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33 Upper Columbia Subbasin Inventory of Existing Programs – Terrestrial

33.1 Current Management Directions
The State of Washington Department of Fish and Wildlife (WDFW), Colville Confederated Tribes, and the Spokane Tribe of Indians are the primary resource managers in the Upper Columbia Subbasin. These three management agencies have initiated several projects through Council’s Fish and Wildlife Program as mitigation for wildlife-habitat losses due to construction of Grand Coulee Dam. 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.

The Spokane Tribe of Indians manages wildlife resources on the Spokane Reservation. The Wildlife Program is directly responsible for the management of 200 acres of wildlife lands that were acquired through the BPA mitigation project in the Upper Columbia Subbasin.

33.1.1 Local Government
33.1.1.1 Ferry Conservation District (FCD)
FCD is involved in several partnership efforts from individuals and agencies, to school districts and tribes. As a political subdivision of Washington State government, under the umbrella of the Washington State Conservation Commission, FCD provides natural
resources planning and management services to individuals, associations, and local government.

**Ferry County Codes**
Nine codes or parts of codes may affect fish and wildlife. Most of these address urban planning/land use.

### 33.1.1.2 The Lincoln County Conservation District (LCCD)
LCCD’s current management strategies can be summarized from excerpts of the District’s updated Long Range Plan. The goals and objectives include:

**Water Quality**
- Address water quality concerns in streams and lakes in Lincoln County
- Address groundwater issues in Lincoln County
- Implement restoration projects that would address improve water quality
- Work with NRCS, WSFW, WDOE and Lincoln County to address water quality complaints

**Wildlife**
- Establish wildlife-habitat and enhance forest/wetland resources through NRCS programs that include: CRP, EQIP, and WHIP

**Education/Information/Communication**
- Increase public awareness of District activities
- Provide educational conservation information to the public through newsletters, public meetings, newspaper articles, etc.

**District Operations and Management**
- Maintain an active and effective LCCD board
- Promote district programs and activities
- Insure adequate funding for LCCD operations

In the last five years, the LCCD has been involved in a minimal number of projects in Spokane and Upper Columbia subbasins. Many landowners in these subbasins have taken advantage of NRCS programs that include CRP, EQIP, and WHIP. Currently, funding sources are focused on finding solutions to improve water quality in the Upper Crab/Wilson Creek Watershed Water Resource Inventory Area (WRIA) #43.

### 33.2 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 Upper Columbia Subbasin. Refer to the Upper Columbia Subbasin Terrestrial Resources Assessment, Section 32, for detailed description of the occurrence and status of federal and state threatened and endangered wildlife species in the subbasin.

33.2.1 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.

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).

Canada Lynx
The lynx was listed as a state threatened species in Washington in 1993 and was listed as a federally threatened species under ESA in April 2000. Kettle Crest, Wedge, and Little Pend Oreille areas above 4,000 ft are designated lynx management zones (LMZs) and are located partially or completely within the Subbasin (Stinson 2001). Although a number of sightings of lynx have been recorded in the Subbasin, most of the records are over ten years old.

Legal take of lynx in Washington ceased in 1991 and consequent designation as a threatened species presently provides complete protection from hunting or trapping at both the state (Chapter 77.16.120 RCW) and federal level.
In 2000, the U.S. Forest Service signed an agreement with the USFWS to manage habitat specifically for lynx in order to minimize the impact of federal actions. Most state and private land in the northeastern Washington LMZs are covered under Lynx Management Plans that theoretically provide for maintaining suitable habitat through time. Forest practice regulations in Washington allow landowners to prepare special wildlife management plans in lieu of being subject to critical habitat rule (WAC 222-16-080). The three major non-federal landowners in Washington have WDFW approved plans in place. Each lynx management plan includes a process for monitoring the plan’s effectiveness and annual or biennial reporting (Stinson 2001).

**Gray Wolf**
The gray wolf is listed as a federally threatened species under the ESA and is classified as endangered in Washington State. The Upper Columbia Subbasin is not located within a designated gray wolf recovery area.

