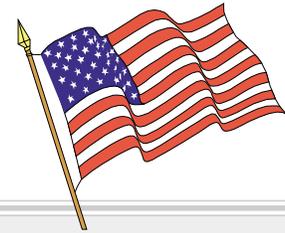




Turnbull National Wildlife Refuge

Planning Update #3



The U.S. Fish and Wildlife Service protects the nation's wildlife, fish, and plants for present and future Americans.

Aerial view of Turnbull National Wildlife Refuge (photo by refuge staff)

Are Turnbull's Wildlife Secure?

Does Turnbull National Wildlife Refuge encompass sufficient habitat to maintain the wildlife it was established to protect? Are water supplies that feed refuge wetlands adequate for the future, and are they free of pollutants? Are there opportunities in the surrounding area to secure the water supply or protect additional habitats? If so, what tools should we use to accomplish this task? These are some of the important questions that refuge staff have been asking as we develop a long-term conservation plan for the refuge.

For most of the refuge's existence, surrounding land use has mostly complemented the refuge by maintaining open space, providing a larger habitat base, and serving as critical linkages to other

undisturbed habitats. However, in the past twenty years, Spokane County's population has increased by 30%. Accelerated home construction, business developments, and the transportation infrastructure to service this growing population have begun to isolate the refuge from other undisturbed habitat. This development increases the potential for threats such as contamination of air and water, altered or depleted supplies of surface and ground water, loss of connectivity to other suitable or complimentary habitats, and the invasion of exotic plant and animal species that erode the integrity of the refuge.

See more inside as we further explore Turnbull's NWR's link to the landscape.

TALKING TOGETHER ABOUT THE FUTURE

of Turnbull National Wildlife Refuge

Over the next several months, the refuge staff plans to spend more time in the community, talking with folks and crafting a shared long-term vision for Turnbull National Wildlife Refuge.

If you are a neighbor of the refuge, we would like to talk with you. If you are a member of a community group, we would like to talk with you. If you are a community leader, elected or not, we would like to talk with you. If you are interested in shaping the future of Turnbull NWR, we would like to talk with you.

As you know, we are in the process of writing a 15-year Comprehensive Conservation Plan (CCP) for the Refuge. Building on the Habitat Management Plan finalized in 1999, this plan will identify key actions for protection of ecosystem components that are important to conservation of the Refuge's fish and wildlife resources and their habitats. The plan will also establish guidelines for future recreational uses on the refuge.

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Turnbull - The Link to the Landscape

Refuge wildlife and their habitats are connected to and depend upon the surrounding landscape. Many of Turnbull's wildlife, especially migratory birds and mammals with large home ranges, move on and off the refuge, finding food, water, and shelter in the larger landscape. Even resident (non-migratory) plant and animal populations are

Refuge wildlife and habitats are connected to and depend upon the surrounding landscape.

contiguous with those on adjacent lands.

This intermingling of plant and animal populations across a landscape is

known as connectivity, and it is essential for long-term survival of plant and animal species. When plants and animals can reproduce with others within a larger population base, the gene pool retains diversity, which increases the probability of the species surviving.

