

**Draft Environmental Assessment**

**For**

**Restoration of wet meadow through lodgepole pine removal**

**On**

**Conboy Lake National Wildlife Refuge  
Mid-Columbia River Refuges Complex  
US Fish and Wildlife Service  
64 Maple Street  
Burbank, WA 99323**

**August 5, 2008**

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# COMMENT INSTRUCTION SHEET

## Conboy Lake NWR Wet Meadow Restoration *Environmental Assessment*

1) Comments must be postmarked by Aug 20 (if mailed) or submitted before 11:00 pm on Aug 20 (if emailed, submitted via web site, or faxed).

2) Written comments should be submitted to: U.S. Fish and Wildlife Service, Attention: Conboy Lake Wet Meadow EA Comments, 64 Maple Street, Burbank, WA 99323.

3) Comments may be emailed to: [mcriver@fws.gov](mailto:mcriver@fws.gov). Please include "Conboy Lake Wet Meadow EA Comments" in the subject line.

4) Comments may be submitted via the web at: <http://www.fws.gov/conboylake/web-comment.html>

Please indicate that your comments are about the Conboy Lake Wet Meadow EA.

5) Comments may be faxed to: (509) 546-8303.

If you have any questions regarding how to provide comments, please call (509) 546-8333. If you have any questions regarding the content of the EA, please call (509) 546-8300.

## **1.0 Purpose of the Proposed Action**

The purpose of this Environmental Assessment (EA) is to evaluate the alternatives for the removal of 50 acres of encroaching lodgepole pine to restore wet meadow habitat on Conboy Lake NWR (Conboy).

## **2.0 Needs for the Action**

Changes in historical water and grazing regimes in wet meadow habitats have allowed conifer species to encroach and negatively impact habitat quality. Operational goals for Conboy include; “to restore, maintain, and enhance a native diversity of wetland habitats for breeding/migrating/wintering waterfowl and other aquatic migratory birds (Operational Goal Statements, 1998).” The most widespread coniferous invader of wet meadow habitat on Conboy is the lodgepole pine. Removal of small diameter lodgepole will set back the encroachment of coniferous forest and return the wet meadow to full function.

## **3.0 Alternatives Including the Proposed Action**

### **3.1 Alternative A (Proposed Action)**

The proposed action is to remove small diameter (<3” dbh) lodgepole pine to improve 50 acres of wetland habitat. The proposed location is in the Troh Tract located in the north central part of the Refuge east of the BZ-Glenwood Highway and south of Troh Road (Township 6N, Range 12E, Section 26).

Two methods of removal may be employed. A bobcat mounted chipper will be used to cut and mulch individual trees. Alternately, hand crews will cut and pile the woody material into burn piles for eventual elimination in a fall burn.

### **3.2 Alternative B (No Action)**

Alternative B is the no action alternative. Under this alternative no lodgepole would be removed. Existing habitat quality would continue to degrade as the encroaching stands increase in height and area.

## **4.0 Affected Environment**

Conboy Lake National Wildlife Refuge is located near the town of Glenwood, Washington in northwest Klickitat County. The Refuge encompasses approximately 58% (1287 hectares, 3182 acres) of the remaining 2205 hectares (5450 acres) of functional wetland system formed by the historic Camas Prairie, Conboy Lake, and Swan Lake; the remaining 42% is in private inholdings, creating a mosaic of refuge and private lands within the basin. This wetland complex as well as lands surrounding the refuge, north to the town of Glenwood is generally referred to as the Glenwood Valley.

The proposed 50 acre work area is within the Troh Tract and is primarily wet meadow.

## 5.0 Environmental Consequences

### 5.1 Alternative A (Proposed Action)

#### 5.1.1 Wetland Habitat Impacts

The proposed work would be conducted in mid-August or early September when the soil of the wet meadow will be at its driest. Minimal disturbance to vegetation is expected from bobcat tires and the addition of pine chips. Access to the work site will be via existing dike top roads. Soil compaction from weight of machinery should be minimal.

#### 5.1.2 Upland habitat Impacts

None.