In Washington, protection of gray wolf from hunting, possession, or control is provided under Chapter 77.16.120 RCW. Washington further charges those convicted of illegal take of state endangered species with a $2,000 reimbursement for each animal taken or possessed (Chapter 77.21.070 RCW).

**Grizzly Bear**
The grizzly bear listed as a threatened species under ESA and as an endangered species in the state of Washington. The Subbasin does not include any lands within designated grizzly bear recovery areas.

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

**Fisher**
The fisher is will become a candidate for federal listing under the ESA in the near future (USFWS 2004). Fisher is a state endangered species in Washington. The species is very rare and possibly extirpated in the Columbia River and Okanogan eco-regions.

In Washington, fisher is managed based on the findings of the WDFW status report (Lewis and Stinson 1998). Protection of fisher in Washington from hunting, possession, or control is provided under Chapter 77.16.120 RCW. Washington further charges those convicted of illegal take of state endangered species with a $2,000 reimbursement for each animal taken or possessed (Chapter 77.21.070 RCW).

**American White Pelican**
The American white pelican is listed as an endangered species in Washington. 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. Sage grouse has been extirpated from the Subbasin due to habitat loss and modification.

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. At least two sharp-tailed grouse populations are currently known in the Subbasin (WDFW 2003b).

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).

### 33.3 Inventory of Recent Restoration and Conservation Projects
Refer to Section 2.4, Inventory of Projects in the Intermountain Province, 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. Below is a summary of some BPA and non-BPA funded projects identified within the Subbasin. Projects that are relevant to both terrestrial and aquatic resources may be presented in the aquatic inventory section for this Subbasin (see Section 31). Refer to Appendix H for a more comprehensive list of the BPA and non-BPA funded projects conducted in this Subbasin and the entire IMP.

#### 33.3.1 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 T&E 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 23,000 acres of habitat for mitigation.
- Protected 11,000 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 our 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 the 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.

Project # 199106200 Spokane Tribe Wildlife Mitigation: Blue Creek Winter Range
Project Description:
Protect wildlife habitat as partial mitigation for the Grand Coulee Dam construction and inundation wildlife loss assessment through fee title and tribal allotment title acquisition on or adjacent to the Spokane Indian Reservation. The project was initially started as acquiring land within the Blue Creek Winter Range area, but has come to include all wildlife mitigation land acquisitions. The current priority areas include McCoy Lake Watershed, Wellpinit Mt., and the Peaks (shrub-steppe/steppe habitat). The Spokane Tribes wildlife projects can be acquired in both the Spokane and Upper Columbia subbasins.

Accomplishments:
• Between 1996 and 1999, the Spokane Tribe acquired 1,863 acres of wildlife lands of which 200 acres are located within the Upper Columbia Subbasin.
• The project was approved for a total of $4.5 million in acquisitions for FY02-03, but no projects were funded due to the BPA financial crisis.
• To date in FY04, the Tribe has acquired 1,151 additional acres of mitigation lands in the Spokane Subbasin, but near the border of the Upper Columbia.

Project #199800300 Spokane Tribe Wildlife Mitigation Operation and Maintenance
Operate and Maintain wildlife lands that have been acquired through Project #199106200. Management activities include fencing, noxious weed control, road maintenance, site clean-up and etc.. The habitat enhancement activities that are occurring on these lands are being conducted with tribal funds. During the 2000 Rolling Review Process the project included the Sharp-tailed Grouse Re-introduction Feasibility Study that has been delayed due to the BPA financial crisis, but should be completed in 2004.

Associated Monitoring:
• Conduct initial HEP analysis on projects within 1 year of acquisition and then every 5 years there after.
• Habitat Monitoring includes tree and shrub survival surveys, native grass/forb restoration establishment surveys and photo point monitoring.
• Wildlife Population Monitoring includes Ruffed Grouse Drum Counts, Bird Point Counts, Small Mammal Trapping, Big Game Counts, Bald Eagle Surveys, and Incidental Wildlife Observations.

