

KLICKITAT WILDLIFE AREA MANAGEMENT PLAN

Washington Department of Fish and Wildlife



Prepared by Wildlife Area Manager, Martin Ellenburg
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2006

STATE OF WASHINGTON
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Washington State Wildlife Area Plan

KLICKITAT WILDLIFE AREA

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

Washington State Wildlife Area Plan

Klickitat Wildlife Area

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November 2006

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

Director, Washington Department of Fish and Wildlife

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EXECUTIVE SUMMARY

The Klickitat Wildlife Area is comprised of several units totaling approximately 14,251 acres. Most of the units share similar elements in habitat and recreational values, but have different management priorities according to the specific character of the unit location. The largest unit, the Soda Springs Unit, is approximately 13,000 acres in size and is managed primarily as a black-tail deer winter range. This unit also provides access to the Klickitat River for steelhead and salmon fishing and supports a strong population of wild turkeys. Deer and turkey hunting are the primary recreational uses of this unit. Western gray squirrels (a Washington State threatened species) are also present and are a priority species for management. Land purchases for the Soda Springs Unit began in 1948 and continued into the 1990's. The Mineral Springs Unit, Dillacort Canyon Unit, Neth Unit, Fisher Hill Unit, and other smaller parcels are located in the Klickitat River Canyon and serve to protect fish habitat and provide access for fishing. They are distributed downstream from the Soda Springs Unit almost to the mouth of the Klickitat River. Collectively these units encompass more than 800 acres. They also offer limited access for turkey and deer hunting. The Mineral Springs Unit features an old building that has been retained by WDFW as an important communal roosting site for Vaux's swifts. The Goldendale Hatchery Unit is 240 acres in size (excluding the hatchery facilities) and has been managed as a pheasant release site and for trout fishing. The Sondino Unit, on the plateau adjacent to the Columbia River, now totals approximately 211 acres. This unit is a conservation area managed specifically for western pond turtles, which are a Washington State Endangered Species. Purchases of parcels for this unit began in 1992 and continue to the present.

Management concerns and issues identified by the Citizen Advisory Group are:

- Access/Recreation
 - Improve facilities and boat ramp at Stinson Flat Campground,
 - Limit camping to specific areas on the Soda Springs Unit,
 - Regulate the duration of camping stay, and
 - Install gates to better control road use as appropriate to road surface quality and wildlife disturbance.
- Wildlife Area Management
 - Remove old boundary fences within the current KWA boundaries and
 - Conduct additional habitat evaluations to determine suitability for augmentation of the bighorn sheep population.
- Habitat
 - Conduct forest thinning project to improve health of stand and reduce fire hazard
 - Undertake a prescribed burn regimen to return the forest to a condition natural to the local area
 - Perform additional work on the old Icehouse building on the Mineral Springs Unit to protect Vaux's swift roosting habitat
 - Complete road abandonment and repair as agreed in the RMAP
 - Return the old Gilliam homestead site to native vegetation
 - Pursue other funding for KWA special project needs and
 - Retain (rather than sell) the Goldendale Hatchery Unit property for continued recreational use by sportsmen and women.

-
- Roads
 - Reduce disturbance to wildlife by abandoning some roads and restricting access to portions of the wildlife area by motorized vehicles by placing gates and implementing seasonal closures.
- Monitor, survey, and inventory
 - Assess value of grazing program for habitat improvement by monitoring changes in plant communities and plant vigor and
 - Identify potential improvements to current grazing program.
- Other Issues
 - Keep the public informed in a timely fashion regarding planned actions that affect user groups and
 - Include the public in the decision making process on important issues.

In 2006 at least two segments of roads in the Soda Springs Unit were abandoned to reduce disturbance to wildlife, return the roadbeds to forage plants for wildlife, and improve the quality of the hunting experience by eliminating vehicle traffic in certain areas. In addition, funding was secured for habitat protection and improvement on the Sondino Unit. Volunteers performed streamside planting of native shrubs and trees on the Goldendale Hatchery Unit, along Spring Creek. Wildlife-related recreation continued at the same level, or greater, than that observed in 2005.

For 2007 management priorities are to monitor the effects of grazing to ensure that Wildlife Area objectives are being met, implement a fire hazard reduction program by piling and burning woody debris, perform field work in preparation for the timber thinning project, and complete the 2007 portion of the road maintenance and abandonment plan as agreed to in cooperation with the Department of Natural Resources. Work will be done to renew a current grazing lease and re-establish an agricultural lease that expired in 2004.

Continuity and momentum in management of the Klickitat Wildlife Area were set back by the departure of the wildlife area manager in August 2006. A new manager will be selected in 2007. Resuming normal management activities will be a high priority for the wildlife area during this year.

CHAPTER I. INTRODUCTION

This plan provides management direction for the Klickitat 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 agency mission and statewide goals and objectives applied 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 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 Klickitat Wildlife Area Goals

Management goals for the Klickitat Wildlife Area are to preserve and enhance 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 Klickitat Wildlife Area can be found in Chapter 3. Public participation, in the form of a Citizens Advisory Group (CAG), will be encouraged as a means to identify social, cultural, and economic issues important to the people of south central Washington and influential in the management of this Wildlife Area.

1.4 Planning Process

Statewide goals and objectives listed above 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 tasks.

A Citizens Advisory Group (CAG) has been established to bring public input, ideas and concerns to wildlife area management. CAG participation in planning will add credibility and support for land management practices and help build constituencies for wildlife areas. The CAG is made up of

representatives from each interest group/entity. CAG members are spokespersons for their interest groups.

Klickitat Wildlife Area Citizens Advisory Group

Neil Keyser	Cattleman Association / Grazing Lessee
Jim Stephenson	Wildlife Biologist for Yakama Tribe
Buzz Ramsey	Local landowner on Klickitat River / Fisherman
Sarah Woo	Conservationist
Marty Hudson	Klickitat County Weed Control Board Coordinator
Leonard Swift	Agricultural lessee

Plans will also incorporate cross-program input and expertise provided by district biologists and enforcement personnel (district teams). Pertinent information from existing species plans, habitat recommendations, watershed plans, eco-regional assessments, etc will be used to identify local issues and needs.

This plan is part of a statewide planning process to ensure consistency in wildlife area management and policy implementation. The plan is not a standalone document. Rather, it relates directly to the Statewide Guide for the Management of Wildlife Areas (Guide), which is currently being developed. The Guide will pull together federal, state and local laws, agency goals and objectives, Commission and agency policies, and other statewide management direction into one document that will go out for public review.

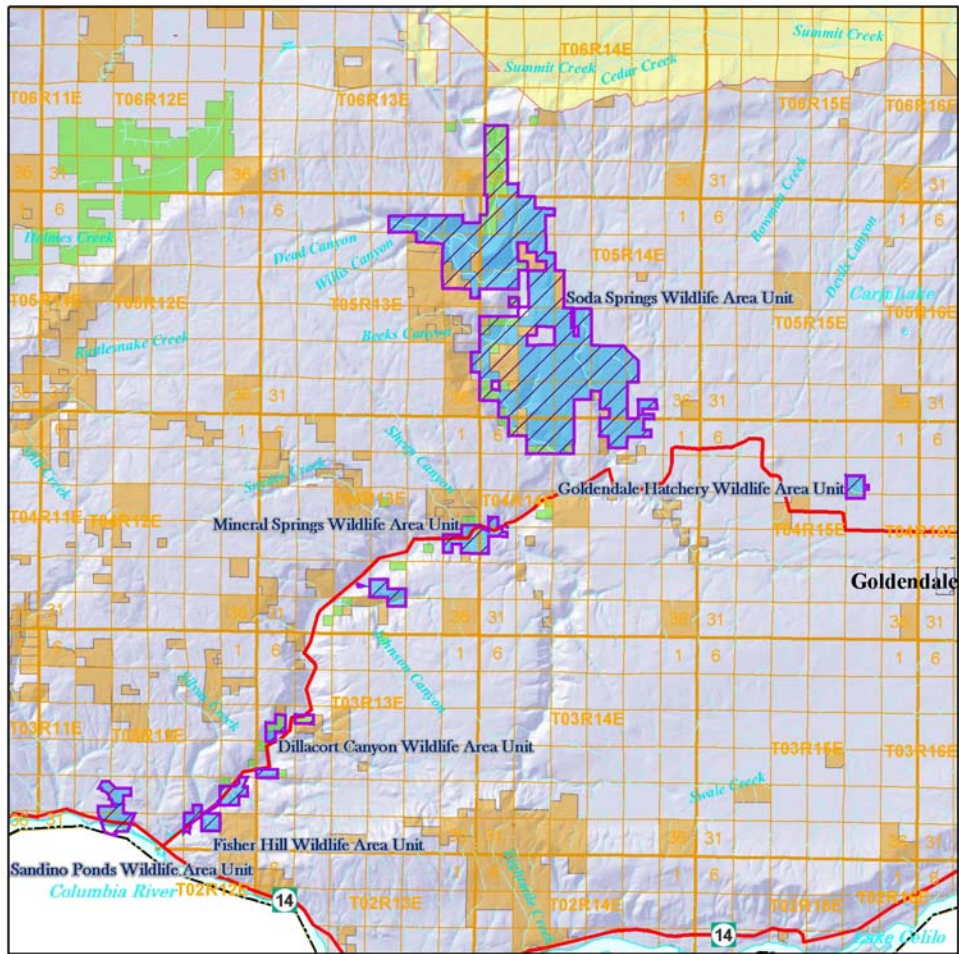
The plan will be reviewed annually with additional input from the CAG and district team to assess accomplishments and desired results. Strategies and activities will be adapted where necessary to set management priorities.

CHAPTER II. AREA DESCRIPTION AND MAPS

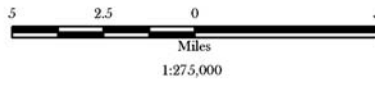
2.1 Property Location and Size

The Klickitat Wildlife Area is located in south central Washington, in the west portion of Klickitat County. It lies on the east slope of the Cascade Mountains, about halfway between the Columbia River Gorge to the south and Mt. Adams to the North (Figure 1). It is comprised of several management units with the majority of the area bordering the middle Klickitat River (T5N, R14E). The Klickitat Wildlife Area is comprised of the Soda Springs Unit and several smaller satellite units. The satellites are the Goldendale Hatchery, Mineral Springs, Dillacort Canyon, Neth, and Sondino Units.

Figure 1. Klickitat Wildlife Area Map



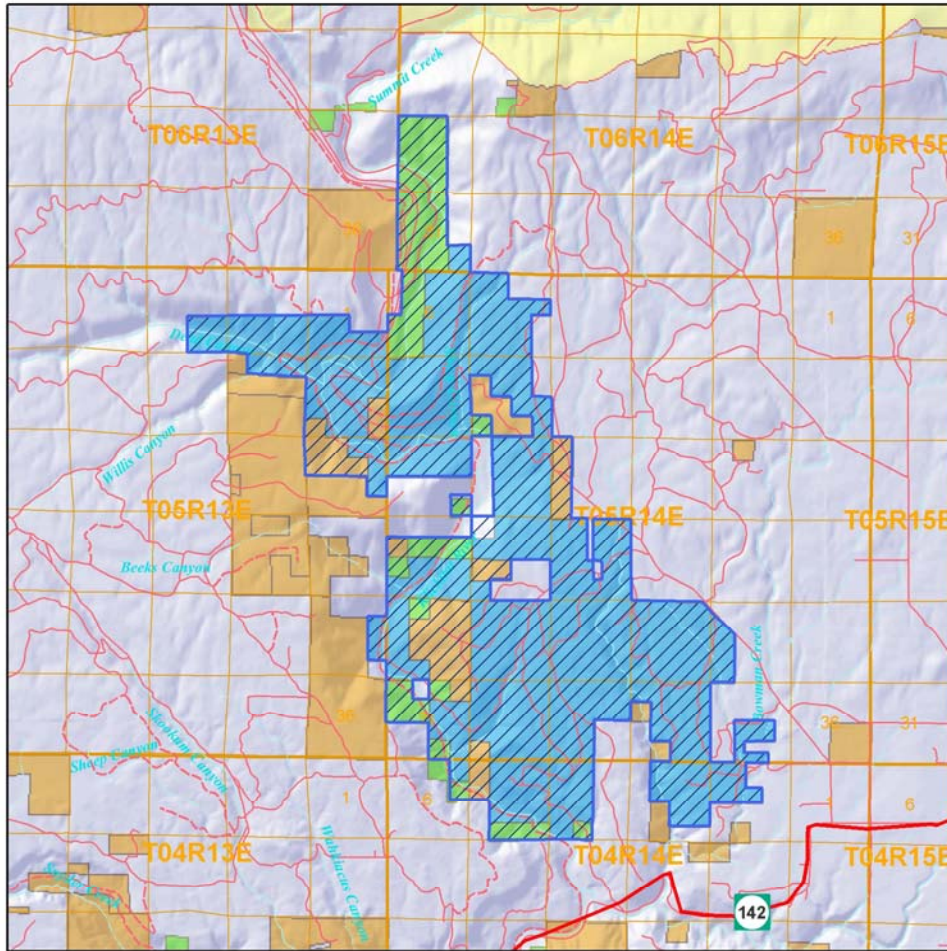
- | Washington Department of Fish and Wildlife | Administrative Borders | Transportation Network | Hydrography |
|--|------------------------|------------------------|------------------------|
| Klickitat Wildlife Area | Township Line | Interstate Highway | Annual Stream or River |
| Wildlife Area Unit | Section Line | US Highway | Intermittent Stream |
| WA Dept of Fish and Wildlife Owned Land | Shore Line | State Route | Canal |
| Other Major Public Lands | County Line | | Shoreline |
| Federal Land | State Line | | Lake or Wide River |
| Other State Land | International Border | | |
| County Land | City or Town Limits | | |
| City Land | | | |
| Tribal Land | | | |



2.1.1 Soda Springs Unit

The Soda Springs Unit, approximately 13,000 acres in size, represents the major portion of WDFW ownership. It consists of numerous mostly contiguous land holdings.

