

LECLERC CREEK WILDLIFE AREA MANAGEMENT PLAN

Washington Department of Fish and Wildlife



Prepared by Wildlife Area Manager, Joe McCanna &
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2006

STATE OF WASHINGTON

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This Program Receives Federal Aid in Wildlife Restoration funds.
Project W-94-D, Segment 24

This report should be cited as:

Washington Department of Fish and Wildlife. 2006. LeClerc Creek Wildlife Area Management Plan. Wildlife Management Program, Washington Department of Fish and Wildlife, Olympia. 37 pp.

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Washington State Wildlife Area Plan

LECLERC CREEK WILDLIFE AREA

Washington Department of Fish and Wildlife
Wildlife Management Program
600 Capitol Way North
Olympia, WA 98501-1091

Washington State Wildlife Area Plan

LeClerc Creek Wildlife Area

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November 2006

A handwritten signature in blue ink, appearing to read "J. McCanna", is written over a horizontal line.

Director, Washington Department of Fish and Wildlife

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EXECUTIVE SUMMARY

LeClerc Creek Wildlife Area is located in Pend Oreille County about 25 miles northwest of the town of Newport. The four land units totaling 614 owned acres were purchased with Pitman-Robertson and State Wildlife funds in 1972. The majority of the area is forested and is managed for a variety of wildlife habitat improvements and public recreation opportunities.

The primary management concerns and public issues identified in the LeClerc Creek Wildlife Area Plan are:

- Maintain big game populations
- Improve and maintain fish populations
- Manage for upland birds
- Manage for species diversity
- Protect and restore riparian habitat
- Protect and manage other species
- Provide sustainable fish and wildlife related recreation
- Manage weeds consistent with state and county rules

In 2006, WDFW staff completed the draft Wildlife Area Management Plan and achieved weed management goals outlined in the plan. The fire and timber harvest preparations at Sherman Creek took management time away from LeClerc Creek in 2006. Performance measures for 2007 focus on increasing public awareness in the Grizzly Bear Recovery Area exploring options for elk and waterfowl management, nongame and upland bird habitat management and noxious weed control.

CHAPTER 1. INTRODUCTION

This plan provides management direction for the LeClerc Creek Wildlife Area. This plan will be updated annually to maintain its value as a flexible working document. It identifies needs and guides activities on the area based on the Washington Department of Fish and Wildlife (WDFW) Agency Mission of “Sound Stewardship of Fish and Wildlife” the statewide goals and objectives of the agency as they apply to local conditions.

1.1 Agency Mission Statement

The Washington Department of Fish and Wildlife serves Washington’s citizens by protecting, restoring and enhancing fish and wildlife and their habitats, while providing sustainable fish and wildlife-related recreational and commercial opportunities.

1.2 Agency Goals and Objectives

The underlined goals and objectives directly apply to the management of this wildlife area. These goals and objectives can be found in the Agency’s Strategic Plan.

Goal I: Healthy and diverse fish and wildlife populations and habitats

- Objective 2: Protect, restore and enhance fish and wildlife populations and their habitats.
- Objective 3: Ensure WDFW activities, programs, facilities and lands are consistent with local, state and federal regulations that protect and recover fish, wildlife and their habitats.

Goal II: Sustainable fish and wildlife-related opportunities

- Objective 6: Provide sustainable fish and wildlife-related recreational and commercial opportunities compatible with maintaining healthy fish and wildlife populations and habitats.
- Objective 7: Improve the economic well-being of Washington by providing diverse, high quality recreational and commercial opportunities.

Goal III: Operational Excellence and Professional Service

- Objective 11: Provide sound operational management of WDFW lands, facilities and access sites.

1.3 Agency Policies

The following agency policies provide additional guidance for management of agency lands.

- Commission Policy 6003: Domestic Livestock Grazing on Department Lands
- Policy 6010: Acquiring and disposing of real property
- Policy 5211: Protecting and Restoring Wetlands: WDFW Will Accomplish Long-Term Gain of Properly Functioning Wetlands Where Both Ecologically and Financially Feasible on WDFW-Owned or WDFW-Controlled Properties
- Policy 5001: Fish Protection At Water Diversions/Flow Control Structures And Fish Passage Structures
- Policy: Recreation management on WDFW Lands
- Policy: Commercial Use of WDFW Lands
- Policy: Forest Management on WDFW Lands
- Policy: Weed Management on WDFW Lands
- Policy: Fire Management on WDFW Lands
- Other policies/contractual obligations/responsibilities

1.4 LeClerc Creek Wildlife Area Goals

Management goals for the LeClerc Creek Wildlife Area are to preserve habitat and species diversity for both fish and wildlife resources, maintain healthy populations of game and non-game species, protect and restore native plant communities, and provide diverse opportunities for the public to encounter, utilize, and appreciate wildlife and wild areas. Specific management goals and objectives for the LeClerc Wildlife Area can be found in Chapter 3.

1.5 Planning Process

Statewide goals and objectives listed above and information specific to the area are used to guide management priorities at LeClerc Creek. The original purpose for purchasing the land, species present, habitat conditions, past management strategies and public issues and concerns are evaluated to develop specific wildlife area management activities.

A Citizens Advisory Group (CAG) has been established to provide for public involvement in wildlife area management. The CAG is made up of one representative from each major interest group in the local community to serve as a spokesperson for that group. CAG members will be informed of, and encouraged to comment on present and future management of the area. CAG participation in planning will add credibility and support for land management practices and help build constituencies for wildlife areas.

The CAG will be used as an ongoing means to identify social, cultural and economic issues important to the people of Washington and the management of the wildlife area. An internal District Team consisting of local representatives from each WDFW program also helps to identify other species or habitat plans pertinent to the management of the area.

Sherman Creek/LeClerc Creek Citizen Advisory Group Members

Kelly White, Landowner, Former WDFW Commissioner

Dwight Morgan, Retired School Teacher

Warren Current, Bird Watcher

Don Comins, Pend Oreille Cons. District

Jerry Cline, U.S. Fish and Wildlife Service

Chris Loggers, U.S. Forest Service

Jim Davidson, Ferry County Weed Board

Larry Walker, National Wild Turkey Federation

Plans will incorporate cross-program input and review at the regional and headquarters level by the habitat program, wildlife program, enforcement program, and fish program. Pertinent information from existing species plans, habitat recommendations, watershed plans, ecoregional assessments, etc., will be used to identify local issues and needs and ensure that the specific Wildlife Area Plan is consistent with WDFW statewide and regional priorities.