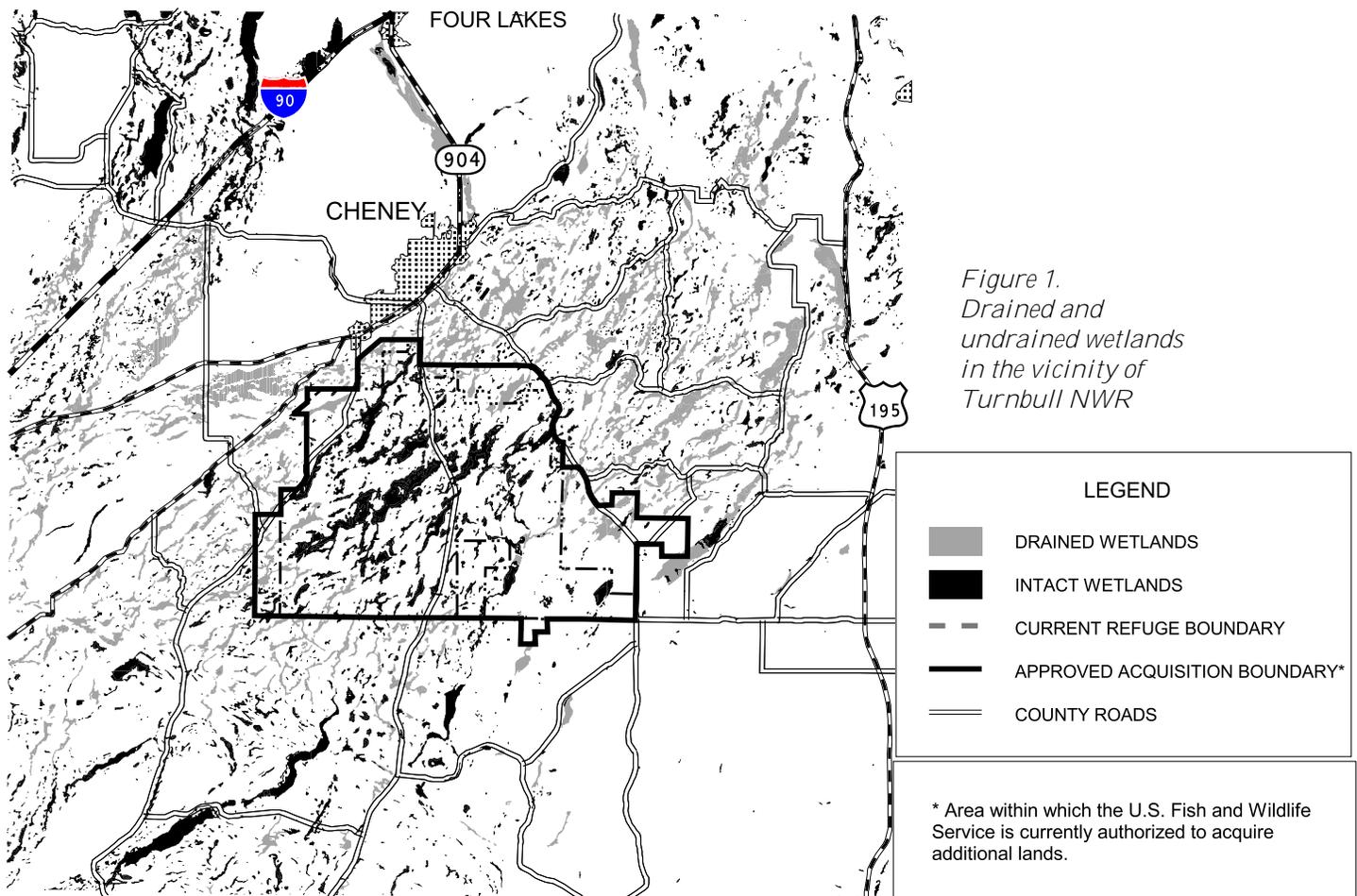
Wetlands - Turnbull is probably best known and loved for its wetlands. Wetlands like these once existed throughout the Channeled Scablands region, formed by the scouring of the great Ice Age Floods. Today, the refuge contains one of the last remaining complexes of permanent, semi-permanent and seasonal wetlands in northeastern Washington; most of the original wetlands of the Scablands have



Swans at the refuge (photo by Derek Hanson)

been drained (Figure 1). Still, many of these drained wetlands continue to flood shallowly in the spring. At this time of year, the area's wetlands support huge populations of migrating waterfowl (peak estimates of 100,000 birds), principally mallards, northern pintail, and American widgeon, and as many as 2,000 tundra swans.

(continued on page 3)



We see a great need to recognize the value of these wetlands, to protect them, and to restore them where possible.