#### 5.1.3 Wildlife Impacts

Removal of lodgepole pines may indirectly affect breeding bird productivity for species nesting in lodgepole pines on the proposed work site such as yellow-rumped warbler or chipping sparrow. No direct loss of nests or nestlings will occur as tree removal will be conducted only during the non-breeding period. Tree removal activities could cause disruptions to feeding and activities adjacent to the work site. Projected work duration is short (less than one week.)

#### 5.1.4 Endangered and Threatened Species Impacts

No federally listed endangered or threatened species occur on or near the proposed building site. However, the Oregon spotted frog (*Rana pretiosa*) which is a Candidate for listing under the Federal Endangered Species Act and is listed as endangered by Washington Department of Fish and Wildlife occurs in many of the wetlands on the refuge.

Oregon spotted frogs occur in the general area of the work site. Oregon spotted frogs are highly aquatic (McAllister and Leonard 1997). The work site is generally dry by mid-August, and will not support the use of spotted frog.

The Mardon skipper butterfly (*Polites mardon*) which is also a federal candidate occurs on parts of Conboy Refuge. Mardon skippers depend on grassland habitats for their survival (Potter et al. 1999).

The butterfly has not been identified within the work site, and no grassland habitat will be impacted by work activities.

Several federal species of concern occur on the refuge at various times of the year and include:

#### Birds

olive-sided flycatcher (*Contopus cooperi*)

peregrine falcon (*Falco peregrinus*)

### Mammals

long-eared myotis (*Myotis evotis*)

Townsend's big-eared bat (*Corynorhinus townsendii*)

Olive-sided flycatchers may nest in the pine trees on or adjacent to the work site (Joe Engler pers. comm.). Any nesting birds would not be directly affected as trees would be removed after the nesting season. Removal of pine trees may result in a loss of future nesting habitat indirectly affecting olive-side flycatchers, however this would not be significant due to the small number of trees that would be removed. Peregrine falcons would not be affected. The effect on bats is unknown, but is expected to be minimal.

Seven plants listed by the state of Washington occur on Conboy Lake Refuge and include:

#### State Endangered:

Suksdorf's milk-vetch (*Astragalus pulsiferae* var *suksdorfii*)

Kellogg's rush (*Juncus kelloggii*)

Rosy owl-clover (*Orthocarpus bracteosus*)

Oregon coyote-thistle (*Eryngium petiolatum*)

#### State Threatened:

Dwarf rush (*Juncus hemiendytus* var *hemiendytus*)

#### State Sensitive:

Long-bearded sego-lily (*Calochortus longebarbatus* var *longebarbatus*)

Pulsifer's monkey-flower (*Mimulus pulsiferae*)

None of these plants are known to occur in the proposed construction site.

Sandhill cranes (*Grus canadensis*) which are listed as endangered by the state of Washington are present on the refuge from March through October.

In 2008, a pair of cranes nested on the Swan Lake area, approximately 300 meters to the east of the proposed work site. Also in 2008, a pair was noted using an area approximately 300 meters to the NW during the breeding season. The Washington Department of Fish and Wildlife recommends a 0.25 mile area around existing crane nests where disturbance should be eliminated or minimized. Tree removal will occur after the nesting season is completed. Tree removal activities could cause cranes to be temporarily displaced from nearby foraging areas due to disturbance. Lodgepole pine removal at this site will result in the improvement of crane foraging habitat.

A pair of bald eagles (*Haliaeetus leucocephalus*) nests approximately 2 km west of the proposed work site. Nesting bald eagles are sensitive to disturbance near the nest. Bald eagles are no longer federally listed as threatened; however, the species is still protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The Bald and

Golden Eagle Protection Act prohibits the Take of bald eagle. The definition of Take also includes disturb. Disturb is defined as to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior. The new National Bald Eagle Management Guidelines (USFWS 2007) recommend a minimum buffer of 330 feet (100 meters) up to 660 feet (200 meters) depending on whether the nest is visible from the area of activity. The nest is not visible from the work site. Overall this construction project would not have significant impacts on bald eagles on Conboy Refuge.

#### 5.1.5 Public Use Impacts

The proposed work area is part of the Troh Tract. The work site is within the Refuge Hunting Area, and is commonly used for deer and waterfowl hunting. Tree removal should have no effect on existing public use on the Refuge.