Figure 2. Soda Springs Unit



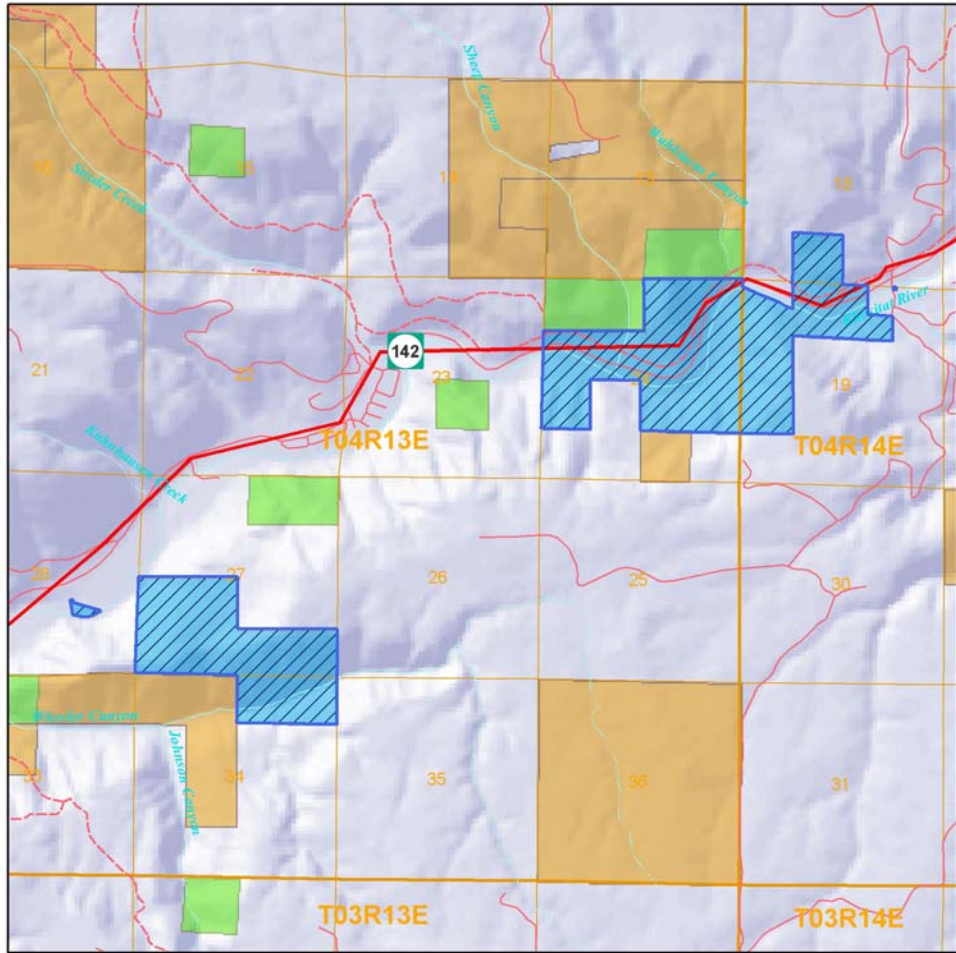
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|---|--|--|---|
| <p>Washington Department of Fish and Wildlife</p> <ul style="list-style-type: none"> ▨ Soda Springs Wildlife Area Unit ▨ Conservation Easement ■ WA Dept of Fish and Wildlife Owned Land <p>Major Public Land Ownership</p> <ul style="list-style-type: none"> ■ Federal Land ■ Other State Land ■ County Land ■ City Land ■ Tribal Land | <p>Administrative Boundaries</p> <ul style="list-style-type: none"> Township Line Section Line Shore Line County Line State Line International Border City or Town Limits | <p>Transportation Network</p> <ul style="list-style-type: none"> — Interstate Highway — US Highway — State Route — Secondary Road — Trail | <p>Hydrography</p> <ul style="list-style-type: none"> — Annual Stream or River — Intermittent Stream — Canal — Shoreline — Lake or Wide River |
|---|--|--|---|

1:125,000
1 inch equals 2 miles

2.1.2. Mineral Springs, Dillacort Canyon and Neth Units (Map not available for Neth Unit)

These units are located within the Klickitat River Canyon downstream from the Soda Springs Unit. They are small, 578 acres, 200 acres and 10 acres respectively.

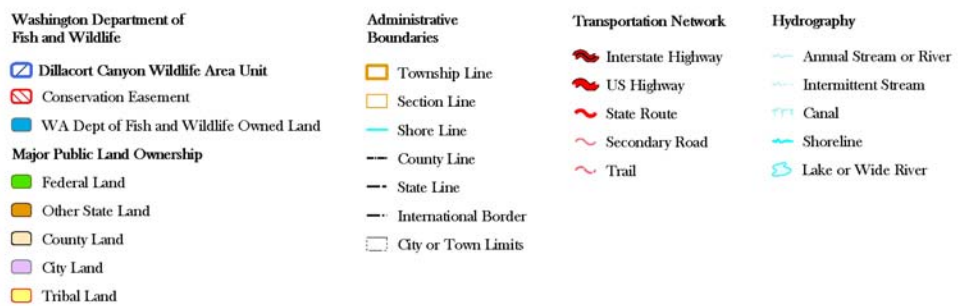
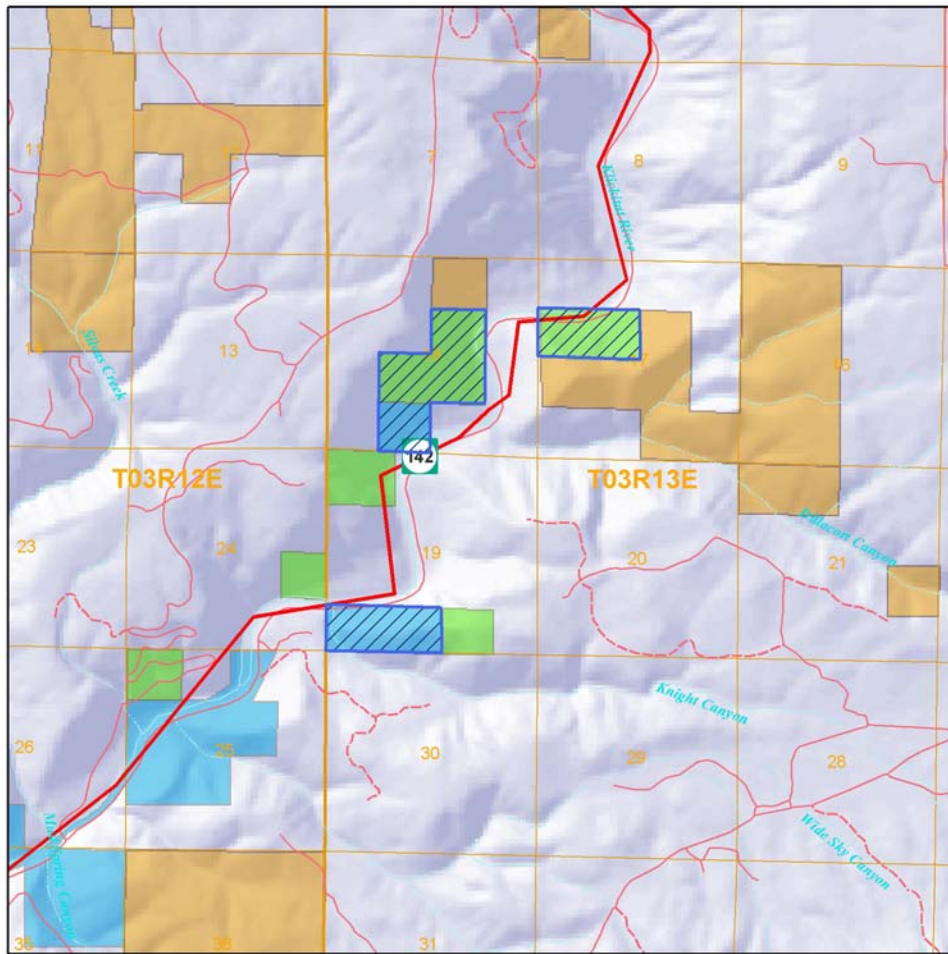
Figure 3. Mineral Springs Unit



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| <p>Washington Department of Fish and Wildlife</p> <ul style="list-style-type: none"> Mineral Springs Wildlife Area Unit Conservation Easement WA Dept of Fish and Wildlife Owned Land <p>Major Public Land Ownership</p> <ul style="list-style-type: none"> Federal Land Other State Land County Land City Land Tribal Land | <p>Administrative Boundaries</p> <ul style="list-style-type: none"> Township Line Section Line Shore Line County Line State Line International Border City or Town Limits | <p>Transportation Network</p> <ul style="list-style-type: none"> Interstate Highway US Highway State Route Secondary Road Trail | <p>Hydrography</p> <ul style="list-style-type: none"> Annual Stream or River Intermittent Stream Canal Shoreline Lake or Wide River |
|---|--|--|--|

1:50,000
1 inch equals 0.79 miles

Figure 4. Dillacort Canyon Unit



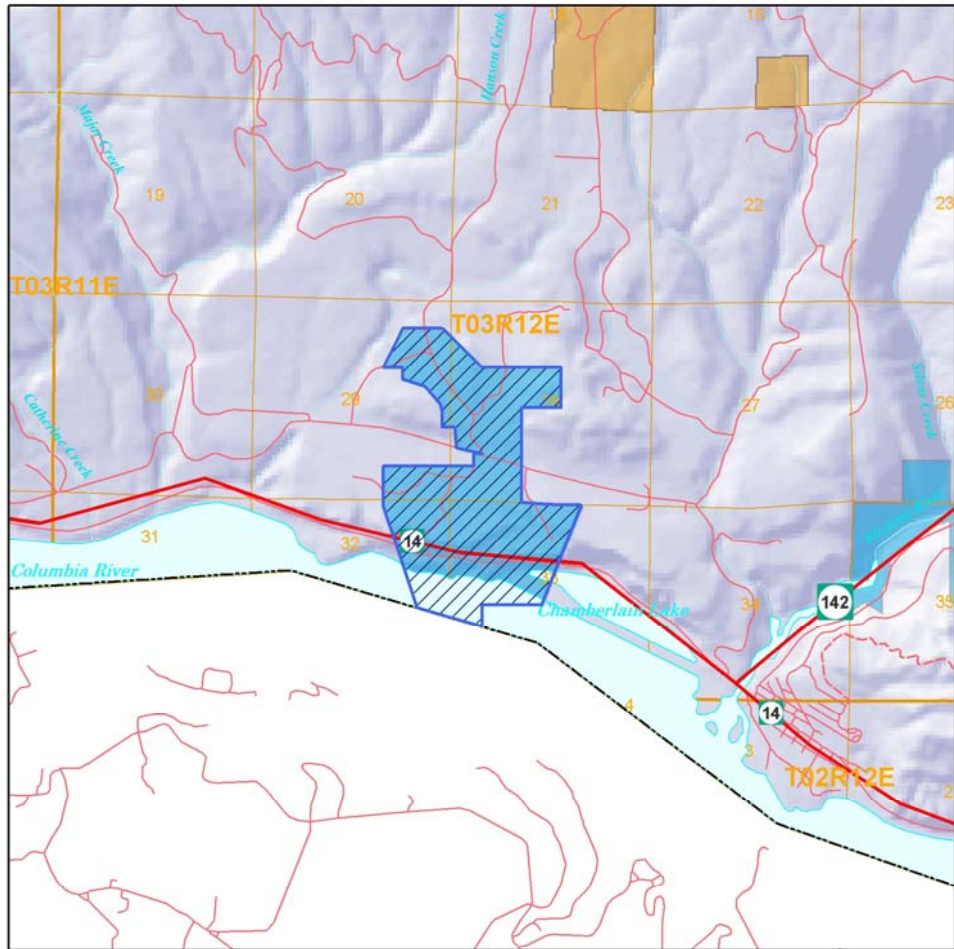
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1 inch equals 0.79 miles

2.1.3. Sondino Unit

This unit is 211 acres located near the town of Lyle north of the Columbia River. It is in Sections 28, 29, 32, and 33 of T3N, R12E. WDFW bought the acreage to manage the property for the sole benefit of wildlife conservation, and especially to protect the western pond turtle. WDFW also acquired title to an access road that is located in the SE $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Section 28, T3N, R12E. This road provides WDFW access to the Sondino Unit from the Old Lyle Highway.