Accomplishments:
• Since 2001, over 16,000 riparian trees and shrubs have been planted within the McCoy Lake Watershed (non-BPA funding)
• McCoy Creek Stream Channel Restoration: 1000' of the stream channel was constructed to near original characteristics. Riparian tree and shrub planting will be conduct on the site in 2005 (non-BPA funding).
• Conversion of over 60 acres of old agricultural land to native grass.

33.3.2 Non-BPA Funded Projects

Fischer Riparian Improvement
Project Description:
Fence riparian area; plant hardwoods to help hold water and improve wildlife-habitat.
The project is sponsored by the FCD. This project ended in 2002.

Associated Monitoring:
Regular inspection by landowner; annual inspection by FCD staff.

Accomplishments:
Excluded cattle from riparian area, improved water retention, fish and wildlife-habitat.
This project was designed to target several water quality issues, such as sediment loading, dissolved oxygen, fecal coliform.

Strandberg Stock Water Project
Project Description:
Through cost-share assistance, helped a landowner install non-freeze water troughs to keep cattle away from stream and improve range utilization. This project was also used to help educate other landowners to implement similar projects, through the same grant, other programs, and help them find incentives without government cost-share programs. This project ended in 2002.

Associated Monitoring:
Regular monitoring by FCD staff.

Accomplishments:
Enabled landowner to fence stock away from flowing stream; lowered fecal coliform levels. Other landowners worked on similar projects without cost-share assistance, and along with the educational component of a WDOE, Centennial Clean Water Funding we have been able to create a watershed management team and educate a considerable number of landowners and interested public.
**Water and Soil Protection Project (WASP)**

**Project Description:**
The intent of WASP was to partner with landowners and other natural resource agencies to conduct a cost-share program, offer technical assistance, and provide public information and educational outreach programs for water quality improvement and protection. Eligible activities included streambank stabilization, riparian vegetation restoration, spraying of noxious weeds, riparian fencing, hard crossings, off stream watering improvements and erosion control BMPs. Also provided was free engineering to landowners and agencies through a separate engineering grant for implementation projects. The project was funded by the Washington State Conservation Commission and ended in 2002.

**Associated Monitoring:**
Continued Monitoring by FCD Staff.

**Accomplishments:**
Technical assistance including permit processing, on-the-ground site surveying, and engineering design development with NRCS and the N.E. Area District Engineers were facilitated by FCD. Numerous other landowners were offered technical assistance to help them address water quality problems on their lands.

On-the-ground accomplishments for these projects resulted in several hundred feet of streambank stabilization through engineered designs and bioengineering projects. Many acres of erosion control and habitat development came from planting grass mixture, shrubs, and trees. Additional acres of steep slopes of noxious weed (knapweed) [received chemical treatments] to prevent further erosion and aid in the re-establishment of beneficial plants. These activities were conducted on the San Poil Watershed (WRIA 52) and Kettle River Watershed (WRIA 60).

WASP has had a very positive impact on the Ferry County landscape and has enabled FCD to educate and assist local families to improve water quality functions and values. Each engineered and bioengineering design, as well as other water and landscape BMPs that are implemented, provide a testing ground for the District upon which to refine BMP designs and applications.

**Water and Soil Protection Project II (WASP II)**

**Project Description:**
The intent of WASP II (continuing the concepts from WASP) was to partner with landowners and other natural resource agencies to conduct a cost-share program, offer technical assistance, and provide public information and educational outreach programs for water quality improvement and protection. Eligible activities included streambank stabilization, riparian vegetation restoration, spraying of noxious weeds, riparian fencing, hard crossings, off stream watering improvements and erosion control BMPs. Also provided was free engineering to landowners and agencies through a separate engineering grant for implementation projects. The project was funded by the Washington State Conservation Committee and ended in 2002.
Associated Monitoring:
Continued Monitoring by FCD Staff.