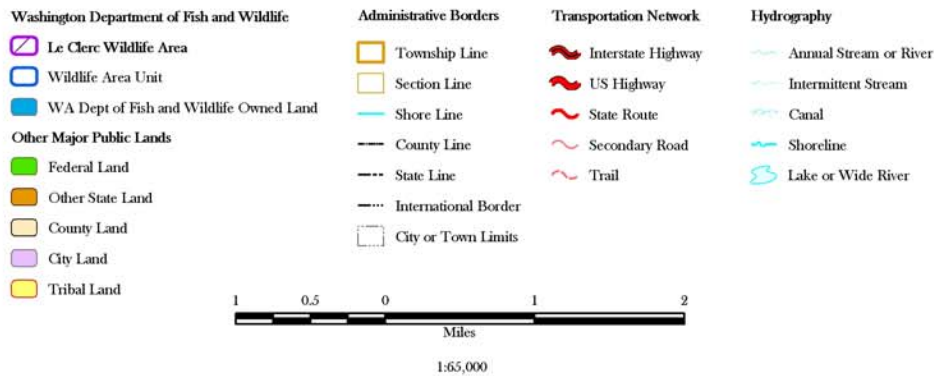
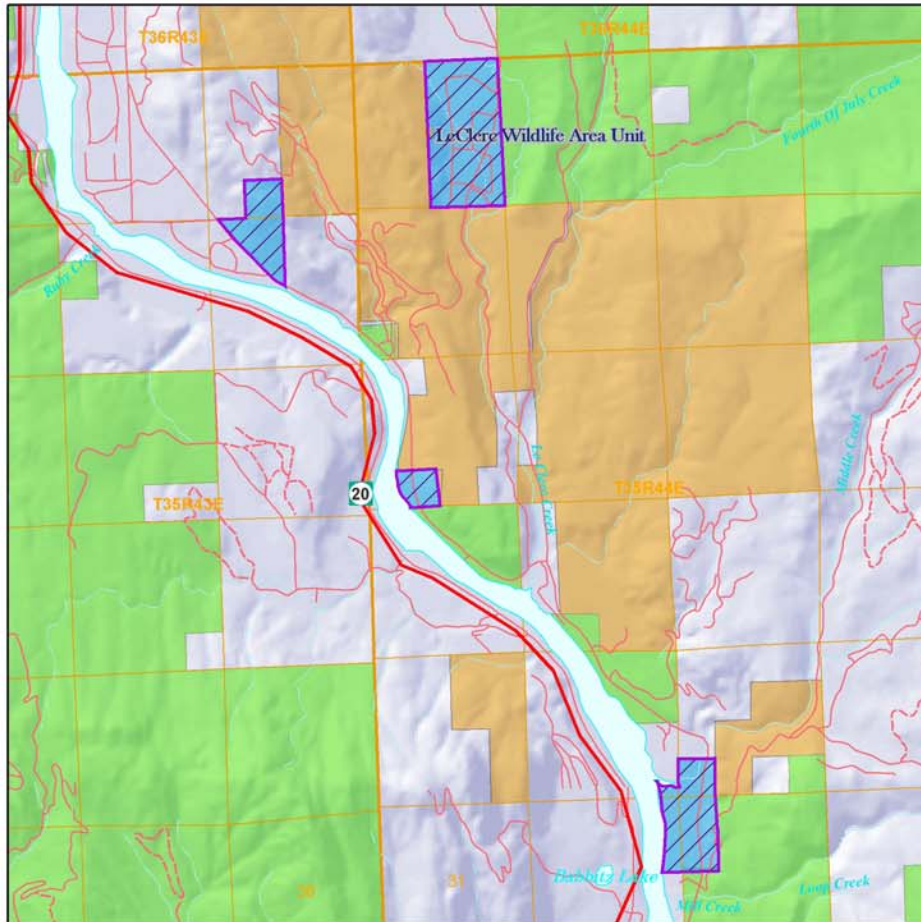
The LeClerc Creek Wildlife Area plan will be reviewed annually with additional input from the CAG and district team to monitor performance and desired results. Strategies and activities will be adapted where necessary to accomplish management objectives.

CHAPTER 2. AREA DESCRIPTION AND MAP

2.1 Property Location and Size

The LeClerc Creek Wildlife Area in northeast Washington, is located in Pend Oreille County along the east side of the Pend Oreille River; about 25 miles northwest of Newport and 65 miles northwest of Spokane. It is centrally located on that portion of the river between Albeni Dam at Priest River, Idaho and Box Canyon Dam north of Ione, Washington. Just south of the area is a small Indian Reservation at Usk. The wildlife area was established by the Washington Department of Fish and Wildlife in 1972. The four land units totaling 614 owned acres were purchased with Pitman-Robertson and State Wildlife funds. The majority of the area is forested and is managed for a variety of wildlife habitat improvements and public recreation opportunities.

Figure 1. LeClerc Wildlife Area



2.2 Purchase History and Purpose

The LeClerc Creek area was booming with logging activity in the early 1900's. A logging railroad and log flumes were used on the main stem of LeClerc Creek and several tributaries. Much of the old growth timber was removed between 1915 and 1930. Livestock grazing, mostly by sheep, began in the 1920's.

The northeast corner of the state has long been a destination for hunters and other outdoor enthusiasts. Forage re-growth following the 1929 fires resulted in a flourishing deer population during the 1930's and 1940's. In February 1939, two men counted 235 white-tailed deer on LeClerc Creek in one day. By the late 1940's, thick stands of brush and lodgepole pine began taking over former openings and deer numbers diminished. A small population of elk was released nearby and became established during the 1950's.

The department first proposed purchasing 22,768 acres in the LeClerc Creek vicinity in 1948 to enhance habitat for big game. Acquisition was delayed until 1972 with only 614 acres purchased. Shortly afterward, the department initiated a study to determine what forage species would be most beneficial to big game on the area. A short-lived shrub planting and farming program was highly successful in attracting wildlife. Monitoring was then conducted to estimate big game numbers and forage utilization on the area.

An early management plan identified forest manipulation as a tool to enhance the area for elk and deer. Budget reductions from the mid 1970's through the 1980's resulted in minimal management of the area. Formerly open meadows were now being taken over by lodgepole pine and noxious weeds.

In the mid-1990's, new management plans were written for many wildlife areas across the state. A draft management plan was completed for the LeClerc Creek Wildlife Area in early 1997. Several public issues and department management proposals were outlined in this plan including additional land purchases for habitat continuity, grizzly bear recovery, deer and elk winter range improvements, use of prescribed fire, maintenance of forest openings and meadows to benefit game and non-game species, upland bird and waterfowl habitat development, weed control and increased recreational opportunities.

2.3 Ownership and Use of Adjacent Lands

Much of the adjacent lands are privately owned and sparsely populated. The US Forest Service manages significant lands in the vicinity primarily for livestock grazing and commercial timber production. Agriculture is confined to the Pend Oreille Valley lowlands. General legal descriptions for the LeClerc Creek Wildlife Area are in the table below.

TOWNSHIP	RANGE	SECTION
35 NORTH	43 EAST	1,12
35 NORTH	44 EAST	6,18,28,29,32,33
39 NORTH	43 EAST	31

2.4 Funding

Funding for management of the wildlife area comes from State General Funds and Pittman-Robertson Federal Aid in Wildlife Restoration Funds. LeClerc Creek **and** Sherman Creek Wildlife Areas are funded using one PR and one state funding allotment for the management of both areas. The annual PR and state funding amounts are \$35,303 and \$14,018 respectively. These funds support all operations and maintenance activities including salaries and are divided between the two wildlife areas to accomplish management goals.

Two staff positions are supported:
0.5 FTE Fish and Wildlife Biologist 2
7 month Habitat Technician 1

The Department will, as part of the implementation of this plan, submit grant proposals and applications and identify other strategies to address unfunded management needs on the wildlife area.

2.5 Climate

The climate in the Pend Oreille River valley is influenced by the Pacific Ocean in summer and Canadian cold fronts in winter. Normal summer temperatures reach 85 to 90 degrees F, while winter averages 15 to 20 degrees. Annual precipitation can be as high as 25 inches of rain and 70 inches of snow.

2.6 Soils and Geology

The elevation in the vicinity varies from 2,000 feet along the Pend Oreille River to more than 3,500 feet on the ridges. Moderate slopes with rounded summits are the result of glacial activity during the last ice age. The soils are thin; consisting mostly of Springdale silt and glacial clays.

2.7 Hydrology and Watersheds

The LeClerc Creek watershed located in the Selkirk Mountains of Pend Oreille County, Washington drains 66,110 acres into the Pend Oreille River. The Pend Oreille River flows north into Canada before entering the Columbia River, which drains to the Pacific Ocean. The watershed flows mostly south whereas most other Pend Oreille tributaries run east and west. LeClerc Creek, East Branch LeClerc Creek, West Branch LeClerc Creek and the Dry Canyon sub-basin (which has no surface connection to LeClerc Creek) are the main drainages within watershed.

2.8 Fire History

The majority of the LeClerc Creek watershed was burned by a series of fires between 1917 and 1934. The most significant of these fires occurred in the summer of 1929, which burned much of the area down to the soil. Deciduous shrubs and lodgepole pine thickets flourished following these fires. Forest succession has led the area back to mixed forest habitat. 75 years of aggressive fire suppression on forested lands throughout the west have increased fuel loads and modified habitats. Cooperation between WDFW and other land management agencies in the use of prescribed fire has been and should continue to be used as a habitat management tool.

