

# **DRAFT**

**Environmental Assessment**

**For**

**Construction of Office/Shop Building, Bunkhouse, and Residence**

**On**

**Conboy National Wildlife Refuge**

*Mid-Columbia River Refuges Complex  
U.S. Fish and Wildlife Service  
64 Maple Street  
Burbank, Washington 99323*

*June 18, 2008*

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# COMMENT INSTRUCTION SHEET

## Conboy Lake Office Building Construction *Environmental Assessment*

- 1) Comments must be postmarked by July 7 (if mailed) or submitted before 11:00 pm on July 7 (if emailed, submitted via web site, or faxed).
- 2) Written comments should be submitted to: U.S. Fish and Wildlife Service, Attention: Conboy Lake EA Comments, 64 Maple Street, Burbank, WA 99323.
- 3) Comments may be emailed to: [hanfordreach@fws.gov](mailto:hanfordreach@fws.gov). Please include "Conboy Lake EA Comments" in the subject line.
- 4) Comments may be submitted via the web at: [hanfordreach.fws.gov/comments.html](http://hanfordreach.fws.gov/comments.html). Please indicate that your comments are about the Conboy Lake Construction 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 construction of a residence, bunkhouse and office/shop buildings at Conboy National Wildlife Refuge.

## **2.0 Need for the Action**

The current office structure at Conboy Refuge is within an old farmhouse and has become deteriorated and obsolete. The current shop structure is a pole barn which is old and inadequate for equipment storage and protection. The current bunkhouse is an aging double-wide trailer located off-refuge in Glenwood. A new bunkhouse located on the refuge near shop and office facilities is needed to provide temporary housing for volunteers, fire fighters, and other refuge staff. A new residence is needed to provide housing for one permanent employee overseeing the day-to-day maintenance operations on the refuge. The current residence building is old and has become inadequate due to aging infrastructure. Funding has been appropriated to construct a new shop/office, bunkhouse, and residence facilities.

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

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

The Proposed Action is to construct a 4,000-square-foot shop/office building, a 1,960-square-foot bunkhouse and a 1,600-square-foot employee residence on Conboy Lake National Wildlife Refuge. The proposed location is in the Brumbaugh Tract located in the north central part of the refuge on the east side of the BZ-Glenwood Highway (Township 6N, Range 12E, Section 27).

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

Alternative B is the No-Action Alternative. Under this alternative the bunkhouse, shop/office, and employee residence would not be constructed. Refuge equipment would still continue to be stored in an unprotected and unsecured pole barn. No housing would be available for any refuge staff, including firefighters, and no shop or office space would be available to facilitate maintenance activities.

### ***3.3 Alternative C (Alternative Location)***

Alternative C proposes to construct the new shop/office, bunkhouse, and employee residence on the west side of the refuge at the site of the current office and pole barn facilities (Township 6N, Range 12E, Section 32). The current office is an old farm house that is no longer usable due to failing plumbing and heating systems. There is a significant bedrock layer close to the soil surface. New construction and associated excavation at this location would require expensive blasting to remove the bedrock. There would also be additional expense associated with providing electricity to the new structures. The current access road to this old site conflicts with an existing nature trail. For these reasons, this alternative was rejected and will receive no further analysis.

## **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% (1,287 hectares, 3,182 acres) of the remaining 2,205 hectares (5,450 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; in some older references it is known as Falcon Valley.

The proposed building site is within the Brumbaugh Tract and is primarily a flat grassland area. There are a few small temporary wetland depressions ranging in size from 0.06 to 0.3 acres in size located in the immediate vicinity.

A semipermanent wetland lies further to the east approximately 60 feet from the eastern edge of the building site. The vicinity of the building site also includes several individual as well as larger clumps of ponderosa pines. The building site is bordered on the west by the BZ-Glenwood Highway.

## **5.0 Environmental Consequences**

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

#### ***5.1.1 Wetland Habitat Impacts***

Portions of three small wetlands would be impacted by the proposed construction. Approximately 0.3 acres of temporary wetlands will be directly impacted by filling. Another approximately 0.2-0.3 acres could be indirectly impacted by construction activities.

### 5.1.2 Upland habitat Impacts

Construction of the shop/office, bunkhouse, and residence in this location will require the removal of approximately 12-15 Ponderosa pine trees. This would result in a permanent loss of potential nesting habitat for some individual birds at the building site.