Figure 5. Sondino Unit



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| <p>Washington Department of Fish and Wildlife</p> <ul style="list-style-type: none"> Sandino Ponds Wildlife Area Unit Conservation Easement WA Dept of Fish and Wildlife Owned Land <p>Major Public Land Ownership</p> <ul style="list-style-type: none"> Federal Land Other State Land County Land City Land Tribal Land | <p>Administrative Boundaries</p> <ul style="list-style-type: none"> Township Line Section Line Shore Line County Line State Line International Border City or Town Limits | <p>Transportation Network</p> <ul style="list-style-type: none"> Interstate Highway US Highway State Route Secondary Road Trail | <p>Hydrography</p> <ul style="list-style-type: none"> Annual Stream or River Intermittent Stream Canal Shoreline Lake or Wide River |
|---|--|--|--|

1:50,000
1 inch equals 0.79 miles

2.2 Purchase History and Purpose

During the 1940s, Washington Game Department identified this area as an important winter range for black-tailed deer. The first land purchase in 1948 was made to acquire and preserve access to the Klickitat River because of its summer-run steelhead fishery. Along with black-tailed deer wintering range and steelhead fishery the Wildlife Area also provides important habitat for the western gray squirrel and Vaux's swifts.

Subsequently, land purchases and leases continued through the 1950s, 1960s, and 1970s until the size of the WA reached about 12,000 acres. The 1990s have seen a renewal of land purchase efforts, increasing the area to just over 14,000 acres.

Funds for the various purchases were generated from traditional budget revenues such as the sale of hunting and fishing licenses, and state dollars from the sale of Outdoor Recreation bonds. Additionally, some of the state funds were matched by federal funds from the Federal Wildlife Restoration Grant Fund. The Interagency Committee for Outdoor Recreation administered the state funds and matching funds (Table 1).

2.2.1. Soda Springs Unit

The Soda Springs Unit represents the major portion of WDFW ownership and has, since its inception, been managed as deer winter range. Consisting of numerous land holdings purchased over the years since 1948, the unit is a major wintering area for the Klickitat River Basin deer herd during the months from November through March.

Prior to WDFW ownership these parcels of land, ranging from 10 to 2,200 acres in size, were used to raise cattle, sheep, horses, and even swine. Most parcels had some timber on them, and often the owner harvested the timber prior to selling the land. Some had agricultural fields of alfalfa or wheat.

WDFW's management has been designed to preserve and enhance forage and cover habitat types for deer. This has been accomplished primarily through farming, regulated cattle grazing, timber harvest and thinning, grass and shrub planting, and water developments.

Farming has been accomplished through sharecrop agreements with area farmers. Alfalfa, winter wheat, barley, oats, and rye have been grown. A portion of the crop has been left in the field for wildlife use, or the sharecropper has paid cash and/or provides services for the WDFW share. Various food plots have been maintained by WA personnel, producing perennial grasses or wheat that is always left in the field as forage for wildlife.

Grazing by cattle has occurred on and off over the years, often depending upon the availability and condition of livestock fences in the area. After fencing was put in place to control grazing, agreements have been maintained to allow cattle grazing on parts of the Wildlife Area during May and June. The goal of these agreements is to utilize surplus grasses that often compete with shrubs and forbs that are important in the diet of deer.

Timber harvest and thinning projects have been used to open up the tree canopy, favoring growth of deer brush (*Ceanothus integerrimus*), a native shrub important as a food source for wintering deer. The seed from this shrub requires heat to germinate, and fire eliminates senescent and dead

twigs, so controlled burns have been employed to improve stands of this shrub following timber harvest.

On two occasions, WDFW purchased land while allowing the owner to reserve timber rights for a year or so. Under these circumstances, the WA Manager had an opportunity to design a grass/forb/shrub planting after the timber harvest. Normally, grasses and forbs were aerially seeded over the entire area, and shrubs were broadcast seeded by hand along the roads and landings. Limited stands of bitterbrush (*Purshia tridentata*) were established, along with scattered patches of tall wheatgrass (*Agropyron elongatum*).

Even though water is not a limiting factor on deer winter range because it is available in the form of rain or snow during the winter, it is limiting during the dry summer months. Past water developments have included the construction of small ponds capable of holding enough water to last through the dry periods. Eight ponds have been constructed by WDFW, in addition to seven ponds which were present when the land was purchased. Eight guzzlers (i.e., structures designed to collect and store rainfall and snowmelt run-off) have been installed throughout the unit to provide water for upland game and non-game wildlife. Newer research has shown that except in extreme situations, most native wildlife does not need or benefit from these types of developments.

2.2.2. Mineral Springs Unit

The Mineral Springs Unit was purchased in 1973 from Klickitat Mineral Springs, Inc. This unit is 578 acres in size and lies entirely within the Klickitat River Canyon. Elevation rises from 500 feet at the river to 1,500 feet at the canyon rims. Habitat is similar to that of the Soda Springs Unit. The area is mostly timbered with Oregon white oak, ponderosa pine, and some Douglas fir. Grasslands occur on south slopes. The river snakes from east to west for two miles, creating slopes of all aspects. Running through the unit and parallel to the river are a railroad track, a state highway, and a private logging haul road. Wildlife using the area include deer, grouse, turkeys, and many songbirds associated with the riparian habitat. The Klickitat River is a popular steelhead and salmon fishery.

As the name suggests, there are numerous mineral springs from which water was tapped, bottled, and sold by the previous owners. The corporation also used these springs, along with a number of wells, to extract carbon dioxide from the water by a spray process and condense it into dry ice. In fact, local citizens often refer to the area as the "Gas-Ice Plant". Other than some limited cattle grazing, this was the major use of the property. The land has some timber, but has not been harvested for many years, probably to protect the mineral springs and wells. A fire in August 1992 burned approximately 300 acres, including 200 acres of timber.

At the time of WDFW acquisition, the bottling and dry ice plants were still onsite, although not functional. They were located on both sides of the river where the public access site is now and were connected by a bridge, which washed out during a flood in 1974. For the most part, the buildings were in a state of disrepair, so WDFW sold all buildings for salvage. After the sale, it was discovered that the chimney of one of the buildings was being used as a roost by Vaux's swifts. An arrangement was made with the salvage contractor to leave this building intact, and all other buildings were salvaged. .

The primary feature of the unit is an Interagency Accesssite, providing overnight camping and boat access. Public use is mainly for fishing and camping. The Vaux's swift roost site, along with the bird community associated with the river, attracts some non-consumptive users to the area.

2.2.3. Dillacort Canyon Unit

The Dillacort Canyon Unit is located eight river miles downstream from the Mineral Springs unit and is situated entirely within the Klickitat River canyon walls. Habitat types are similar to those on the Mineral Springs unit. This 200 acre unit is owned by the Bureau of Land Management (BLM), and is managed through a Memorandum of Understanding signed in 1964. The MOU involves a total of 2,233 acres, most of which is in the Soda Springs unit. WDFW manages wildlife and fish resources, while BLM maintains other resources.

Current public use of the Dillacort Canyon Unit includes fishing access to the Klickitat River and limited hunting. There is no developed access feature or campground. Entry is from State Highway 142, though most of the unit is located on the opposite side of the river and highway, which limits use.

2.2.4. Goldendale Hatchery Unit

Management of the Goldendale Hatchery Unit was assumed in the late 1970s. The unit includes the Goldendale Trout Hatchery, and an additional 240 acres of agricultural and range land. The hatchery facility itself has its own manager, while responsibility for land management lies with the Klickitat WA Manager.

The unit was historically a farm located along Spring Creek. All buildings have been removed. Public use includes upland bird and waterfowl hunting, and trout fishing. WDFW utilizes this unit as a pheasant release site.

Current management consists of leasing the agricultural fields under a sharecrop agreement. WDFW's compensation for alfalfa production is dedicated for management activities on the area. Wheat produced on the unit is used for supplementary winter feed for upland game birds.

2.2.5. Sondino Unit

In the mid -1980s, wildlife biologists determined that the most important remaining population of western pond turtles (*Clemmys marmorata*) in the state was located on this parcel. Shortly thereafter, the landowners agreed to participate in the Washington Register of Natural Areas Program. Under this program, they allowed WDFW to conduct studies of the western pond turtle and cooperated to protect important wetland habitats. These efforts were very successful. In 1986, the WDFW estimated the western pond turtle population on the parcel at 83 turtles. To date, recovery efforts have succeeded in increasing the population to approximately 300 turtles. This unit is considered the most important western pond turtle habitat in the state of Washington.

The landowners held a single 252-acre parcel at the time the Columbia River Gorge National Scenic Area Act went into effect in 1986. The Gorge Commission designated approximately 113 acres of this parcel as Open Space per the land use designation policies in the Management Plan, adopted in 1991. This designation was used to help protect critical habitat for the western pond turtle. The land was used traditionally for agriculture. Therefore, the Gorge Commission designated the remainder of the parcel as Small-Scale Agriculture.

In 1992, WDFW purchased 108 acres that had been designated as Open Space and in 1994 purchased an additional five acres of Open Space for a total of 113 acres. WDFW bought the acreage to manage the property for the sole benefit of wildlife conservation. This area became the Sondino Unit of the Klickitat Wildlife Area. WDFW also acquired title to an access road that is located in the SE $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Section 28, T3N, R12E. This road provides WDFW access to the 113 acres from the Old Lyle Highway.

Neither landowner nor WDFW obtained Scenic Area approval to divide the 113 acres from the 252-acre parcel. Thus, in the view of the Gorge Commission, WDFW and the original owners became joint owners of the 252-acre parcel in regards to Scenic Area regulations. This has since been resolved.

In 2002, WDFW purchased an additional 15 acres of critical habitat for the western pond turtle adjacent to above described parcel. This property contained two seasonal wetlands and critical nesting habitat. It is located immediately east of the above described parcel and is designated Small-Scale Agriculture. In 2006, WDFW purchased 32 more acres south of the 15-acre parcel, to protect more suitable habitat and provide a buffer for the core habitat area.

2.3 Ownership and Use of Adjacent Lands

The Klickitat Wildlife Area is bounded by many landowners. Large landowners include Western Pacific Timber (current owners of land formerly held by Boise Cascade) Rainier Timber, and Washington Department of Natural Resources. All of these entities manage the lands for timber production, and each has policies for maintenance of wildlife diversity, salmonid recovery, and maintenance of range condition.

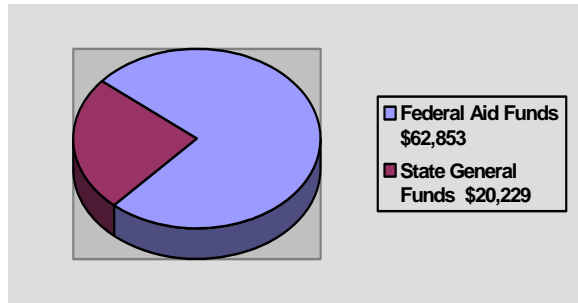
The remaining neighbors of the Klickitat Wildlife area are private landowners who utilize their property as residences, livestock rangeland or for agricultural production.

Within Soda Springs Unit approximately 160 acres is in agricultural use, predominantly for alfalfa and winter wheat production, with approximately another 2,600 acres grazed as rangeland for cattle during spring and early summer months. Grazing is permitted for 160 Animal Unit Months per season with a rotation of use only two out of three years.

The nearest town and urban area is Goldendale, Washington, population 3,500. In relation to larger metropolitan areas, the Klickitat Wildlife Areas lies 86 miles southwest from Yakima and 42 miles northeast from Hood River, Oregon.

2.4 Funding

Funding for management of the wildlife area comes from two primary sources, the State General fund and the Federal Aid in Wildlife Restoration Fund. State General Funds provide a 25% match for Federal Aid dollars. The budget for the 2005 fiscal year is \$83,082, which supports all operations and maintenance on the area.



