

PHILLIP W. SCHNEIDER WILDLIFE AREA MANAGEMENT PLAN

**October 2006
(Updated September 2017)**

**Oregon Department of Fish and Wildlife
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Executive Summary

The Phillip W. Schneider Wildlife Area (PWSWA) was acquired in 1972 to protect and enhance winter habitat for the upper John Day River, Aldrich Mountains, and eastern Ochoco Mountains mule deer population. Recent GPS collaring data also indicates that the wildlife area provides critical winter range habitat from mule deer populations from the Beulah, Desolation and Malheur River Game Management Units. The wildlife area presently consists of 25,127 acres of deeded land, with 27,200 acres of Bureau of Land Management (BLM) land within the area boundaries. The total base of public land within the exterior boundary of the PWSWA is 52,327 acres. The wildlife area protects, enhances, and restores wildlife habitats and ensures public access to thousands of acres of public lands.

In 1993 the first long range management plan for the wildlife area was created.

The 2006 Phillip W. Schneider Wildlife Area Management Plan offered a 10 year comprehensive vision and action plan. The 2017 review is intended to update and revise any changes necessary for the current and future operation of the wildlife area.

This plan describes issues and provides actions for addressing them. These actions will be implemented during the life of this plan, but are subject to funding and personnel availability. The management plan will be reviewed in 2022 to gauge the implementation progress and make necessary revisions and revised in its entirety in 2027.

Introduction

Purpose of the Plan

This document is a long range plan designed to guide the management of the PWSWA for the next 10 years. The Oregon Department of Fish and Wildlife's (Department) management planning process for wildlife areas involves the development of broad goals for the areas, and formulation of specific objectives and management strategies to achieve those goals. The purposes of this plan are:

- To provide clear direction for the management of the PWSWA over the next 10 years;
- To provide long-term continuity in wildlife area management;
- To communicate the Department's management priorities for the PWSWA to its neighbors, visitors, and to the public;
- To ensure that management programs on the PWSWA are consistent with the original mandate and purpose of the area when it was first established;
- To ensure that management of the PWSWA is consistent with Federal, State, and local plans, and;
- To provide a basis for budget requests to support the PWSWA needs for staffing, operations, maintenance, and capital improvements.

Oregon Department of Fish and Wildlife Mission and Authority

The mission of the Oregon Department of Fish and Wildlife is to protect and enhance Oregon's fish and wildlife and their habitats for use and enjoyment by present and future generations. The Oregon Department of Fish and Wildlife is the only state agency charged exclusively with protecting Oregon's fish and wildlife resources. The state Wildlife Policy (ORS 496.012) and Food Fish Management Policy (ORS 506.109) are the primary statutes that govern the management of fish and wildlife resources.

Purpose and Need of the Phillip W. Schneider Wildlife Area

The PWSWA was acquired in 1972 to protect and enhance winter habitat for the upper John Day River, Aldrich Mountains, and eastern Ochoco Mountains mule deer population. In addition to providing important mule deer habitat, the PWSWA provides habitat components for Rocky Mountain elk, California bighorn sheep and pronghorn. Management of vegetation on the PWSWA enhances the growth and nutrition of native plants used by big game for winter forage. This vegetation management contributes to minimizing the number of big game animals that winter on proximate private land. The PWSWA also includes management to maintain and enhance significant habitat for anadromous and resident fish on the wildlife area.

Phillip W. Schneider Wildlife Area Vision Statement

The vision for the Phillip W. Schneider Wildlife Area is as follows:

Quality mule deer winter range is enhanced, while balancing the needs of other key fish and wildlife species, and is available for the enjoyment of present and future generations.

Wildlife Area Goals and Objectives

Using the SMART acronym (**SMART-Specific, Measurable, Achievable, Realistic, Tractable**), department staff has developed the following goals and objectives to help guide management activities throughout PWSWA. Wildlife area goals are broad, open-ended statements of desired future conditions that convey a purpose but do not define measurable units. In contrast, objectives are more concise statements of what the Department wants to achieve, how much the Department wants to achieve, when and where to achieve it, and who will be responsible for the work. Objectives derive from goals and provide the basis for determining strategies, monitoring wildlife area accomplishments, and evaluating the success of strategies. The goals and objectives for the P.W. Schneider Wildlife Area are:

Goal 1: To protect, enhance, and restore range conditions that will provide key winter habitat for mule deer.

Objective 1.1: To provide winter range habitat capable of supporting up to 70% of the Murderers Creek Wildlife Management Unit mule deer population management objective (9,000) by annually enhancing 500 acres of native grassland and shrubs.

Goal 2: To protect, enhance, and restore habitat diversity for all other beneficial wildlife, compatible with Goal 1.

Objective 2.1: To protect, enhance and restore upland habitats to benefit native and desirable non-native wildlife.

Objective 2.2: To protect, enhance and restore high quality instream habitat, water quality and quantity, and riparian/wetland systems for resident and anadromous fish, native wildlife, and desirable non-native fish and wildlife.

Objective 2.3: Maintain 80 acres of agricultural lands annually to provide forage for native and desirable non-native wildlife.

Objective 2.4: To maintain and enhance wildlife area facilities, structures, and equipment to conduct habitat management and public use projects on the wildlife area.

Goal 3: To provide a variety of quality recreational and educational opportunities to the public which are compatible with Goals 1 and 2.

Objective 3.1: Provide approximately 30,000 hunting, trapping and angling use days annually.

Objective 3.2: To provide approximately 15,000 wildlife viewing and education/interpretation use days annually.

Wildlife Area Establishment

Acquisition of the PWSWA, previously named Murderers Creek Wildlife Area, was initiated in 1972 to protect and enhance winter habitat for mule deer. In 2002, the name of the Murderers Creek Wildlife Area was changed to Phillip W. Schneider Wildlife Area in honor of Phillip W. Schneider, past Director of the Department and Commissioner Emeritus, for his work to obtain funds for the initial purchases of the area. Mr. Schneider was committed to providing outdoor recreational opportunities for the citizens of Oregon.

From 1929 through 1933 the Murderer's Creek basin was a State wildlife refuge where hunting was not permitted. At the end of that period, the largest deer population for the area was recorded. Heavy domestic livestock use combined with a large mule deer population resulted in highly degraded range conditions. Large numbers of mule deer perished due to starvation. Native bunchgrasses, bitterbrush, other shrubs, and trees were heavily affected by overgrazing. Studies conducted by the BLM on Murderer's Creek Flats indicate that six to eight inches of topsoil was lost to erosion, resulting in substantial reduction in potential for vegetative production.

In 1972, the Wayne Stewart Ranch was purchased by the Department to provide habitat for a large wintering deer herd, to help reduce wildlife damage to crops on private land and to protect streams important to salmonids. Then, in 1977, the John Bennett Ranch and Joe Martin Ranch properties were added. The James Sproul Ranch was added to the PWSWA in 1997. In 2013, the Department finalized a land deal with Rocky Mountain Elk Foundation that included the sale of 160 acres of State property in lower Deer Creek to aid with the purchase of an additional 560 acres. These purchases make up the current wildlife area, with 25,127 acres of deeded land and 27,200 acres of Bureau of Land Management land lies within the area boundaries. The total base of public land within the exterior boundary of the PWSWA is 52,327 acres. Additionally, there are 64,515 acres of U.S. Forest Service (USFS) land adjoining the wildlife area. The 116,442 combined acres make up the Murderer's Creek Coordinated Resource Area (MCCRA). Acquisition of the PWSWA has guaranteed public access to thousands of acres of public land.

Description and Environment

Physical Resources

Location

The PWSWA is located southeast of Dayville on Highway 26 near mile post 132, 30 miles west of John Day in Grant County, Oregon (**Figure 1**). The wildlife area's western border consists of several miles of the South Fork of the John Day River.

Climate

Elevation ranges from 2,400 feet near Dayville to 5,200 feet near Aldrich Mountain. Annual precipitation averages 13.7 inches in Dayville and fluctuates with elevation. Summers are typically hot and dry, averaging 82.5°F and 0.9 inches of rain per month during the period May through September at Dayville. Winters are moderately cold with temperatures averaging 24.8°F for the period from December through March. Total annual snowfall fluctuates widely, from a few to 40 inches per winter.

Topography and Soils

Moderately shallow to deep and well-drained soils over gravel are representative of riparian areas along the major drainages.

The upland soils are of two types: one being shallow and stony basalts, the other being sediments with dense clay subsoil providing slow water penetration and fast runoff. The latter type has created sheet and gully erosion in some areas.

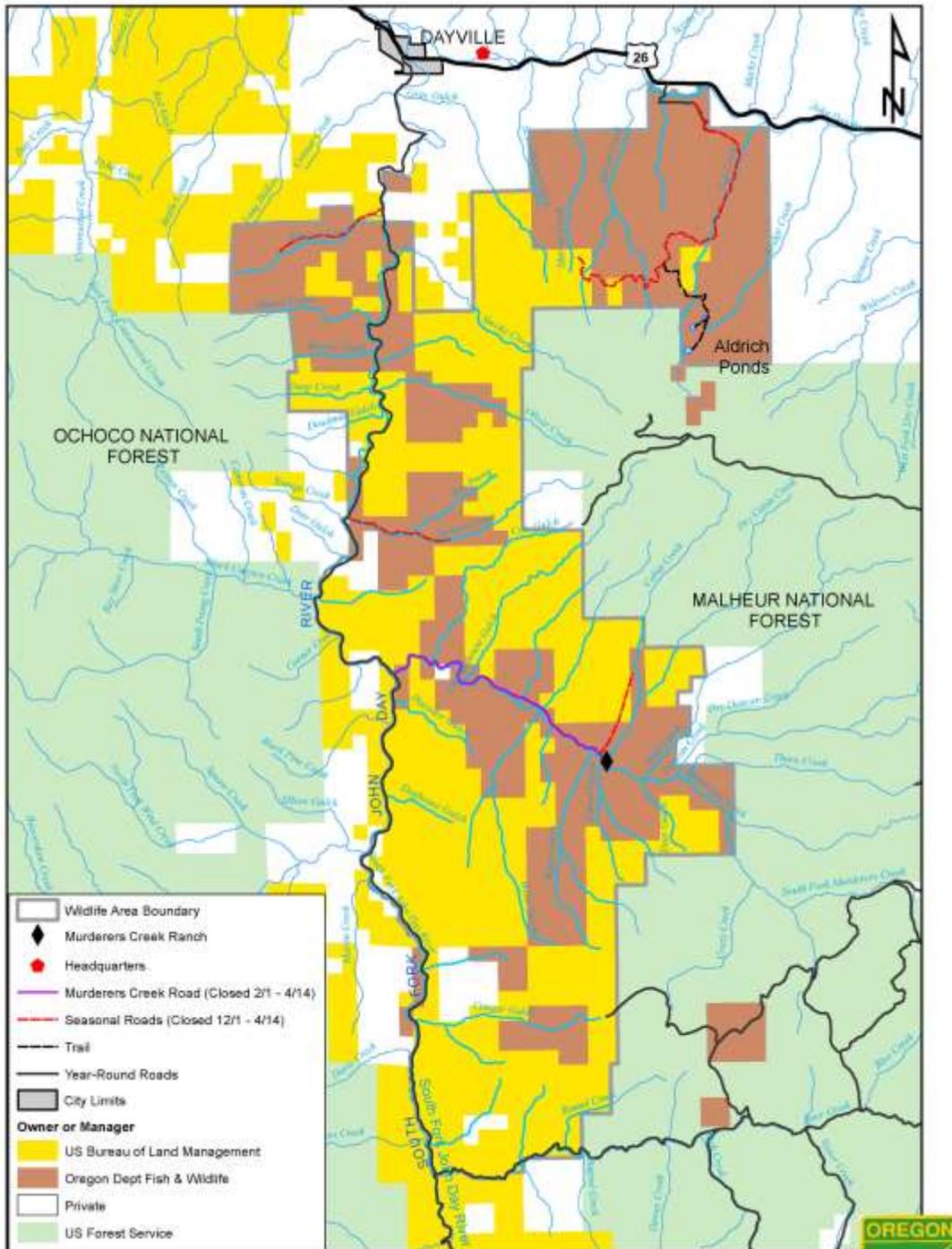
The timbered soils range from very shallow to very deep. Increased precipitation at higher elevations supports timber and good grass growth in the deeper soils.

Riparian soils are generally "barren", thin, and well-drained, comprised of gravels over basalt with low nutrient level.

Topography within the exterior boundaries of the PWSWA consists of steep cut canyons and draws. About 165 acres of flat creek bottom pastures is present along Murderers Creek. There are approximately 6,000 acres of rolling flatlands, known as Murderers Creek Flats, which lie south of Aldrich Mountain and north of Murderers Creek. The BLM owns most of the acreage associated with Murderers Creek Flats, but cooperatively manages this acreage with the PWSWA. There are about 300 acres of high-elevation wet meadows near Aldrich Mountain.

Figure 1: Phillip W. Schneider Wildlife Area Features and Land Ownership

Features and Ownership/Management within Phillip W. Schneider Wildlife Area



July 2017



Habitat Types

Many of the natural plant communities on the wildlife area have been altered from their original condition by various types of human activities and the introduction of non-native plants.