Additionally, about 0.5-1 acre of grassland/forb habitat would be permanently lost.

### 5.1.3 Wildlife Impacts

Removal of ponderosa pines may indirectly affect breeding bird productivity for species nesting in ponderosa pines on the proposed building 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.

Displacement of some wildlife species also will occur from the filling of the small wetland areas and the loss of upland grassland/forb habitat.

This alternative may have some short-term temporary impacts on adjacent wildlife during the construction of the new shop/office, bunkhouse, and residence. Disturbance from these activities could cause disruptions to feeding and/or nesting activities adjacent to the construction site. This disturbance would be reduced following construction; however, some disturbance on the site would continue permanently due to activities of refuge personnel possibly causing wildlife to be displaced.

### 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 large seasonal wetland approximately 65 feet east of the proposed building site (Joe Engler personal communication). Oregon spotted frogs are highly aquatic (McAllister and Leonard 1997) and generally do not use upland areas. Construction of the buildings will likely not have a direct effect on spotted frogs, even though some small, isolated temporary wetlands will be filled. Because these wetlands are small and go dry early in the summer, it is unlikely that they support spotted frogs. Indirect effects may occur after construction due to disturbance. There is the potential for impacts to water quality from construction activities and barriers to sedimentation will be used during the construction phase to minimize these impacts.

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 construction site. The loss of approximately 0.5 acres of grassland habitat may potentially have an effect on feeding or reproduction of Mardon skippers. Adults using the area may become displaced. Maintenance of facilities following construction such as mowing around buildings may cause disturbance and continued displacement in the facilities area. However, given that the construction area is relatively small and that Mardon skippers have not been observed specifically using the area, any negative effects would likely not be significant.

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 (*Buteo regalis*)

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 construction site (Joe Engler personal communication). 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.

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

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

Kellogg's rush (*Juncus kelloggii*) – State Endangered

Rosy owl-clover (*Orthocarpus bracteosus*) – State Endangered

Oregon coyote-thistle (*Eryngium petiolatum*) – State Threatened

Dwarf rush (*Juncus hemiendytus* var *hemiendytus*) – State Threatened

Long-bearded sego-lily (*Calochortus longebarbatus* var *longebarbatus*) – State Sensitive

Pulsifer's monkey-flower (*Mimulus pulsiferae*) – State Sensitive

None of these plants 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 2006, a pair of cranes nested in a wetland to the south of the Brumbaugh Tract boundary line (Jessica Stocking personal communication). The Washington Department of Fish and Wildlife recommends a 0.25 mile area around existing crane nests where disturbance should be eliminated or minimized.

A pair of cranes nested in the vicinity in 2007; however, the exact location of the nest is not known. A group of pine trees lies between the construction site and the previous nesting site. Maintaining this tree buffer may help to minimize disturbance to crane pairs using the area in the future. A crane pair and its colt was observed on one occasion in 2007 traveling through these pine trees and into the proposed construction site (Jessica Stocking personal communication). Sandhill cranes use portions of the Brumbaugh Tract for foraging (Joe Engler personal communication). Construction at this site could result in the permanent loss of a small amount of crane foraging habitat. Cranes also forage in the fields west of the BZ-Glenwood Highway across from the proposed construction site.

Construction activities could cause cranes to be temporarily displaced from nearby foraging areas due to disturbance. Following construction, disturbance by refuge personnel at the shop/office complex could cause cranes to be displaced from the Brumbaugh Tract and adjacent foraging area and to seek foraging habitat elsewhere. Overall, impacts to cranes on Conboy Refuge due to construction of an office/shop, bunkhouse, and residence would not be significant.

A pair of bald eagles (*Haliaeetus leucocephalus*) nests approximately 600 feet south of the proposed area of construction on the Brumbaugh Tract. 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 disturbance. Disturbance 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 area of construction activity as an area of trees approximately 400-feet-wide is included within the distance from the nest and the proposed construction area. The guidelines also recommend that clearing, external construction, and landscaping between 330 feet and 660 feet should be done outside of the breeding season. Construction activities at the Brumbaugh Tract may cause disturbance if undertaken during the breeding season. However, construction is planned to occur outside the breeding season, thereby eliminating the potential for disturbance.