Klickitat Wildlife Area Funding Sources

One Full Time Employee position is supported; a Wildlife Area Manager (Fish and Wildlife Biologist 3).

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.

Funding for Klickitat Wildlife Area acquisitions are shown in Table 1.

Table 1. Klickitat Wildlife Area Acquisitions

<u>Land Unit</u>	<u>Acres</u>	<u>Year</u>	<u>Funding Source</u>
Leidl	1773	1948	State 100%
Garner/Amidon	487	1950	State 25%-PR 75%
Lester	40	1950	State 25%-PR 75%
Mulligan	80	1950	State 25%-PR 75%
Bowman	10	1950	State 25%-PR 75%
Miles Estate	160	1950	State 25%-PR 75%
Lang	40	1951	State 25%-PR 75%
Shaffer	80	1953	State 25%-PR 75%
Bratton	2206	1955	State 25%-PR 75%
Morgan	160	1960	State 100%
Mahaffey	40	1962	State 25%-PR 75%
Garner	760	1964	State 100%
McCrae	461	1965	State 100%
Yeackel	369	1967	State 25%-PR 75%
Johnson	860	1971	State 25%-PR 75%
Messenger	160	1972	State 25%-PR 75%
Klickitat Mineral Springs	880	1973	IAC 50%-BOR 50%
Yeackel	649	1974	IAC 100%
Shafer	160	1974	IAC 100%
Barrett	463	1990	WWRP 100%
Layman	840	1991	WWRP 100%
Stone	10	1992	WWRP 100%
Sondino	160	2004	WWRP 100%

State = Funds from sale of game licenses & tags.
PR = Pittman-Robertson funds (Federal Wildlife Restoration Grant Funds).
IAC = Interagency Committee for Outdoor Recreation (funds from Initiative 215 and bond sales).
BOR = Bureau of Outdoor Recreation (Federal Land & Water Conservation Funds).
WWRP = Washington Wildlife and Recreation Program (State General Funds).

2.5 Climate

The Cascades form a barrier to the storms moving from the Pacific Ocean easterly, causing the storms to deposit most of their moisture before reaching this area. Much of the Wildlife Area range slopes towards the south, resulting in maximum radiant heat from the sun during the winters. Light moisture and radiant heat often keep these areas free of snow, attracting large numbers of black tail deer during the winter months. The Columbia River Gorge allows some of the warmer marine air to enter the region from the Pacific Ocean, helping to keep winter temperatures milder than areas farther eastward. This results in much of the winter precipitation falling as rain instead of snow.

Mountains to the west and north, and prevailing westerly winds influence the region's climate. The area receives a mean annual precipitation of 17.41 inches. The majority of the precipitation falls between October and May. Temperatures range from an average low of 35.9°F in winter to an average high of 61.0°F during summer. The growing season is between 115 and 155 days.

2.6 Soils and Geology

In 1978 the Soil Conservation Service surveyed most of the soils on the Klickitat Wildlife Area. Generally, the soils are shallow and rocky. Approximately 50 percent of KWA land is classified as the Leidl-Wahoo complex. This type of soil is found within the breaks of the Klickitat River, Dry Canyon, Dead Canyon and Sheep canyon. It is shallow, rocky, and ranges in slope from 30 to 75 percent. The bench area of KWA is composed mostly of Gunn and Kiakus-Munset-Wahoo complex, with the Gunn soils the best. Typically, the Gunn soils are up to 60 inches deep with slopes from 2 to 15 percent. Kiakus-Munset-Wahoo complex are soils from 20 to 40 inches deep on slopes of 0 to 30 percent. These two soil types, Gunn and Kiakus-Munset-Wahoo complex cover approximately 30 percent of the wildlife area. On the geologic time scale, this area of Washington is among the youngest areas in the state. The major events shaping southcentral Washington occurred between three and sixteen million years ago. The great basalt floods, pouring out repeatedly over a four million-year period from areas in central and eastern Oregon, moved the ancestral Columbia River valley northward. The Cascades began to fold up into an arch, producing a rainshadow east of the Cascades. About one million years ago the volcanoes of Mt. Adams and Mt. Hood were formed. During the Ice Age, ice sheets from Canada advanced and retreated causing changes in climate and increasing precipitation which accelerated erosion of the Gorge, enabling the river to maintain its course while the Cascades were rising. During the melting of the ice sheets in Canada and northern Washington, huge ice dams formed, creating lakes as large as 3,000 square miles. When these dams gave way, catastrophic floods flowed down the Columbia River, widening the narrow "V" shaped canyon of the Gorge.

These geologic formations, the Cascades, Columbia River Gorge, and the Klickitat River, are ultimately the reason for the Klickitat WA's importance to wildlife. The Klickitat River formed a deep twisting canyon on its way south to the Columbia River. This twisting characteristic has created juxtaposing areas of open grassland (on south slopes) and thermal cover (on north slopes), ideal winter habitat for deer.

2.7 Hydrology and Watersheds

The major source of water is the Klickitat River. Fed by the glaciers of Mt. Adams, it runs relatively steady throughout the year. It is the only stream on the wildlife area that is a Type 1 water as set forth by the "Washington Forest Practices Rules and Regulations." It is also a shoreline of statewide significance.

Other drainages within KWA are:

Sheep Canyon – normally dries up by June and is classified Type 3 for the first ¼ mile, then Type 4 for the remainder of the wildlife area

Soda Springs Canyon – dries up by June. Type 4 for the first ¼ mile and Type 5 thereafter.

Dry Canyon (Canyon Creek) – except for springs along its creek bed, it too dries up by June. It is classified Type 3 from the southern boundary of the Wildlife Area to the Glenwood Highway and Type 4 upstream from that point.

Bowman Creek – Type 3 throughout its length in the wildlife area.

Other tributaries to the Klickitat River and to the above drainages are either Type 4 or 5, mostly 5.

There are 19 man-made ponds located throughout the area. They are filled by run-off. Numerous springs are present on the Wildlife Area. The flows of these springs vary from being wet spots to up to 10 gallons per minute.

2.8 Fire History

Oregon white oak, ponderosa pine, Douglas fir and buck brush are tolerant of low intensity fires. However, the history of fire suppression and the accumulation of fuels has altered the nature of burns. Fires burn hotter and for a prolonged period, resulting in more damage to vegetation, killing trees and shrubs that might normally have survived.

In many areas, trees grow in dense stands and compete with each other, making some tree species susceptible to disease and insect invasion. These conditions have favored heavy infestations of pine bark beetles, resulting in extensive losses in pine stands and a large buildup of deadfall wood on the ground. Small fires have been suppressed throughout the area, so that no major sections have burned. Areas subjected to small fires have exhibited vigorous growth in deer brush. Controlled burns were used in earlier years to encourage deer brush growth for wildlife forage.

Washington Dept. of Natural Resources routinely has fire crews on patrol around and in KWA throughout fire season. A large portion of the Area also lies within rural fire districts in Klickitat County, which also provide protection for the area.

2.9 Vegetation Characterization

General vegetation types found on the WA include the forested riparian zone along the Klickitat River, south-facing hillsides of open grasslands, north-facing hillsides forested with conifers, and the flatter plateau covered by mixed forests of oak and pine interspersed with small grassland openings.

The vegetation of KWA is very diverse due to its situation within the transition zone between coniferous forest and shrub steppe. Overstory vegetation consists generally of ponderosa pine (*Pinus ponderosa*) and Oregon white oak (*Quercus garryana*), with limited patches of Douglas fir (*Pseudotsuga menziesii*). Within the riparian habitat zones, the overstory consists of cottonwood (*Populus trichocarpa*), red alder (*Alnus rubra*), white alder (*Alnus*), quaking aspen (*Populus tremuloides*), and willow (*Salix* spp.).

The shrub layer consists primarily of deer brush, bitterbrush, Oregon white oak sucker sprouts, hazel (*Corylus rostrata*), snowberry (*Symphoricarpos alba*), black hawthorn (*Crataegus douglasii*), mock orange (*Philadelphus lewisii*), serviceberry (*Amelanchier alnifolia*), oceanspray (*Holodiscus discolor*) and Oregon grape (*Mahonia*).

Some of the more abundant forbs include lupine (*Lupinus* spp.), balsamroot (*Balsamorhiza* spp.), desert parsley (*Lomatium* spp.), deathcamas (*Zigadenus venenosus*), camas (*Camassia quamash*), fiddleneck (*Amsinchia* spp.), phlox (*Phlox longifolia*), yarrow (*Achillea millefolium*), gold stars (*Crocidium multicaule*), northwest saxifrage (*Saxifrage*) and waterleaf ().

Grasses common to the area include bluebunch wheatgrass (*Agropyron spicatum*), Idaho fescue (*Festuca idahoensis*), bottlebrush squirreltail (*Sitanion hystrix*), cheat grass (*Bromus secalinus*), pinegrass (*Calamagrostis rubescens*), Sandberg bluegrass (*Poa secunda*), bulbous bluegrass (*Poa bulbosa*), Kentucky bluegrass (*Poa pratensis*), Canada bluegrass (*Poa compressa*), Columbia needlegrass (*Stipa columbiana*), and slender hairgrass (*Deschampsia elongate*). Elksedge (*Carex geyeri*) is a grasslike plant that is also an important forage species.

2.10 Important Habitats

Wetlands are among the most productive ecosystems in the world. As a result, wetlands support numerous species from all of the major groups of organisms, from microbes to mammals. Wetlands provide food and shelter as well as refuge.

Riparian habitat performs many functions that are essential to fish survival and productivity, and is critical in supporting suitable in-stream conditions necessary for the recovery of imperiled native salmon stocks. Vegetation in riparian areas shade streams and thereby helps to maintain cool temperatures. Streamside vegetation also stabilizes stream banks, controlling erosion and sedimentation. It also creates cover for fish and provides food for organisms that in turn become food for fish.

Meadows habitat provide unique assemblage of plant and wildlife species. These areas provide a wide range of species diversity when not altered by human use or overgrazed by livestock.

Oak woodlands are used by many mammalian, avian, reptile and amphibian species. Many invertebrates, including various moths, butterflies, gall wasps, and spiders are found exclusively in association with this oak species. Oak/conifer associations provide contiguous aerial pathways, roosting, nesting, and feeding areas for several of the priority wildlife species on the Klickitat Wildlife Area.

Talus/rock habitats are areas of exposed rock or fields of broken rock that provide living space for plants and wildlife. These landscape features provide key habitat requisites that are often limiting for some species, including bighorn sheep.

Cliff habitat appears as high cliffs, rocky out-thrusts, ledges and rimrock. These areas provide habitat for nesting birds and mammals. Birds that use cliffs for nesting may be more susceptible to loss of nesting habitat than many other species because they rely completely on cliffs as nest sites.

2.11 Fish and Wildlife

Fish and wildlife abundance and diversity are the foundation guiding WDFW's management efforts. All activities occurring on the Wildlife Area must be consistent with this overall objective. Agency management and public use of the Wildlife Area must foster an increase, or at least maintain populations of priority species over the long term.

The Klickitat River supports federally listed steelhead trout, spring chinook salmon, and bull trout. These three species are present (or were historically present) year round throughout the watershed and are considered to be culturally, ecologically and economically important to the area. The limiting factors for summer steelhead and spring chinook are habitat diversity, sediment load, and quantity of key habitats for various life stages. It is assumed that other aquatic life will benefit from managing toward suitable conditions for these species, due to their wide ranging habitat requirements.

Wildlife game species common to the area include black-tailed deer, Rocky Mountain elk, ruffed and blue grouse, Merriam's turkey, and California quail. The western gray squirrel, western bluebird, Vaux's swift, and American kestrel are among the many nongame species found on the Wildlife Area. At least 107 species of birds have been observed. Numerous cavity-nesting birds are associated with oak woodlands. Oak woodlands provide important habitat for many of the mammalian and reptile species indigenous to the area as well.

Several reptile species are present, including the northwestern fence lizard, southern alligator lizard, western pond turtle, Great Basin gopher snake, garter snakes, northwestern ring-neck snake, western skink, northern Pacific rattlesnake, and rubber boa. Pacific tree frogs and rough-skinned newts are the most abundant amphibians on the Wildlife Area. Nonnative bullfrogs have been observed in a few locations.

Priority Species

WDFW priority species that occur, or have the potential to occur on the Wildlife Area are: black-tail deer, western gray squirrel, western pond turtle, Vaux's swift, Mardon skipper, acorn woodpecker, and Lewis' wood pecker. Fish species include summer steelhead trout, spring chinook salmon, and bull trout.