2.9 Vegetation Characterization

The vegetation on the area is typical of mixed coniferous forest habitat types. Riparian, deciduous shrub understory, meadow and open and closed forest canopy habitats are most common. Forage

re-growth following the 1929 fires resulted in a flourishing deer population during the 1930's and 1940's. In February 1939, two men counted 235 white-tailed deer on LeClerc Creek in one day. By the late 1940's, thick stands of brush and lodgepole pine began taking over former openings and deer numbers diminished. Over the last several decades, lodgepole pine and weeds have overtaken much of the open meadow habitat in the area due to the lack of sufficient management funding. The variety and distribution of vegetation at LeClerc Creek provide hiding, escape and thermal cover, shade, foraging and nesting sites, perches, and water sources. Often these highly productive communities contain plant and/or wildlife species that are sensitive, endangered or threatened. Statewide management goals outlined by WDFW as well as goals specific to LeClerc Creek Wildlife Area will be discussed in this document to address these issues.

2.10 Important Habitats

Mixed Coniferous Forest- Much of the land in the LeClerc Creek area is important winter range for deer and elk; and a portion of the wildlife area lies within the Grizzly Bear Recovery Area. Progressive forest management of uneven-aged timber stands should continue in order to increase wildlife diversity and achieve priority management objectives stated herein.

Riparian- Conservation of riparian areas along the Pend Oreille River and associated drainages provides clean water, cover, travel corridors and other important habitats for terrestrial and aquatic wildlife. Cooperation with other WDFW programs and neighboring public and private land managers will ensure ongoing riparian health.

Snags and Logs- This habitat type provides forage and shelter for a large variety of wildlife at LeClerc Creek. Pileated Woodpecker and other cavity-dependent species, black bear, forest grouse, small passerines and a wide variety of invertebrate life benefit from forest management practices which increase the density of standing dead and downed woody material.

2.11 Fish and Wildlife

Wildlife diversity is of primary importance to the goals and strategies guiding WDFW's management efforts. LeClerc Creek Wildlife Area hosts many species of wildlife that depend on mixed coniferous forest habitat and the associated habitats described above.



White-tailed Deer

A diverse mix of wildlife can be found at LeClerc Creek. Bird species found here include bald eagle, osprey, Cooper's hawk, white-headed woodpecker, Tundra swan, common loon, wild turkey and ruffed grouse. Mammals include mule and white-



Townsend Chipmunk

tailed deer, grizzly and black bears, cougar, coyote, mink, badger, otter, chipmunk, squirrel, various rodents and numerous bats. In 1970, 26 elk were transplanted from Yakima to the West Branch of LeClerc Creek, with an additional release from the Hanford area in 2000. Expansion of elk to other areas of Northeast Washington began about the same time as the original release at LeClerc Creek. Historically, the river has produced a spiny ray and eastern brook trout fishery. Threatened, endangered, sensitive and candidate wildlife species that occur or potentially use the wildlife area are listed in **Appendix 5**.

2.12 Cultural Resources.

Cultural, geological, and other non-renewable resources are protected, and may not be removed unless such removal is beneficial to wildlife, habitat, or the Wildlife Area, or for scientific or educational purposes. WDFW will coordinate with the appropriate agency of jurisdiction for the protection of such resources. Past issues have included the removal of various rock formations, Native American artifacts, plants, seeds, and other items by members of the public.

CHAPTER 3. MANAGEMENT OBJECTIVES, ISSUES & STRATEGIES

Statewide goals and objectives listed in chapter one shape management priorities on wildlife areas. Specific wildlife area information including why the area was purchased, habitat conditions, species present, and public issues and concerns are evaluated to identify wildlife area activities or strategies. *Public issues from past planning efforts and the Citizens Advisory Group are noted in italics and are captured in Appendix 1.*

Objectives and associated strategies or tasks specific to LeClerc Creek Wildlife Area are listed where appropriate under applicable agency objectives. Unfunded needs are underlined.

Agency Objective: Protect, Restore & Enhance Fish and Wildlife and Their Habitats.

1. Maintain big game populations

One of the management objectives at LeClerc Creek Wildlife Area is to protect habitat for deer and elk residing on winter range. However, Grizzly Bear, Bald and Golden eagles, osprey, various woodpeckers, songbirds, ruffed grouse and other species are important to forested habitat. Many of the activities planned for management of big game will benefit these other species.

A. Strategy: Use timber sales and pre-commercial forest management practices to achieve desired forage/cover ratios within key winter range. Use commercial logging as well as a schedule of understory thinning to create openings, particularly in thick stands of lodgepole pine. Cooperate with WDFW state forester to develop a long-range plan prioritizing stands appropriate for such activity. Use timber sale receipts to pay for habitat improvements following logging.

B. Strategy: Conduct controlled burns, as appropriate, to dispose of timber slash and improve forage quality and quantity. Seed areas to highly desirable winter forage species such as evergreen and red-stemmed ceanothus and serviceberry prior to burning. Seed skid trails and slash burns with clover.

C. Strategy: Plant conifers and deciduous shrubs along roads and other forest openings and cottonwood and shrubs along the river to increase available hiding and thermal cover for deer and elk.

2. Improve and maintain fish populations

A. Strategy: Work with the Kalispel Tribe, USFWS, USFS and other land managers to reduce sediment loads to LeClerc Creek and the surrounding drainages.

Timeframe: Ongoing.

3. Manage for upland birds

Upland birds at LeClerc Creek Wildlife Area include ruffed grouse and wild turkey. These species provide hunting and wildlife viewing opportunities for many visitors each year.

A. Strategy: See agency objective: Protect, Restore & Enhance Fish and Wildlife and Their Habitats. Sub-objective 1 (will improve foraging and nesting habitat for ruffed grouse and wild turkey.)

B. Strategy: Mow 2 acres of vegetative strips or plots annually to increase succulent forage and provide multiple layers of foraging/brood cover. Timeframe: Annually.

4. Manage for species diversity

Develop and maintain quality habitat that will provide habitat for a diversity of species.

A. Strategy: Determine species use by performing surveys for breeding birds, amphibians, or explain what general rules will apply so as not to indirectly create threats to intrinsic species. Timeframe: Annually.

B. Strategy: Where appropriate, plant open meadows dominated by a monoculture of smooth brome to a variety of grasses, forbs and shrubs to increase habitat for game and non-game species; and protect these areas from vehicle traffic by fencing them. Add specific goals to the management plan that target non-game species.

C. Strategy: *Place more nesting boxes near open meadows throughout the wildlife area.* Remove dense stands of young trees encroaching on meadows. Open meadows with a few scattered trees provide foraging habitat for Western Bluebirds and other passerines. Explore opportunities for volunteers to conduct annual breeding bird surveys for WDFW. Timeframe: Annually.

5. Protect and restore riparian habitat

The agency has prioritized riparian habitat management and protection. Riparian areas provide habitat for a large diversity of fish and wildlife species, for high densities of animals, for important breeding areas and movement corridors.

A. Strategy: Protect and enhance riparian habitats along the river by planting shrubs and cottonwood trees within 200 feet of the shoreline to provide for layers of cover and bank stabilization.

6. Protect and manage other species

The projects outlined in this section will be implemented in cooperation with USFWS and the Kalispel Tribe.

A. Strategy: Artificial snag recruitment or placement for eagle/osprey nesting and perching sites along the river (Woods parcel and other known nesting/feeding areas). Options may include transplanting of snags, ringing trees to create snags and placing poles with nesting platforms. Plant cottonwoods for long term natural recruitment of nesting and feeding habitat.

B. Strategy: Create potholes and ponds in meadows along the river to improve nesting and brooding habitat for waterfowl. Timeframe: Project planning 2007, implement in 2008-2009.

C. Strategy: Improve habitat for Pileated, Lewis' and other woodpeckers by using forest management practices that will recruit the proper size, distribution and density of snags for nesting sites and foraging habitat over the long term. Timeframe: Pending funding of Agency Objective: Protect, Restore & Enhance Fish and Wildlife and Their Habitats. Sub-objective 1.

D. Strategy: Grizzly Bear management. The 340-acre Dry Canyon parcel is within the Grizzly Bear Recovery Area. Limit access and interaction with bears with road closures. Educate the public with signage concerning bear identification/behavior and proper sanitation of campsites to reduce negative interactions with the bears. Cooperate with USFS and consider using their guideline on this issue as a model for our lands. Timeframe: Fall 2006, as funding allows.