Operation of the facilities by refuge personnel following construction may be a potential source of disturbance. Again, maintaining the existing tree buffer should eliminate or significantly reduce any potential disturbance. Refuge staff may need to monitor nest activities from a safe distance to

determine nest status and success and assure that nesting eagles are not being disturbed. Overall this construction project would have not significant impacts on bald eagles on Conboy Refuge.

#### *5.1.5 Public Use Impacts*

The proposed construction site is part of the Brumbaugh property, a privately owned tract which was purchased by The Nature Conservancy and donated to the refuge. It is likely that no public use existed prior to the property becoming part of the refuge. After construction activities are completed, the shop office will be open to the public when staff are present. The remainder of the tract will likely remain closed to the public. Therefore, construction of a shop/office, bunkhouse, and residence will have no effect on existing public use on the refuge.

#### *5.1.6 Cultural Resources*

The construction site has been surveyed for cultural resources by a member of the U.S. Fish and Wildlife Service Region 1 Cultural Resources Team and a cultural resource clearance has been received.

#### *5.1.7 Environmental Justice*

This alternative would have no negative impact on low-income or minority populations. A possible positive effect may be the availability of short-term construction jobs to local residents.

#### *5.1.8 Cumulative Impacts*

Construction of the shop/office, bunkhouse, and residence under this alternative would directly impact less than 0.5 acres of temporary wetlands. Displacement of wildlife and even a small loss in productivity may occur for species using these wetlands. Several wetland restoration and enhancement projects are planned for other areas of the refuge which should serve to offset the wetland loss at the construction site. Further, Washington Department of Fish and Wildlife and other entities, such as the Columbia Land Trust, are working to increase wetland habitat on lands that they manage in the vicinity. Overall wetland habitat in the local area should be improving.

Construction of the facilities would cause the direct loss of approximately 0.5-1.0 acres of grassland/forb habitat on the Brumbaugh Tract and 12-15 Ponderosa pine trees.

Displacement of wildlife and even a small loss in productivity may occur. Again, activities being carried out in other parts of the Glenwood Valley and vicinity by other agencies, as well as the U.S.

Fish and Wildlife Service represent an improvement in upland habitats which should benefit associated upland wildlife species in general.

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 personal communication). Sandhill cranes are known to nest in wetlands near the proposed building site on the Brumbaugh Tract. A family group has also been sighted using the Brumbaugh Tract for foraging and as a travel corridor. Any permanent loss of crane productivity or displacement of cranes caused by construction of facilities on the Brumbaugh Tract and subsequent use of those facilities could have a minor effect on reaching sandhill crane recovery goals in the Glenwood Valley. However, proposed habitat improvements to be carried out by various agencies and entities in the valley should help to increase the number of nesting pairs.

The bald eagle was recently declared a recovered species by the U.S. 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. Construction of facilities at the Brumbaugh Tract would have no cumulative impacts to bald eagles.

Construction of facilities on the Brumbaugh Tract 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 construction would be conducted. No wetlands would be directly or indirectly affected.

### *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 impacts to wildlife would occur due to construction of a new office/shop, bunkhouse, and residence.

### *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 Resource Impacts*

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**

Howard Browsers, Supervisory Wildlife Biologist, Mid-Columbia River National Wildlife Refuge Complex, Burbank, Washington – Author

Mike Ritter, Supervisory Refuge Manager, Mid-Columbia River National Wildlife Refuge Complex, Burbank, Washington – Reviewer, editor

Lee Albright, Supervisory Refuge Manager, Mid-Columbia River National Wildlife Refuge Complex, Burbank, Washington – Reviewer, editor

## **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, Washington.
- McAllister, K.R., and W.P. Leonard. 1997. Washington state status report for the Oregon spotted frog. Washington Department of Fish and Wildlife, Olympia, Washington.
- 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, Washington.
- U.S. Fish and Wildlife Service. 2007. National bald eagle management guidelines. Available at: [www.fws.gov/migratorybirds/issues/BaldEagle/NationalBaldEagleManagementGuidelines.pdf](http://www.fws.gov/migratorybirds/issues/BaldEagle/NationalBaldEagleManagementGuidelines.pdf)

## **8.0 Appendices**

- 8.1 Conboy Lake Refuge Location Map
- 8.2 Proposed Construction Site for Preferred Alternative
- 8.3 List of Federal Threatened and Endangered Species for Klickitat County, Washington

0 10 kilometers  
0 5 miles

**Mount Adams**  
(12,276 feet)

Indian Heaven  
Volcanic Field

Simcoe Mountains  
Volcanic Center

Conboy Lake NWR

Lemei Rock

Smith Butte

King Mtn.