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 III. MANAGEMENT OBJECTIVE, 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 tasks. *Public issues from past planning efforts and the Citizens Advisory Group are noted in italics.*

Objectives and associated tasks specific to the Klickitat 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

The Klickitat Wildlife Area was purchased to provide access to the Klickitat River and provide winter habitat for big game, upland birds and salmon. The Game Management Plan calls for an increase in numbers and antler quality in the black tail deer herd populations. *Public concerns include deer damage to private lands and possible hunting seasons shortened to increase quality of deer, also implement 3pt. Minimum regulation.*

A. Strategy: Maintain 200 acres of agriculture in alfalfa and wheat to provide forage in the winter and spring for the deer in the Soda Springs unit. Timeframe yearly.

B. Strategy: Permit light spring/early summer grazing on acres in the Sheep Canyon, and North Breaks areas of the Soda Springs Unit to remove dead grass material and stimulate new growth for winter grasses and forbs for deer forage. Timeframe 2 out of 3 years

C. Strategy: Conduct timber thinning and controlled burns to improve habitat quality for deer. Timeframe when WDFW forester and other resources available.

D. Strategy: Comply with KWA's Road Management and Abandonment Plan, which was formally adopted in 2006, and close certain roads to limit disturbance of wildlife by vehicles. Timeframe depends resources available to accomplish the work.

2. Improve and Maintain Fish Populations

Portions of the Klickitat Wildlife Area were purchased to provide recreational access for fishermen and to protect suitable habitat for priority fish species. Steelhead, spring chinook, and bull trout are all considered to be culturally, ecologically and economically important to the area. The most common limiting factors for both summer steelhead and spring chinook are habitat diversity, sediment load, and quantity of key habitats for various life stages.

A. Strategy: Maintain riparian habitat and prevent non-permitted intrusion from livestock and vehicles. Timeframe constant monitoring and improvement as needed

B. Strategy: Maintain fence along riparian habitat to protect areas and keep permitted cows out. Timeframe check and repair in spring before cattle are released.

C. Strategy: Plant native riparian plants along spring creek during late winter and early spring seasons at the Goldendale Hatchery Unit to help shade out reed canary grass, along with summertime herbicide spraying regimen.

3. Manage for Upland Birds

Upland birds provide recreational hunting opportunities for sportsmen and are a priority for management on the Klickitat Wildlife Area. Several game species are found on the Wildlife Area. Nonnative species include wild turkeys, chukars, and pheasants. Turkeys and pheasants benefit from

water, food plot, and cover maintenance activities. Chukars, and native grouse and quail subsist on resources naturally present on the Wildlife Area.

A. Strategy: Maintain springs and evaluate guzzlers to provide water for upland birds and other species. Timeframe: check several times yearly.

B. Strategy: Develop new water sources (springs) in areas of habitat limited from lack of water. (Sheep Canyon and Zelinski Rd. areas) Timeframe depends on when funding is available.

C. Strategy: Maintain seasonally planted wildlife openings (approximately 20 acres) throughout KWA. Timeframe: yearly.

4. Manage for Species Diversity

Klickitat Wildlife Area supports a wide range of indigenous wildlife species. Diversity is an indicator of a healthy ecosystem and provides aesthetic value, enhancing nonconsumptive enjoyment of wildlife. Development and maintenance of quality habitat for a diversity of species is a high priority.

A. Strategy: Determine species use and density by conducting appropriate surveys to evaluate and assess the full range of species currently using the wildlife area. Timeframe: Yearly.

B. Strategy: Assess timber-thinning project to reduce potential insect and fire danger and create forest conditions more suitable to a diversity of species. Timeframe depends on when WDFW can make prescribed area and agree on cut plan.

C. Strategy: Implement controlled burns to relieve fuel build up, stimulate forb, grass, and shrub growth, and initiate more variety in vegetative succession stages. Timeframe will be after timber thinning practice.

5. Protect and Restore Riparian Habitat

The agency has identified riparian habitat management and protection as an important component of wildlife population enhancement. Riparian areas provide habitat for a wide range of fish and wildlife species. Animals subsist in higher densities in riparian areas. Streamside vegetation provides cover, critical nesting habitat, and corridors for movement among other areas used by animals for foraging and other life activities.

A. Strategy: See Agency Objective 3.1.2.

6. Protect and Manage Priority Species

Priority species listed under 2.11. receive special emphasis in management practices on the Wildlife Area.

A. Strategy: Management activities undertaken to accomplish objectives covered in 3.1.1. through 3.1.4. also serve this objective. Timeframe: yearly.

B. Strategy: Protect roosting structure at the Mineral Springs Unit for Vaux's swift. Timeframe: monitor and maintain the structure throughout the year

C. Strategy: Protect snags within oak woodlands for various nesting birds and mammals. Timeframe: yearly.

D. Strategy: Monitor timber thinning and control burn areas for use by Western gray squirrels. Timeframe will start after timber thinning.

E. Strategy: install and maintain fences and signs to prevent intrusion by humans and cattle at the Sondino Unit. Timeframe: yearly.

Agency Objective: Ensure that 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

Weed control activities are subject to state laws protecting public economic and natural resources. Invasive weeds are one of the greatest threats to fish and wildlife habitat quality. Cooperative weed efforts are intended to improve efficacy and to minimize negative impacts, as well as unwanted effects on adjacent landowners.

A. Strategy: Identify and prioritize areas for treatment by mechanical, hand labor, or chemical means to control noxious weeds. Timeframe: yearly

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

C. Strategy: Control 2 acres of knapweed and Himalayan blackberry in the Sondino Unit. Timeframe: control as needed

D. Strategy: Control 2 acres of knapweed, Canadian thistle, and Himalayan blackberry in the Soda Springs Unit. Timeframe: control as needed

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 mandates the protection and management of threatened and endangered species. State law requires that fish passage and screening issues, and forest road sedimentation issues be addressed on state public lands. Forest practice operations on agency lands must follow state forest practice law.

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

B. Strategy: Roads have been inventoried and a Road Maintenance and Abandonment Plan plan adopted. Forest roads (used for timber hauling since 1974) and roads that adversely affect water quality for fish must be brought up to acceptable standards, or else closed to vehicle use. Problem structures on abandoned roads that have potential to harm stream habitat quality must be removed. Timeframe: Roads regulated under the RMAP will be dealt with according to terms agreed upon with Washington Dept. of Natural Resources. Abandonment of problem roads that are not regulated by DNR will occur as time and resources permit (subject to Citizen Advisory Group approval).

3. Provide fire control on agency lands

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

A. Strategy: Contract with local, state or federal entities to provide fire suppression service on the Klickitat Wildlife Area. Contact list is to be updated and checked yearly.

B. Strategy: Provide fire training for wildlife area manager per WDFW policy, and maintain list of fire responsible individuals. Fire training and list are to be updated yearly.

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. Strategy: Assess cultural resource value (historic and archaeological) of all structures before renovation or removal. **Timeframe:** as needed before construction or removal of structures.

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. **Timeframe:** monitor continuously

B. Strategy: Close road access where conditions are not safe or where vehicle use has a significant negative impact on road surface condition, or fish and wildlife. **Timeframe:** monitor continuously

C. Strategy: Post signs on all roads with limited access. **Timeframe:** ongoing

D. Strategy: Provide limited camping where no resource issues exist. **Timeframe:** year around, with emphasis during periods of heavy public use

2. Provide commercial opportunities compatible with fish, wildlife and habitat protection

Commercial opportunities are suitable activities where they can be controlled to protect fish and wildlife resources. Activities must comply with federal and state regulations.

A. Strategy: Assess habitat to determine the value of grazing to improve habitat for big game. Identify opportunities for commercial use that is compatible with management objectives. **Timeframe:** monitor yearly, with emphasis during cattle grazing of WDFW rangeland

B. Strategy: Utilize sharecrop agreements when appropriate. **Timeframe:** yearly

C. Strategy: Evaluate commercial requests as needed.

Agency Objective: Provide sound operational management of WDFW lands, facilities and access sites

Maintenance of facilities, equipment, and other infrastructure is essential to the performance of other duties on the Wildlife Area. These assets support all other management activities, and are therefore important in accomplishing agency objectives.

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:** as needed

B. Strategy: Maintain all fences to prevent trespass by livestock thereby protecting wildlife and fish habitat. Begin with boundary fence on Sondino ponds and Canyon Creek..

Timeframe: as needed

C. Strategy: Remove old boundary fence within the borders of existing WDFW lands. **Timeframe:** yearly until complete.

D. Strategy: Maintain roads to prevent resource damage and provide access. Anderson and Sheep Canyon Roads need to be graded and rocked. Timeframe: as needed and when resources are available.

E. Strategy: Maintain camping and parking areas to prevent resource damage and provide access. Sign all campgrounds and parking lots. Timeframe: as needed.

F. Strategy: Identify and request other capital needs for buildings. Timeframe: yearly.

2. Maintain other structures and physical improvements

A. Strategy: Maintain all signs, gates, culverts, water structures, wells, cooperate as necessary to achieve management purpose. Timeframe: Ongoing

B. Strategy: Replace/install new boundary and unit signs. Timeframe: Ongoing

3. Maintain equipment

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

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

4. Pursue funding opportunities

A. Strategy: Apply for grants and other funding opportunities consistent with planned priorities to supplement funding for specific projects when needed. Timeframe: Ongoing.

B. Strategy: Enroll lands in CRP and other federal programs to generate revenue and accomplish desired habitat conditions. Timeframe: when there are openings for Klickitat County.

5. Assess forest conditions with regard to catastrophic fire, insect and disease risks

The history of fire suppression in many cases has resulted in forest tree densities far greater than historic levels. Dense forest stands create fire safety issues and contribute to the spread of detrimental forest insects and disease.

A. Strategy: Assess timber-thinning project to reduce potential insect and fire danger and create forest conditions more suitable to a diversity of species. Timeframe: Will be scheduled with WDFW Forester.

6. Perform administrative responsibilities

A. Strategy: Develop and monitor budgets. Timeframe: Ongoing.

B. Strategy: Plan activities to accomplish management objectives. Timeframe: Ongoing

C. Strategy: Supervise employees and volunteers as needed. Timeframe: Ongoing.

D. Strategy: Attend meetings and training. Timeframe: Ongoing.

7. Perform annual evaluation and updates to the Klickitat Wildlife Area Management Plan

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.

A. Strategy: Convene CAG and district team meetings to assess accomplishments, results and new issues. Need to expand membership and participation of CAG. Timeframe: Yearly

B. Strategy: Update plan. Timeframe: Annual.

8. Protect and apply water rights for best use

- A. Strategy:** Identify and record all water rights and uses of water. Completed 2005.
- B. Strategy:** Move all unneeded water rights permanently or temporarily into the State Trust Water Rights Program. Timeframe: Ongoing.

CHAPTER IV. PERFORMANCE MEASURES, EVALUATIONS AND UPDATES TO THE KLICKITAT WILDLIFE AREA PLAN

Performance measures for the Klickitat Wildlife Area Plan are listed below. Accomplishments and progress toward desired outcomes will be monitored and evaluated to produce an annual performance report each calendar year. The plan will be considered a working document that will evolve as habitat and species conditions change, as new regulations are enacted, and as public issues and concerns change. Updates will be considered annually and added to the plan as needed.

1. Performance measures for the Klickitat Wildlife Area in 2006 include:

- 1) Maintain 200 acres of agriculture in alfalfa and wheat.
- 2) Permit light spring/early summer grazing on 3840 acres.
- 3) Conduct forest thinning and controlled burns.
- 4) Reduce disturbance to wildlife in sensitive areas and times
- 5) Pursue funding for habitat enhancement.
- 6) Conduct habitat evaluations to determine the suitability of the KWA for augmentation of the California bighorn sheep.
- 7) Protect riparian habitat
- 8) Develop and maintain water sources used by upland birds.
- 9) Determine presence, status and trend for priority species on the KWA.
- 10) Protect roosting structure at the Mineral Springs Unit for Vaux's swift.
- 11) Limit intrusion by humans and cattle at the Sondino Unit.
- 12) Prioritize areas for weed control treatment
- 13) Control 2 acres of knapweed and Himalayan blackberry in the Sondino Unit.
- 14) Control 2 acres of knapweed, Canadian thistle and Himalayan blackberry in the Soda Springs Unit
- 15) Comply with WDFW fire control policy to provide adequate fire protection on the KWA
- 16) Provide wildlife related recreation at current level
- 17) Monitor grazing by use of control and exclosure plots to determine if management objectives are being realized
- 18) Maintain safe work environment

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

Citizens Advisory Group (CAG) and District Team (DT) Issues and Concerns

The purpose of meeting with the CAG and DT was to obtain input to help guide management actions on the wildlife area. A draft of the introduction and history of the wildlife area and copies of the Agency's goals and objectives were distributed for review and discussion. Below is a list of issues and concerns identified by the CAG and DT.