The variety of vegetative species and habitats the PWSWA can successfully support is dependent upon ecological factors including geographical position, elevation, topography, soils, and weather. Other limiting factors include insects, disease, noxious weed encroachment and historical anthropogenic management activities. Common plant species found on the PWSWA are listed in **Appendix A**.

Table 1 shows the habitat types and approximate amount of acres of each type present on the wildlife area. **Figure 2** illustrates the habitat types present on the PWSWA.

Table 1. Habitat Types and Approximate Acreages on the Phillip W. Schneider Wildlife Area.

Habitat Type	Acres
Western juniper woodland	45,697
Ponderosa pine forest	3,229
Northern Oregon mixed conifer	3,280
Big sagebrush shrubland	1,172
Agricultural	549
Fresh Water Aquatic/Riparian	37 miles
Total	53,927*

***Note: Total includes 1,600 acres of private lands within the wildlife area boundaries.**

Western Juniper Woodland

This is the most common habitat type found on the wildlife area. This habitat is dominated by Western juniper (*Juniperus occidentalis*), mountain mahogany (*Cercocarpus montanus*), sagebrush (*Artemisia* spp), rabbitbrush (*Crysothamnus* spp), bitterbrush (*Purshia tridentata*) and grasses such as bluebunch wheatgrass (*Pseudoroegneria spicata*) Idaho fescue (*Festuca* spp) and needlegrass (*Stipa* spp). This habitat association with its shrub understory is a key habitat feature on PWSWA for mule deer forage during hard winters. Disturbance regimes, including the mean fire return intervals maintained historic juniper distribution and associated plant communities within the PWSWA and other parts of the Northern Great Basin. Recent anthropogenic activities have disrupted disturbance regimes, allowing western juniper to increase its distribution and density upon the landscape. Expansion of western juniper into neighboring plant communities is cause for concern due increased soil erosion, reduced stream flows, reduced forage production, changes in plant community composition and altered wildlife habitat.

Ponderosa Pine Forest

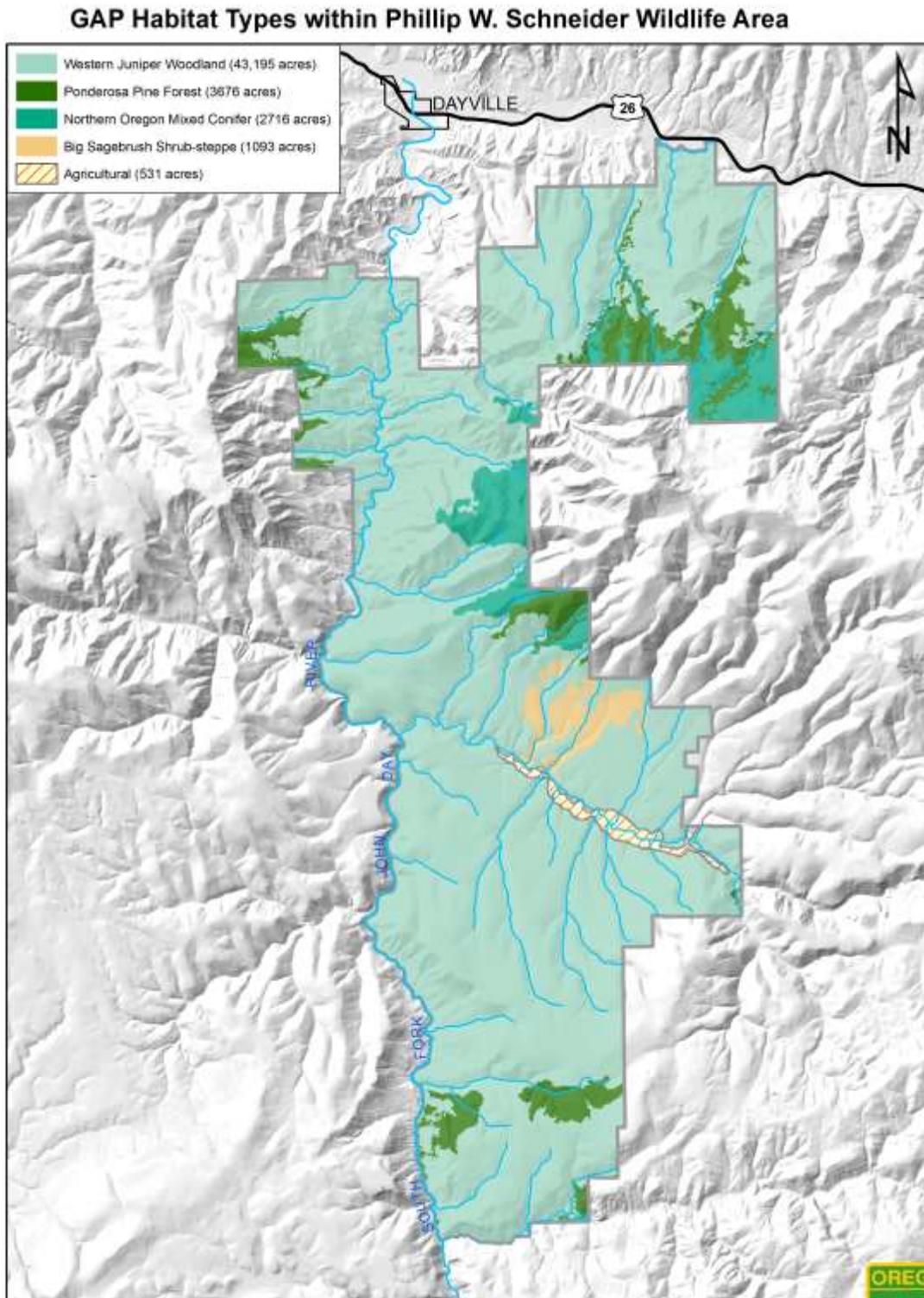
This habitat type is dominated by ponderosa pine (*Pinus ponderosa*) but also has lodgepole pine (*Pinus contorta*), western larch (*Larix occidentalis*), Douglas fir (*Pseudotsuga menziesii*), white fir (*Abies concolor*) and Western juniper. Depending on elevation and time since disturbance numerous grass and shrub species including sagebrush, rabbitbrush, bitterbrush, bluebunch wheatgrass, Idaho fescue and needlegrass are present.

Ponderosa pine woodlands are valuable to a variety of wildlife species on PWSWA. This habitat type provides escape and security cover for big game species and is used as foraging habitat for white-headed woodpecker (Oregon Conservation Strategy (OCS) strategy species), mountain (*Sialia currucoides*) and western bluebirds (*Sialia mexicana*) and roosting and foraging habitat for a variety of bat species. Ponderosa pine with a strong shrub understory is also an important habitat feature on PWSWA for mule deer forage during hard winters.

Northern Oregon Mixed Conifer

Mixed conifer forest species consist of Douglas fir, grand fir (*Abies grandis*), white fir, western larch, lodgepole pine, and western juniper. Elk sedge is also abundant in forested areas and provides important summer habitat for mule deer and other wildlife species.

Figure 2: Habitat Types within Phillip W. Schneider Wildlife Area



Habitat Data Source: Idaho Fish and Wildlife GAP, ~2007



Big Sagebrush Shrubland

This habitat type includes both shrubland and grassland. Shrubland species are dominated by sagebrush, rabbitbrush, bitterbrush and some mountain mahogany. Native grasslands include Idaho fescue, bluebunch wheatgrass and Sandberg's bluegrass. Medusaehead rye (*Taeniatherum caput-medusae*) is a non-native species that has invaded and replaced native grasses in some locations. Due to a reduction in the incidence of wildfire, western juniper is encroaching into much of the grassland and shrubland. Bitterbrush and mountain mahogany, common browse species for wintering mule deer, continue to decline in vigor as old plants age and young plants are suppressed by encroaching juniper.

Sagebrush habitats are a critical component to the historical success of the PWSWA. This habitat type is important to wintering large numbers of deer by providing quality forage during a physiologically stressful time of the year. Shrublands are also beneficial to other wildlife species by providing foraging and nesting habitat for various passerines, reptiles and small mammals. Due to its relative importance to a range of species and its noted decline in quality throughout the western U.S., the proper conditioning, use, and management of this habitat type is essential

Agriculture

Pastures with domestic grass and legumes, as well as seed and grain producing crops, are cultivated on some lowland floodplains.

Freshwater Aquatic & Riparian

The PWSWA includes 37 miles of steelhead-producing waters along the mainstem South Fork of the John Day River. Wildlife area staff maintains 4 pond fisheries and 27 miles of angling access to resident and anadromous fish species. Numerous miles of perennial and intermittent streams, with associated riparian habitat, are present on the wildlife area. Hardwood communities including black cottonwood (*Populus trichocarpa*), alder (*Alnus* spp) and willow (*Salix* spp) dominate the riparian zones of the larger streams. Riparian shrub species include blue elderberry, chokecherry, mock orange and red osier dogwood. Management of streamside riparian habitat is conducted to prevent degradation of water quality, to enhance water quantity and to improve aquatic habitat for fish.

Description of Tracts

Unlike other Department wildlife areas which may include several disconnected tracts of land, the PWSWA consists of a large core property of 22,927 acres, with an additional 1,800 acres of Department-owned lands lying within proximate USFS-managed lands. As previously described, an inholding of 27,200 acres of BLM-managed land lies within the core property of the wildlife area.

Biological Resources

The PWSWA is diverse in elevation, habitat types, and water availability. With habitats ranging from riparian and shrubland to juniper woodland and mixed conifer, the

PWSWA supports numerous species of fish and wildlife. Management activities which improve habitat conditions for mule deer also provide benefits for other wildlife such as other big game species, furbearers, songbirds, waterfowl, upland game birds, small mammals, reptiles, amphibians and fish.

Birds

A wide variety of bird species can be found throughout the wildlife area. Riparian areas along the main stem John Day River, South Fork John Day River and Murderers Creek provide excellent habitat for many of the bird species listed in **Appendix B**. Upland areas also provide important habitat for passerines and game species.

Many species of songbirds and waterfowl are migratory and only frequent the wildlife area seasonally during breeding and brood-rearing periods. Migratory birds such as ducks, geese and morning doves are seasonally abundant throughout the PWSWA. There are good winter viewing opportunities for bald eagles (*Haliaeetus leucocephalus*) along the mainstem John Day River, South Fork John Day River and in the Murderers Creek basin.

Duskygrouse (*Dendragapus obscurus*) are common at higher elevations on the PWSWA. Broods are counted along with other gallinaceous birds. Ruffed grouse (*Bonasa umbellus*) are common in brushy draws and creek bottoms and occupy all suitable habitats.

Chukar partridge (*Alectoris graeca*) are common throughout the canyon areas of the PWSWA. Hungarian partridge (*Perdix perdix*) inhabit the PWSWA in small numbers, adjacent to agricultural areas.

Mountain quail (*Oreortyx pictus*) distribution has expanded rapidly since birds were transplanted onto the PWSWA to bolster dwindling natural populations. Broods are also counted annually in late July and population numbers have fluctuated based on numerous factors. However, it is believed that Mountain quail occupy most of the available habitat within the wildlife area. California quail (*Callipepla californica*) occupy all suitable habitat on the PWSWA. Broods are counted in late July to determine population status. California quail offer good opportunities for hunter recreation.

Wild turkeys (*Meleagris gallopavo intermedia*) have been released on the PWSWA to provide hunting opportunities. Broods are counted in late July to determine population status. Habitat on the PWSWA which supports turkeys is stable and expected to remain so. Wild turkeys will likely continue to increase in numbers until a stable population is reached.

Mammals

The PWSWA is managed primarily to protect and restore winter habitat for mule deer (*Odocoileus hemionus*). Since 1990 the mule deer population has fluctuated between a high of 97% of management objective in 1998 (8,800 deer) to a low of 56% of management objective in 2008 (5037 deer) in the Murderers Creek Wildlife

Management Unit. Recent light to moderate winter conditions have allowed good adult carryover. The fawn recruitment rate is at the targeted benchmark of 40 fawns/100 adults

There has been no significant harvest of female deer in the Murderers Creek Unit since 1981. Buck hunting however is managed under a limited entry system. Further information on deer populations can be found in the Department's Mule Deer Management Plan, February 2003.

A complicating factor for management of forage resources is inter-specific competition between deer, Rocky Mountain elk (*Cervus elaphus*), and feral horses (*Equus caballus*). Significant consumption of winter forage by the existing feral horse population is a major concern. Feral horses occur both on and proximate to the PWSWA.

Under federal protection the feral horse herd has grown and competes heavily with wildlife for available food. Department personnel continue to coordinate with federal land managers to support managing horse populations at management objectives established in the Forest Planning and Coordinated Resource Management Planning process.

Competition for forage occurs between deer and elk especially on the winter range. Browse lines on mountain mahogany plants, beyond the reach of deer, indicate a competitive presence that may be affecting mule deer population levels. The elk population in the Murderers Creek Unit has been near or above the management objective of 1,700 animals since 1993 (1,600 elk in 1993 to a high of 2300 elk in 1996). The current population estimate is 1,900 elk.

Through natural dispersal from Idaho, wolves (*Canis lupus*) became established in Oregon in 2008. By July of 2015 the known population in Oregon was 85 wolves with reproduction documented in 13 packs¹. Because of the abundant wintering big game wildlife species and suitable habitat on the PWSWA it is likely wolves will occur on the wildlife area in the future.