Agency Objective: Provide Sustainable Fish and Wildlife-Related Recreational and Commercial Opportunities Compatible With Maintaining Healthy Fish and Wildlife Populations and Habitats. Improve the Economic Well-Being of Washington by Providing Diverse, High Quality Recreational and Commercial Opportunities.

1. Provide public access compatible with fish, wildlife and habitat protection.

Access for hunting, fishing, wildlife viewing and other activities is an agency priority. However, access and recreation must be controlled to protect fish and wildlife resources and to comply with federal and state regulations. *Public input clearly emphasizes the importance of providing recreational access, with protections for the resource.*

A. Strategy: Provide open roads where no resource issues exist and when there are sufficient resources to maintain them. Timeframe: Ongoing.

B. Strategy: Close road access where road conditions are not safe or where conditions have a significant negative impact on fish and wildlife. Timeframe: Complete by November 2007.

C. Strategy: Provide hunting opportunities for persons with disabilities. This may include, on a case-by-case basis, allowing disabled hunters drive-in access to the center of the wildlife area, on established trails. Timeframe: Ongoing.

D. Strategy: Introduce habitat and wildlife management practices to school groups, Boy Scouts and other local interest groups to further education and support for WDFW programs. Timeframe: Seasonally.

Agency Objective: Ensure WDFW Activities, Programs, Facilities and Lands are Consistent With Local, State and Federal Regulations that Protect and Recover Fish, Wildlife and Their Habitats

1. Manage weeds consistent with state and county rules, and to protect and recover fish and wildlife and their habitats

Weed control is required by state law to protect public economic and natural resources. Invasive weeds are one of the greatest threats to fish and wildlife habitat quality. Cooperative weed control efforts are encouraged to improve efficacy and to minimize impacts on adjacent landowners as part of the agency's good-neighbor priority.

A. Strategy: Produce and implement weed management plan, (**Appendix 2**) to include weed identification and inventory, risk/threat, control priorities, and monitoring. Timeframe: Developed in 2006, annual updates beginning 2007.

B. Strategy: Coordinate weed efforts with federal, state and local entities to improve efficacy and minimize costs. Timeframe: Ongoing.

C. Strategy: Control weeds in old agricultural fields, and re-plant to perennial native vegetation as appropriate. Timeframe: Ongoing.

D. Strategy: Control weeds along power line rights-of way and roads to reduce the spread of weeds from one area to another. Timeframe: Annually.

E. Strategy: Continue to manage weed populations of special concern including diffuse knapweed, leafy spurge and Dalmatian toadflax and adjust management as needed. *Treat and re-seed weed infestations with desirable vegetation using cultural, mechanical chemical and biological methods.* Continue cooperative projects with Pend Oreille County Extension office within the bio-control program. Timeframe: Ongoing.

F. Strategy: Ensure staff is properly trained and licensed, including annual refresher training, to use weed control chemicals. Maintain all required weed control records.
Timeframe: Annually.

2. Manage species and habitats in compliance with the Endangered Species Act and Washington State fish passage, road management and forest practice rules

Federal law requires the protection and management of threatened and endangered species.

A. Strategy: Protect buffers adjacent to wetlands and riparian habitat. Timeframe: Ongoing.

B. Strategy: Specific strategies associated with ESA species present or potential.
Timeframe: Ongoing.

3. Provide fire management on agency lands (Appendix 3)

Fire suppression agreements must exist for all agency lands to protect the people of Washington, and to protect natural and economic resources of the agency and adjacent landowners.

A. Strategy: Contract with local, state or federal entities to provide fire suppression support on the LeClerc Creek Wildlife Area. Timeframe: Ongoing.

B. Strategy: Provide “Red Card” fire training, and annual refresher training, for wildlife area manager and assistant manager. Develop a list of fire responsible individuals. Timeframe: Training completed 2005, refresher complete 2006 and maintain annually.

4. Protect cultural resources consistent with state and federal law

Federal and state law requires an assessment of cultural resources on agency lands prior to activities that may impact those resources. A comprehensive cultural resource survey has been conducted for the wildlife area.

A. Strategy: Assess cultural resource value (historic and archaeological) of all structures before renovation or removal. Timeframe: completed 2004.

B. Strategy: Perform cultural resource review and assessment before digging-including posts for new fence line, parking lots, toilets, buildings, etc. Timeframe: ongoing.

5. Pay county PILT and assessment obligations

State law requires the agency to pay PILT and county assessments.

A. Strategy: Pay PILT and assessments to counties. Timeframe: annually.

Agency Objective: Provide Sound Operational Management of WDFW Lands, Facilities and Access Sites.

1. Maintain facilities to achieve safe, efficient and effective management of the wildlife area.

A. Strategy: Maintain office to provide a safe and effective workplace. Provide utilities, phone, computers, etc. Timeframe: Ongoing.

B. Strategy: Maintain all fences to prevent trespass livestock and unauthorized vehicular traffic, thereby protecting habitat. Timeframe: Ongoing.

C. Strategy: Survey ownership and build additional fence if needed to protect habitat. Timeframe: Ongoing.

D. Strategy: Maintain roads and trails to prevent resource damage and provide access for staff. This includes activities such as weed control, grading, and re-graveling as appropriate. Timeframe: Ongoing.

E. Strategy: Maintain parking areas to prevent resource damage and provide access. Sign all parking lots as appropriate. Timeframe: Annually.

F. Strategy: Identify and explain other capital needs.

Wildlife area staff will address the capital needs and submit them to the district team and program staff. Timeframe: July of 2006.

2. Maintain other structures and physical improvements

A. Strategy: Maintain all signs, gates, culverts, water structures, wells, irrigation systems to perform operation and maintenance of area. Timeframe: Annually.

3. Maintain equipment

A. Strategy: Service all equipment including trucks, tractor and implements, weed sprayers, trailers, etc. Request replacement equipment when needed. Timeframe: Ongoing.

B. Strategy: Rent equipment when it is more efficient to do so, or when needed. Timeframe: As needed.

4. Pursue funding opportunities

A. Strategy: Apply for grants and other funding opportunities consistent with planned priorities to supplement funding. Timeframe: As needed.

B. Strategy: Enroll lands in CRP and other federal programs when appropriate, to generate revenue and accomplish desired habitat conditions. Timeframe: As appropriate.

C. Establish or maintain sharecropping agreements with neighbors, to address artificial cultivation needs and generate additional revenue to support enhanced O&M. Timeframe: Ongoing.

5. Perform administrative responsibilities

A. Strategy: Develop and monitor budgets. Track expenditures when purchasing supplies and materials. Timeframe: Annual and Ongoing.

B. Strategy: Supervise employees. Timeframe: Ongoing.

C. Strategy: Complete administrative and fiscal reports as required. Timeframe: Annual and Ongoing.

D. Strategy: Attend project/mitigation related meetings and conduct local public outreach activities. Timeframe: As appropriate.

E. Strategy: For criminal or civil unauthorized activities found to occur or have occurred on the area, take appropriate actions to report/resolve problems. Issue incident reports as necessary. Timeframe: As necessary.

F. Strategy: Maintain leases on DNR lands within the wildlife area. If/when these sections' ownership is turned over to WDFW, assist with the transfer as appropriate. Timeframe: As needed.

6. Protect and apply water rights for best use

Water rights can impact wildlife area operations including food plots, restoration projects, etc. Water use can also reduce instream volumes for fish and other animals.

A. Strategy: Identify and record all water rights and uses of water. Timeframe: Completed see (**Appendix 4**).

B. Strategy: Move all unneeded water rights permanently or temporarily into the State Trust Water Rights Program. Timeframe: Completed see (**Appendix 4**).

CHAPTER 4. PERFORMANCE MEASURES, EVALUATION AND UPDATES TO THE LECLERC CREEK WILDLIFE AREA PLAN

Wildlife area plan performance measures are listed below. Accomplishments and desired outcomes will be evaluated to produce an annual performance report. The wildlife area plan is a working document that will evolve as habitat and species conditions change, as new regulations are enacted, and as public issues and concerns change. Plan updates will address these changes.

