Government

49.1.1.1 Douglas County

Douglas County borders Lake Rufus Woods along the southern shoreline. The County regulates and enforces the Growth Management Act and is responsible for planning, land use and building permits.

49.1.1.2 Okanogan County

The Colville Confederated Tribes has management and regulatory authority of lands within the boundaries of the Colville Indian Reservation in Okanogan County.

49.2 Existing and Imminent Protections

Refer to Section 2.4 for a description of the natural resources management agencies and organizations and their primary authorities at the federal, state, and regional levels. Many State and Federal laws and regulations protect natural resources within the IMP. Tribal governments and local governments also have regulations that protect specific areas or locations within the IMP. The following section summarizes the existing and imminent protections for federal and state threatened and endangered wildlife species known or potentially occurring in the Lake Rufus Woods Subbasin. Refer to the Lake Rufus Woods Subbasin Terrestrial Resources Assessment, Section 48, for detailed description of the occurrence and status of federal and state threatened and endangered species in the subbasin.

49.2.1 Endangered Species Act

Bald Eagle

Bald eagles are currently listed as threatened under the federal Endangered Species Act. This provides protection from "take" (i.e., harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect…). Bald eagles were proposed for removal from the endangered species list in 1999. That action has not been taken, in part because one prerequisite for delisting, a nationwide monitoring plan, has not yet been met. If a development project occurs on federal land or involves federal funding (i.e., nexus), an endangered species consultation may be required by the U.S. Fish and Wildlife Service.

Bald eagles are classified as threatened in Washington State.

In 1984, Chapter 77.12.655 RCW was adopted by the Washington State Legislature, requiring the establishment of rules defining buffer zones around bald eagle nests and roost sites. The law states that the rules shall take into account the need for variation of the extent of the buffer zone on a case by case basis.

In 1986, the Bald Eagle Protection Rules (WAC 232-12-292) were adopted by the Washington Wildlife Commission. The rules require permitting agencies (i.e., Department of Natural Resources, counties, cities) to review the database of bald eagle nest and communal roost locations prior to issuing permits for timber harvest, clearing land, residential development, etc. If the activity is within ½ mile of an eagle nest, the permitting agency notifies WDFW, who works with the applicant to develop a Bald Eagle Management Plan (see WAC 232-12-292 (4.4)).

Deliberate harassment of eagles is prohibited by state and federal law (Chapter 77.15.130 RCW; Bald Eagle Protection Act; Endangered Species Act; and, Migratory Bird Treaty Act).

American White Pelican

The American white pelican is listed as an endangered species in Washington. American white pelican, a Washington State endangered species, has been observed on occasion on Lake Rufus Woods. No breeding or regular use areas are thought to occur in the Subbasin.

Protection of American white pelican in Washington from hunting, possession, or control is provided under Chapter 77.16.120 RCW. Washington further charges those convicted of illegal take of an American white pelican with a $2,000 reimbursement for each animal taken or possessed (Chapter 77.21.070 RCW).

Northern Leopard Frog
The northern leopard frog is classified as an endangered species in Washington. Protection of northern leopard frog in Washington from hunting, possession, or control is provided under Chapter 77.16.120 RCW. Washington further charges those convicted of illegal take of northern leopard frog with a $2,000 reimbursement for each animal taken or possessed (Chapter 77.21.070 RCW).

Sage Grouse
The sage grouse is classified as a threatened species in Washington. The only known sage grouse lek in the IMP is located south of the Columbia River in the southwestern portion of the Lake Rufus Woods Subbasin (WDFW 2003b).

Protection of sage grouse in Washington from hunting, possession, or control is provided under Chapter 77.16.120 RCW. Washington further charges those convicted of illegal take of sage grouse with a $2,000 reimbursement for each animal taken or possessed (Chapter 77.21.070 RCW).

Sharp-tailed Grouse
The Columbian sharp-tailed grouse is classified as a threatened species in Washington. Records from the WDFW (2003) show that 33 of 48 sharp-tailed grouse leks in the Province occur within this Subbasin.

Protection of sharp-tailed grouse in Washington from hunting, possession, or control is provided under Chapter 77.16.120 RCW. Washington further charges those convicted of illegal take of sharp-tailed grouse with a $2,000 reimbursement for each animal taken or possessed (Chapter 77.21.070 RCW).