No recent surveys have been conducted for furbearers or bats. Oregon State University has conducted preliminary small mammal presence surveys in association with habitat restoration work being conducted within the wildlife area. In order to determine population levels of these species, additional resources would be required to conduct adequate surveys.

A list of wildlife species known or thought to inhabit the PWSWA is shown in **Appendix B**.

¹ Oregon Department of Fish & Wildlife, 2015. Updated biological status review for the Gray Wolf (*Canis lupus*) in Oregon an evaluation of criteria to remove the Gray Wolf from the List of Endangered Species under the Oregon Endangered Species Act. Oregon Department of Fish & Wildlife. 4030 Fairview Industrial Dr. SE. Salem, Oregon 97302.

Reptiles and Amphibians

The PWSWA's managed ponds, riparian areas and uplands provide habitat for 17 of 22 species of reptiles and amphibians as recorded during a 1984 contracted inventory of the upper John Day River drainage. Little recent survey work has been conducted. Those species found on the wildlife area are also listed in Appendix B.

Fish Resources

Summer steelhead (anadromous form of *Oncorhynchus mykiss*) and redband trout (resident form of *O. mykiss*) are found throughout the PWSWA in perennial as well as some intermittent streams. Many streams on the wildlife area provide important spawning and rearing habitat for both of these species. Murderers Creek, its tributaries and Deer Creek are the largest and most important steelhead spawning areas within the boundaries of the area. Other steelhead spawning and rearing streams include Flat Creek, Cabin Creek, Todd Creek, Thorn Creek, Duncan Creek, South Fork Murderers Creek, Tex Creek, and Cougar Gulch. In total 37.25 miles of steelhead production waters are within the wildlife area. Fisheries management as well as restoration activities within these tributaries are based on the strategies and recommendations made within Oregon's 2010 Mid-Columbia Steelhead Recovery Plan.

During years with abundant water the South Fork John Day River, primarily between Murderers Creek and Izee Falls, is used for spawning by small numbers of adult spring Chinook salmon (*Onchorynchus tshawytscha*). Juvenile Chinook that migrate out of the mainstem John Day River use the South Fork John Day River for rearing in most years.

No bull trout (*Salvelinus confluentus*) are known to use the wildlife area for spawning or rearing. However, the mainstem John Day River is a migratory corridor for bull trout from late fall through early spring.

The wildlife area has four ponds that are stocked with hatchery rainbow trout. Roosevelt and Stewart ponds, located on the north side of Aldrich Mountain and commonly referred to as Aldrich Ponds, are stocked each spring with a total of 750 fingerling rainbow trout. These two ponds are managed for trophy trout and are very popular with anglers because the fingerlings grow rapidly, often producing trout over 20 inches long. Access to Aldrich Ponds is limited to non-motorized use on the last 1.5 miles. Other ponds that are stocked periodically include small ponds in Wiley Gulch (0.5 acre) and in Aldrich Gulch (0.7 acre). Access to these ponds requires anglers to walk in from 1 to just over 3 miles, which limits angling pressure. A detailed list of fish species present on the PWSWA is found in at the end of **Appendix C**.

Species of Conservation Concern

No specific surveys have been conducted to determine the presence or absence of Threatened or Endangered wildlife species on the PWSWA. However there are six federally listed wildlife species that have been found in the region and may be present on the wildlife area. These are shown in **Table 2**. A detailed list of state sensitive wildlife species is found in **Appendix D**.

Table 2. Federal and State listed Endangered, Threatened, Candidate and Species of Concern potentially present on the PWSWA.

Common Name	Scientific Name	Federal Status	State Status
Canada Lynx	<i>Lynx canadensis</i>	Threatened	None
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	Proposed Threatened	None
Gray Wolf	<i>Canis lupus</i>	Endangered	None
Mid-Columbia Steelhead	<i>Oncorhynchus mykiss</i>	Threatened	None
Interior Redband Trout	<i>Oncorhynchus mykiss</i>	Species of Concern	None
Columbia Spotted Frog	<i>Rana luteiventrus</i>	Candidate	Sensitive

Surveys for threatened, endangered or sensitive plant species have been conducted on BLM property in the South Fork John Day River drainage. Three special status plant species are known to exist in this area or nearby. However none of these special status species are currently listed, or proposed to be listed, by USFWS, as threatened or endangered.

When the Department's 1993 Murderers Creek Wildlife Area Long Range Management Plan was developed, the transparent milkvetch (*Astragalus diaphanus v. diurnus*) was named the South Fork John Day milkvetch. Transparent milkvetch is an annual plant found along the northern portion of the South Fork John Day River, in openings within western juniper woodland. A member of the pea family, it is a BLM-designated Sensitive species and listed as Threatened by the Oregon Department of Agriculture (ODA). Due to its habitat, it is not generally affected by most land uses, other than those that would greatly impact the soil surface, such as excavation for road material. The milkvetch flowers in April and May.

The Washington monkeyflower (*Mimulus washingtonensis*) listed in the Murderers Creek Long Range Management Plan (1993) as a Species of Concern, is no longer listed by the ODA or the BLM.

Arrowleaf thelypody (*Thelypodium eucosmum*) is a biennial, sometimes a short-lived perennial, member of the mustard family usually found in moist, seep areas on ashy-clay soils in Grant and Wheeler Counties, in association with western juniper. Considered to be threatened throughout its range, it is a BLM-designated Sensitive species and is listed as Threatened by the Oregon Department of Agriculture. Most populations are found in steep drainages along the John Day River, near Monument to Service Creek, with other populations in the Sutton Mountain, Dayville and John Day areas. This species is extremely susceptible to livestock grazing and other types of continuous disturbance, although it appears to benefit from occasional disturbance which exposes bare soil and provides a new seedbed. Arrowleaf thelypody has been observed to flourish after wildfires, although an intense fire could result in damage to rosettes and the seed bed, especially where the plants occur under juniper. Although not known to be on the PWSWA, it should be suspected in appropriate habitat.

Dwarf evening-primrose (*Camissonia pygmaea*), a member of the evening primrose family, is a Candidate species listed by the Oregon Department of Agriculture and is designated as Sensitive by BLM. Known habitat of this diminutive annual consists of dry, gravelly washes along tributaries of the John Day River system. Historic collections are from the Clarno, Big Muddy and Sutton Mountain areas, with one contemporary collection from public land near Kimberly. This species should also be suspected in appropriate habitat on the PWSWA.

Non-native Species

Non-native wildlife species present on the PWSWA include pest species such as the European starling (*Sturnus vulgaris*) and house mouse (*Mus musculus*) and introduced game species such as California quail and wild turkey. These species are shown in **Table 3**.

At this time there is no active management effort on the PWSWA aimed specifically at control of non-native wildlife species, except for California quail and wild turkey.

Table 3. Non-native Wildlife Species that May Occur on the Phillip W. Schneider Wildlife Area.

Common Name	Scientific Name	Common Name	Scientific Name
House sparrow	<i>Passer domesticus</i>	House mouse	<i>Mus musculus</i>
Red fox	<i>Vulpes vulpes</i>	European starling	<i>Sturnus vulgaris</i>
Rock dove	<i>Columba livia</i>	California quail	<i>Callipepla californica</i>
Wild turkey	<i>Meleagris gallopavo</i>	Chukar	(<i>Alectoris chukar</i>)
Eurasian Collared Doves	<i>Streptopelia decaocto</i>		

Many non-native plants occur on the PWSWA. Most non-native plants are domestic pasture grasses and forbs that are used by cattle and wildlife. Some non-native plants are actively controlled by biological, chemical and mechanical means. The list of plants considered noxious by the Grant County Weed Control is found in **Table 4**.

Table 4. Noxious weeds listed by the Grant County Weed Control.

Common Name	Scientific Name	Common Name	Scientific Name
Common Creeper	<i>Crupina vulgaris</i>	Leafy Spurge*	<i>Euphorbia vulgaris</i>
Mediterranean Sage	<i>Salvia aethiopsis</i>	Purple Loosestrife	<i>Lythrum salicaria</i>
Rush Skeletonweed	<i>Chondrilla juncea</i>	Squarrose knapweed	<i>Centaurea virgata</i>
Tansy ragwort*	<i>Senecia jacobaea</i>	Yellow Starthistle*	<i>Centaurea solstitialis</i>
Perennial pepperweed	<i>Lepidium latifolium</i>	Spikeweed	<i>Hemizonia pungenis</i>
Plumeless thistle	<i>Carduus acanthoides</i>	Houndstongue*	<i>Cynoglossum officinale</i>
Canada thistle*	<i>Cirsium arvense</i>	Dalmation Toadflax*	<i>Linaria dalmatica</i>
Diffuse knapweed	<i>Centaurea diffusa</i>	Spotted knapweed	<i>Centaurea maculosa</i>
St. Johnswort	<i>Hypericum perforatum</i>	Poison hemlock	<i>Conium maculatum</i>
Puncturevine*	<i>Tribulus terrestris</i>	Russian Knapweed	<i>Acrotilon repens</i>
Scotch Thistle*	<i>Onopordum acanthium</i>	Western Waterhemlock	<i>Circuta douglasii</i>
Whitetop	<i>Cardaria spp</i>	Broad leaf cocklebur	<i>Xanthium strumarium</i>
Common burdock	<i>Arctium minus</i>	Dodder	<i>Cuscuta spp.</i>

Field bindweed	<i>Convolvulus arvensis</i> L.	Kochia	<i>Kochia scoparia</i>
Cheat Grass*	<i>Bromus tectorum</i>	Ventenata*	<i>Ventenata dubia</i>
Medusaehead rye*	<i>Taeniatherum caput-medusae</i>	Teasel*	<i>Dipsacus sylvestris</i>

* Species known to be present on the PWSWA and subject to mechanical, biological and/or chemical control.

Monitoring

The PWSWA management program and how successfully it meets project objectives is monitored on an annual basis by Department staff.

Big Game

East Region Wildlife District personnel and PWSWA staff conduct two census routes annually to inventory the populations of deer and elk. A fall count, on foot and by vehicle, is used to determine age and sex ratios. A spring count by aircraft is used to develop an index to the populations.

An aerial pronghorn census route is also done in conjunction with the spring deer and elk routes. Big horn sheep are counted on foot by a crew from the Department Wildlife District and PWSWA staff, during June of each year. Male/female and young/female ratios are calculated for each big game species.

Other Wildlife

Bald eagles are counted on a standard route during winter months. Songbirds are inventoried twice per year, in spring and fall. The spring count is conducted to catch migrants and a fall count inventories resident songbirds. Species and numbers are recorded by the Wildlife District, PWSWA staff and volunteers.

Fish

Fish populations are monitored by the Department's John Day Fish District personnel. Stream surveys for spawning mid-Columbia River steelhead are conducted in the early spring. Creel checks are conducted by the Oregon State Police (OSP) and Fish District personnel at various times.

Wildlife Diseases

Disease testing on the wildlife area has been opportunist and sporadic. There are some indications of a possible Adenovirus epizootic in the early 2000's and a possible EHD epizootic in 2016 in mule deer. However, these have not been confirmed and there impacts to the mule deer population are unclear. Chronic Wasting Disease has been monitored opportunistically through samples taken from hunter harvest animals; thus far, no animals have tested positive. East Region Wildlife District and PWSWA staff will continue to monitor deer and elk for diseases.

Grazing

Livestock grazing management throughout the PWSWA is done in conjunction with grazing activities on the adjoining BLM parcels through annual agreements with the Dayville Grazing Association (DGA). With 20 pastures throughout the wildlife area a

deferred rest-rotation livestock grazing management system is employed. The numerous fenced pastures are designed to manage cattle movements and grazing intensity. Cattle are rotated through individual pastures each year. The timing of grazing is also varied annually to protect plants during the critical growing period, to provide for seed production and to improve plant vitality. Several pastures are excluded each year from cattle use. This type grazing system conditions forage for wintering mule deer and assists with providing a range of habitat attributes (vertical and horizontal cover/structure) for a multitude of wildlife species inhabiting or using the habitats. Livestock grazing on the PWSWA generally targets a rate of ~30 - 35% utilization to stimulate compensatory growth of native and desirable perennial bunchgrass communities. Higher or lower rates of utilization may be authorized depending on conditions and vegetation management objectives. The program is also intended to aid in natural recruitment and dispersal through seed shattering and hoofing action as well as assists in reducing fine fuels and overall severity/frequency of catastrophic fire. With introduction of invasive species such as Medusahead, Cheat grass (*Bromus tectorum*) and Ventenata (*Ventenata dubia*), it is critical to protect the overall integrity of this habitat type. Management activities are intended to aid and assist grassland habitats while particular care is given to not over-stress or reduce vigor of native plant communities. Riparian fences have been constructed and are monitored to protect stream corridors. All wildlife area fences are maintained and repaired as needed by PWSWA staff and the DGA each year, prior to cattle being moved onto the PWSWA.

Since the BLM administers land within the boundaries of the PWSWA, grazing responsibility is shared by both PWSWA and BLM. In order to prevent overutilization by livestock, the PWSWA and BLM range staff annually determine the number of Animal Unit Months (AUM) available for removal in each pasture. An annual grazing agreement, with the DGA ensures the proportion of use by livestock and grass management. Most PWSWA pastures are spring- and early summer range. Cattle turn out is dictated by soil conditions and plant phenology, but typically occurs by the first of May and livestock are generally removed in early-July. By mid-July grass is dry and has little nutritional value. Two DGA herds are permitted to graze until mid-September in locations where summer and early fall grasses are available. Grass use is monitored throughout the grazing season by both PWSWA staff and BLM range conservationists. Pastures that are grazed are normally monitored twice, once when cattle are turned in to a pasture and once before the cattle leave to assure proper utilization.