Accomplishments:
Technical assistance including permit processing, on-the-ground site surveying, and engineering design development with NRCS and the N.E. Area District Engineers were facilitated by FCD. Numerous other landowners were offered technical assistance to help them address water quality problems on their lands.

On-the-ground accomplishments for these projects resulted in several hundred feet of streambank stabilization through engineered designs and bioengineering projects. Many acres of erosion control and habitat development came from planting grass mixture, shrubs, and trees. Additional acres of steep slopes of noxious weed (knapweed) [received chemical treatments] to prevent further erosion and aid in the re-establishment of beneficial plants. These activities were conducted on the San Poil Watershed (WRIA 52) and Kettle River Watershed (WRIA 60).

WASP II has had a very positive impact to the Ferry County landscape and has enabled FCD to educate and assist local families to improve water quality functions and values. Each engineered and bioengineering design, as well as other water and landscape BMPs that are implemented, provide a testing ground for the District upon which to refine BMP designs and applications.

Water and Soil Protection Project III (WASP III)
Project Description:
The intent of WASP III (continuing the concepts from WASP II) was to partner with landowners and other natural resource agencies to conduct a cost-share program, offer technical assistance, and provide a public information and educational outreach programs for water quality improvement and protection. Eligible activities included streambank stabilization, riparian vegetation restoration, spraying of noxious weeds, riparian fencing, hard crossings, off stream watering improvements and erosion control BMPs. Also provided was free engineering to landowners and agencies through a separate engineering grant for implementation projects. The project is funded by the Washington State Conservation Committee, and is scheduled to end at the end of 2003.

Associated Monitoring:
Continued Monitoring by FCD Staff.

Accomplishments:
Technical assistance including permit processing, on-the-ground site surveying, and engineering design development with NRCS and the N.E. Area District Engineers were facilitated by FCD. Numerous other landowners were offered technical assistance to help them address water quality problems on their lands.

On-the-ground accomplishments for these projects resulted in several hundred feet of streambank stabilization through engineered designs and bioengineering projects. Many acres of erosion control and habitat development came from planting grass mixture,
shrubs, and trees. Additional acres of steep slopes of noxious weed (knapweed) [received chemical treatments] to prevent further erosion and aid in the re-establishment of beneficial plants. These activities were conducted on the San Poil Watershed (WRIA 52) and Kettle River Watershed (WRIA 60).

WASP III has had a very positive impact to the Ferry County landscape and has enabled FCD to educate and assist local families to improve water quality functions and values. Each engineered and bioengineering design, as well as other water and landscape BMPs that are implemented, provide a testing ground for the District upon which to refine BMP designs and applications.

**Riparian Demonstration and Education Project (RDEP)**

**Project Description:**
The RDEP implemented riparian protection, enhancement, and restoration for water quality benefits throughout FCD in WRIA 52, 58, and 60. This project met the challenge of protection and restoration of riparian areas adjacent streams and lakes in such a manner that maintains water quality integrity while improving, protecting, or enhancing fish and wildlife-habitat. The implementation projects in this program are available for use in individual, group, associations, and schools for education efforts into the future. Many varieties of BMPs have been implemented and landowners can view the different strategies used to create the various types of environmental protection and enhancement that were utilized. This project is funded by the WDOE and sponsored by the FCD. The project is scheduled to end in 2003.

**Associated Monitoring:**
FCD Staff continue the monitoring efforts for this project.

**Accomplishments:**
Developed a Riparian Education and Demonstration Program to include implementation of projects on the FCD property, and a native plant nursery for use in this and future implantation projects. Conducted a partnering restoration effort with several individual landowners, agencies, the Colville Confederated Tribes, and School Districts (as far as Seattle). Implemented an extensive public education and information program. Perform a comprehensive monitoring program.

**FCD Native Plant Nursery**

**Project Description:**
Establish a Native Plant Nursery to provide plants for revegetation and restoration projects throughout the Conservation District, and the greater area, as available. The project is ongoing and sponsored by the FCD.