49.3 Inventory of Recent Restoration and Conservation Projects

Below is a summary of some of the BPA and non-BPA funded projects identified within the Lake Rufus Woods Subbasin. Projects that are relevant to both terrestrial and aquatic resources may be presented in the aquatic inventory section for this Subbasin (see Section 47). Refer to Section 2.4, Inventory of Projects in the IMP, for description of projects involving more than one subbasin. Major Grand Coulee Dam wildlife mitigation projects are located and managed in more than one subbasin. Appendix H includes more comprehensive listings of the BPA and non-BPA funded project conducted in this subbasin and the entire IMP.

49.3.1 BPA Funded Projects

Project #1992-048-00 Colville Tribes Hellsgate Wildlife Mitigation

Project Description:

The focus of the Hellsgate Project is the protection, restoration, and enhancement of critical winter habitat for big game and shrub-steppe/sharp-tailed grouse habitat on lands purchased/managed for mitigation on the Colville Indian Reservation. At present, the Hellsgate Project protects and manages 25,501 acres for the biological requirements of wildlife (CCT 2004). Currently there are 12 management units that make up the Hellsgate Project, most are located on or near the Columbia River (Lake Rufus Woods and Lake Roosevelt) and surrounded by Tribal land. These management units contain a wide diversity of vegetative types and habitats for a variety of wildlife.

Associated Monitoring:

- Monitor threatened and endangered species and habitats of concern.
- Conduct HEP to evaluate habitats and collect HU data for mitigation accounting.
- Conduct annual neo-tropical birds surveys for species diversity using project lands.
- Conduct population and trend data to monitor habitat use and seasonal distribution.
- Coordinate with other agencies and Tribes on Columbia River mitigation issues and methodologies.

Accomplishments:

- Acquired 25,501 acres of habitat for mitigation.
- Protected 14,920 Habitat Units on acquired lands.
- Installed fencing on several units.
- Conducted noxious weed control on acquired lands.

Notes:

No enhancements to project lands to offset hydropower losses have taken place. Some small-scale enhancements have been conducted using USDA funds to plant native vegetation on selected sites.

Project #21034 Colville Tribes Habitat Restoration and Adaptive Management of Columbian Sharp-tailed Grouse on the Intermountain Province

Project Description:

Develop and implement an adaptive management plan that will include restoration of native plant communities on lands within the IMP to support viable meta-populations of Columbia sharp-tailed grouse.

Associated Monitoring:

Monitor sharp-tailed grouse and their habitats using scientific principals and techniques to ensure that project objectives are being met and to provide a basis for use of adaptive management when appropriate. To evaluate species and habitat responses to management activities for the benefit of sharp-tailed grouse and other wildlife using similar habitats. Develop a Habitat Suitability Index for the area and create a sharp-tailed grouse management plan for the Colville Reservation.

Accomplishments:

- Literature review of all information concerning sharp-tailed grouse on the IMP.
- Conducted grouse surveys on known and historic leks.
- Surveyed for new leks.
- Trapped and collected data on marked 48 birds fitted with radio collars.
- Followed and mapped habitats used by marked grouse throughout the year.
- Conducted genetic variance tests on trapped birds.
- Determined sharp-tailed grouse seasonal ranges and associated GIS maps.
- Formed and coordinated with a regional grouse team for support and input.
- Reported progress through quarterly reports and unpublished papers.
- Conducted a public outreach program to inform individuals of status and future of sharp-tailed grouse on the Colville Indian Reservation and IMP.

Notes:

This is currently the last year of funding for the sharp-tailed grouse project. The regional grouse team agrees that this is an extremely important project that addresses concerns of various agencies throughout the region dealing with a State Threatened and Endangered Species. It is the recommendation of the regional grouse team that future funding for this project be a priority within the IMP and that the work continue to conserve and protect this species and associated habitats.