Refuge wetlands are dependent on surface water that flows into the refuge from the north and east (Figure 2). Maintaining water quality in surface streams is very important.

Refuge wetlands are also sustained by the shallow aquifer that underlies the region. Many wells are located near the refuge and within the groundwater “watershed,” estimated to extend about one mile on the north and east of the refuge and about a half-mile to the south and west. The County does not

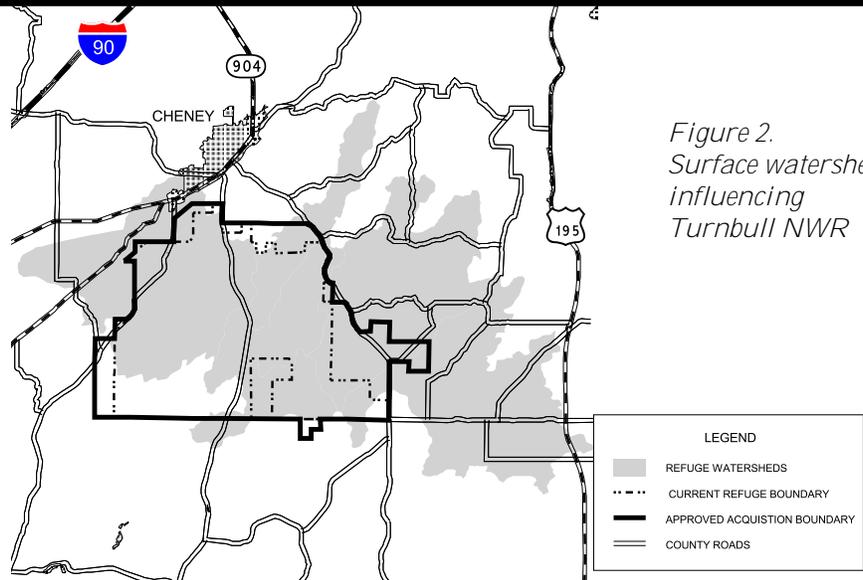


Figure 2.
Surface watersheds
influencing
Turnbull NWR

require permits for most residential groundwater use. We are concerned that, over time, groundwater withdrawals could exceed the rate of recharge. This would cause the

aquifer level to drop and wetlands at Turnbull could dry up as a result.

See more on refuge links to the landscape on page 4

Recreational Uses - Planning for the Future

Our goals, objectives and strategies for this Comprehensive Conservation Plan are being developed for the next 15 years. For a plan of this scope we need to estimate the amount and types of recreational use the public desires and the refuge can support.

Last year, when we initiated our planning process, we received suggestions from you that ranged from leaving things as they are, to providing additional interpretative, viewing, and educational opportunities, developing more and longer hiking trails, and adding hunting opportunities.

The 1997 National Wildlife Refuge System Improvement Act states that National Wildlife Refuges should facilitate family-oriented recreation, with priority consideration for the “Big Six” uses. These uses include: wildlife observation, wildlife photography, interpretation, environmental education, hunting and fishing. To date all of the Big Six except hunting and fishing have been permitted at Turnbull National Wildlife Refuge.

We are particularly proud of our environmental education program. Each year we host between 3,000 - 6,000 students at the refuge.

They learn about wetlands, wildlife, indigenous peoples who used the refuge, and the various refuge habitats.

A big question under consideration is whether to open the refuge to hunting. Since its establishment, the refuge has never been hunted. If the refuge is opened to hunting, what species should be harvested? To run a quality hunt, how many permits should be issued? What portions of the refuge should be open to hunting? Should we still maintain a portion of the refuge as sanctuary, closed to hunting and other recreational activities? How would hunting affect other established refuge programs, such as environmental education? Fishing is not being considered here since the refuge does not have a population of sport fish.