1. The LeClerc Creek Wildlife Area performance measures in 2007 include:

- Work with WDFW forester and local staff biologists to ensure timely implementation of forest management practices that accomplish PHS objectives specific to the LeClerc Creek Wildlife Area.
- Appropriate weed control on the wildlife area, with focus on areas adjacent to roads. Meet the goals for 2006 outlined in the weed management plan. Concentrate control efforts on Diffuse Knapweed, Dalmatian Toadflax and Leafy spurge populations. Review the year's weed control work, using reports generated, and compare effort and success to previous years' weed control activities.
- Mow 2 acres of forest openings to increase succulent forage.
- Expand open meadows by 1 acre and install 10 nest boxes for bluebirds.
- Develop and implement Grizzly Bear management guidelines by August 31, 2006.
- Maintain all signs, parking areas and access sites.
- Maintain current licenses and certifications required for staff.
- As habitat surveys are conducted and analyzed, determine general trend in habitat quality. If quality is declining, attempt to determine cause of decline and develop strategies to improve habitat quality.
- Plans completed and updated as appropriate, including WA plan and all listed appendices.
- Maintain current fire protection contracts.

2. Annual Evaluation of Performance.

Evaluate performance measures and produce an annual report. At the beginning of each calendar year, the manager will convene the CAG and district team to assess wildlife area specific performance measures and accomplishments that will be used to develop the annual plan update. This update will be an attachment to the plan.

3. Annual Plan Update.

As projects are completed and new issues arise, this plan will be updated, without needing to be re-written. With CAG and District Team input, the plan will continually reflect the strategies, goals and objectives of the current year.

APPENDIX 1. PUBLIC ISSUES AND CONCERNS

The planning process included meetings with the Citizens Advisory Group (CAG) and District Team (DT) to obtain input helpful in guiding management of the wildlife area. Draft documents of an introduction and history of the wildlife area as well as WDFW goals and objectives were distributed for review and discussion. Listed below are issues and concerns from previous planning efforts and meetings with the DT and CAG held in 2005. Issues identified by the District Team are underlined.

Issue A. Access/Recreation

- Consider using language in the plan that addresses the use of horses, ATV's and mountain bikes when developing guidelines for public access.
- Include wildlife viewing opportunities along the Pend Oreille River.
- Post "Please Don't Litter" (describe fines??) signs along main roads.
- Post and maintain signs in Dry Canyon to educate the public about Grizzly bears.

Issue B. Wildlife Area Management

- Add management activities that benefit moose and elk to the plan.
- Add goals to the management plan that are targeted to non-game species.
- Place more bird boxes throughout the wildlife area.
- Make more use of volunteer organizations and local school groups for project work.

Issue C. Habitat

- Plant willow cuttings in wetter areas.
- Plant more food plots throughout the wildlife area.

Issue D. Weed Control

- Continue using a variety of weed control methods (chemical, mechanical, cultural, biological).

APPENDIX 2. LECLERC CREEK WILDLIFE AREA WEED MANAGEMENT PLAN

Weed Control Goals on WDFW Lands

The goal of weed control on Department lands is to maintain and improve the habitat for wildlife, meet legal obligations, provide good stewardship and protect adjacent private lands.

Weed control activities and restoration projects that protect and enhance fish and wildlife populations and their habitats on Department lands are a high priority. When managing for specific wildlife species on our lands the weed densities that trigger control are sometimes different than on lands managed for other purposes (e.g. agricultural, etc.). For example, if a weed is present at low densities and does not diminish the overall habitat value, nor pose an immediate threat to adjacent lands, control may not be warranted. WDFW focuses land management activities on the desired plant species and communities, rather than on simply eliminating weeds.

Control for certain, listed species is mandated by state law (RCW 17.10 and 17.26). WDFW will strive to meet its legal obligation to control for noxious weeds listed according to state law (Class A, B-Designate).

Importantly, WDFW will continue to be a good neighbor and partner regarding weed control issues on adjacent lands. Weeds do not respect property boundaries. The agency believes the best way to gain long-term control is to work cooperatively on a regional scale. As funding and mutual management objectives allow, WDFW will find solutions to collective weed control problems.

Weed Management Approach

State law (RCW 17.15) requires that WDFW use integrated pest management (IPM), defined as a coordinated decision-making and action process that uses the most appropriate pest control methods and strategy in an environmentally and economically sound manner to meet agency programmatic pest management objectives, to accomplish weed control. The elements of IPM include:

Prevention- Prevention programs are implemented to keep the management area free of species that are not yet established but which are known to be pests elsewhere in the area.

Monitoring- Monitoring is necessary to implement prevention and to document the weed species, the distribution and the relative density on the management area.

Prioritizing- Prioritizing weed control is based on many factors such as monitoring data, the invasiveness of the species, management objectives for the infested area, the value of invaded habitat, the feasibility of control, the legal status of the weed, past control efforts, and available budget.

Treatment- Treatment of a weeds using biological, cultural, mechanical, and chemical control serves to eradicate pioneering infestations, reduce established weed populations below densities that impact management objectives for the site, or otherwise diminish their impacts. The method used for control considers human health, ecological impact, feasibility, and cost-effectiveness.

Adaptive Management- Adaptive management evaluates the effects and efficacy of weed treatments and makes adjustments to improve the desired outcome for the management area.

The premise behind a weed management plan is that a structured, logical approach to weed management, based on the best available information, is cheaper and more effective than an ad-hoc approach where one only deals with weed problems as they arise.

Weed Species of Concern on LeClerc Creek Wildlife Area:

Spotted knapweed (*Centaurea maculosa*), Diffuse knapweed (*Centaurea diffusa*), Dalmatian toadflax (*Linaria genistifolia*), Leafy Spurge (*Euphorbia esula*), St. John’s wort (*Hypericum perforatum*).

Table 1. Sherman Creek Wildlife Area Weeds Including the State and County Weed Class Listing and Approximate Number of Acres Present.

Weed Species	2006 State Weed Class	2006 Pend Oreille County Weed Class	Wildlife Unit(s)	Acres Present**
Spotted knapweed	B	B	All Units	5
Diffuse knapweed	B	B	All Units	100
Dalmatian toadflax	C	B	All Units	10
Leafy Spurge	B	B-Designate	All Units	14
St. John’s wort	C	C	All Units	75
Canada thistle	C	C	All Units	5
General weeds	(n/a)	(n/a)	All Units	5

** The number of acres listed represents an estimate of acres occupied if all populations were combined into one solid stand of the weed.
B – Designate: These weeds occur at a few sites within the county, are considered an economic threat, and the landowner will control them annually to prevent seed production until eradication is secured.
 B and C: These classes are mostly common in the county and will be controlled on right-of-ways and other areas where requested with the overall goal of containment and reducing the negative impact to an acceptable level.
 Source: 2006 Pend Oreille County Noxious Weed List

Detailed descriptions, natural history and management information for each weed species listed above (with the exception of “general weeds”) was taken from the Washington State Noxious Weed Control Board web site: http://www.nwcb.wa.gov/weed_list/weed_listhome.html and The Nature Conservancy’s Invasive Species Initiative web site: <http://tncweeds.ucdavis.edu/index.html>. Management for individual weed species can be found in the following “Weed Species Control Plan” (WSCP) sections.

SPOTTED KNAPWEED CONTROL PLAN

Scientific name: *Centaurea maculosa*
Updated: 2006

Common name: Spotted knapweed

DESCRIPTION: Spotted knapweed is an eight to 48 inch tall perennial with a stout tap root. The plant is hairy and rough with a somewhat woolly appearance. The leaves, which are once or twice divided into lobes on each side of the center vein, are blue-gray in color. The over-wintering rosettes bolt in early summer, producing 1-15 stems. The stem leaves, which have a few lobes or are linear, become smaller toward the top of the plant. The pink to purple flowers (rarely white) occur in egg-shaped to oblong heads, which are solitary at the ends of clustered branches. The bracts of the flower heads have obvious veins, with a black spot on the tip. The lower and middle bracts are egg-shaped, and green to brown below the tip. The tip and upper bract margin have a soft spine-like fringe, with the center spine being shorter than the others. White-flowered plants usually lack the dark spot on the bract tip. The plant flowers from June to October, producing black to brown, oval seeds with pale lengthwise lines, and a ring of slender, chaffy bristles.