49.3.2 Non-BPA Funded Projects

Foster Creek Habitat Conservation Plan (FCHCP)

Project Description:

The Foster Creek Conservation District in cooperation with local, state, and federal agencies, local stakeholders, and advocacy groups is in the process of developing a habitat conservation plan for presentation to the USFWS for Section 10 incidental take permits on 17 terrestrial animal species. The plan may also include an addition element for spring Chinook and steelhead Section 10 permits from NOAA Fisheries. The FCHCP is intended to offer legal certainty and coverage for incidental take to the agricultural producers of Douglas County. The county is approximately 87 percent privately owned, with nearly 570,000 acres in privately owned/operated agriculture. When adopted, the FCHCP will provide strategies to minimize impacts to terrestrial species and mitigate for lost habitat in Douglas County. The project is funded by the USFWS Section 6 and sponsored by the Foster Creek Conservation District. This project will run for 50 years of acceptance by the USFWS.

Associated Monitoring:

The FCHCP includes provisions to monitor the plan implementation on large and small scales. On the large scale, remote sensing and GIS information will be utilized to assess the progress of the plan on an ecosystem-wide scale. This will be accomplished by comparative analysis and appropriate ground truthing. On the smaller scale, all participants will be required to develop a farm plan though the NRCS farm planning

process. This allows for site-specific data to be gathered and monitored on an annual basis, or more often as necessary.

Accomplishments:
To date, technical assessment and stakeholder committees have been formed and are meeting regularly. Best Management Practices (BMPs) have been developed to minimize impacts to the covered species. Sample farm plans have been created and monitoring strategies developed to ensure internal and external validation is achieved. Federal Register notice has been given to begin the process of developing an environmental impact statement. A preliminary draft FCHCP has been presented to all collaborators for review and comment.

HB 2514 Watershed Planning

Project Description:
To create and adopt a watershed plan for WRIA 44 and 50. The process involves conducting a technical assessment of all watersheds in the two WRIAs and develop strategies to manage the watershed in the future. A final management plan will be adopted that describes community-developed strategies for the Foster Creek and Moses Coulee watersheds. This project is funded by the WDOE and is sponsored by the Foster Creek Conservation District; it will run through 2009.

Associated Monitoring:
Currently, real time stream and well monitoring is occurring in support of the watershed planning process. Quarterly snorkel surveys of all surface water streams in Douglas County are performed. Macro invertebrate and water quality analysis is also performed quarterly to establish baseline data to evaluate future management strategies after implementation.

Accomplishments:
A preliminary basin assessment was completed in January of 2003. Following this, groundwater models of both WRIA have been developed to aid in the understanding of hydrology in the area. A final management plan is scheduled to be adopted by the end of September 2004.

Conservation Reserve Program (CRP)

Project Description:
To provide a resource for agricultural producers to remove their land from production in return for an annual payment. The lands removed from active agriculture are required to be restored to a prescribed level of native habitat and managed to control invasive species.

Associated Monitoring:
The Farm Service Agency conducts annual aerial photography for compliance and overall project evaluation. Local agency representatives also conduct on-farm inspection on a rotating basis to ensure compliance.

Accomplishments:
187,000 acres of agricultural land in Douglas County are enrolled in the program, approximately 13,000 acres in the Lake Rufus Woods Subbasin. These lands are providing increased habitat quality verses their traditional agricultural uses. Significant improvements to species populations have been linked to the improved habitat quality on lands enrolled in the program.

Conservation Reserve Program Projects with WDFW
Within the Douglas County section of the Lake Rufus Woods subbasin, several projects have occurred protecting and restoring habitat. CRP has had the biggest influence in this area. Specific restoration projects within the last five years are as follows:

A. Strahl Canyon Habitat Project- WDFW/Foster Farm. This was a riparian restoration project, started in 1999 and completed in 2003. Approximately 4000 trees/shrubs were planted to restore critical sharp-tailed grouse wintering habitat. This was completed and managed by the UWRP of the WDFW. Part of this project was funded by NRCS WHIP program. The project took place on private land and was funded by state and federal funds. The riparian habitat in Strahl Canyon is very critical riparian habitat for local sharp-tailed grouse. Legal Description: T29N R29E SW ¼ Section 33.

B. Rice Farms Habitat Project-WDFW/Richard Rice. This was a habitat project to provide permanent protective cover for local wildlife. It was completed in 2003. Approximately 2,000 trees/shrubs were planted. This project was completed by the UWRP of the WDFW. This project took place on private land and was funded by state/federal funds. Permanent protective cover is very critical to wildlife in the winter months. Legal Description: T29N R30E SE ¼ Sec. 19.