Students engaged
in environmental
education program at
Turnbull

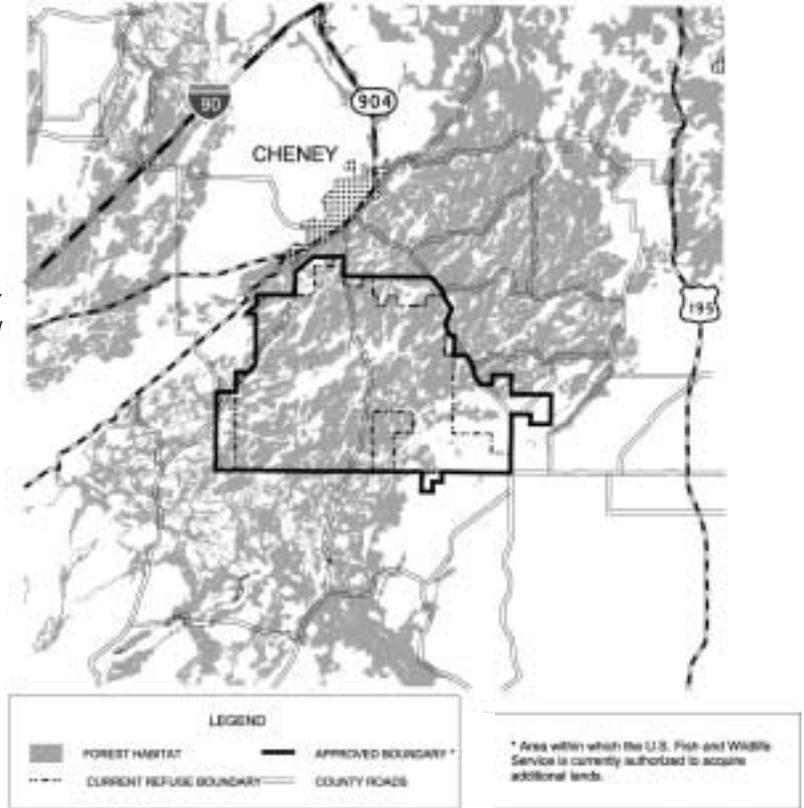
We have developed a goal and draft objectives for recreational uses at the refuge (see pages 6-7). Please take a look at these and see how they meet your concerns, needs, and thoughts about the future of Turnbull National Wildlife Refuge.

Refuge Link to the Landscape (continued from page 3)

Ponderosa Pine Forests

Although a widespread ecosystem, only 2.1% of Ponderosa Pine in the Northeast Region of the state is protected and managed for biodiversity. The refuge and surrounding area is situated on a narrow extension of Ponderosa pine forest which enters the Columbia Basin from the forested areas in the northeastern portion of Washington State. This narrow peninsula of forest - surrounded by intensively cultivated agricultural land - is in danger of being isolated from the core forest areas of the north by urban development around Spokane and along the I-90 corridor. Figure 3 shows the distribution of ponderosa pine forests around the refuge.