MANAGEMENT INFORMATION:

Herbicide can be an effective tool for control and applicators should refer to the PNW Weed Management Handbook, or other reputable resources, for product recommendations and timing.

Response to Cultural Methods: Grazing, mowing, and tillage: seasonal.

Biocontrol Potential Presently, there are ten biocontrol agents that have been released on spotted knapweed in Washington. *Agapeta zoegana* (root-boring moth), *Bangasternus fausti* (seed head weevil), *Chaetorellia acrolophi* (seed head fly), *Cyphocleonus achates* (root-boring/gall weevil), *Larinus obtusus* (seed head weevil), *Terellia virens* (seed head fly) are not presently collectable, and their effectiveness is unknown. *Larinus minutus* (seed head weevil) is available in limited quantities for redistribution. *Metzeria paucipunctella* (seed head moth), *Urophora affinis* (seed head gall fly), and *Urophora quadrifasciata* (seed head gall fly) are available for mass collections.

CURRENT DISTRIBUTION ON THE SITE

Widely scattered throughout all units on the wildlife area.

ACRES AFFECTED BY WEED: ~5

WEED DENSITY: Widely scattered.

GOALS

Continue to reduce the current population.
Prevent new occurrences.

OBJECTIVES

Treat all known populations.
Survey nearby areas for pioneering infestations.

ACTIONS PLANNED

Continue treatment of all infestations with herbicide to prevent seed production.
Monitoring will continue on an annual basis.

CONTROL SUMMARY AND TREND

Knapweed control efforts at LeClerc Creek have focused on reducing plant density in scattered patches and stop seed production annually. Patch size and plant have been reduced over time using a combination of chemical and cultural controls.

DIFFUSE KNAPWEED CONTROL PLAN

Scientific name: *Centaurea diffusa*

Common name: Diffuse knapweed

Updated: 2006

DESCRIPTION: Diffuse knapweed is an 8 to 40 inch tall, biennial or short-lived perennial species, with a long tap root. The single, upright stem produces several spreading branches. The basal leaves are short-stalked and divided into lobes on both sides of the center vein. The stem leaves are stalkless, becoming smaller and less divided near the top of the stem. The flowers, which are generally white (sometimes pink or lavender), occur in urn-shaped heads that grow in clusters at the ends of the branches. The bracts of the flower heads are leathery, with obvious veins. The lower and middle bracts are yellowish-green with a buff or brown margin; they are edged with a fringe of spines plus a longer, spreading spine at the tip.

MANAGEMENT INFORMATION:

Herbicide can be an effective tool for control and applicators should refer to the PNW Weed Management Handbook, or other reputable resources, for product recommendations and timing.

Response to Cultural Methods: Cultivation will eliminate diffuse knapweed. Grazing or mowing delays flowering and may increase the number of stems, thereby increasing seed production.

Biocontrol Potential: Five biocontrol agents have been established on diffuse knapweed in Washington. Two seed head weevils, *Bangasternus fausti* and *Larinus minutus*, do not occur in collectable numbers at present. *Urophora affinis* (seed head fly), *Urophora quadrifasciata* (seed head fly), and *Sphenoptera jugoslavica* (root boring/gall beetle) are available for mass collections.

CURRENT DISTRIBUTION ON THE SITE

Widely scattered throughout the wildlife area. We expect roadside infestations to continue for the foreseeable future regardless of control efforts, due to introduction of seeds from vehicles, hunters' clothing, etc.

ACRES AFFECTED BY WEED: ~100 **WEED DENSITY:** Moderate: widely scattered with some dense patches.

GOALS

Control current populations.

Prevent new occurrences.

OBJECTIVES

Annually inspect roadsides and known areas of infestation for new plants.

Treat as much of known infested acreage as funding allows each year with residual herbicide before plants produce seed.

Survey nearby areas for pioneering infestations.

ACTIONS PLANNED

In 2006, herbicide application with Tordon 22K.

Monitoring will continue on an annual basis on all units.

CONTROL SUMMARY AND TREND

Knapweed control efforts at LeClerc Creek have focused on reducing plant density in scattered patches and stop seed production annually. Patch size and plant density have been reduced over time using a combination of chemical and cultural controls.

DALMATIAN TOADFLAX CONTROL PLAN

Scientific name: *Linaria genistifolia*

Common name: Dalmatian toadflax

Updated: 2006

DESCRIPTION: (Following information is taken from the website:

<http://tncweeds.ucdavis.edu/esadocs/Linadalm.html>): Mature dalmatian toadflax plants grow to be between 0.8 to 1.5 m tall. Leaves are broad, 2-5 cm long, ovate to ovate-lanceolate, 1-2.5 cm long and are alternate, generally clasping but crowded. Flowers are bright yellow. *Linaria genistifolia* ssp. *dalmatica* typically flowers from May to August. A mature plant can produce up to 500,000 seeds annually, and they can remain dormant for up to ten years. Dalmatian toadflax produces seed from July to October.

MANAGEMENT INFORMATION:

Herbicide can be an effective tool for control and applicators should refer to the PNW Weed Management Handbook, or other reputable resources, for product recommendations and timing.

(Following information is taken from website:

<http://tncweeds.ucdavis.edu/esadocs/Linadalm.html>):

Successful control can be obtained by pulling, or killing the plants with herbicide, before toadflax seed production begins. Since the plant also spreads through vegetative propagation, and the seeds can remain dormant for up to ten years, this process must be repeated every year for at least ten years to completely remove a stand. Competitive perennial grasses and forbs should be planted to utilize water and nutrients that would otherwise be readily available to toadflax.

The key to managing *Linaria genistifolia* ssp. *dalmatica* is to: 1) eliminate or greatly reduce seed production from established individuals (by cutting or pulling seed stalks prior to seed set, or by using insects to destroy flowers, seeds, or damage plants sufficiently so that no or few seeds are produced); and 2) destroy toadflax seedlings that arise from the soil seed bank before these plants become established (as above, plus herbicide).

Several insect species have been introduced as biological control agents for both toadflax species but none of them completely eliminate infestations. Herbicide treatment, if applied at the right time, can significantly reduce toadflax seed production. Cutting, mowing, and disking of toadflax plants can be effective on agricultural lands if repeated annually.

CURRENT DISTRIBUTION ON THE SITE

There are small populations throughout the wildlife area.

ACRES AFFECTED BY WEED: ~10

WEED DENSITY: Low.

GOALS

Continue to reduce population size and eliminate stray plants.

Prevent new occurrences.

OBJECTIVES

Treat all plants found each year with herbicide before they produce seed.
Survey nearby areas for pioneering infestations.

ACTIONS PLANNED

Herbicide application to all populations in 2006.
Monitoring will continue on an annual basis.

CONTROL SUMMARY AND TREND

Spot spraying of widely scattered individual plants and small populations has controlled the spread of known infestations through 2005.

LEAFY SPURGE CONTROL PLAN

Scientific name: *Euphorbia esula*

Common name: Leafy Spurge

Updated: 2006

DESCRIPTION: Leafy spurge is a perennial plant ranging in size from 6 to 36 inches in height. *Euphorbia esula* is one of the first plants to emerge in the spring. Stem elongation is very rapid as daily temperatures increase from May through June. Seedlings may emerge when temperatures are near freezing (Biesboer, personal observation). Seedlings appear deep red or purplish because of anothocyanin production in the hypocotyl. As the growing season progresses some seedlings will appear to dry up and die but their underground parts will persist and produce adventitious buds especially near the hypocotylar end of the shoot (Raju 1975). The main seedling shoot usually does not survive and flower because of the rapid development of adventitious organs. It is replaced by an adventitious shoot that will mature into the flowering shoot. Inflorescences form on the main axis from May to the end of July with flowering and seed development again occurring for a short time in the fall, usually from axillary branches. Seed development and maturation continue for 4-6 weeks after the appearance of the last flowers with seed dispersal occurring into early August. The plant usually ceases to grow during the hottest and driest weeks of July and August. Stems from seedling or root buds generally do not flower the first year.