Following the stand replacing South Fork Complex Fire in 2014, grazing has been deferred in a number of pastures. ODFW and the BLM have dedicated significant resources to wildfire remediation efforts, including the application of grass specific herbicide to control invasive annual grass species, seeding desirable native and non-native forage species, and planting shrubs that include sagebrush and bitterbrush. Monitoring plots have been established in conjunction with these activities in order to track the progress of treatments and make recommendations about their success or need for additional measures. Livestock grazing will reoccur only when plant communities are re-established.

Other noxious weeds are also controlled on the PWSWA to prevent spread of established populations and to prevent establishment of new invasive plant species. Because BLM lands are interspersed within the PWSWA, Department personnel cooperate with BLM to control weeds. As time and resources allow noxious weed populations will be mapped by PWSWA staff to indicate the location and extent of weed invasions. These plants will also be monitored to determine potential spread to new sites.

Livestock grazing on the wildlife area is oriented to increase forage value for wildlife and provides economic benefits to the local community. Overgrazing is prevented by rotating of cattle through the pastures, visual monitoring of grass utilization, and removal of grazing by mid-September.

Timber

A timberland inventory and analysis was completed in 1983 on the then Murderers Creek Wildlife Management Area. This analysis is useful in providing baseline data on timber inventories, stand type, soils, etc. Many portions of the wildlife area's land had been logged in the past. Current timber stand conditions are the result of broad scale weather patterns, wildland fire protection and silvicultural practices.

Recent Oregon legislative action resulted in the passage of two forestry-related laws. House Bill 3152 and HB 2344 both impact management activities on the PWSWA. These laws are described below and in further detail in **Appendix G**.

HB 3152 requires the Department of Administrative Services to coordinate with the Department of Fish and Wildlife, the Parks and Recreation Department, the State Forestry Department, the Division of State Lands and other agencies with state forestland oversight responsibilities to adopt forest management plans or policies. HB 2344 directs state agencies to develop plans for timber salvage operations to restore and recover forest lands burned by fire.

A comprehensive integrated habitat management plan is needed for the PWSWA that would incorporate much of the same information contained in the 1983 timberland inventory and analysis but would also include management recommendations for other types of habitat such as grazing, fencing and forage enhancement. This type of long range plan would enable the wildlife area staff to improve and increase wildlife habitat, improve forest health, reduce fire danger, and control insect infested and diseased stands of timber. These actions would not only benefit big game species, but all wildlife on the PWSWA. As personnel, time and funding are available production of an Integrated Habitat Management Plan to accomplish these goals will be evaluated. At this time, funding limitations prevent implementation of such a comprehensive study and related reports. Instead, with the assistance of Oregon Department of Forestry and private professional foresters, PWSWA staff has conducted select timber management activities in specific project areas to address the wildlife area's objectives and forest health.

Water Use

Irrigation water is monitored by staff from both the PWSWA and Oregon Water Resources Department (OWRD). Monitoring is conducted using flow devices at the irrigation ditch screens. The screens are monitored each week by the John Day Screen Crew and also at random times by PWSWA staff.

Public Use

Public use during authorized hunting seasons is monitored by PWSWA staff. The bulk of the public use occurs during big game hunting and upland bird seasons. The number of hunters and their harvest success are recorded by OSP as well as Department staff. Random samples of use during periods of the year other than hunting seasons are used to determine other types of wildlife oriented use. Public use is also monitored by OSP at random times during the year.

Cultural Resources

Before European settlement the land which is now the PWSWA was part of the territory of the Northern Paiute tribe of Native Americans.

The majority of what is now the Wildlife Area was homesteaded by European settlers in the late 1850s. Grass in the basin was reported to be high enough to hide a horse if lying down.

Records indicate that livestock use started in 1912, although actual use likely began with homesteading. In 1912, the Stewart family held permits on public land for 1,270 cows, 150 horses, and 7,275 sheep. In terms of domestic animal unit months (AUM), this was about 50,000 AUMs compared to less than 2,000 on the same ground today. Herds of feral horses also used the area. Grazing, logging, agriculture, hunting, trapping and fishing are the known historical and cultural practices that have occurred on the PWSWA for many years prior to the Department's acquisition of the land.

The Department is responsible for coordinating with the State Historic Preservation Office (SHPO) on an annual basis, when applying for federal grants for all wildlife areas, to ensure that proposed area management activities comply with State and Federal cultural resource laws. Several comprehensive cultural resource surveys have been conducted on the PWSWA and significant Native American cultural resource sites have been identified, primarily in the Murderers Creek basin.

Social Environment

Demographics

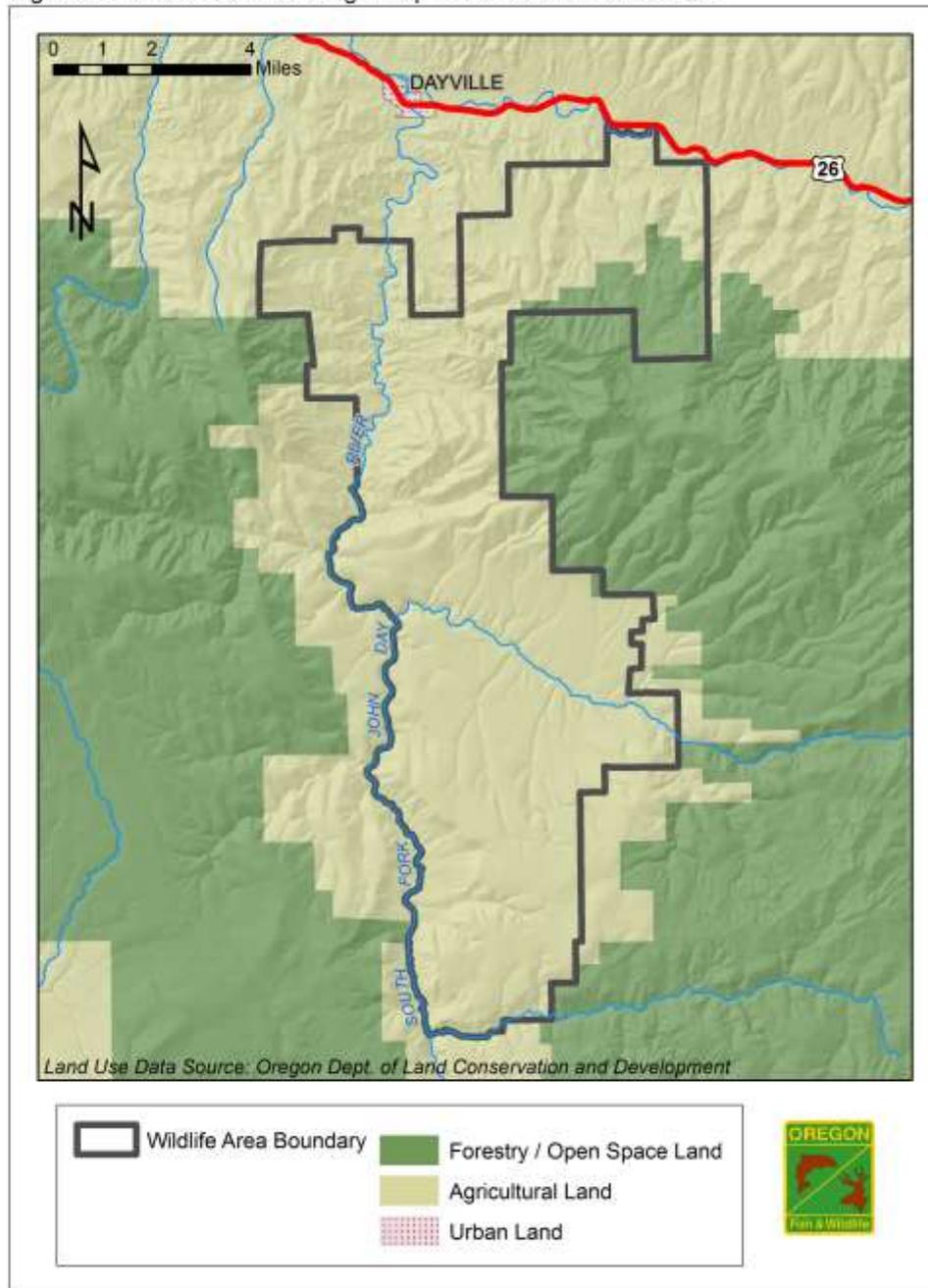
The PWSWA is located near the town of Dayville in Grant County. Census figures from the 2010 survey indicate there are 160 residents in Dayville and 7,380 residents in the County.

Land Use

The PWSWA is surrounded almost entirely by private lands and lands managed by the USFS. The land uses in the region are primarily agriculture, forestry, and dispersed rural residential. As previously described in the Monitoring section, grazing is a common activity on both agricultural and forested lands. Agricultural lands consist of irrigated pastures used for grazing and hay production as well as land farmed for cereal grains and alfalfa hay. Forested lands, depending on ownership, are used for grazing livestock and for timber production.

Figure 3 shows the land uses surrounding the Phillip W. Schneider Wildlife Area.

Figure 3 - Land Use Surrounding Phillip W. Schneider Wildlife Area



Infrastructure

Developments/Facilities

Developments and improvements on the PWSWA have been focused on wildlife use and public use. Signing is maintained to direct and inform the hunting and non-consumptive user public. Construction of a headquarters office and a maintenance shop has been a recent major development. Facilities are now available to serve the public with written material about recreational opportunities available on the wildlife area. The shop provides an enclosed space for maintenance and repair of equipment. **Table 5** lists the structures and facilities present on the wildlife area.

Table 5. Development and facilities on the P. W. Schneider Wildlife Area.

1. Viewing Sites	Natural terrain offers unlimited, unimproved opportunities to view wildlife.
2. Campgrounds	Historical unimproved sites.
3. Parking Areas	Maintain four parking areas.
4. Trail and Roads	34 miles of roads (some are open year-round, others have seasonal and/or year-round closures).
5. Fences	148 miles of perimeter and cross fencing, 24 miles riparian fences.
6. Ponds	35 ponds
7. Springs	20 developed (with trough)
8. Bird Guzzlers	19 guzzlers
9. Irrigation Systems	10 miles of gravity flow ditch. 300 acres have the potential to be flood irrigated. Sprinkler gravity pipe is available for 50 acres.
10. Bridges	3 bridges
11. Buildings	10 buildings

Water Rights

There are 31 water rights issued by the OWRD that serve the wildlife area. These include rights to irrigate 651 acres and for stock watering, reservoirs, ponds and spring water uses. Water use out of four ditches is currently monitored and reported to the OWRD on an annual basis. Not all water rights are currently being used. See **Appendix E** for a list of these water rights.

Easements/Access Agreements

Purchases, easements and agreements are listed by year in **Appendix F**.

Land Acquisition and Adjustment

It is the policy of the Department to only acquire land or interests in lands, including easements and leases, from willing sellers consistent with statutory authority and the Department's mission. Acquisitions and adjustments must be for the conservation of fish and wildlife and their habitats and to provide fish- and wildlife-oriented public use for educational and recreational purposes. Land adjustments would allow for the sale, trade or exchange of land with willing landowners to enable the Department to consolidate wildlife area boundaries.

There are three categories of lands that may be considered for acquisition. These include: 1) Significant or unique habitats, especially those beneficial to threatened, endangered or sensitive species; 2) Sites, or access to sites, that provide wildlife-related recreational opportunities; and, 3) Properties which facilitate the performance of the Department's mandated duties (e.g., storage and warehouse, feeding barns, etc.). An in-depth analysis of the wildlife values associated with any property considered for acquisition would be developed prior to purchase.

As land acquisition funds become available, the following properties might be considered for purchase from their willing owners. Properties are listed in priority order:

1. A 640 acre section of land, located at the upper end of Jackass Creek drainage, T-14S, R-27E, Section 16. This acquisition would give the Department the ability to manage cover habitats adjacent to USFS property, and south facing grassland habitats that are heavily used by wildlife during the winter.
2. An 800 acre parcel located in the upper end of Murderer's Creek basin, surrounded by public lands. Deer, elk, pronghorn, wild turkeys, and other upland game frequent the property.
3. Two 40-acre parcels of deeded land located on the south side of Murderer's Creek.
4. 240 acres located in the T 14 S R 26 E Section 24. Acquisition would secure a private in holding that includes south facing slopes that is used by deer, elk, bighorn sheep, and upland game birds.
5. Magic Lantern-640 acres located in T-15S R-27E Sections 29 and 30. The parcel is situated near the South Fork of the John Day River and surrounded by public land. Acquisition of this inholding would secure the parcel for deer, elk, pronghorn, wild turkeys, and other upland game that frequent the property. The acquisition would prevent the subdivision of the property into 160 acre chunks for resale.
6. 2,002 deeded acres located three miles south of Dayville, parcels in T-13S, R-27E, Sections 17, 18, 19, and 30. This would include approximately 2,000 acres of BLM lands which would open approximately 4,000 acres to public access. One-half mile of

the South Fork John Day River would be included for fishing access and water quality enhancement. Bighorn sheep use the upper portion of this ranch year-round, along with deer, elk, and antelope. The property would tie into Department ownership north, south, east, and west.