This input will assist in developing strategies to implement management goals and objectives. Underlined statements below indicate that the input was received from the DT. Issues that are not underlined originated from the CAG.

Issue A. Access/Recreation

- Proposed ramp and toilet facility work at Stinson Flats Access area.
- Replacement of the toilet facility and the extension of the boat ramp at Stinson Flats Access Area.
- Limiting camping to specified areas on KWA. This project was received well and everyone agrees that this would improve the quality of hunting and outdoor experiences.
- Install gates where needed to better facilitate appropriate road use.
- Regulate camping (maximum number of days)

Issue B. Wildlife Area Management

- Remove old boundary fence within the borders of existing WDFW lands.
- Conduct habitat evaluations to determine the suitability of the Wildlife Area for augmentation of the California bighorn sheep population (currently estimated at fewer than 10 individuals).

Issue C. Habitat

- RMAP (Road maintenance abandonment plan) issues and orphaned roads to be abandoned.
- Proposed timber harvest and prescribed burn regimen. Discussed the timber harvest plan to thin (not just timber of commercial value) bug infested, dense and overgrown areas and prescribe burning to benefit wildlife and improve the health of the forest
- Conduct forest thinning and controlled burns to promote the growth of shrubs, forbs, oaks and grasses to improve habitat quality for deer.
- Work proposed on the Icehouse to protect the Vaux swift roost and Gilliam homestead to reclaim old house site
- Goldendale Hatchery / Pheasant Release Site land sell The group thinks that the funding for this project would be better spent on habitat improvements, instead of purchasing new land for a release site. Concerns were also raised for the lack of public involvement on the sale of this land and the reasons for the sale.
- Pursue funding avenues in support of expanded habitat improvement opportunities

Issue D. Roads

- Reduce disturbance to wildlife by abandoning roads and further restricting motorized access to appropriate portions of the Wildlife Area via gates and seasonal closures.

Issue G. Monitor, Survey and Inventory

- Assess habitat to determine the value of grazing to improve habitat for big game. Identify any suitable changes to current grazing strategy.
- Monitor grazing by use of vegetation measurements in controls and exclosures

Issue H. Other

- Additional Feedback WDFW needs to keep the public informed about issues and decisions that would affect user groups. They also felt that the public has no input on issues or decisions about things that they have helped to fund and are told only after the issue has been resolved or the decision has already been made.
- Discussed the purchase history and purpose of KWA.
- Grazing and farming practices benefits to wildlife was discussed.
- WDFW goals for KWA were discussed.

APPENDIX 2. KLUCKITAT 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) and enforced by the County Noxious Weed Board. WDFW will strive to meet its legal obligation to control for noxious weeds listed according to state law (Class A, B-Designate, and county listed weeds).

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 the Klickitat WMA

Weeds of concern on the Klickitat include Dalmatian toadflax (*Linaria dalmatica ssp. dalmatica*), diffuse knapweed (*Centaurea diffusa*), spotted knapweed (*centaurea biebersteinii*), yellow starthistle (*Centaurea solstitialis*) and Himalayan blackberry (*Rubus procerus*). This list is based on species that have been documented on the wildlife area (Table 2).

Table 2. Klickitat Wildlife Area Weeds. Including the State and County Weed Class Listing and Acres Treated.

	2005 State	2005 County	Wildlife	2005
Weed Species	Weed Class	Weed Class	Unit(s)	Treated Acres
Dalmatian Toadflax	B	B	Soda Springs	1
Spotted Knapweed	B	B	Soda Springs, Sondino Ponds	2.5
Diffuse Knapweed	B	R & S	Soda Springs, Sondino Ponds	2.5
Yellow Starthistle	B	B-non	Soda Springs, Sondino Ponds	1
General Weeds			Soda Springs, Sondino Ponds, Mineral Springs	3
Himalayan blackberry			Soda Springs, Sondino Ponds	4

B-Designate are state-listed and mandatory for control to prevent seed production/spread.

New Invader is not an official state classification, but indicates the county reserves the right to implement control.

R&S (Reduction and Suppression) Weeds are of wide distribution. Control along transportation corridors is recommended.

Management for individual weed species can be found in the following “Weed Species Control Plan” (WSCP) sections.

DALMATION TOADFLAX CONTROL PLAN

Scientific name: *Linaria dalmatica ssp. dalmatica*
Updated: 2005

Common name: Dalmatian toadflax

DESCRIPTION: Dalmatian toadflax is an erect, short-lived, perennial herb, 0.8 to 1.5 m tall. Dalmatian toadflax is a perennial species that spreads by horizontal or creeping rootstocks and by seed. A mature plant can produce up to 500,000 seeds, which are primarily dispersed by wind. The seeds may live up to ten years in the soil. Most seedlings emerge in the spring when soil temperature reaches 8° C at 2.5 cm. Germination in the fall is probably limited by soil water content, as well as possibly seed dormancy with the average life span of a plant being three years.

Mature Dalmatian toadflax plants are strongly competitive. Studies indicate that plots without Dalmatian toadflax may produce two and a half times as much grass as plots with toadflax. Mature plants are especially competitive with shallow-rooted perennials and winter annuals. Because of its competitive ability, Dalmatian toadflax is a concern in pasture and rangelands, as well as in natural areas, where it may out-compete more desirable, native species. Dalmatian toadflax occurs in a variety of habitats, including: roadsides, pastures, rangelands, and waste areas. It has spread most extensively west of the 100th meridian, occurring primarily on coarse-textured soils, ranging from sandy loams to coarse gravels.

Cars, deer, and birds can spread this weed. Individual plants and small groups of plants are found throughout much of the Klickitat Valley.

Dalmatian toadflax is a state-listed class B-Designate in the management areas.

MANAGEMENT INFORMATION:

Intensive clean cultivation can effectively control Dalmatian toadflax. A successful approach includes at least a two-year effort, with eight to ten cultivations in the first year and four to five cultivations in the second year. Cultivation should begin in early June and be repeated so that there are never more than seven to ten days with green growth visible. Since Dalmatian toadflax seedlings do not compete well for soil moisture against established winter annuals and perennials, control efforts should include attempting to establish and manage desirable species that will compete with toadflax.

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.

Calophasia lunula, a defoliating moth, is well-established in Washington and reportedly provides good control and *Mecinus janthinus*, a recently introduced stem boring weevil, shows promise. *Brachypterolus pulicarius*, although usually associated with yellow toadflax, can survive and may reduce seed production of Dalmatian toadflax.

CURRENT DISTRIBUTION ON THE SITE

Soda Springs Unit

ACRES AFFECTED BY WEED: ~100 **WEED DENSITY:** Low (Widely Scattered)

GOALS

- Monitor for increases in distribution.
- Continue to control plants when located incidental to other work.
Control expanding populations

OBJECTIVES

Survey and map existing populations

More accurately calculate the acres affected by Dalmation toadflax

Release biological controls

Treat all plants that can be reached by ATV before they produce seed

Survey nearby units for pioneering infestations

ACTIONS PLANNED

Monitoring will continue on an annual basis on nearby units.

HIMALAYAN BLACKBERRY WEED SPECIES CONTROL PLAN

Scientific Name: *Rubus discolor/armeniacus*
Updated: 2006

Common Name: Himalayan blackberry

DESCRIPTION: Himalayan blackberry (*Rubus discolor/armeniacus*) is a robust, sprawling perennial, more or less evergreen, shrub. Leaves are large, round to oblong and toothed, and usually in groups of five. Stout, thick, arching stems (canes) have large, stiff thorns. Shrubs first appear as individual canes, then groups of canes, gradually increasing to become great mounds or banks, with individual canes reaching up to nine feet. The main cane grows up to 15 feet tall; trailing canes spread up to 20-40 feet, frequently taking root at the tips. Small white to pink flowers appear in spring and then roundish, black edible fruits form in mid-summer to early August. Individual canes live only two to three years, yet reach a density of 525 canes per square yard. Roots penetrate down about 3 feet, and can be 30 feet long. Himalayan blackberry also grows vegetatively by root and stem fragments. Seeds remain viable for several years.

Native to Western Europe, this weed was probably first introduced to North America in 1885 as a cultivated crop. By 1945 it had naturalized along the West Coast. Himalayan blackberry tolerates a wide range of soils and moisture conditions, but not true wetland soils. It prefers full sun and well-drained soils. It is found in vacant lands, pastures, open forests, tree farms, roadsides, creek gullies, riparian areas, fence lines and right-of-way corridors.

Once it becomes well established, Himalayan blackberry out competes any low growing native vegetation and can prevent shade intolerant trees from growing, leading to permanent thickets with little other vegetation present. These dense, impenetrable thickets limit the movement of large animals. When this species takes over entire stream channels and banks, it can increase the possibility of flooding and erosion.

MANAGEMENT INFORMATION:

Control is best done in two phases: 1) remove above ground vegetation, and 2) kill/remove root crowns and major side roots (not necessarily in that order).

Biological: The USDA has not supported the introduction of herbivorous insects to control Himalayan blackberry due to the risk these insects may pose to commercially important *Rubus* species. Research on this subject continues.

Chemical: Herbicides such as triclopyr (Garlon 3a and 4), glyphosate (Roundup, Rodeo) or 2,4-D with triclopyr (Crossbow) deliver effective control when applied to mature, uncut canes in late summer/fall or to cut/resprouted stems in fall. All standing, dry, hard canes need to be removed for effective restoration.

Manual: Removing root crowns and major side roots by hand digging (claw mattock, pulaski/mattock) is a slow but sure way to destroy blackberry (especially small patches). You must be thorough and follow up because large root fragments left in soil may produce a new plant. Starting with lesser weed infestations and working towards the worst stands is effective at maximizing self-recovery of native vegetation. Or immediately seed with native grasses to reduce invasion by other weeds and allow follow-up treatment of surviving Himalayan blackberry with

broadleaf killing herbicides (if desired). Remove canes and fragments to prevent resprouting. Although fire alone doesn't control this weed, burning large infested areas will remove standing mature plants after a pre-spray of herbicide(s) to kill and desiccate aboveground portions. Planting fast-growing shrubs or trees or shade tolerant species may reduce or prevent Himalayan blackberry re-establishment, since the species is usually intolerant of shade. Grazing sheep and goats where mature plants have been removed has also controlled regrowth, but both are non-selective eaters.

Mechanical: Mowing and cutting can be very effective in controlling Himalayan blackberry. Several cuttings are required before the underground parts exhaust their reserve food supply. If only a single cutting can be made, do it when plants begin to flower. Debris may be fed through a mechanical chipper and used as mulch. Need to follow-up the next year, as Himalayan blackberry may resprout from root crowns in greater density (and overtop any planted vegetation).

CURRENT DISTRIBUTION ON THE SITE

Himalayan blackberry is sparsely scattered throughout spring and creek areas on the wildlife area. It is also present in forested areas to an unknown extent.

ACRES AFFECTED BY WEED: 10+

WEED DENSITY: Low

GOALS

- Monitor for increases in distribution.
- Continue to control plants when located incidental to other work.
- Prevent new occurrences

OBJECTIVES

- Spray plants when encountered during other weed control work.
- Cut or pull plants when encountered.

ACTIONS PLANNED

In 2006, conduct control concurrent with other work. Determine the extent of infestations.

CONTROL SUMMARY AND TREND

Himalayan blackberry has not been a major concern to date on this site. Grazing by elk, deer and cattle and dry periods during the summer has probably helped to limit the plants spread. It is unknown at this time whether the plant is increasing or static.

DIFFUSE KNAPWEED WEED SPECIES CONTROL PLAN

Scientific name: *Centaurea diffusa*

Common name: Diffuse Knapweed

DESCRIPTION: Diffuse knapweed (*Centaurea diffusa*) is a native of Eurasia, introduced into the U. S. in the early 1900s. It spreads by seed, aided by the tumbling of windblown mature plants, and it grows under a wide range of conditions and is widespread in the Northwest and many other states. The plant can grow as a short-lived perennial, a biennial, or occasionally an annual. It reproduces and spreads from seed. The plant develops a single shoot (stem), 1 to 2 feet tall that is branched toward the top. Grazed plants may produce multiple stems. Rosette and lower shoot leaves are finely divided. Leaves become smaller toward the top of the shoot and have smooth margins. Many solitary flowering heads occur on shoot tips. They are about 1/8 inch in diameter and 1/2 to 2/3 inch long. Flowers usually are white but may be purplish. Involucres bracts are divided like teeth on a comb and tipped with a slender spine that makes them sharp to the touch. Sometimes the bracts are dark-tipped or spotted like spotted knapweed. The long terminal spine differentiates diffuse from spotted knapweed. Diffuse knapweed seeds germinate in spring or fall or anytime during the growing season following a disturbance, if adequate soil moisture is present. Seedlings develop into rosettes and diffuse knapweed remains as a rosette until it grows to a critical size, then it bolts, flowers, and sets seed. It may take from one to several years for diffuse knapweed to reach the critical size necessary to reproduce by seed. Diffuse knapweed is native to degraded non-cropland and seashores from southern Europe to north-central Ukraine. It generally is found on dry, light, porous soils in Europe. Diffuse knapweed appears to occupy similar areas in the United States. Diffuse knapweed will not tolerate flooding or shade and thrives in the semiarid west (generally in 9- to 16-inch precipitation zones). Environmental disturbance (e.g., overgrazed pastures or rangeland, roadsides, rights-of-way, gravel piles, etc.) promotes its invasion.