#### 5.1.6 Cultural Resources

The work activity will not disturb any soil, and no cultural resources should be impacted.

#### 5.1.7 Environmental Justice

This alternative would have no negative impact on low-income or minority populations.

#### 5.1.8 Cumulative Impacts

Removal of the small lodgepole pines will improve wet meadow habitat in the area. Sandhill cranes are listed as endangered by the State of Washington. In order to downlist to threatened the sandhill crane recovery plan objectives are to achieve approximately 50 pairs in the Glenwood Valley (most of which would be on the refuge), and 15 pairs outside of the Glenwood Valley. Currently, the refuge contributes 23 pairs towards the goal of 50 in the Glenwood Valley (Jessica Stocking pers. comm.). This proposed habitat improvement should help to increase the number of nesting pairs.

The bald eagle was recently declared a recovered species by the US Fish and Wildlife Service and removed from the federal endangered species list. The population in the lower 48 States has increased from approximately 487 breeding pairs in 1963, to an estimated 9,789 breeding pairs today. The Washington population has also increased and is currently estimated at 848 breeding pairs. Removal of small lodgepole in wet meadow habitats would have no cumulative impacts to bald eagles.

Removal of small lodgepole pine would not have a direct effect on the Oregon spotted frog. The refuge currently provides the majority of spotted frog habitat and therefore is the major stronghold for frogs in the valley. Though some private land has been surveyed, more work likely needs to be done to determine status for the whole valley.

## 5.2 Alternative B (No Action alternative)

### 5.2.1 Wetland habitat Impacts

No tree removal would be conducted. No wetlands would be improved.

### 5.2.2 Upland Habitat Impacts

No impacts to upland habitat would occur as the construction project would not be completed.

### 5.2.3 Wildlife Impacts

No improvement in crane foraging habitat would occur. Work site habitat would continue slow transition from wet meadow to lodgepole forest.

### 5.2.4 Endangered and Threatened Species Impacts

There would be no effect to any federal or state listed threatened or endangered species.

### 5.2.5 Public Use Impacts

No impacts to public use would occur.

### 5.2.6 Cultural Resources

No impacts to cultural resources would occur.

### 5.2.7 Environmental Justice

This alternative would have no impact on low-income or minority populations.

### 5.2.8 Cumulative Impacts

Since the project would not be constructed under this alternative, there would be no cumulative impacts.

## 6.0 List of Preparers

Lamont Glass, Refuge Manager, Conboy Lake NWR, Glenwood, WA - Author

Howard Browsers, Supervisory Wildlife Biologist, Mid-Columbia River Refuge Complex, Burbank, WA – Author.

## 7.0 References

Littlefield, C. D., and G. L. Ivey. 2002. Washington state recovery plan for the sandhill crane. Washington Department of Fish and Wildlife, Olympia, WA.

McAllister, K. R., and W. P. Leonard. 1997. Washington state status report for the Oregon Spotted Frog. Washington Department of Fish and Wildlife, Olympia, WA.

Potter, A., J. Fleckenstein, S. Richardson, and D. Hays. 1999. Washington state status report for the mardon skipper. Washington Department of Fish and Wildlife, Olympia, WA.