In the past, a private sheep rancher negotiated for this property. A sheep ranching operation would be incompatible with Department objectives for bighorn sheep management. (See the Department's Bighorn Sheep & Rocky Mountain Goat Management Plan, December 2003.)

7. A parcel located approximately 10 miles south of Dayville along the South Fork John Day River. The wildlife area borders the majority of this ranch. Mule deer winter on the ranch along with elk and good populations of upland game birds. Acquisition would secure management of another mile of the South Fork John Day River.
8. Land located 22 miles south of Dayville along the South Fork John Day River. Acquisition would allow Department management of approximately 5 miles of the South Fork John Day River (including BLM owned lands) and provide for limited winter use for deer, elk, antelope, and upland game birds.

Public Use

Public Access

The PWSWA is open to the public for wildlife oriented recreational activities from April 15th through January 31st. Beginning in 2011 as part of the Mule Deer Initiative, a joint ODFW/BLM administrative closure action is annually implemented from February 1st through April 14th to protect wintering mule deer from harassment during this physiologically stressful period. Additionally, some wildlife area roads are closed from December 1st through April 14th to prevent wildlife disturbance and damage by vehicles during the wet period of the year. The South Fork of the John Day River remains open year-round. Administrative use roads are closed to public travel all year.

Hunting, Trapping and Angling

The PWSWA is open to hunting, trapping and angling during appropriate seasons. The hours of use in hunting, trapping and angling activity is estimated via patrols by wildlife area personnel and OSP. Estimated consumptive use days are listed in **Table 6**.

Hunting tags, specific to gender and species, are issued for public hunting to maintain management objectives for big game animal populations. The PWSWA is an integral part of the Murderers Creek Wildlife Management Unit.

Table 6. Estimated annual hunting, trapping and fishing use days on the PWSWA.

Activity	Estimated Annual Use Days
Hunting	
Big Game	12,600
Upland Game	4,200
Waterfowl	840
Unprotected Wildlife	840
Trapping	420
Fishing	12,600
Total	31,500

Non-consumptive

The wildlife area lands are open for many wildlife-oriented recreational activities. Those activities include wildlife viewing, horn hunting, photography, bird watching, and sightseeing. Other activities may be allowed via a Special Use Permit (i.e. fruit gathering). Open spaces permit good wildlife and scenic views. Access to PWSWA is via the South Fork John Day River Road, Murderers Creek Road and Flat Creek Road. Murderers Creek is a primitive road. The South Fork John Day River and Flat Creek roads are not paved, but well graveled and maintained. Flat Creek Road is closed December 1st to reduce wildlife disturbance and road maintenance costs. There are no developed campgrounds. Flat areas within 300 feet of open roads provide traditional, dry camping sites.

Non-consumptive use estimates, in **Table 7**, are based on random contacts with individuals at the wildlife area headquarters and in the field.

Table 7. Estimated non-consumptive use days on the PWSWA.

Activity	Estimated Annual Use Days
Wildlife Viewing	5,040
Horn Hunting	5,000
Sightseeing other than wildlife	1,680
Swimming	1,680
Photography	840
Rock Hunting	420
Wild Fruit Gathering (elderberries, choke cherries, etc.)	420
Artifact viewing	420
Total	15,500

Educational/Interpretive

In 2006 an informational kiosk was installed at the PWSWA headquarters. Informational wildlife area use signs and boards are installed at the main access points to the area.

The PWSWA staff participates annually in local hunter education classes. Staff also participates with the local school in its work study program. The opportunity has been discussed to set up an internship, through Oregon State University (OSU), to monitor livestock grazing/wildlife interactions and juniper invasion into upland habitats.

Objectives and Strategies

Objectives and Strategies

As stated previously, objectives are concise statements of what the Department wants to achieve, how much the Department wants to achieve, when and where to achieve it and who will be responsible for the work. Objectives derive from goals and provide the basis for determining strategies. Strategies describe the specific actions, tools, techniques or a combination of these elements used to meet an objective.

The following objectives and strategies identify the management activities and priorities of the Phillip W. Schneider Wildlife Area Management Plan:

(Goal 1: To protect, enhance, and restore range conditions that will provide key winter habitat for mule deer.)

Objective 1.1: To provide winter range habitat capable of supporting up to 70% of the Murderers Creek Wildlife Management Unit mule deer population management objective (9,000) by annually enhancing 500 acres of native grassland and shrubs.

Rationale

In order to maintain and improve winter range conditions and provide adequate diverse winter habitat for mule deer, the PWSWA staff actively manages native and desirable non-native grasses and shrubs. Management of these plant species also benefits an assortment of other wildlife species. Management activities include timber management, juniper removal, weed control, prescribed burns, range and pasture seeding, shrub plantings, and livestock grazing along with the planting and irrigation of agricultural crops important to wildlife. These activities are important tools, among many, that PWSWA staff use to improve habitat conditions. Management of livestock includes minimizing impacts to riparian areas and excluding grazing in areas where not beneficial to wildlife objectives. Measures to control both western juniper and medusahead rye have been initiated by the Department, BLM, OSU, Oregon Hunters Association (OHA), Rocky Mountain Elk Foundation (RMEF) and DGA in a cooperative effort.

Murderers Creek Game Management Unit elk populations have increased over the past few decades. Consequently the number of elk wintering on the wildlife area has increased, especially on winters with more snow. This increase has caused some concern about competition for forage and space between elk and mule deer. There may be negative affects to winter deer populations but these interactions are complicated

and difficult to quantify. More information is needed to better understand this issue and help make informed management decisions. The Department also actively supports USFS and BLM efforts to control the local feral horse population in order to limit natural resource impacts as well as interspecific competition with mule deer for winter range forage. Vegetation management also contributes to minimizing the number of animals that winter on proximate private land.

Strategy 1. Manage and restore native grassland and shrubland habitats to provide range conditions that enhance mule deer distribution and body condition:

- Maintain and restore grasslands and shrub lands through supplemental seeding, weed control and prescribed burns.
- Responsibly graze cattle to condition forage grasses for winter wildlife use.
- Seed grass, grain and legumes on agricultural lands for winter wildlife use and to reduce wildlife damage to adjacent private croplands.
- Plant trees shrubs and forbs to increase habitat diversity in big game winter range and upland game bird habitat.
- Revitalize important browse and grass stands through western juniper removal.

Strategy 2. To determine the appropriate management level of wintering elk on the wildlife area that will meet unit wide elk management objectives while reducing forage/space competition between mule deer and elk.

- To collar elk on the wildlife area to improve understanding of seasonal elk movements and help target harvest if reductions are necessary.
- To gather vegetation information to better understand forage utilization by wintering wildlife.

Strategy 3. Cooperatively work with the Malheur National Forest and Prineville District BLM to maintain the feral horse herd at the stated Appropriate Management Level of 50 to 140 head, to reduce destructive use of native rangeland plants.

Strategy 4. Develop specific harvest plans for timbered land to provide winter range forage, summer range and escape/hiding cover for mule deer and other big game.

Strategy 5. As part of the Murderers Creek Mule Deer Initiative plan, maintain the PWSWA joint ODFW/BLM winter range closure from February 1st to April 15th.

(Goal 2: To protect, enhance, and restore habitat diversity for all other beneficial wildlife, compatible with Goal 1.)

Objective 2.1: To protect, enhance and restore upland habitats to benefit native and desirable non-native wildlife.

Rationale

PWSWA staff's management activities to meet Objective 1.1 will also result in providing adequate wintering habitat for elk and year-round habitat for California bighorn sheep,

antelope and a wide variety of non-game wildlife, within the upland habitats of the PWSWA. Strategies employed by the PWSWA will also support upland habitat conservation actions described in the OCS.

Strategy 1. Manage native grassland and shrub habitat in a condition that enhances distribution and body condition by:

- Plant trees and shrubs of both native and non-native species to provide more wildlife browse and promote a multi-story cover and stabilize erosion problems.
- Use prescribed burning as a tool to control undesirable plants and tree species, and to remove old non-palatable vegetation.
- Select juniper removal projects in areas where adequate cover is present to release higher quality feed.
- Develop food plots and alfalfa fields on agriculture lands adjacent to private lands to reduce wildlife damage.
- Use livestock as a tool to condition rangelands for wintering big game; exclude or eliminate grazing in areas where not beneficial to wildlife.
- Continue to control noxious weeds through chemical, biological, and manual methods.

Strategy 2. All practices employed in Strategy 1 will also benefit pronghorn antelope by protecting and enhancing forage, cover and browse.

Strategy 3. As above, practices employed in Strategy 1 will benefit bighorn sheep by enhancing forage, cover and maintaining travel corridors.

Strategy 4. Develop specific timber harvest prescriptions to provide adequate habitat for native forest grouse, mountain quail and turkeys.

Strategy 5. Plant annual food/cover crops and maintain alfalfa crops in specific agricultural fields.

Strategy 6. Consider potential impacts to listed plant and wildlife species during management actions on the PWSWA; evaluate and resolve if significant adverse changes are noted.

Objective 2.2: To protect, enhance and restore high quality instream habitat, water quality and quantity, and riparian/wetland systems for resident and anadromous fish, native wildlife, and desirable non-native fish and wildlife.

Rationale

Natural and artificially-created wetlands and riparian areas provide habitat for numerous terrestrial species of wildlife as well as fish and other aquatic species. Wetlands offer food and cover to birds, small mammals and bats, along with providing materials for nesting migrant and resident waterfowl, shorebirds and passerines. PWSWA staff actively maintains and enhances riparian systems for high quality instream habitat to

benefit anadromous and resident fish and to improve water quality and quantity. Wildlife area streams and ponds support a wide variety of reptiles, amphibians, mammals, and insects. Aquatic habitats on the PWSWA are important recreational and educational attractions to the public. Special management consideration is given to sensitive, threatened and endangered species. These strategies will also support the aquatic habitat conservation actions described in the OCS.

Strategy 1. Monitor and regulate irrigation water per Oregon Water Resources Department standards.

Strategy 2. Promote natural stream meandering and stream bank narrowing by allowing natural processes to occur.

Strategy 3. Manage beaver populations in appropriate streams to enhance aquatic habitats.

Strategy 4. Provide stream shade by protecting and enhancing streamside vegetation.

Strategy 5. Maintain fenced riparian habitats and fence additional areas if identified as needing protection.

Strategy 6. Maintain current primitive access for anglers to ponds.

Strategy 7. Work with Fish District staff to identify fish habitat improvement projects that may include placing large woody debris, removal of fish passage barriers, planting riparian vegetation, and seek partnerships with other agencies, sport groups or volunteers for implementation of such projects.

Objective 2.3: Maintain 80 acres of agricultural lands annually to provide forage for native and desirable non-native wildlife.

Rationale

Agricultural crops provide important forage as well as nesting, rearing, and thermal cover for many species of wildlife. Grains are important food sources for upland game birds and song birds. Irrigated grass and clover provides nesting and escape cover, and increases insect populations which are an important food source for young birds. Agricultural crops also provide food and cover for many small mammals. Grain fields are also desirable hunting areas for upland bird hunters. Vegetation management of agricultural lands on the PWSWA contributes to minimizing big game use on proximate private lands.

Strategy 1. Farm 50 acres of agricultural land adjacent to private lands with alfalfa to provide forage and reduce wildlife damage.

Strategy 2. Plant 30 acres of annual food plots throughout the area to provide forage for native and desirable non-native wildlife.

Objective 2.4: To maintain and enhance wildlife area facilities, structures, and equipment to conduct habitat management and public use projects on the wildlife area.

Rationale

Many historic structures on the wildlife area are now nearing 100 or more years old and are suffering from deterioration. Some structures need to be repaired while others need simple aesthetic improvements. Properly functioning water control structures, headgates, and dams are needed to maintain irrigation infrastructure and wildlife/livestock ponds and water developments. Maintenance of bridges, trails, fences, and gates are necessary to ensure the safety of public users while they enjoy the wildlife area's resources.

Strategy 1. Maintain 35 ponds, 20 spring developments, 19 wildlife guzzlers, 2 sprinkler irrigation systems and 10 miles of gravity flow irrigation ditch.

Strategy 2. Maintain 34 miles of public and administrative roads, 4 parking areas, 3 bridges and 3 miles of trails. Maintain and repair 148 miles of perimeter and cross fence (including 20 miles damaged during the South Fork Complex Fire), and 24 miles of riparian protection fence.

Strategy 3. Maintain and repair 10 structures including the shop/office, equipment shed, Murderers Creek Ranch house, 2 barns, 2 outbuildings, 3 cabins

Strategy 4. Prioritize repairs of structures including water control structures, fences, ditches, water developments and buildings based on the results of the maintenance master plan developed fall 2005.

Strategy 5. Build a second equipment shed at the PWSWA HQ, to cover vehicles and equipment.

Strategy 6. Complete the bunk quarters within the office and shop and keep information kiosk/signs updated.

Strategy 7. Service equipment and implements in a timely manner and upgrade when necessary.

(Goal 3: To provide a variety of quality recreational and educational opportunities to the public which are compatible with Goals 1 and 2.)

Objective 3.1: Provide approximately 30,000 hunting, trapping and angling use days annually.