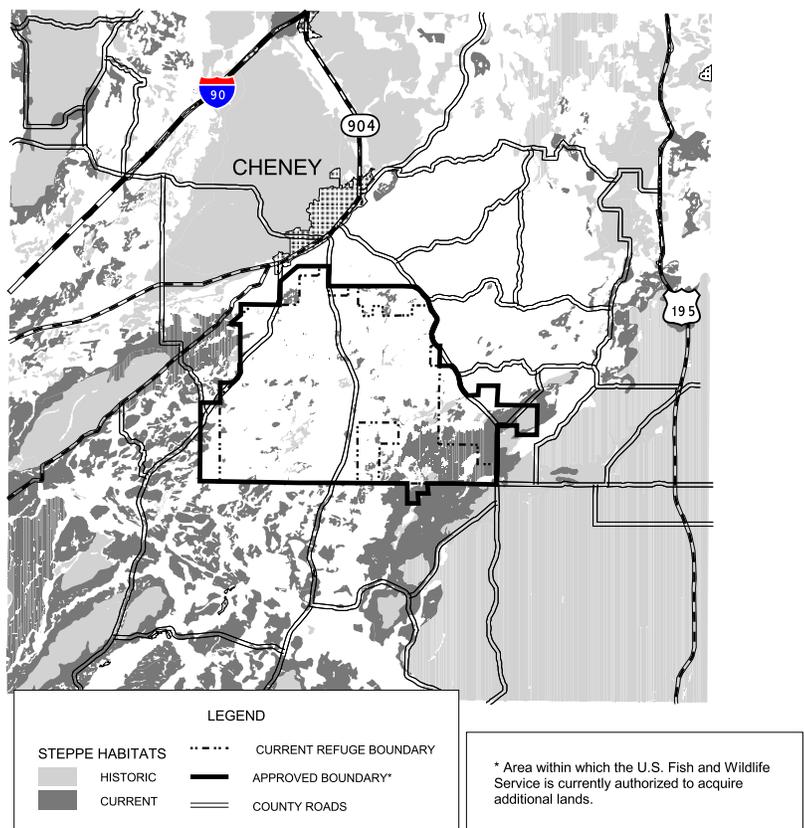
Figure 3.
Ponderosa Pine habitat in the vicinity of Turnbull NWR



Palouse Steppe Grasslands

The Palouse prairie steppe habitat in the Channeled Scablands region is among a handful of national ecosystems classified as "critically endangered." This steppe habitat is considered the top Conservation Priority in the State of Washington. About 90% of Washington state's original Palouse steppe has been converted to farmland (shown as historic steppe in Figure 4). The remaining ten percent is highly fragmented and almost completely unprotected. The refuge currently contains almost the entire inventory of protected steppe (less than 1% of the ten percent remaining). There are some high quality areas located around the refuge.

Figure 4.
Current and historic Palouse Steppe habitat in the vicinity of Turnbull NWR



Palouse steppe has the potential to support grasshopper, savannah, and vesper sparrows, as well as numerous rare plants. Figure 4 shows the distribution of steppe habitat in the area as well as areas that were once steppe, but have now been converted to agricultural lands.

Protecting the Landscape

Spokane County has recently completed its Comprehensive Plan, which limits development in the area around the refuge to one dwelling per 20 acres. Areas already platted for more intensive development were grandfathered in.

The refuge first explored the questions of how best to raise awareness of and protect important off-refuge habitats in the refuge Habitat Management Plan (HMP), finalized in December, 1998. The HMP identified the need to more precisely describe and prioritize important resources around the refuge and to work cooperatively with partners to protect these resources. Goals, objectives and strategies were developed to address off-refuge issues including water quality and quantity, landscape connectivity, and the protection of additional water howellia (a threatened plant species) and Palouse steppe habitat.



Volksmarchers at Turnbull NWR (photo by Nancy Curry)

The refuge manager prepares a written compatibility determination for each use proposed under the CCP. The determination explores questions such as: How much impact will the use have on wildlife and what level of impact is acceptable? Does the refuge expect to have the resources to manage the use, in other words funding for staff, facilities, and maintenance? Does the refuge have the land base to support the proposed activity? Compatibility determinations are reviewed by the public when the draft CCP is released.

The refuge is now preparing a Comprehensive Conservation Plan (CCP) that lays out long-term strategies for all management programs. An important part of this plan is land protection. The land protection objectives established in the HMP will be incorporated into the CCP. The planning team is also looking more closely at off-refuge issues and hoping to develop more specific land protection objectives and alternatives with your help. The inventory of off-refuge habitats and resources (as shown in the maps on pages 2 and 4) fulfills some of the objectives identified in the HMP and provides groundwork to develop alternatives for habitat protection.

Early next year the refuge staff plans to meet with the public to discuss land protection needs and to develop alternatives.

Compatibility

By law all uses on national wildlife refuges need to be compatible with the purpose for which the refuge was established and must meet the mission of the National Wildlife Refuge System.



Grasshopper sparrow (photo by USGS)

Draft Refuge Goals

Seven goals are proposed for the Turnbull NWR under the CCP.