MANAGEMENT INFORMATION:

Diffuse knapweed can be readily controlled with herbicides. However, the weeds will reinvade unless cultural techniques are used. Tordon 22K (picloram), Transline (clopyralid), Curtail (clopyralid + 2,4-D), or Banvel/Vanquish/Clarity (dicamba) all effectively control diffuse knapweed. Pulling the entire plant including roots can control small infestations of diffuse knapweed. If desirable grass competition is evident in diffuse knapweed stands, judicious herbicide application that does not injure grasses may allow them to compete effectively with the weeds. Irrigation (where possible) may help stimulate grass competition in these cases. However, infested rangeland or pastures often are degraded, allowing knapweed invasion, and herbicides alone will not restore the land to a productive state. Seeding suitable perennial grasses is necessary to prevent weed reinvansion. Several biological control agents, including a root boring beetle and moth, 2 seed head gall flies, and a seed head weevil are available but have not proven effective. Root-feeding insects may have a more detrimental effect on knapweed populations than seed-feeding ones. Larvae of the diffuse knapweed root beetle (*Sphenoptera jugoslavica*) feed in the roots of diffuse knapweed. Larvae of the yellow-winged knapweed moth (*Agapeta zoegana*) and the knapweed root weevil (*Cyphocleonus achates*) feed in the roots.

CURRENT DISTRIBUTION ON THE SITE

Found at on the Sondino pond and Soda Springs unit.

ACRES AFFECTED BY WEED: approximately 5 acres

WEED DENSITY: Moderate

GOALS

- Contain, control, suppress and/or eradicate the present infestation
- Monitor for and prevent new occurrences

OBJECTIVES

- Continue to actively search for new infestations
- Revisit the infestation site twice per year for a minimum of 10 years until site is declared weed free, i.e., it has been at least 10 years since diffuse knapweed seed was produced at the site and or live Diffuse knapweed plants have been observed at the site.
- Spray or pull as plants become evident each spring.
- Establish regulations and procedures for assuring equipment is washed clean of soil and plant material before entering the wildlife area.

ACTIONS PLANNED

In 2005 the diffuse knapweed infestation site on the Sondino ponds unit were mowed to prevent seed maturity and will be visited at least twice during the growing season with appropriate action being taken based on findings, e.g., spraying or pulling.

CONTROL SUMMARY AND TREND

Diffuse knapweed is not a new weed to the wildlife area and is spread through out the area were agriculture and soil disturbance has occurred. Areas of disturbance with native grasses and forbs communities reestablishing are competing and even out competing the knapweed. Encouragement of native grasses and plants will continue were infestations occur.

SPOTTED KNAPWEED WEED SPECIES CONTROL PLAN

Scientific name: *Centaurea malculosa*

Common name: Spotted knapweed

Updated: 2006

DESCRIPTION: Spotted knapweed (*Centaurea malculosa*) is a short-lived, perennial herb, 1-3 feet tall. It reproduces from seed and forms a new shoot each year from a taproot. Like diffuse knapweed, it is a native to central Europe. It can be distinguished from its close relative diffuse knapweed by the lack of a terminal spine at the tip of its bracts. Flowers are pinkish-purple or rarely cream colored. Spotted knapweed seeds germinate in spring or fall. The seedlings develop into and remain as rosettes for at least one growing season while root growth occurs. It usually bolts in May of its second growing season and flowers August through September. It is a prolific seed producer, and can produce up to 140,000 seeds/m². Seeds may remain viable in the soil for over 8 years. Seeds are spread by wind, with most seeds being shed immediately after reaching maturity.

Spotted knapweed is a highly competitive weed that invades disturbed areas and degrades desirable plant communities. It is found in light, porous soils, fertile, well-drained and often calcareous soils in warm areas. It occupies dry meadows, pastureland, stony hills roadsides and sandy or gravelly floodplains of streams and rivers. Spotted knapweed tolerates dry conditions, similar to diffuse knapweed, but survives in higher moisture areas as well, preferring areas that receive 12 to 30 inches of annual precipitation. Like diffuse knapweed, spotted knapweed has been reported to contain cnicin, an allelopathic chemical. Cnicin inhibits root growth of other plants, and destroys their ability to compete for limited soil moisture and nutrients.

Spotted knapweed is a state-listed class B weed.

MANAGEMENT INFORMATION:

Spotted knapweed can be managed similarly to diffuse knapweed. It is readily controlled with herbicides such as Tordon, Transline, Banvel or Clarity. As with diffuse knapweed, seeding competitive, desirable plant species after control of spotted knapweed is required to prevent reinvasion.

Hand pulling and mowing can reduce spotted knapweed densities but is labor intensive and not suited to large infestations. Seed production must be prevented for many years to prevent reestablishment. Similarly to diffuse knapweed, several insects have been found to be effective as biological control agents for spotted knapweed. These include seedhead flies (*Urophora*, spp.) a root-feeding beetle (*Cyphocleonus achates*), and several seedhead weevils (*Bangasternus* and *Latrines* spp.) The larvae of the yellow-winged knapweed moth (*Agapeta zoegana*) feeds in the roots of both knapweed species.

CURRENT DISTRIBUTION ON THE SITE

Found in the Soda Springs and Sondino Ponds Units.

ACRES AFFECTED BY WEED: 5

WEED DENSITY: Moderate

GOALS

Contain, control, suppress and/or eradicate the present infestation
Prevent further spread of this weed.

OBJECTIVES

Reduce spotted knapweed densities by chemical and mechanical methods.
Establish competitive desirable native plants on the site.

ACTIONS PLANNED

Continue chemical applications and/or pulling on the infestation.

CONTROL SUMMARY AND TREND

Spotted knapweed is not a new weed to the wildlife area and is spread through out the area were agriculture and soil disturbance has occurred. Areas of disturbance with native grasses and forbs communities reestablishing are competing and even out competing the knapweed. Encouragement of native grasses and plants will continue were infestations occur.

GENERAL WEEDS CONTROL PLAN

Scientific name: *Many*

Common name: General Weeds

Updated: 2005

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, sandbur, kochia, tumbleweed, puncture vine, knotweed etc. General weeds may also occur in agricultural fields, or comprise the dominant vegetation at a site identified for habitat restoration and includes species like cheatgrass, tarweed, cockle bur, reed canarygrass, bindweed, thistle, etc.

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 depending on the weed and desired management objectives.

Mechanical weed control may include mowing, burning, to the plowing and disking entire fields.

CURRENT DISTRIBUTION ON THE SITE

All public accesses and roadsides on the wildlife area contain general weeds to varying degrees. Several fields in the Soda Springs unit are comprised of general weeds.

ACRES AFFECTED BY WEED: ~150

WEED DENSITY: High

GOALS

- Maintain public access
- Restore fields to native grasses
- Reduce fire danger

OBJECTIVES

- Treat high public use areas with residual herbicide to prevent seed production.
- Summer fallow fields in second phase of restoration.

ACTIONS PLANNED

In the spring of 2006, problematic portions of roadsides, parking lots, access sites, and trailheads will be treated with a residual herbicide to eliminate the production and spread of weed seeds and improve appearance and public access for the entire season. Agricultural fields at the Klickitat will be sprayed or cultivated to prevent weed infestations.

CONTROL SUMMARY AND TREND

Roadside and access management have required a consistent, yearly maintenance effort. However, using new residual herbicide has reduced the effort needed to accomplish the same amount of work.

APPENDIX 3. FIRE CONTROL PLAN

Responsible Fire-Suppression Entities: The Klickitat Wildlife Area (and its Satellite Units) fall within the jurisdiction of DNR Forest Fire Protection, Parts of the wildlife Area also fall in the boundaries of Klickitat county Rural fire district 4, 7, 12 and 14. Fires that occur on the Klickitat Wildlife Area fall within the responsibility of the DNR Forest Fire Protection. Depending upon where the fire occurs, DNR will be contacted first, followed by an immediate call to other jurisdictions adjacent and within the fire area. In some cases, where there are multiple landowners or fire responders, fire suppression activities may involve two or more fire fighting entities.

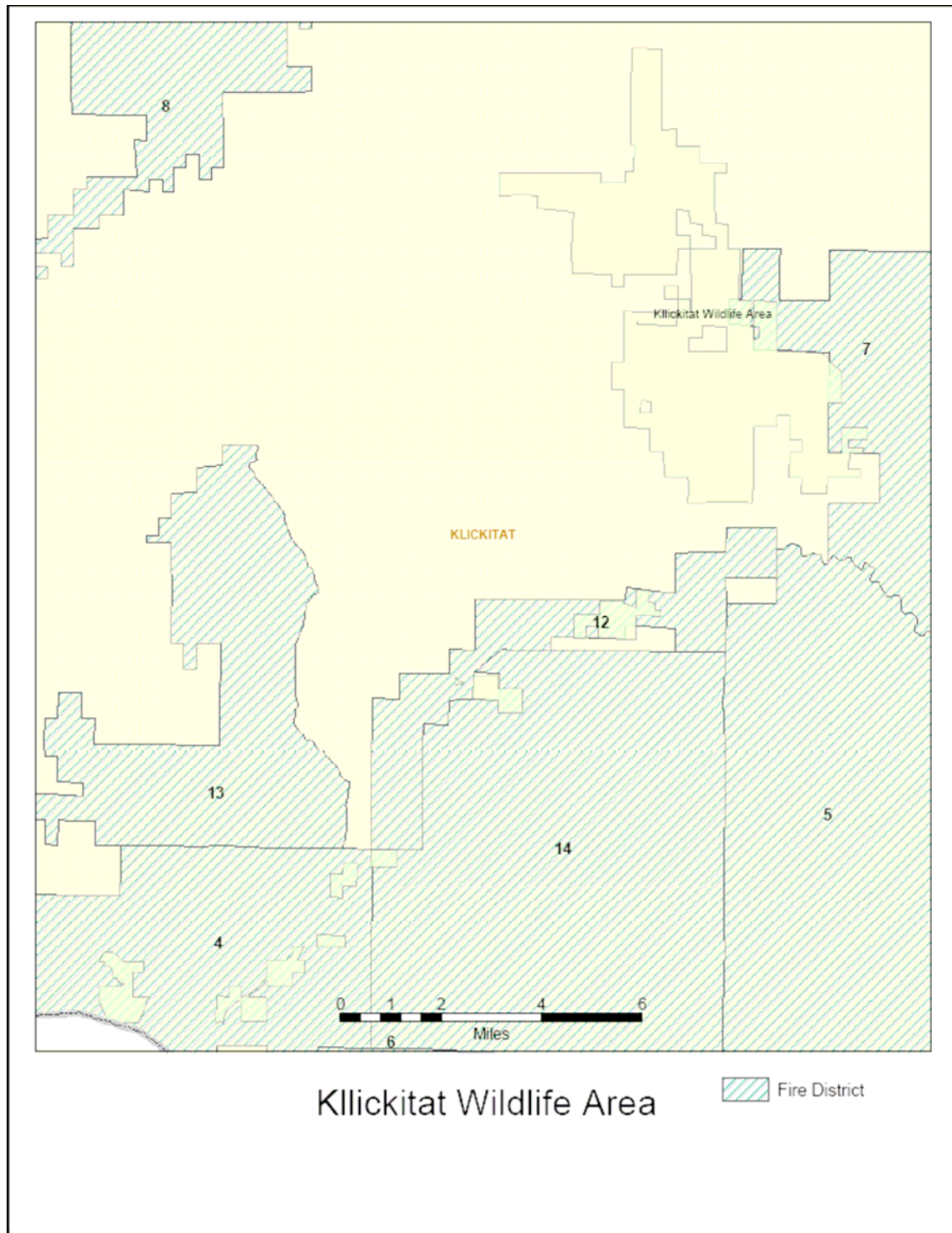
WDFW pays an annual fee to DNR to maintain an existing fire protection services contract. Suppression of fires on Klickitat Wildlife Area falls within the State Fire Protection Boundary and suppression is performed by DNR. WDFW pays an assessment fee for each acre within the fire protection boundary for these services.

Department Fire Management Policy: It is the Departments policy that wildlife area staffs 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 critical habitat values to the Incident Commander of the responding fire entity.