Rationale

The PWSWA is funded entirely by hunter dollars through the Federal Aid to Wildlife Restoration Act (Pittman Robertson) (75%) and hunting license receipts (25%). The area is an historic and common destination for hunters and anglers alike. PWSWA staff is committed to providing outdoor recreational opportunities for the citizens of Oregon.

Strategy 1. Maintain 34 miles of roads for public and administrative use.

Strategy 2. Maintain fences and signs at public parking areas, access points and informational kiosk. Install new vault toilets at 4 locations.

Strategy 3. Increase informational signs and continue cooperative project with BLM to place informational display at the South Fork John Day road entrance.

Strategy 4. Annually monitor hunting use of the area to review and possibly revise wildlife area hunting regulations to enhance the quality and safety of the area's hunting program.

Strategy 5. Explore additional special hunt or angling events as public interest and staffing resources allow.

Objective 3.2: To provide approximately 15,000 wildlife viewing and education/interpretation use days annually.

Rationale

Currently, the wildlife area is maintained almost entirely by funds generated from hunters and anglers. In 2009, the Department established a parking permit program for non-consumptive recreation and education constituents. The PWSWA staff will seek to expand opportunities for interpretation and environmental education that will foster visitors' appreciation, understanding, and stewardship of the wildlife area's fish and wildlife species and their associated habitats. PWSWA staff is committed to providing wildlife-oriented recreational opportunities for the citizens of Oregon.

Strategy 1. Maintain 34 miles of roads for public use.

Strategy 2. Maintain fences and signs at public parking areas, access points and informational kiosk. Install new vault toilets at 4 locations.

Strategy 3. Increase informational signs and continue cooperative project with BLM to place informational display at the South Fork John Day road entrance.

Strategy 4. Explore the possibilities of developing internship programs with schools to survey, monitor, and identify non-game species.

Strategy 5. Continue to foster relationships with educational groups such as OSU, Dayville School, Oregon Stewardship, the Audubon Society, Scouts, and others.

Strategy 6. Explore ways of raising revenue from non-hunters and fishers, such as a parking permits or some other type of user fee.

Plan Implementation

Funding

From inception in 1972 through June 2009, funding for the operation and maintenance of PWSWA was accomplished through an annual federal grant under the Federal Aid to Wildlife Restoration (WR) Program. This program was created with the passage of the Pittman- Robertson (PR) Act in 1937. The PR Act authorizes the U.S. Fish and Wildlife Service to cooperate with the States, through their respective State fish and wildlife departments, to fund wildlife restoration projects. Eligible types of projects include restoration, conservation, management, and enhancement of wild birds, wild mammals and their habitats, and providing for public use and benefit from these resources.

Funding for WR is derived from a federal excise tax on the sale of firearms, ammunition, and archery equipment. Funding is then apportioned to states based on a mathematical formula of area of the state in square miles (50%) and total number of hunting licenses sold annually (50%). Under the program no state may receive more than 5%, nor less than 0.5% of the total money available.

To be eligible, States must have assented to the provisions of the PR Act and passed laws for the conservation of wildlife that include a prohibition against the diversion of license fees paid by hunters for any other purpose than the administration of the State fish and wildlife department. Another major requirement is that states have to contribute up to 25% of the total grant cost since federal participation is limited to 75% of eligible costs incurred under a grant. The Department provides its 25% cost share from annual license and tag revenues.

Since July, 2009, PWSWA no longer operates on PR dollars. Today funding for personnel along with the operation and maintenance of PWSWA is based solely on Other Funds (license and tag revenues). Operation and maintenance costs have increased from approximately \$147,765 annually to more than \$191,375 annually. To implement many of the proposed actions and achieve the objectives and goals of this plan, the Department will need additional funding and staff to undertake the following types of projects: upgrades of existing facilities, construction of new facilities or amenities (orientation kiosks, interpretive signs and vault toilets), purchasing equipment (i.e. bull dozer and backhoe), continued wildfire remediation and habitat restoration as well as wildlife species and habitat monitoring for developing a Comprehensive Habitat Management Plan.

Accomplishments

In the past decade since the 2006 PWSWA Management Plan review there has been some major accomplishments that have been summarized in this section.

- 2006 through 2014 annually implement PWSWA grazing program

- 2015 and 2016 Implemented grazing program on the Flat Creek pastures and Murderers Creek irrigated pasture. Deferred grazing in the remaining wildlife area pastures due to scheduled rest or for wildfire remediation activities.
- Reseeded 100 acres of irrigated pasture from 2012-2014.
- Annually planted 30 acres of food crops from 2006-2016.
- Irrigated and maintained 50 acres of alfalfa food plots from 2006-2016.
 - With assistance from Oregon Hunters Association upgraded from hand sprinkler line to wheel line in 2008.
- 2006-2009 Oregon Hunters Association, Murderers Creek shrub plantings (23 acres)
- 2007-2014 – Western juniper removal on 5,273 acres.
- 2014 – 7,000 acres aerial herbicide application for the control of Medusahead and other invasive annual grass species following the South Fork Complex Fire.
- 2015 - Seeded 5,875 acres (2,300 drill and 3,575 aerially) following the South Fork Complex Fire.
- 2013 – purchased 560 acre Moss property
- November 2015 signed MOU for a Cooperative Management Agreement between the Malheur National Forest, Prineville BLM and ODFW for the Murderers Creek Wild Horse Territory/Herd Management Area.
- 2011-2012 Silviculturally treated 712 acres of Northern Oregon mixed conifer
- 2014 Silviculturally treated 120 acres (select harvest 63 acres and fire salvage 57 acres per **HB 2344**).
- 2016 – Developed and sold timber sale to silviculturally treat 417 acres of Ponderosa Pine forest.
- 2012 - Implemented a permanent, joint winter range closure with the Prineville BLM District and ODFW to protect wintering mule from harassment during a physiologically challenging period.
- 2015 - Began evaluation of Murderers Creek and South Fork of Murderers Creek with John Day Fish District staff, and Bureau of Reclamation to assess the potential for stream restoration that includes historical channel and floodplain connectivity.
- 2011 – Assisted John Day Fish District personnel with rotenone application to Stewart Pond to remove bullhead catfish, excavate sedimentation and make repairs to the dam and water control structure.
- Annually maintain public and administrative roads as time and resources permit
 - 2009 – Graveled and regraded 5 miles of Flat Creek road
 - 2014 – Graveled 1.5 miles of the Murderers Creek road
 - 2015 – Replaced 5 culverts through the Murderers Creek road
- 2009 – Installed new Mule Deer Initiative/Wildlife Area Informational kiosk at PWSWA HQ.
- 2009 – Built new 40 foot equipment shed
- Implemented Flat Creek Youth Elk Hunt 246T2 to assist with elk damage to proximate private lands.

- 2009 – Established Wildlife Area parking permit program

Staffing/Organization

In total, the Department manages seventeen wildlife areas statewide. The wildlife areas encompass approximately 200,000 acres and are found in both Department administrative regions; the PWSWA is located in the East Region. One full-time Fish and Wildlife Supervisor and one full-time Fish and Wildlife Technician currently staff the wildlife area.

Compliance Requirements

Management strategies employed by the Department on the PWSWA are formed and constrained by Oregon law regarding land and resource management in general and the PWSWA in particular. Oregon Administrative Rule 635-008-0153 specifically addresses activities on the PWSWA. Recognizing that all wildlife species do not respond to like management, long-range strategies have been developed with the understanding that fish and wildlife species are being managed at the highest possible levels.

This management plan was developed to comply with all Federal and State laws, Oregon Revised Statutes (ORSs), Oregon Administrative Rules (OARs) and Department policies. Full implementation of all components of this plan will require compliance with the laws, regulations, rules, and policies listed in **Appendix G**.

Partnerships

A number of other state, federal, and local agencies, and interest groups assist with management activities on PWSWA. These partners play an important role helping the Department achieve its mission and the PWSWA goals. The Department will continue to rely on these and other partners in the future to help implement this plan and provide input for future updates. This plan identifies projects that provide new opportunities for existing or new partners. There is a great potential for more public participation and assistance in the management of the wildlife area given its proximity to population centers such as Dayville and John Day. The Department welcomes and encourages more public participation in the administration of the wildlife area.

Adaptive Management

This plan provides for adaptive management of the wildlife area. Adaptive management is a flexible approach to long-term management of resources that is directed by the results of ongoing monitoring activities and latest data. Management techniques and strategies are regularly evaluated in light of monitoring results, new scientific understanding, and other new information. These periodic evaluations are used over time to adapt both management techniques and strategies to better achieve the area goals.

Monitoring is an essential component of adaptive management in general, and of this plan in particular; specific monitoring strategies have been integrated into the goals and

objectives described in this plan whenever possible. Where possible, habitat management activities will be monitored to assess whether the desired effects on wildlife and habitat components have been achieved.

Plan Amendment and Revision

Wildlife area management plans are meant to evolve with each individual area, and as such each plan will be formally revisited after 5 years and updated every 10 years. In the meantime, however, the Department will be reviewing and updating this plan periodically (at least as often as every 5 years) based on the results of the adaptive management program. This plan will also be informally reviewed by area staff while preparing annual work plans. It may also be reviewed during routine inspections or programmatic evaluations. Results of any or all of these reviews may indicate a need to modify the plan. The goals and objectives described in this plan will not change until they are re-evaluated as part of the formal plan revision process. However, the strategies may be revised to better address changing circumstances or due to increased knowledge of the resources on the area. If changes are required, the level of public involvement and associated compliance requirements will be determined by the Department.

Appendices

Appendix A. Plant Species Known or Thought to Occur on the Phillip W. Schneider Wildlife Area

Conifer trees

Douglas fir (*Pseudotsuga menziesii*)
Grand fir (*Abies grandis*)
White fir (*Abies concolor*)
Western larch (*Larix occidentalis*)
Western juniper (*Juniperus occidentalis*)
Ponderosa pine (*Pinus ponderosa*)
Lodgepole pine (*Pinus contorta*)
Engelmann spruce (*Picea engelmannii*)

Deciduous trees

White alder (*Alnus rhombifolia*)
Common chokecherry (*Prunus virginiana*)
Quaking aspen (*Populus tremuloides*)
Black cottonwood (*Populus trichocarpa*)
Water Birch (*Betula occidentalis*)
Black hawthorn (*Crataegus douglasii*)

Shrubs

Bitterbrush (*Purshia tridentata*)
Rabbitbrush (*Crysothamnus* spp)
Currant (*Ribes* spp)
Rose (*Rosa* spp)
Huckleberry (*Vaccinium* spp)
Sagebrush (*Artemisia* spp)

Grasses

Barnyard grass (*Echinochloa crusgalli*)
Kentucky bluegrass (*Poa pratensis*)
Canada bluegrass (*Poa compressa*)
Bulbous bluegrass (*Poa bulbosa*)
Bluebunch wheatgrass (*Agropyron spicatum*)
Common Teasel (*Dipsacus fullonum*)
Smooth brome (*Bromus inermis*)
Crabgrass (*Digitaria sanguinalis*)
Tall Fescue (*Festuca* spp)
Idaho Fescue (*Festuca idahoensis*)
Meadow foxtail (*Alopecurus pratensis*)
Needlegrass (*Stipa* spp)
Orchardgrass (*Dactylis glomerata*)

Grasses, con't.

Porcupine grass (*Stipa spartea*)
Quackgrass (*Agropyron repens*)
Redtop (*Agrostis stolonifera*)
Prairie threeawn (*Tripsacum dactyloides*)
Timothy (*Phleum pratense*)
Crested wheatgrass (*Agropyron cristatum*)
Intermediate wheatgrass (*A. intermedium*)
Western wheatgrass (*A. smithii*)

Legumes

Alfalfa (*Psoralea* spp)
Alsike clover (*Trifolium hybridum*)
Red clover (*Trifolium pratense*)
Yellow sweet-clover (*Melilotus officinalis*)
Rigid pea (*Lathyrus triernatum*)

Forbes

Button weed (*Malva neglecta*)
Horse nettle (*Solanum* spp)
Burnet (*Sanguisorba* spp)
Milkweed (*Asclepias* spp)
Evening primrose (*Primula* spp)
False Dandelion (*Agoseris grandiflora*)
Basalt Milkvetch (*Astragalus filipes*)
Oregon Sunshine (*Eriophyllum lanatum*)
Nineleaf Lomatium (*Lomatium triernatum*)

Composites

Buckwheat (*Eriogonum* spp)
Stinging nettle (*Urtica dioica*)
Western bracken fern (*Pteridium aquilinum*)
Cockleburr (*Xanthium* spp)
Western ragweed (*Ambrosia psilostachya*)
Common sunflower (*Helianthus annuus*)
Cattail (*Typha latifolia*)
Houndstongue (*Cynoglossum officinale*)
Bull thistle (*Cirsium vulgare*)
Canada thistle (*Cirsium arvense*)
Scotch thistle (*Onopordum acanthium*)
Iris (*Iris* spp)

Appendix B. Wildlife Species Known to Occur

on the Phillip W. Schneider Wildlife Area.