**Associated Monitoring:**
Constant monitoring of plant health and growth. Annual assessment of overall progress.

**Accomplishments:**
Have established and propagated locally unique varieties of seven different native
hardwood species and three different softwoods.

**Sherman Creek Implementation Project**

*Project Description:*
Planted native hardwood and softwood species along the banks of Sherman Creek. This project ended in 2001 and was sponsored by FCD.

*Associated Monitoring:*
Regular monitoring by FCD staff and USFS personnel.

*Accomplishments:*
Reestablished riparian buffers to provide shade, fish and wildlife-habitat.

**Sherman Creek Wildlife Area**

*Project Description:*
The Sherman Creek Wildlife Area is owned and managed by WDFW. The 8,782 acre wildlife area is managed primarily for deer winter range. Additional management activities provide habitat protection and improvement for non-game birds, waterfowl, and upland birds. Wildlife management programs traditionally focus on habitat manipulation including farming, shrub plantings, timber sales, forage enhancement seedlings, and weed control. Farming has occurred on up to 200 acres, with 100 acres of irrigated farming.

*Associated Monitoring:*
Breeding Bird point count and area search surveys are conducted annually. The area is also included in general Game Management Unit mule deer and white-tailed deer composition counts. Planted crops or shrubs are monitored and evaluated on a regular basis. Weed control is regulated by Ferry County and monitored regularly by WDFW.

*Accomplishments:*
Approximately 1,785 acres of deer and other wildlife habitat has been enhanced through timber management. Noxious weed control has been aggressive and implemented annually for at least the last decade. There is not a sufficient O&M budget to facilitate a full-time manager so that is the primary limitation to further accomplishments or monitoring.

**Conservation Reserve Program (CRP), Environmental Quality Incentives Program (EQIP) and Wildlife-habitat Incentives Program (WHIP)**

*Project Description:*
These programs help eligible participants implement structural and management practices to address soil, water and related natural resources concerns on their lands. These programs encourage landowners to convert environmentally sensitive acreage to vegetative cover, such as native grasses, wildlife plantings, trees, filterstrips, or riparian buffers. These projects are funded by the USDA and are continuing.
Associated Monitoring:
The implementation projects are periodically inspected to insure the effectiveness of the new conservation practices.

Accomplishments:
CRP, EQIP, and WHIP aid in reducing soil erosion and sedimentation in streams and lakes, improving water quality, establishing wildlife-habitat, and enhancing forest and wetland resources.

Road Surface Treatment
Project Description:
The Lincoln County Public Works has used a magnesium chloride dust suppressant and road base stabilizer in Lincoln County. The dust guards attract moisture and are used for dust and erosion control. This project is funded through a Lincoln County tax assessment and is ongoing.

Associated Monitoring:
None.

Accomplishments:
Applying dust control treatments will help maintain natural surfaces. In addition, it will help prevent wind blown dust and eroded soils from entering any water system.

33.4 Strategies Currently Being Implemented Through Existing Projects
33.4.1 Limiting Factors and Strategies
Refer to Figure 31.1 of the Aquatic Inventory section for a graph displaying the percent of all fish and wildlife mitigation projects in the Subbasin that respond to specific limiting factors. Wildlife mitigation projects in the Subbasin respond primarily to the limiting factors of habitat quantity and quality; in addition, the sharp-tailed grouse, mule deer, and cougar DNA projects addressed lack of information on the species.

Figure 31.2 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 watershed planning/recovery planning, RM&E, and education.

33.4.2 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 Grand Coulee Project. The construction loss assessment was completed in 1986 (Creveling and Renfrow 1986). Currently, the mitigation for the construction wildlife losses in terms of Habitat Units (HUs) is about 51 percent complete (refer to Section 24). Acquisition of HUs for the Washington State threatened sage grouse has been completed; future enhancement and
monitoring funding will be necessary to improve and maintain habitat values. Acquisition of HUs for the Washington State threatened sharp-tailed grouse is approximately 52 percent complete. Populations of this species are considered at very high risk in the state and continued action to enhance habitats and populations in the province is needed.

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