Wildlife Habitat Concerns: The Klickitat Wildlife Area contains fire sensitive habitat that is critical to providing winter forage for the migrating black tail deer. Deciduous and conifer trees and shrubs provide critical habitat, nesting and escape cover for western gray squirrels. WDFW requests that the Incident Commander or other fire fighting personnel on site notify WDFW personnel in the order listed below. 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 Scotch 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 Klickitat Wildlife Area by contacting the local fire district and the DNR Dispatch Office (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.



Fire Coverage for DNR and Klickitat County Fire Districts.

Fire Districts – DIAL 911

NAME	TELEPHONE	CELL
Klickitat County Fire District # 4 (Lyle)	(509) 365-2500	
Klickitat County Fire District # 7 (Goldendale)	(509) 773-4246	
Klickitat County Fire District # 12 (Klickitat)	(509) 369-2720	
Klickitat County Fire District # 14 (High Prairie)	(509) 365-2912	

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

NAME	TELEPHONE
DNR Dispatch (Forest Fires)	800-562-6010
DNR Goldendale Office	509-773-5588

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
Martin Ellenburg, Klickitat Wildlife Area Manager	509-773-4459	509-250-2938	
Regional Office, Vancouver	(360) 696-6211		
Dan Bolton, Wildlife Agent, Klickitat	(509) 637-0837		
Regional Program Manager	(360) 906-6722		

APPENDIX 4. WATER RIGHTS

Klickitat Wildlife Area

File #	Cert #	Stat	Doc	Priority Dt	Purpose	Qi	UOM	Qa	IR Acres	WRIA	County	TRS	Src's	1 st Source
S4-046472CL		A	Claim Short Form		DG, ST		CFS		20.00	29	Klickitat	03 0N 12 08 28	1	Spring
S4-06752PW RIS		IA		11/7/45	IR	.5000	CFS			30	Klickitat	05 0N 14 0e 07	1	Klickitat River

APPENDIX 5: MANAGEMENT PLAN COMMENTS & RESPONSES

Washington State Department of Fish and Wildlife, February 2007

The following individuals commented during the management plans public comment period.

Comment Author	Interest Group	Location
Chuck Edwards	Hunter	Unkown
Jerry Wilson	Adjacent Landowner	Klickitat County

Abbreviations: USFWS-United States Fish and Wildlife Services, etc.

Comments received on the Klickitat Wildlife Area Plan are presented below. A response for each comment is included. Where appropriate, changes were incorporated into the management plan to address public comments.

Commenter	Comment	Response
	General Support	
Jerry Wilson	I have lived here [next to the Klickitat Wildlife Area] for 17 years and hunted and fished here since 1962. I have read the draft that Dobler and Ellenburg prepared, and after the fluff is pushed aside, it is not a bad report.	Comment is noted.
	Public Access	
Chuck Edwards	What I'd like to see changed is the access for the people that are not a local. . . . So my gripe is you must be fair to all, not just the locals and let access be fair to all. I noticed this last year that employees of some timber companys had access to these areas with keys to the gates and would go in and make their kill behind locked gates that the public access was denied except walking in for miles. So us who do not have a key manage to stalk or move the aminated to them that have drove in with easy access for their kill. So how damn fair is that. This happends every where that either wharehouse or rainer timber companys either give management people keys to gates and they take their friends in, or they have polices preventing public access all together. I think these polices need to be changed as people like myself spend a lot of money to all of the local buisness' so whats fair?	WDFW is committed to providing equal access for residents and non-residents to the Wildlife Area. Access to public lands is the same for local residents as it is for citizens visiting from outside the area. Access to private land is granted at the discretion of the owner. Company-owned land is considered private land and private landowners may issue gate keys, as they deem appropriate. There are cases where a landowner needs access to their property via a gated road belonging to another landowner. If the gated road is the legally recognized access route to the property, the owner must be able to pass through the gate. There are gates on at least two roads that cross the boundary of the Soda Springs Unit that affect multiple landowners.

<p>Chuck Edwards</p>	<p>. . . Or thinge like letting the localls or WDFW runing OUR wildlife off to private lands just before OUR hunting seasons come around. I see this happen ever year. Then we the puplic have no access to any of these lands not even by asking for access.</p>	<p>WDFW works with large private landowners to encourage public access to their lands. Members of the public are also encouraged to contact landowners to discuss activities and access to their land. Private landowners have the right to restrict access to their land for various reasons such as fire, vandalism, garbage dumping, etc.</p>
<p>Jerry Wilson</p>	<p>I am 67 years of age. Both my wife and I are disabled hunters. there is no way we could walk back in there, and bring out an animal. With that in mind you would be doing an injustice to disabled hunters [by closing the South Breaks Road]. There are several other diaabled hunters that use that area because it is so open.</p>	<p>The road management plan is being reviewed. The current plan is to keep the Anderson Rd, Old Headquarters Rd., and the South Breaks Rd. open during the general hunting seasons. Parts of the Grayback Rd., Sheep Canyon Rd., and North Breaks Rd. have also historically been open during the general seasons and will continue to be open under the current plan. Road surface conditions will be an important factor in determining whether the roads can be left open during the later fall hunts. The needs of disabled hunters will be considered in scheduling road access during special hunts.</p>
<p>Road Management</p>		
<p>Jerry Wilson</p>	<p>In the draft it mentions closing " orphan roads." I know the roads in question, as they tried to close them last year. I went to the book Mr. Webster puts out and found the word orphan. Well it did not seem to fit the situation, so on January 17, I called the game dept at the Olympia office. I told the lady that answered the phone that I would like the definition of "Orphan Road according to the Game Dept. She transfered me back to the people in wildlife. Again I talked to a very nice lady and after explaining what I wanted, she ask me to give her a few minutes and she would find out. True to her word she came back with your defination of an orphaned road. It is, A road that is hardly used and is overgrown with plant life. Well that dosen't fit the description of the two roads Mr. Ellenburg, and Dobler closed last year. Both roads should have gates at the entry point. The South Breaks Road should be closed after archery season and not be opened until the first of April for turkey season. This road takes you into an area of at least a thousand acres. The road is gravel for about a quarter</p>	<p>Roads on the wildlife area must meet minimum state standards for protection of natural resources, especially habitat for native fish. The Washington Department of Natural Resources has been charged with ensuring that forest management roads meet these standards. For purposes of identifying the roads that fall under these guidelines, a forest practice road is one that has been used for timber hauling any time since 1974. A road that does not meet this criterion is called an orphan road. This definition basically distinguishes between roads that either are, or are not being regulated by DNR.</p> <p>Very few of the WDFW roads on the Klickitat Wildlife Area have been used for timber haul since 1974. Therefore, most of the roads are considered orphan roads. DNR does not regulate management of these roads, and WDFW may maintain or abandon roads on the Klickitat Wildlife Area in accordance with wildlife area needs and priorities.</p> <p>The Wildlife Area road management plan is being reviewed. Values such as public access,</p>

	<p>of a mile, then is dirt. Each hunting season there are places in the road that get tore up because the soil, once it is wet has no bottom. In the spring after it is driven over a few times it is once again a good road. Should it be closed permanatly, as Dobler and Ellenburg suggested, you would be closing a road that is in no way, an orphan road as per your own definition.</p> <p>The other road of concern is a road that does not fit the criteria for an orphan road but is an exception. This road takes off the Anderson Loop road, heading back to the North. There was a sign there, but Ellenburg removed it when told to take the sign off the Breaks Road. This road can be very very nasty at times. I know people were disappointed about the removal of the sign, and opening up the area again. It is an excellent place for people, who are able, to walk into for a chance at a decent buck. It also holds a large turkey population. The road is rarely used, and is becoming overgrown, so I believe it could qualify for orphan road status.</p>	<p>WDFW management needs, and access for fire protection, as well as habitat/range damage, cost and difficulty of maintenance, and potential for disturbance of wildlife during periods of vulnerability are being weighed for each section of road. Some roads will be improved, others will be subject to seasonal closures, and others will be permanently closed (abandoned). The proposed actions on orphan roads will be presented to the Citizen Advisory Group.</p>
Hunting/Fishing		
<p>Chuck Edwards</p>	<p>Being an avid hunter and fisherman, I very much enjoy the out doors. Hunting Black Powder this year, One of the problems I ran into was the locals that had managed to run the elk out of the area before the season had started. Either that or the WDFW was the culprit. What I'd like to see changed is the access for the people that are not a local. Also the herds not chased out of the public lands like they were in 2006 season. I know the area well and were the elk and deer roam. This comes after many days and at great cost of gas and supplies I needed, purchased from the local establishments. So my gripe is you must be fair to all, not just the locals and let access be fair to all.</p> <p>. . . Or thinge like letting the localls or WDFW runing OUR wildlife off to private lands just before OUR hunting seasons come around.</p>	<p>If habitat quality is more or less equal, animals tend to go where they experience the least disturbance. Public lands receive heavy use by hunters during hunting seasons. Adjacent private lands that are closed to entry during this time may receive less pressure or disturbance, which may cause animals to utilize these areas.</p> <p>Concentrations of deer and elk and associated browse can cause damage on private lands. Landowners will often chase animals off their lands to reduce damage. WDFW will sometimes assists landowners with hazing animals to discourage them from concentrating on private land where they are causing damage; however, WDFW does not engage in activities that would drive animals away from or off of public land.</p>

Jerry Wilson	This area [accessed via the South Breaks Road] also hosts a large population of turkeys. Last year [Wildlife Area Manager] Mr. Ellenburg closed the road for the winter, but then refused to open it in the spring. Myself and many others called his boss in Vancouver and complained. We finally got it open in the last week of the season.	The South Breaks Rd. will be open during spring turkey season 2007. This road is one of several that is planned to be open for most hunting seasons from mid-spring through the end of October every year.
Camping Area Maintenance		
Chuck Edwards	I see things every year that are totally unfair to hunters and things like some locals using good camping or hunting areas for a dump. this is what appalls me. Yet you plan to do nothing about this kind of abuse.	WDFW does not permit littering or dumping on its lands. WDFW staff are not always able to monitor all problem areas at the same time, and sometimes unlawful actions do occur. WDFW staff duties include cleaning up areas when possible. WDFW also collaborates with and receives assistance from volunteer groups and individuals to clean up areas.
Jerry Wilson	I live right next to the Klickitat Wild Life area and spend a lot of time checking for illegal fires and my wife and I pick up trash after the hunting season.	WDFW appreciates the help in keeping the Klickitat Wildlife Area safe and clean.
Management Plan Development Team		
Chuck Edwards	Your cag groups are only comprised of people that have no idea about what to do it seems, just look at their credentials. just for the hell of it why don't you pick on some people like hunters through out the state. You spend lots of time wasted just trying to agree or disagree with others in your group because your afraid to imbarss someones intelligence or insult them. So my sugestion to you is get someone who spends time and lots of their own money just trying to have a good time while their outside in the woods or wilderness.	Managing habitat for the benefit of wildlife and for public enjoyment can be a complex enterprise. Many disciplines and varying interests come into play. WDFW values the broad range of perspectives that the Citizen Advisory Group has to offer. This helps the Agency manage the land as well as serve the interests of the public. Some of the CAG members are hunters and fishermen, in addition to their other interests. Many WDFW staff members are hunters and fishermen, and are advisors in wildlife area management as well. There are other uses of the wildlife area that are compatible with the primary objective of providing habitat for wildlife. WDFW considers it important to encourage appreciation of the outdoors, while managing its lands in a responsible way.
WDFW Public Relations		

<p>Jerry Wilson</p>	<p>. . . on January 17, I called the game dept at the Olympia office. I told the lady that answered the phone that I would like the definition of "Orphan Road according to the Game Dept. She transfered me back to the people in wildlife. Again I talked to a very nice lady and after explaining what I wanted, she ask me to give her a few minutes and she would find out. True to her word she came back with your defination of an orphaned road.</p> <p>Last year Mr. Ellenburg closed the road for the winter, but then refused to open it in the spring. Myself and many oters called his boss in Vancouver and complained. We finally got it open in the last week of the season. His reasons to his superiors at times we quite humorus. Oh. Did I mention that Mr Ellenburg is a turkey hunter.</p> <p>I have talked to the Acting wildlife Area manager,Sue VanLouven. She has somewhat the same thoughts on this matter. She also is the best manager you folks have had in here in a long time. She is a worker and a great spokes person for the game dept. Keep her here. Jerry & Cathleen Wilson</p>	<p>Comment is noted. WDFW is committed to treating the public respectfully and providing information as needed in a professional manner.</p>
<p>Chuck Edwards</p>	<p>This is the kind of government interference [running game animals off public land before the hunting season begins] we have to put up with</p>	<p>WDFW does not engage in activities that would drive animals away from or off of public land.</p>