The following table and letter keys identify the species presence/sightability by season and relative abundances:

W-winter, Sp-spring, S-summer, F-fall A-abundant, C-common, U-uncommon, R-rare,

Common Name	Scientific Name	W	Sp	S	F
Amphibians					
Long-toed Salamander	<i>Ambystoma macrodactylum</i>	C	C	C	C
Spotted Frog	<i>Rana pretiosa</i>	U	U	U	U
Western Toad	<i>Bufo boreas</i>	C	C	C	C
Pacific Tree Frog	<i>Pseudacris regilla</i>	C	C	C	C
Total Amphibians:	4				
Birds					
White-faced Ibis	<i>Plegadis chihi</i>		R	R	
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>			R	
Great Egret	<i>Ardea alba</i>		R		
Great Blue Heron	<i>Ardea herodias</i>	A	A	A	A
Tundra Swan	<i>Cygnus columbianus</i>		R		
Canada Goose	<i>Branta canadensis</i>	A	A	A	A
Common Goldeneye	<i>Bucephala calngula</i>		U		
Lesser Scaup	<i>Aythya affinis</i>		U		
American Widgeon	<i>Anas penelope</i>	U	U		U
Gadwall	<i>Anas strepera</i>		U		
Cinnamon Teal	<i>Anas cyanoptera</i>		U	U	
Green-winged Teal	<i>Anas carolinensis</i>	U	U	U	U
Northern Shoveler	<i>Anas clypeata</i>	U	U	U	U
Northern Pintail	<i>Anas acuta</i>		R		
Mallard	<i>Anas platyrhynchos</i>	C	C	C	C
Wood Duck	<i>Aix sponsa</i>		U	U	
Bufflehead	<i>Bucephala albeola</i>		U		
Ruddy Duck	<i>Oxyura jamaicensis</i>		U		
Common Merganser	<i>Mergus merganser</i>	A	A	A	A
Osprey	<i>Pandion haliaetus</i>		C	C	
Turkey Vulture	<i>Cathartes aura</i>		C	C	C
Bald Eagle	<i>Haliaeetus leucocephalus</i>	C	C		
Golden Eagle	<i>Aquila chrysaetos</i>	C	C	C	C
Northern Harrier	<i>Circus cyaneus</i>		C	C	C
Sharp-shinned Hawk	<i>Accipiter striatus</i>	C	C	C	C
Cooper's Hawk	<i>Accipiter cooperii</i>	C	C	C	C
Northern Goshawk	<i>Accipiter gentilis</i>	U	U	U	U
Swainson's Hawk	<i>Buteo swainsoni</i>			U	
Red-tailed Hawk	<i>Buteo jamaicensis</i>	C	C	C	C
Rough-legged Hawk	<i>Buteo lagopus</i>	C	C	R	C
Merlin	<i>Falco columbarius</i>		U	U	U
American Kestrel	<i>Falco sparverius</i>	C	C	C	C
Prairie Falcon	<i>Falco mexicanus</i>	U	U	U	U

Common Name	Scientific Name	W	Sp	S	F
Peregrine Falcon	<i>Falco peregrinus</i>	U			
Short-eared Owl	<i>Asio flammeus</i>	C	C	C	C
Western Screech-owl	<i>Otus kennicottii</i>		U	U	U
Great Horned Owl	<i>Bubo virginianus</i>	C	C	C	C
Northern Pygmy-owl	<i>Glaucidium gnoma</i>			U	U
Northern Saw-whet Owl	<i>Aegolius acadicus</i>			U	U
California Quail	<i>Callipepla californica</i>	C	C	C	C
Mountain Quail	<i>Oreortyx pictus</i>	C	C	C	
Ruffed Grouse	<i>Bonasa umbellus</i>	C	C	C	C
Dusky Grouse	<i>Dendragapus obscurus</i>	C	C	C	C
Chukar	<i>Alectoris chukar</i>	C	C	C	C
Ring-necked Pheasant	<i>Phasianus colchicus</i>	U	U	U	U
Greater Sage Grouse	<i>Centrocercus urophasianus</i>	U	U	U	U
Wild Turkey	<i>Meleagris gallopavo</i>	C	C	C	C
American Coot	<i>Fulica americana</i>		U	U	U
Killdeer	<i>Charadrius vociferus</i>		C	C	C
Sandhill Crane	<i>Grus americana</i>	U	U		
Long-billed Curlew	<i>Numenius americanus</i>		U	U	
Wilson's Snipe	<i>Gallinago delicata</i>		C	C	C
Mourning Dove	<i>Zenaida macroura</i>		C	C	C
Rock Pigeon	<i>Columba livia</i>	C	C	C	C
Ring-billed Gull	<i>Larus delawarensis</i>		U	U	U
California Gull	<i>Larus californicus</i>		U	U	U
Common Nighthawk	<i>Chordeiles minor</i>		A	A	A
Vaux's Swift	<i>Chaetura vauxi</i>		C	C	C
White-throated Swift	<i>Aeronautes saxatalis</i>		C	C	C
Black-chinned Hummingbird	<i>Archilochus alexandri</i>			C	C
Calliope Hummingbird	<i>Stellula calliope</i>		C	C	C
Rufus Hummingbird	<i>Selasphorus rufus</i>		C	C	C
Belted Kingfisher	<i>Ceryle alcyon</i>	C	C	C	C
Red-naped Sapsucker	<i>Sphyrapicus ruber</i>		U	U	U
Lewis's Woodpecker	<i>Melanerpes lewis</i>		C	C	C
White-headed Woodpecker	<i>Picoides albolarvatus</i>		U	U	U
Downy Woodpecker	<i>Picoides pubescens</i>		C	C	C
Hairy Woodpecker	<i>Picoides villosus</i>		C	C	C
Black-backed Woodpecker	<i>Picoides arcticus</i>		R	R	R
Northern Flicker	<i>Colaptes auratus</i>		C	C	C
Pileated Woodpecker	<i>Dryocopus pileatus</i>	U	U	U	U
Olive-sided Flycatcher	<i>Contopus cooperi</i>		R		
Willow Flycatcher	<i>Empidonax traillii</i>			U	U
Hammond's Flycatcher	<i>Empidonax hammondi</i>			U	U
Dusky Flycatcher	<i>Empidonax oberholseri</i>			U	U
Ash-throated Flycatcher	<i>Myiarchus cinerascens</i>		U	U	
Say's Phoebe	<i>Sayornis saya</i>		C	C	
Western Wood Peewee	<i>Contopus sordidulus</i>		C	C	C
Western Kingbird	<i>Tyrannus verticalis</i>		C	C	C
Eastern Kingbird	<i>Tyrannus tyrannus</i>		U	U	
Warbling Vireo	<i>Vireo gilvus</i>		C	C	

Common Name	Scientific Name	W	Sp	S	F
Northern Shrike	<i>Lanius excubitor</i>	U	U		U
Loggerhead Shrike	<i>Lanius ludovicianus</i>		U	U	U
Gray Jay	<i>Perisoreus canadensis</i>	C	C	C	C
Steller's Jay	<i>Cyanocitta stelleri</i>	C	C	C	C
Blacked-billed Magpie	<i>Pica hudsonia</i>	C	C	C	C
Clark's Nutcracker	<i>Nucifraga Columbiana</i>	C	C	C	C
Brown Creeper	<i>Certhia americana</i>	U	U	U	U
American Crow	<i>Corvus brachyrhynchos</i>		C	C	C
Common Raven	<i>Corvus corax</i>	C	C	C	C
Horned Lark	<i>Eremophila alpestris</i>		C	C	C
Tree Swallow	<i>Tachycineta bicolor</i>		C	C	C
Violet-green Swallow	<i>Tachycineta thalassina</i>		C	C	C
Cliff Swallow	<i>Petrochelidon pyrrhonota</i>		C	C	U
Barn Swallow	<i>Hirundo rustica</i>		C	C	C
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>		C	C	C
Bank Swallow	<i>Riparia riparia</i>		U	U	U
Black-capped Chickadee	<i>Poecile atricapillus</i>	C	C	C	C
Mountain Chickadee	<i>Poecille gambeli</i>	C	C	C	C
Pygmy Nuthatch	<i>Sitta pygmaea</i>	C	C	C	C
Red-breasted Nuthatch	<i>Sitta canadensis</i>	C	C	C	C
White-breasted Nuthatch	<i>Sitta carolinensis</i>	C	C	C	C
White-crowned Sparrow	<i>Zonotrichia leucophrys</i>	C	C	C	C
Grasshopper Sparrow	<i>Ammodramas savannarum</i>		U	U	
Lark Sparrow	<i>Chondestes grammacus</i>		C	C	C
Vesper Sparrow	<i>Pooecetes gramineus</i>		C	C	C
Savannah Sparrow	<i>Passerculus sandwichensis</i>		C	C	C
Fox Sparrow	<i>Passerella iliaca</i>		U	U	U
Song Sparrow	<i>Melospiza melodia</i>	C	C	C	C
Dark-eyed Junco	<i>Junco hyemalis</i>	C	C	C	C
Evening Grosbeak	<i>Coccothraustes vespertinus</i>	C	C	C	C
Black-headed Grosbeak	<i>Pheucticus melanocephalus</i>		C	C	C
House Wren	<i>Troglodytes aedon</i>		C	C	C
Pacific Wren	<i>Troglodytes pacificus</i>	C			
Bewick's Wren	<i>Thryomanes bewickii</i>		R	R	R
Canyon Wren	<i>Catherpes mexicanus</i>		C	C	C
American Dipper	<i>Cinclus mexicanus</i>	C	C	C	C
Ruby-crowned Kinglet	<i>Regulus calendula</i>		C	C	C
Western Bluebird	<i>Sialia mexicana</i>		C	C	C
Mountain Bluebird	<i>Sialia currucoides</i>		C	C	C
Townsend's Solitaire	<i>Myadestes townsendi</i>	U	U	U	U
Swainson's Thrush	<i>Catharus ustulatus</i>		U	U	U
Hermit Thrush	<i>Catharus guttatus</i>	C	C	C	C
Varied Thrush	<i>Ixoreus naevius</i>		C	C	C
American Robin	<i>Turdus migratorius</i>	C	C	C	C
Cedar Waxwing	<i>Bombycilla cedrorum</i>		C	C	C
Bohemian Waxwing	<i>Bombycilla garrulous</i>		U		U
Orange-crowned Warbler	<i>Vermivora celata</i>		U	U	U
Yellow Warbler	<i>Dendroica petechia</i>		C	C	C

Common Name	Scientific Name	W	Sp	S	F
Yellow-rumped Warbler	<i>Dendroica coronata</i>		C	C	C
Black-throated Gray Warbler	<i>Dendroica nigrescens</i>		U	U	U
Townsend's Warbler	<i>Dendroica townsendi</i>		U	U	U
McGillivray's Warbler	<i>Oporomis tolmiei</i>		C	C	C
Wilson's Warbler	<i>Wilsonia pusilla</i>		C	C	C
Yellow-breasted Chat	<i>Icteria vimes</i>		C	C	
Common Yellowthroat	<i>Geothlypis trichas</i>		U	U	U
Lazuli Bunting	<i>Passerina ameona</i>		C	C	C
Western Tanager	<i>Piranga ludoviciana</i>		C	C	
Western Meadowlark	<i>Sturnella neglecta</i>		C	C	C
Yellow-headed Blackbird	<i>Xanthocephaluxanth ocephalus</i>		C	C	C
Red-winged Blackbird	<i>Agelaius phoeniceus</i>		C	C	C
Brewer's Blackbird	<i>Euphagus cyanocephalus</i>		C	C	C
Brown-headed Cowbird	<i>Molothrus ater</i>		C	C	C
Bullock's Oriole	<i>Icterus bullockii</i>		C	C	C
Pine Siskin	<i>Carduelis pinus</i>	C	C	C	C
House Finch	<i>Carpodacus mexicanus</i>	C	C	C	C
Cassin's Finch	<i>Carpodacus cassinii</i>	C	C	C	C
Red Crossbill	<i>Loxia curvirostra</i>		C	C	C
American Goldfinch	<i>Carduelis tristis</i>	C	C	C	C
European Starling	<i>Sturnus vulgaris</i>	A	A	A	A
House Sparrow	<i>Passer domesticus</i>	C	C	C	C
Total Birds:	151				
Mammals					
Rocky Mountain Elk	<i>Cervus elaphus nelsoni</i>	A	A	C	C
Mule Deer	<i>Odocoileus hemionus</i>	A	A	C	C
White-tailed Deer	<i>Odocoileus virginianus</i>	C	C	C	C
Pronghorn	<i>Antilocapra americana</i>	U	C	C	C
California Bighorn Sheep	<i>Ovis canadensis californicus</i>	C	C	C	C
Mountain Lion/Cougar	<i>Puma concolor</i>	C	C	C	C
Bobcat	<i>Lynx rufus</i>	C	C	C	C
Spotted Skunk	<i>Spilogale gracilis</i>	U	U	U	U
Striped Skunk	<i>Mephitis mephitis</i>	C	C	C	C
Short-tailed Weasel	<i>Mustela erminea</i>	C	C	C	C
Long-tailed Weasel	<i>Mustela frenata</i>	C	C	C	C
Mink	<i>Mustela vison</i>	C	C	C	C
River Otter	<i>Lutra canadensis</i>	C	C	C	C
Badger	<i>Taxidea taxus</i>	U	U	U	U
Raccoon	<i>Procyon lotor</i>	C	C	C	C
Black Bear	<i>Ursus americanus</i>	U	C	C	C
Coyote	<i>Canis latrans</i>	C	C	C	C
Gray Wolf	<i>Canus lupus</i>	R	R	R	R
Red Fox	<i>Vulpes vulpes</i>	U	U	U	U
Pine Martin	<i>Martes Americana</i>	U	U	U	U
Yellow-bellied Marmot	<i>Marmota flaviventris</i>	U	C	C	U
American Beaver	<i>Castor canadensis</i>	C	C	C	C
Muskrat	<i>Ondatra zibethicus</i>	C	C	C	C
Townsend's Ground Squirrel	<i>Citellus townsendii</i>	U	U	U	U
Golden-mantled Ground	<i>Citellus lateralis</i>	U	C	C	C