- Provide habitat conditions essential to the conservation of birds and other wildlife within a variety of wetland complexes.
- Protect and restore water quality and quantity sufficient to maintain native wetland flora and fauna.
- Restore Refuge forest to a natural distribution of stand structural and successional stages to benefit forest dependent wildlife.
- Protect and restore the natural distribution and diversity of grassland and shrub steppe habitats to benefit wildlife.
- Support the conservation of threatened and endangered species in their natural ecosystems.
- Support the maintenance of biologically effective landscape linkages and corridors between the Refuge and other intact areas of vegetation zones representative of this ecoregion.
- Provide quality environmental education, interpretation, research and wildlife-oriented recreation compatible with the Refuge purposes and mission.

Selected Draft Objectives for the Comprehensive Conservation Plan

Establish a non-motorized trail link between the Columbia Plateau Trail and the Public Use Area via the old Cheney Plaza Highway within five years partnering with State and County

Protect incoming water quality and quantity so as to manage existing Refuge wetlands in accordance with the Habitat Management Plan

Within seven years, provide environmental education/visitor facilities together with partners:

- to reach public of all ages, including up to 6,000 students annually

- to increase awareness of the Channeled Scablands ecosystem, the Refuge System, and Turnbull NWR management practices
- to provide orientation and a jumping-off point for Refuge wildlife-dependent recreational activities

- to instill a sense of stewardship and environmental ethic
- to provide an exhibit area for the general public, a separate classroom facility for 70 people, a bookstore, and a meeting/workshop room able to accommodate up to 50 people

Develop a round-trip bike/hike loop from Cheney/Spangle Highway through the Public Use Area to Cheney Plaza Highway, linking with Columbia Plateau Trail as a cooperative effort with State and County.

Protect and restore rare Palouse steppe, declining aspen and ponderosa pine habitats and their associated species

*Are these objectives something you would support?
We welcome your input, suggestions and*

Initiate a program providing a pilot safe, high quality, primitive elk hunting opportunity. Minimize hunting conflicts with other priority public uses. Evaluate pilot program thoroughly after a five-year period.

Provide opportunities for restoration of formerly drained wetlands in the historic Channeled Scablands region

Expand and enhance existing trails in the Public Use Area within 10 to 15 years, including some with universal access. Provide a diversity of trail links, longer trail routes, and some improved interpretation. Replace Blackhorse Lake boardwalk.

Provide an off-Refuge environmental education program to community groups and schools that fosters understanding, appreciation and support for Refuges, and the habitat and wildlife of the Channeled Scabland ecosystem, coordinated by skilled, paid, educators. The off-Refuge environmental education program:

- complements on-Refuge environmental education opportunities
- reaches audiences not reached by on-Refuge programs
- is generally focused on groups and schools within an hour drive
- reaches up to 2,000 individuals annually, at least 500 of these from "non-traditional" audiences
- incorporates Washington State educational objectives
- incorporates specific learning objectives and utilizes audience-appropriate curricula

Ensure protection of strategically placed and sizeable tracts of forested habitat so as to provide viable stepping stone landscape linkages from the refuge to other protected forest areas north and east.

The Refuge Vision - Make it Your Own

In this newsletter, we have described some significant threats to the refuge that we are responsible for protecting. Now, we need your help to identify the best methods and approaches to resolving these problems. Please take a good look at the background discussions on pages 1-4 of this update and at the draft objectives on pages 6-7. We want to complete these objectives in the near future and begin designing a number of alternatives for management of the Turnbull National Wildlife Refuge. We want to share with you a vision for the future and we need to hear your ideas.



Workshop participants at Turnbull NWR (photo by Nancy Curry)

If you would like us to come speak to you and your neighbors, or at one of your community group meetings, please contact us (see adjoining box). We will also be contacting some of you directly.

For Further Information

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*Have you moved? If so, please send
us updated address information.
Thanks!*