C. Upper China Creek Habitat Project- WDFW/Leroy Sanderson
This was a riparian restoration project to provide critical winter cover for sharp-tailed grouse. It was completed in 1999. Approximately 1,250 trees/shrubs were planted. This project was completed by the UWRP of the WDFW. This project took place on private land and was funded by state/federal funds. China Creek is very critical riparian habitat for local sharp-tailed grouse. Legal Description: T30N R29E SE ¼ Sec. 25

Noxious Weed Control
Project Description:
Biological Noxious Weed Control using beneficial insects. With the cooperation of many landowners in Douglas County, the Foster Creek Conservation District was able to establish release sites for the stem-boring weevil *(Mecinus janthinus),* an effective biological control for the suppression of Dalmation toadflax. In 2002, 4,500 *Mecinus janthinus* were released. In 2003, 6,900 *Mecinus janthinus* were released. Additional species were introduced in 2003. These included releasing 1,000 *Gymnetron tertrum* to suppress mullein, 1,250 *Larinus minutus* for diffuse knapweed, and *2,000 Rhinocyllus conicus to control Canada thistle.* Approximately, 4,000 *Mecinus janthinus,* 1,000 *Gymnetron tertrum,* 200 *Larinus minutus* and 700 *Rhinocyllus conicus* were released on private lands within the Lake Rufus Woods Subbasin. This project is funded by the

Washington State Conservation Commission and is sponsored by the Foster Creek Conservation District; it is ongoing.

Associated Monitoring:
Photo monitoring

Accomplishments:
The Conservation District established release sites for beneficial insects with and relationships with approximately 50 private landowners in Douglas County, 10 within the Rufus Wood Subbasin. The use of a biological control is a long-term method for weed management. The general time frame for biological weed control agents is to see a weed reduction in three to five years. Their impacts will not be noticeable until they reach high population densities.

Environmental Quality Incentive Program – EQIP
Project Description:
Conversion of rill irrigation to sprinkler systems, install field filter strips, livestock exclusion from the Columbia River, spring development including wells, pipelines and troughs. The project is funded by the Commodity Credit Corporation and is sponsored by the USDA and NRCS. The project will run through 2008.

Associated Monitoring:
Annual status reviews by NRCS field staff.

Accomplishments:
First component to be installed in spring of 2004.

49.4 Strategies Currently Being Implemented Through Existing Projects

49.4.1 Limiting Factors and Strategies

Refer to Figure 47.1 of the Aquatic Inventory section for a graphic displaying the percent of all fish and wildlife mitigation projects in the Subbasin that respond to specific limiting factors. Wildlife mitigation projects in the basin respond primarily to the limiting factors of habitat quantity and quality. In addition, the sharp-tailed grouse project addressed lack of information on the species.

Figure 47.2 of the Aquatic Inventory section shows the types of management strategies used in the fish and wildlife mitigation projects in the Subbasin. Wildlife mitigation projects in the Subbasin have used primarily the habitat acquisition and habitat improvement/restoration strategies. Other strategies include RM&E and watershed planning/recovery planning.

49.4.2 Gaps Between Actions Taken and Actions Needed

The primary terrestrial resources mitigation need in the subbasin, with respect to the FCRPS, is completion of the construction loss mitigation for the Chief Joseph Project.

The construction loss assessment was completed in 1992 (Kuehn and Berger 1992). Currently, the mitigation for the construction wildlife losses in terms of Habitat Units (HUs) is about 16 percent complete (refer to Section 48).

Two state threatened species are among the HEP indicator species for which mitigation is owed: sage grouse (HU acquisition about 47 percent complete) and Columbian sharp-tailed grouse (HU acquisition less than one percent complete). Populations of these species are considered at very high risk in the state. The current sharp-tailed grouse project is in its last year of funding. The regional grouse team notes that this is an extremely important project that addresses concerns of various agencies throughout the region and recommends that future funding for this project be a priority within the IMP.

Additional funding for habitat acquisitions, enhancement and/or restoration measures, and maintenance funding will be necessary to meet the existing construction loss mitigation obligation.

Pygmy rabbit, a federally threatened species, no longer occurs within the Subbasin due to habitat loss and modification. The species is managed under the state recovery plan at the Sagebrush Flat Wildlife Area in Douglas County, adjacent to the Subbasin. Long-term funding of reintroduction and habitat enhancement efforts will be necessary to ensure recovery of the species.