Common Name	Scientific Name	W	Sp	S	F
Columbian Ground Squirrel	<i>Citellus columbianus</i>	U	U	U	U
Belding Ground Squirrel	<i>Citellus belding</i>	U	U	U	U
Northern Flying Squirrel	<i>Glaucomys sabrinis</i>	U	U	U	U
Douglas' Squirrel	<i>Tamiasciurus douglasii</i>	U	C	C	C
Red Squirrel	<i>Tamiasciurus hudsonicus</i>	U	U	U	U
Black-tailed Jackrabbit	<i>Lepus californicus</i>	U	U	U	U
Mountain Cottontail	<i>Sylvigaus nuttalli</i>	C	C	C	C
Snowshoe Hare	<i>Lepus americanus</i>	C	C	C	C
Ord's Kangaroo Rat	<i>Dipodomys ordii</i>	U	C	C	C
Canyon Mouse	<i>Peromyscus crinitus</i>	U	U	U	U
Deermouse	<i>Peromyscus maniculatus</i>	C	C	C	C
Pinyon Mouse	<i>Peromyscus truei</i>	C	C	C	C
Yellow Pine Chipmunk	<i>Tamias amoenus</i>	U	C	C	C
Least Chipmunk	<i>Tamias minimus</i>	U	C	C	C
Bushy-tailed Woodrat	<i>Neotoma cineria</i>	C	C	C	C
Bat Species – Little is known	about abundance on Wildlife Area				
Hoary Bat	<i>Lasiurus cinereus</i>				
Pallid Bat	<i>Snytozous palidus</i>				
Big Brown Bat	<i>Eptesicus fuscus</i>				
Western Big-eared Bat	<i>Plecotus townsendii</i>				
Long-legged Myotis	<i>Myotis volans</i>				
Long-eared Myotis	<i>Myotis evotis</i>				
California Myotis	<i>Myotis californicus</i>				
Little Brown Myotis	<i>Myotis lucifugus</i>				
Fringed Myotis	<i>Myotis thysanodes</i>				
Yuma Myotis	<i>Myotis yumanensis</i>				
Total Mammals:	50				
Reptiles					
Western Fence Lizard	<i>Sceloporus occidentalis</i>	U	C	C	C
Western Skink	<i>Eumeces skiltonianus</i>	U	C	C	C
Racer	<i>Coluber constrictor</i>	U	C	C	C
Rubber Boa	<i>Charina bottae</i>	U	C	C	C
Gopher Snake	<i>Pituophis catenifer</i>	U	C	C	C
Western Rattlesnake	<i>Crotalus viridus</i>	U	C	C	C
Common Garter Snake	<i>Thamnophis sirtalis</i>	U	C	C	C
Western Terrestrial Garter Snake	<i>Thamnophis elegans</i>	U	C	C	C
Total Reptiles:	8				

Appendix C. Fish species known or thought to be present on the Phillip W. Schneider Wildlife Area.

Fish Species	Occurance
Redband/inland Rainbow <i>Onchoryncus mykiss spp.</i>	Abundant
Spring Chinook Salmon <i>Onchoryncus tshawytscha.</i>	Seasonally common
Steelhead <i>Onchoryncus mykiss</i>	Abundant
Mountain Whitefish <i>Prosopium williamsoni</i>	Common
Smallmouth Bass <i>Mycropterus dolomieu</i>	Occasional
Chiselmouth Sucker	Abundant
Bridgelip Sucker <i>Catostomus columbianus</i>	Abundant
Coarsescale Sucker <i>Catastomas macrocheilus</i>	Abundant
Mountain Sucker <i>Catostomus platyrhunchus</i>	Abundant
Brook Lamprey <i>Ichthyomyzon fossor</i>	Common
Pacific Lamprey <i>Entosphenus tridentatus</i>	Common
Speckled Dace <i>Rhinichthys osculus</i>	Abundant
Longnose Dace <i>Rhinichthys cataractae</i>	Abundant
Redsided Shiner <i>Clinostomus elongatus</i>	Abundant
Sculpin <i>Cottus sp.</i>	Abundant
Brown Bullhead <i>Ictalurus nebulosus</i>	Occasional
Northern Pike Minnow <i>Ptychocheilus oregonensis</i>	Abundant

**Appendix D. Oregon Sensitive Species Which May Be Present
on the Phillip W. Schneider Wildlife Area**

Sensitive Species	Status
Great Gray Owl, <i>Strix nebulosa</i>	Sensitive
Ferruginous Hawk, <i>Buteo regalsi</i>	Sensitive
Swainson's Hawk, <i>Buteo swainsoni</i>	Sensitive
Flammulated Owl, <i>Otus flammeolus</i>	Sensitive
Burrowing Owl, <i>Athene cunicularia</i>	Sensitive-Critical
Greater Sage Grouse, <i>Centrocercus urophasianus</i>	Sensitive-Critical
Lewis's Woodpecker, <i>Melanerpes lewis</i>	Sensitive-Critical
White-headed Woodpecker, <i>Picoides albolarvatus</i>	Sensitive-Critical
Black-backed Woodpecker, <i>Picoides articus</i>	Sensitive
Pileated Woodpecker, <i>Dryocopus pileatus</i>	Sensitive
Upland Sandpiper, <i>Bartramia longicauda</i>	Sensitive-Critical
Olive-sided Flycatcher, <i>Contopus cooperi</i>	Sensitive
California Myotis, <i>Myotis californicus</i>	Sensitive
Fringed Myotis, <i>Myotis thysanodes</i>	Sensitive
Hoary Bat, <i>Lasiurus seminolus</i>	Sensitive
Long-legged, <i>Myotis Myotis volans</i>	Sensitive
Pallid Bat, <i>Snytozous palidus</i>	Sensitive
Mid-Columbia River Steelhead, <i>Onchoryncus mykiss</i>	Sensitive-Critical
Redband/Inland Rainbow Trout, <i>Onchoryncus mykiss spp</i>	Sensitive-Critical

Appendix E. Water Rights Held by the Phillip W. Schneider Wildlife Area

Type: IR – Irrigation, LV – Livestock water, IL – Irrigation and livestock,
WI – Water storage for livestock and wildlife.

No.	Certificate	Acres	Type	Quantity (cfs)	Remarks
1	753		IR	Not used	Oliver Cr.
2	3244		IR	Not used	Jackass Cr.
3	4826		IR	Not used	Brown Cr.
4	5113	40	IR	0.5	Todd Cr.
5	14144	5	IR	1/40th to June 1 1/80 th thereafter	South Fork John Day R.
6	21085	5.4	IR	1/40th to June 1 1/80 th thereafter	South Fork John Day R.
7	25543		LV		Flat Cr. Trough
8	25856		IL	1/40th to June 1 1/80 th thereafter	South Fork John Day R.
9	25857		IR	Not used	Aldrich Cr.
10	25858	126.4	IR	1/40th to June 1 1/80 th thereafter	Todd Cr.
11	25859	237	IR	1/40th to June 1 1/80 th thereafter	Cabin Cr.
12	25760	3.3	IR	1/40th to June 1 1/80 th thereafter	South Fork John Day R.
13	25863		IR	Not used	Oliver Cr.
14	25864		IR, LV	Livestock only	SF Basin Spring
15	25865	47.9	IR		Flat Cr
16	25866	6.8	IR	1/40th to June 1 1/80 th thereafter	Duncan Cr.
17	25867	0.5	IR		Thorp Ranch - Trough
19	27785		LV		Stewart Reservoir
20	27786		LV		Unnamed stream. Pond
21	32297	12.8	IR	Not used	John Day River (above bridge)
22	32429		IR	No quantity	Flat Cr.
23	32430		IR	"	Flat Cr.
24	32432		IR	Storage	Pinchot Reservoir
25	32431		IR	Storage	Stewart Reservoir
27	32432		IR	Not used	Roosevelt Reservoir
28	69314		WI	4 ponds	Flat and Murray Cr.
29	69315		WI	3 ponds	Cougar Gulch
30	69316		WI	2 Ponds	Water Gulch, Maggot Spring
31	74529	107	IR	1/40th to June 1 1/80 th thereafter	Quantity equivalent in case of rotation. Murderers Cr.
32	74530	58.6	IR	1/40 th to June 1 1/80 th thereafter	Quantity equivalent in case of rotation. Murderers Cr.

Appendix F. Land Acquisitions and Adjustments Involving the Philip W. Schneider Wildlife Area

Date	Acres	Action	Cooperator
1972	21,107	Acquired from	Wayne Stewart Ranch
(The Stewart family retains 50% of the mineral rights on what was their deeded land (approximately 80% of the wildlife area).			
1976		USFS right-of way easement	Tex Creek property
1977	1,038.34	Acquired from	John Bennett Ranch
1977	789.95	Acquired from	Joe Martin Ranch
10-1977		ODFW access easement from	Joe Martin Ranch
5-11-46		Utilities easement to	California-Pacific Utilities
3-1-57		Road access agreement w/	U.S. Forest Service
10-29-57		Road access easement w/	U.S. Forest Service
12-5-60		Right-of-way easement w/	U.S. Forest Service
1962		Road access easement w/	Grant County
5-6-66		Road access easement w/	U.S. Forest Service
1986 (updated 2016)		Gauging station agreement w/	OR Water Resources Department
4-11-88		Telephone line easement to	C.P. National Corporation
1988	4.6	Fire guard station lease to	U.S. Bureau of Land Management
8-11-88		Power line easement to	C.P. National Corporation
1997	2,400	Exchange of 554 acres	Rocky Mountain Elk Foundation
(exchanged the Headquarters Ranch of 554 acres (a part of the James Stewart Ranch) to Rocky Mountain Elk Foundation for the James Sproul Ranch of 2,400 acres.)			
2013	400 Net	Acquired 560 acres sold 160	Rocky Mountain Elk Foundation
2016		Utilities easement to	Oregon Trail Electric Coop

Appendix G. Legal Obligations Influencing Management of the Phillip W. Schneider Wildlife Area

Federal Laws

Federal Aid in Wildlife Restoration Act
Pittman- Robertson Act of 1937
The Endangered Species Act of 1973, as amended
National Historic Preservation Act
National Environmental Policy Act
Americans with Disabilities Act
Wild and Scenic River Act of 1968

Oregon Revised Statutes

ORS 496.012 Oregon's Wildlife Policy
ORS 496.138 General Duties and Powers; Rulemaking Authority
ORS 496.146 Additional Powers of the Commission
ORS 496.162 Establishing seasons, amounts and manner of taking wildlife; rules
ORS 496.992 Penalties

Oregon Administrative Rules

Division 8 - Department of Fish and Wildlife Lands

635-008-0015 Agreements to Restrict Motor-propelled Vehicles
635-008-0040 Forage Removal from State Lands
635-008-0050 Fish and Wildlife Commission to Post and Enforce Rules
635-008-0153 Phillip W. Schneider Wildlife Area

Division 11 - Statewide Angling Regulations

635-011-0050 Procedure of Promulgation of Angling Regulations
635-011-0100 General Rule

Division 51 - General Game Bird Regulations

635-051-0000 Purpose and General Information
635-051-0065 State Wildlife Area Regulations

Division 65 - Game Mammal General Seasons and Regulations

635-065-0001 Purpose and General Information
635-065-0625 Regulations on State Wildlife Areas, Refuges and Special Areas

State Legislation for Forestlands

HB 3152: Requires the Department of Administrative Services to coordinate with the Department of Fish and Wildlife, the Parks and Recreation Department, the State Forestry Department, the Division of State Lands and other agencies with state

forestland oversight responsibilities to adopt forest management plans or policies. The bill also establishes provisions whereby state forestland plans may address excess fuels build up and forest health. Calls for efforts to determine necessary silvicultural practices to improve and increase wildlife habitat, improve forest health, control insect-infested and diseased-stands of timber, and reduce fire danger.

HB 2344: Directs state agencies to develop plans for timber salvage operations to restore and recover forest lands burned by fire.

A comprehensive integrated habitat management plan is needed for the PWSWA that would incorporate much of the same information contained in the timberland inventory and analysis but would also include recommendations for other types of habitat management such as grazing, fencing and forage enhancement for the benefit of wildlife. This type of long range plan would enable ODFW to improve and increase wildlife habitat, improve forest health, reduce fire danger, and control insect infested and diseased stands of timber. These actions would not only benefit big game species, but all wildlife in the PWSWA. As personnel, time and funding are available production of an Integrated Habitat Management Plan to accomplish these goals will be evaluated. At this time, funding limitations prevent implementation of such a comprehensive study and related reports. Instead, with the assistance of Oregon Department of Forestry and private professional foresters, PWSWA staff has conducted select timber management activities in specific project areas to address the wildlife area's objectives and forest health.