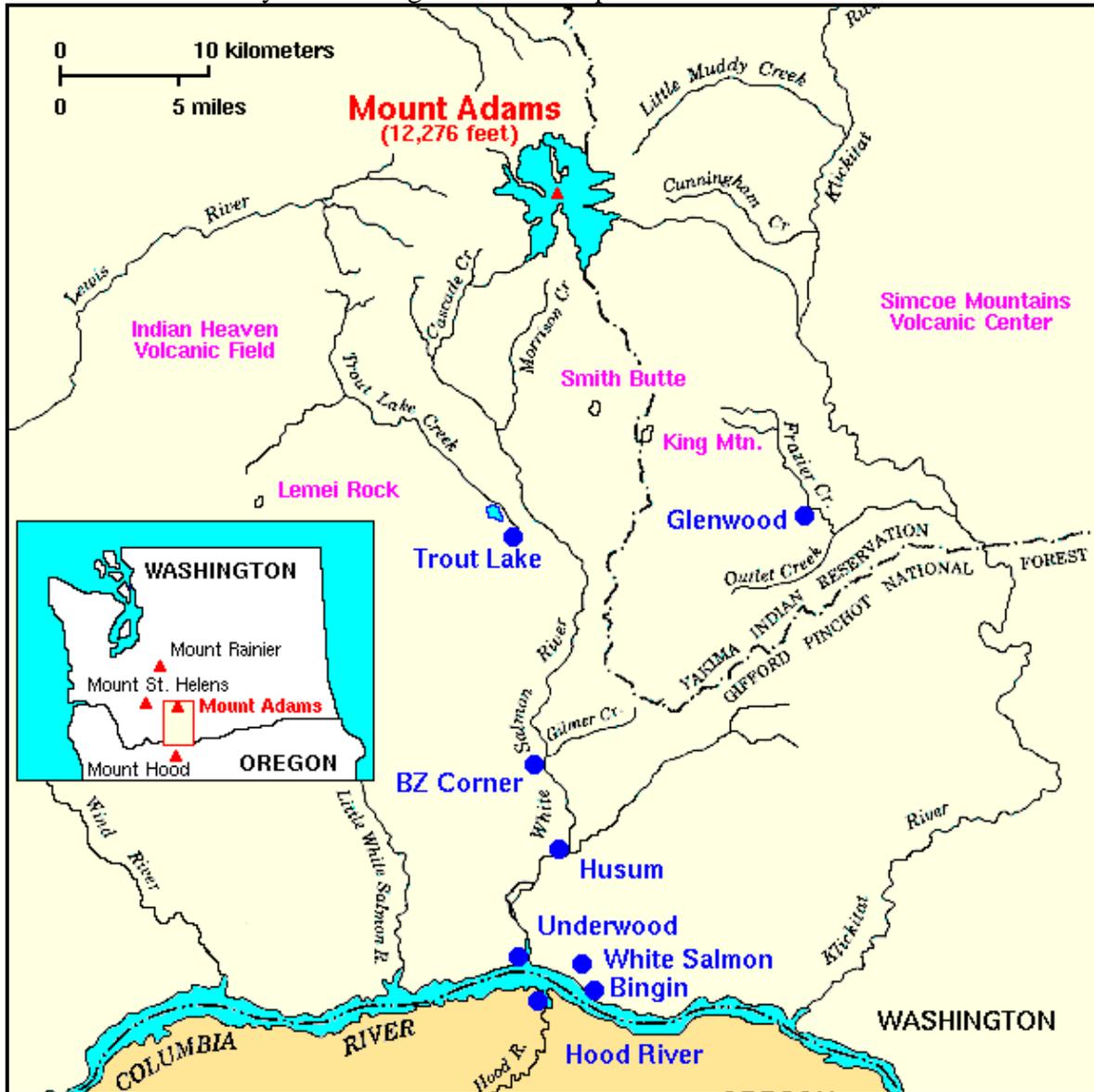
U. S. Fish and Wildlife Service. 2007. National bald eagle management guidelines.

Available at:

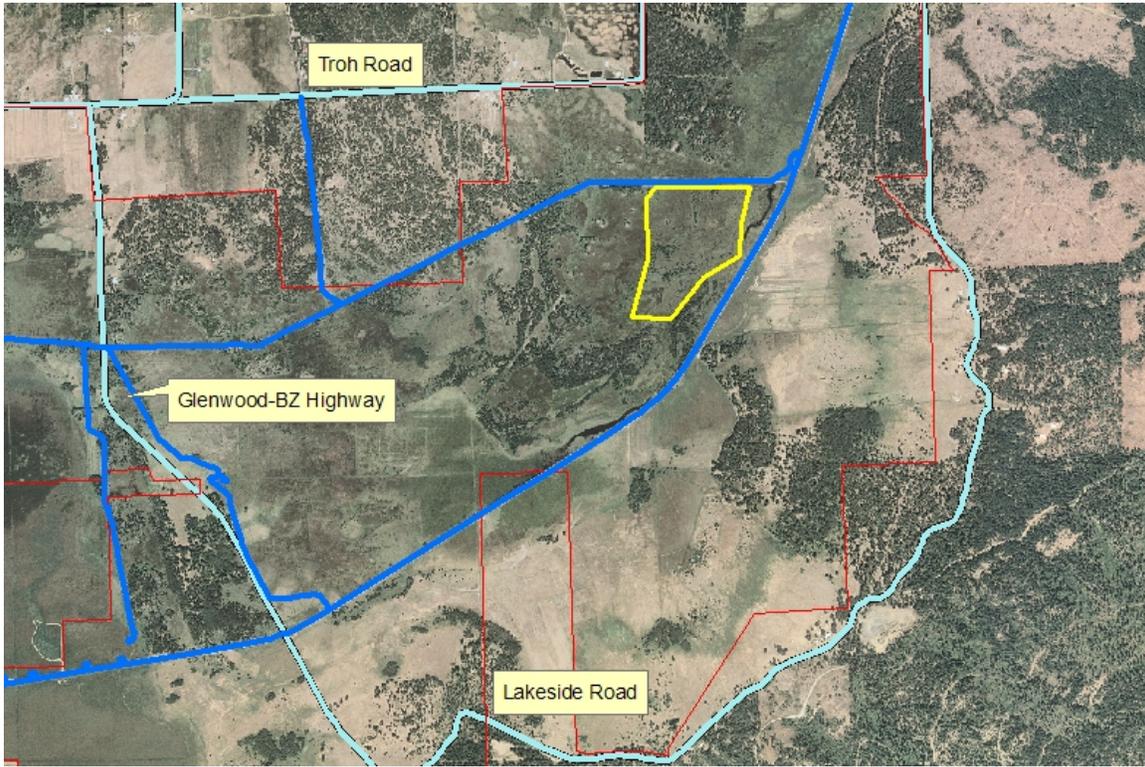
<http://www.fws.gov/migratorybirds/issues/BaldEagle/NationalBaldEagleManagementGuidelines.pdf>

## 8.0 Appendices

### 8.1 Conboy Lake Refuge Location Map



## 8.2 Proposed Work Site for Preferred Alternative



### 8.3 List of Federal Threatened and Endangered species for Klickitat County, WA

#### **Klickitat County**

(Updated 5/31/2007)

#### **LISTED**

Endangered

Gray wolf (*Canis lupus*)

Threatened

Bald eagle (*Haliaeetus leucocephalus*)

Bull trout (*Salvelinus confluentus*) – Columbia River distinct population segment

Northern spotted owl (*Strix occidentalis caurina*)

Spiranthes diluvialis (*Ute ladies' tresses*)

Designated

Critical habitat for the northern spotted owl

Critical habitat for the Columbia River distinct population segment of the bull trout

#### **CANDIDATE**

Fisher (*Mantes pennanti*) – West Coast distinct population segment

Mardon skipper butterfly (*Polites mardon*)

Oregon spotted frog (*Rana pretiosa*)

Yellow-billed cuckoo (*Coccyzus americanus*)

Northern wormwood (*Artemisia campestris* ssp. *borealis* var. *wormskioldii*)

#### **SPECIES OF CONCERN**

Burrowing owl (*Athene cunicularia*)

California floater mussel (*Anodonta californiensis*)

Ferruginous hawk (*Buteo regalis*)

Giant Columbia spire snail (*Fluminicola columbiana*)

Larch Mountain salamander (*Plethodon larselli*)

Loggerhead shrike (*Lanius ludovicianus*)

Long-eared myotis (*Myotis evotis*)

Northern goshawk (*Accipiter gentilis*)

Olive-sided flycatcher (*Contopus cooperi*)

Pacific lamprey (*Lampetra tridentata*)

Pacific Townsend's big-eared bat (*Corynorhinus townsendii townsendii*)

Pallid Townsend's big-eared bat (*Corynorhinus townsendii pallescens*)

Peregrine falcon (*Falco peregrinus*) (Delisted, monitor status)

Redband trout (*Onchrhynchus mykiss*)