Trout Lake

Glenwood

WASHINGTON

Mount Rainier

Mount St. Helens

Mount Adams

Mount Hood

OREGON

BZ Corner

Husum

Underwood

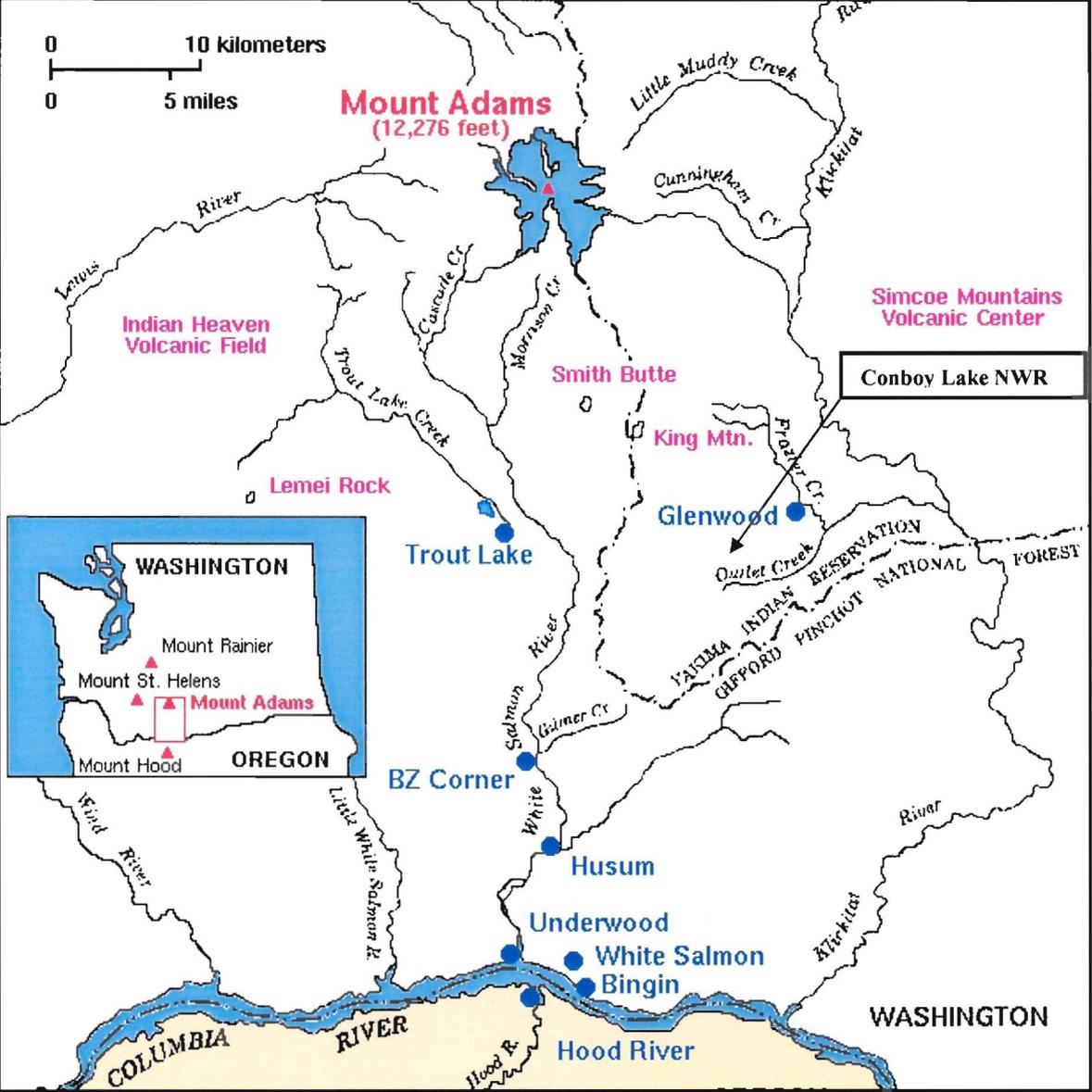
White Salmon

Bingin

Hood River

WASHINGTON

COLUMBIA RIVER





## 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 (*Martes 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*)