MANAGEMENT INFORMATION:

Leafy spurge, once established, will spread very rapidly, crowding out and shading desirable species. As patches develop, density reaches over 200 shoots/sq m in light soils, and up to 2000/sq m in heavy soils. Monitoring of areas with known or potential *Euphorbia esula* infestations is critical; adequate control is possible if management procedures are implemented in the early stages of infestation. 100% eradication of spurge is rarely achieved, but infestations can be reduced to manageable levels with the use of herbicides. Picloram is the most effective, and 2 lb/acre applied in the spring and again in fall will provide 85-90% control for several years. A less expensive and also very effective method is to mix picloram at .25 lb/acre with 2,4-D at 1 lb/acre. This mixture applied once a year in the spring will give 90-95% control after about five years. Whatever the treatment, it is important to realize that spurge cannot be controlled with a single herbicide treatment. Continuous surveillance and reapplication of the herbicide as shoot control decreases must continue for at least 10 years, and probably a good deal longer. Prescribed burning in conjunction with herbicide application can provide excellent control of leafy spurge in open areas. Results are apparently very good whether burning is followed by spraying or vice versa, but as with other methods, repeated treatments are necessary over at least a 5-10 year period.

Biocontrol Potential: Biological control is being actively researched at many locations and since the 1960's several insects have been released in certain locations, most notably the spurge hawkmoth, *Hyles euphorbiae*. Biocontrol agents alone have not so far been effective in controlling spurge populations, but may become valuable if several different insects can be successfully used together or in conjunction with other control methods. Research should focus on a highly integrated approach to spurge management, with the goal of reducing the amount of herbicides needed for adequate control.

CURRENT DISTRIBUTION ON THE SITE

There is one site on the Dry Canyon unit.

ACRES AFFECTED BY WEED: ~14

WEED DENSITY: moderate

GOALS

Continue to reduce the current population.
Prevent new occurrences.

OBJECTIVES

Treat the current population.
Survey nearby areas for pioneering infestations.

ACTIONS PLANNED

Continue annual treatment with herbicide to prevent seed production.
Monitoring will continue on an annual basis.

CONTROL SUMMARY AND TREND

Approximately 18 acres of leafy spurge was discovered on this site about 10 years ago; with a density of 10 plants/sq. ft. Aggressive annual herbicide application through 2005 has reduced the population size to 14 acres and plant density to 2 plants/sq. ft.

CANADA THISTLE CONTROL PLAN

Scientific name: *Cirsium arvense*

Common name: Canada thistle

Updated: 2006

DESCRIPTION: Canada thistle is a perennial herb with a deep-seated complex system of roots spreading horizontally, which give rise to aerial shoots. The one to four foot tall stems are slender, green, and freely branched. The leaves are alternate, sessile, and deeply lobed. The leaf margins have stiff yellowish spines. The heads are many and relatively small. The plants are dioecious (all flowers on a plant are either male or female). The flowers are purple. The fruits are about 1/8 inch long, somewhat flattened, and brownish with an apical circle of long hairs, these eventually falling. Four varieties of *C. arvense* have been recognized based on variation in leaf characters, texture, vestiture, segmentation, and spyness.

Canada thistle is a perennial herb with a deep-seated complex system of roots spreading horizontally which give rise to aerial shoots. The one to four foot tall stems are slender, green, and freely branched. The leaves are alternate, sessile, and deeply lobed. The leaf margins have stiff yellowish spines. The heads are many and relatively small. The plants are dioecious (all flowers on a plant are either male or female). The flowers are purple. The fruits are about 1/8 inch long, somewhat flattened, and brownish with an apical circle of long hairs, these eventually falling. Four varieties of *C. arvense* have been recognized based on variation in leaf characters, texture, vestiture, segmentation, and spyness.

MANAGEMENT INFORMATION:

Herbicide can be an effective tool for control and applicators should refer to the PNW Weed Management Handbook, or other reputable resources, for product recommendations and timing.

Response to Herbicides: Effective control can be achieved by using several broad-leaved herbicides that do not harm grasses. For more site-specific control recommendations, please refer to the latest edition of the Pacific Northwest Weed Control Handbook.

Response to Cultural Methods: Planting competitive crops, such as alfalfa and forage grasses can be very effective in controlling an infestation of Canada thistle.

Response to Mechanical Methods: Repeated tillage at 21-day intervals for about four months can be effective on minor infestations of Canada thistle. Repeated mowing to weaken stems and prevent seeding is also effective in low-level infestations.

Biocontrol Potentials: Many insects, a few nematodes, and the American Goldfinch have been reported to feed on various parts of Canada thistle. Most of these do very little damage. Three insects from Europe have been studied for biological control - *Altica carduorum* Guer (flea beetle), a leaf feeder, has not established itself well. Adults of the beetle *Ceutorhynchus litura* F. eat young thistle shoots, but do little damage. The fly, *Urophora cardui* L. is the most promising biological control agent. Eggs are laid in the terminal buds and galls develop which divert nutrients and stress the plant. Many microorganisms have been found associated with Canada thistle, but no potential biocontrol agents are known.

CURRENT DISTRIBUTION ON THE SITE

Found in very small patches on all units of the wildlife area.

ACRES AFFECTED BY WEED: ~5

WEED DENSITY: Low

GOALS

Control isolated populations and prevent new occurrences.

OBJECTIVES

Treat as many patches and individual plants as possible before they produce seed.

Survey nearby areas for pioneering infestations.

ACTIONS PLANNED

Continue spraying with herbicides such as Curtail or Tordon.

Monitoring will continue on an annual basis on all units.

CONTROL SUMMARY AND TREND

Several years of control efforts up through the 2005 season have kept Canada thistle from expanding on the wildlife area.

ST. JOHN'S WORT CONTROL PLAN

Scientific name: *Hypericum perforatum*
goatweed

Common name: St. John's wort,

Updated: 2006

DESCRIPTION: Saint Johnswort is an erect, opposite-leaved perennial herb, ranging from two to four feet tall arising from a taproot. The plant can have single or multiple stems. The reddish stems are smooth, somewhat two-edged, woody at the base, and branching out toward the top of the plant. The narrow, lance shaped leaves are about one inch long, stalkless with pointed tips. Each leaf is spotted with tiny translucent dots. Each flower has five yellow petals and many yellow stamens. The black dots often visible along the petal margins are glands containing hypericin. This red pigment is also visible in glands on leaf margins giving the leaf a perforated look. The inflorescence is a flat-topped cluster of many flowers found at branch ends. The extended flowering period is from May to late September. St. Johnswort spreads both by underground and aboveground creeping stems, and by seed.

MANAGEMENT INFORMATION:

Herbicide can be an effective tool for control and applicators should refer to the PNW Weed Management Handbook, or other reputable resources, for product recommendations and timing.

Response to Herbicides: Always refer to Pacific Northwest Weed Control Handbook when using herbicides for noxious weed control to check for timing and rates of application. ALWAYS READ THE LABEL. Repeated applications will be necessary. Biological control agents are recommended for large weed infestation sites.

Response to Cultural Methods: St. Johnswort seedlings will readily establish in disturbed situations that include roadsides, overgrazed pastures, or open rangeland where native or forage species do not offer any competition. The combination of site-specific range management which includes encouragement of beneficial plants species as well as a grazing management plan will prevent new infestations and reinfestations. (Piper 1997). A successful control program in Australia included cultivation, sowing a competitive grass species, and fertilization. (Campbell and Delfosse 1984 as cited in Piper 1997; Moore et al. 1989 as cited in Mitich 1994).

Response to Mechanical Methods: Pulling should only be considered an option on new or small infestation sites and repeated pulls will be necessary to ensure removal of the whole plant and any lateral roots. Do not leave plants at the site, since vegetative growth will occur, and the seed source will remain. Tillage is effective when repeated in croplands (Crompton et al. 1988 as cited in Piper 1997). Mowing is a limited option depending both on site accessibility and whether seed formation has occurred. Repeated cuts are necessary (Piper 1997).

Biocontrol Potentials: Two foliage beetles, *Chrysolina hyperici* and *C. quadrigemina* were released in California from 1945 to 1946, and established within two years. This was the first intentional release of biological control agents on a weed population in North America. (Holloway 1957 cited in Piper 1997). A root-boring beetle *Agrilus hyperici* and a leaf bud gall-forming midge *Zeuxidiplosis giardi* were released in 1950 to help the *Chrysolina* spp. (Holloway and Huffaker 1953 as cited in Piper 1997). These established California colonies became the source for

collections and distribution to *Hypericum perforatum* infestations throughout the western United States. Recently released and established is the moth *Aplocera plagiata*. (McCaffrey et al. 1995 cited in Piper 1997).

CURRENT DISTRIBUTION ON THE SITE: There are large infestations throughout Pend Oreille County. This weed is widely scattered throughout the wildlife area. We expect roadside infestations to continue for the foreseeable future regardless of control efforts, due to introduction of seeds from vehicles, hunters' clothing, infestations on neighboring lands etc.

ACRES AFFECTED BY WEED: ~75

WEED DENSITY: moderate, widely scattered patches

GOALS

Treat as much of known infested acreage as funding allows each year with residual herbicide before plants produce seed

Reduce current populations to allow increased competition from desirable vegetation.

Prevent new occurrences.

OBJECTIVES

Prioritize infestations to be treated.

Investigate biological control availability.

Treat as many plants as possible with herbicide before they produce seed.

Survey nearby areas for pioneering infestations.

ACTIONS PLANNED

Continue with herbicide treatments of priority infestations in 2006.

Monitoring will continue on an annual basis on all units.

CONTROL SUMMARY AND TREND

Funding has limited control efforts although herbicide treatments and cultural controls have controlled or reduced targeted populations through 2005.

GENERAL WEEDS CONTROL PLAN

Scientific name: *Many*

Common name: General Weeds

Updated: 2006

DESCRIPTION: General weeds describe mixed vegetation that interferes with maintenance, agricultural, or restoration activities, where keying plants to individual species is not appropriate. Examples of general weeds may include vegetation occurring along roadsides, parking areas, trails, and structures and include species like, cheatgrass, kochia, Russian thistle, etc. General weeds may also occur in agricultural fields, or comprise the dominant vegetation at a site identified for habitat restoration. These weed species includes cheatgrass, Jim Hill mustard, purple mustard, field bindweed, and others.

MANAGEMENT INFORMATION

Herbicide can be an effective tool for control. Applicators should refer to the PNW Weed Management Handbook, or other reputable resources, for product recommendations and timing, depending on the weed and desired management objectives.

Mechanical weed control may include mowing, burning, and/or plowing and disking of entire fields. Plowing and/or disking is required when preparing old farm fields for rehabilitation to native grass stands.

CURRENT DISTRIBUTION ON THE SITE

All public accesses and roadsides, and most old agricultural fields, on the wildlife area contain general weeds to varying degrees.

ACRES AFFECTED BY WEED: ~5

WEED DENSITY: Low

GOALS

Maintain public access

Reduce fire danger

OBJECTIVES

Treat high public use areas with residual herbicide to prevent seed production, and with broad-spectrum/low residual herbicide such as glyphosate to minimize green growth.

Monitor and treat agricultural fields using chemical and mechanical controls to prevent infestation and promote desirable vegetation.

ACTIONS PLANNED

In 2006, problematic portions of roadsides, parking lots, and access sites, will be treated with appropriate herbicides, to eliminate the production and spread of weed seeds and improve appearance and public access for the entire season.

CONTROL SUMMARY AND TREND

For the past several years up through the 2005 season, general weed control using a variety of controls has been a priority around parking areas, agricultural fields, campsites and interior access roads. Trend: control or reduction of general weeds in these areas.

APPENDIX 3. Fire Control

Responsible Fire-Suppression Entities: Fire response and suppression on the LeClerc Creek Wildlife Area falls within the jurisdiction of the Department of Natural Resources (DNR). Therefore, DNR must be contacted first, followed by an immediate call to other jurisdictions adjacent to the fire including the U.S. Forest Service. In some cases, where there are multiple landowners or fire responders, fire suppression activities may involve two or more fire fighting entities.

WDFW pays an annual fee to DNR for fire protection on WDFW lands. Fire suppression on WDFW forestlands is performed by DNR and/or U.S. Forest Service depending on the location of the fire, proximity to USFS lands and decisions made by fire management officials.

Department Fire Management Policy: It is the Departments policy that wildlife area staff members are not firefighters and should not fight fires. Wildlife Area staff are trained in fire fighting and fire behavior. However, staff will only provide logistical support and information regarding access to the Incident Commander of the responding fire entity.

Wildlife Habitat Concerns: The LeClerc Creek Wildlife Area contains fire sensitive habitat critical for survival of wintering herds of deer and elk. WDFW recommends that dense coniferous forest stands be protected whenever possible. This will maintain valuable thermal and escape cover habitat components and minimize displacement of all wildlife species due to fire. A WDFW Advisor will provide information to the Incident Commander regarding habitat concerns.

Aerial Support: The WDFW recommends that fire-fighting entities suppress fires on the wildlife area as rapidly as possible. WDFW requests the Incident Commander to seek aerial support if needed to extinguish a fire on its land promptly. If, in the professional judgment of the Incident Commander, a fire on lands adjacent to the LeClerc Creek Wildlife Area causes an immediate threat to the area, WDFW requests that he/she seeks aerial support as possible.

Reporting: Report any fire on or adjacent to all units of the LeClerc Creek Wildlife Area by contacting the DNR Dispatch Office in Colville (See contacts below). It is absolutely critical that any fire on the area is attacked as aggressively as possible during the initial attack. The importance of aerial support cannot be overstated.

Contact in the order listed below.

Fire Districts- Dial 911

DNR- contact in order listed and request Operations or Staff Coordinator

NAME	TELEPHONE	CELL
DNR Dispatch (Colville)	509-684-7474	
Request Operations or Staff Coordinator		

USFS – contact in order listed

U.S. Forest Service- Carl Wright (Newport)	509-447-7307	
USFS Dispatch-Don Deese (Colville)	509-684-7194	

The following table provides telephone numbers in priority order of Department staff to be contacted in the event of a fire.

Department of Fish and Wildlife - contact in order listed

NAME	TELEPHONE	PRIVATE TELEPHONE	CELL
Joey McCanna, Sherman Creek Wildlife Area Manager	509-648-3680	509-648-3631	509-994-9335
Todd Baarstad, Wildlife Biologist	509-636-2344 or 636-2345	509-253-4355	509-721-1302
Chris Christensen, W.A. Habitat Tech.	509-684-4120	509-935-6488	509-675-1248
Alan Myers, Wildlife Officer, Pend Oreille Co.	509-684-2089		
Mike Charron Sergeant, Chewelah	509-684-2089		
Regional Office – Spokane	509-892-1001		
Regional Program Manager – Kevin Robinette	509-892-7859		

APPENDIX 4. Water Rights

No water rights or permits are known to be associated with the LeClerc Wildlife Area.

APPENDIX 5. MANAGEMENT PLAN COMMENTS & RESPONSES

Washington State Department of Fish and Wildlife, February 2007

No public comments were received on the LeClerc Creek Wildlife Area Plan.

**APPENDIX 6. Threatened, Endangered, Sensitive And Candidate Species List
For LeClerc Creek Wildlife Area.**

<i>Wildlife Species</i>	<i>Listed Status</i>
Bald Eagle	State Threatened
Common Loon	State Sensitive
Peregrine Falcon	State Sensitive
Gray Wolf	State Endangered
Grizzly Bear	State Endangered
Golden Eagle	State Candidate
Lewis' Woodpecker	State Candidate
White-headed Woodpecker	State Candidate
Pileated Woodpecker	State Candidate
Western Toad	State Candidate
Northern Goshawk	State Candidate

REFERENCES

WDFW Strategic Plan

Wildlife Area Statewide Plan

WDFW Policies and Procedures

WDFW LeClerc Creek Wildlife Area Draft Working Summary-1997

WDFW Priority Habitats and Species List-1999

LeClerc Creek Watershed Assessment-USDA Forest Service, July 1997