

# Draft Compatibility Determination

## Title

Draft Compatibility Determination for Cross-Country Skiing, Snowshoeing, and Running/Jogging, Little Pend Oreille National Wildlife Refuge.

## Refuge Use Category

Outdoor Recreation (General)

## Refuge Use Type(s)

Cross-Country Skiing, Snowshoeing, and Running/Jogging

## Refuge

Little Pend Oreille National Wildlife Refuge

## Refuge Purpose(s) and Establishing and Acquisition Authority(ies)

"... as a Refuge and breeding ground for migratory birds and other wildlife..."  
(Executive Order 8401, dated May 2, 1939)

" ... for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." (16 U.S.C. 715d [Migratory Bird Conservation Act])

"... suitable for (1) incidental fish and wildlife-oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered species or threatened species ..." (16 U.S.C. 460k-1) ... the Secretary ... may accept and use ... real ... property. Such acceptance may be accomplished under the terms and conditions of restrictive covenants imposed by donors ... 16 U.S.C. 460k-2 (Refuge Recreation Act (16 U.S.C. 460k-460k-4), as amended).

"... for the development, advancement, management, conservation, and protection of fish and wildlife resources ..." (16 U.S.C. 742f(a)(4) ... for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude ... 16 U.S.C. 99 742f(b)(1) (Fish and Wildlife Act of 1956).]

. . for conservation purposes. Consolidated Farm and Rural Development Act (7 U.S.C. 2002).

## National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System (Refuge System) is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats

within the United States for the benefit of present and future generations of Americans (Pub. L. 105-57; 111 Stat. 1252).

## Description of Use

Is this an existing use?

Yes. This compatibility determination (CD) updates and replaces the 2000 CD for cross-country skiing, snowshoeing, and running/jogging on Little Pend Oreille NWR with a few minor changes. Cross-country skiing and snowshoeing were evaluated with dog sledding in the Comprehensive Conservation Plan (CCP). Dog sledding has not occurred on the Refuge in more than 15 years and is not being re-evaluated. Running/jogging was evaluated with bicycling in the CCP. Bicycling is being re-evaluated under a separate CD.

What is the use?

We propose to allow cross-country skiing, snowshoeing, and running/jogging. Visitors typically participate in cross-country skiing, snowshoeing, and running/jogging for their own sake, but these uses can also facilitate access to the priority wildlife-dependent public uses, including wildlife observation, photography, hunting, and fishing.

Is the use a priority public use?

No

Where would the use be conducted?

Cross-country skiing, snowshoeing, and running/jogging will occur on areas open to public access on the main unit of Little Pend Oreille NWR as well as the Kaniksu and Cusick units. The majority of the activities take place along Refuge roads and established trails, however off-trail cross-country skiing and snowshoeing is permitted.

Entry on to all or portions of the Refuge may be temporarily suspended and posted closed due to unusual or critical conditions affecting public safety or any of the resources managed by the Refuge.

When would the use be conducted?

Cross-country skiing, snowshoeing, and running/jogging is allowed year-round, sunrise to sunset, as conditions permit. Most running/jogging visits occur during the spring, summer, and fall seasons. Cross-country skiing and snowshoeing activities require sufficient snow cover; therefore, the majority of these activities would be expected to occur November through March.

## How would the use be conducted?

Cross-country skiing, snowshoeing, and running/jogging on the Refuge will be conducted in accordance with the stipulations necessary to ensure compatibility. The average group size is one to four participants. Group size is limited to 25 or fewer people for all activities without requiring a Special Use Permit (SUP). Organized groups, competitive events, and/or group training for these uses may be considered for a Special Use Permit by the Refuge manager on a case-by-case basis.

Each request for a SUP (if warranted) will be evaluated for impacts to wildlife, habitats, Refuge resources, priority public uses, and as appropriate, wilderness character. Conditions may be added to the SUP on a case-by-case basis to minimize the anticipated impacts to resources from cross-country skiing, snowshoeing, and running/jogging, and to ensure that any impacts which cannot be avoided, minimized, or mitigated remain temporary and negligible. Some requests may require further analysis of the impacts of the proposed activity on special status species or cultural resources, which may require additional compliance with the National Environmental Policy Act (NEPA), and consultation under any other relevant laws.

If a use conflicts with Refuge resources, Refuge management programs, or priority wildlife-dependent uses, the participant(s) must identify in advance the methods/strategies required to minimize or eliminate the potential impact(s) and conflict(s). If unacceptable impacts cannot be avoided, then a SUP would not be issued.

## Why is this use being proposed or reevaluated?

This use is being reevaluated in accordance with Service policy, 603 FW 2.11H(2).

### **Availability of Resources**

The present Refuge non-priority public use program is designed to be administered with minimal Refuge resources (less than \$1,000 annually) at the current level of use (approximately 200 visits annually for all non-priority uses combined) and can be managed with existing staff resources. Maintenance of the Auto Tour Road and other trails incur costs, but costs are not directly related to cross-country skiing, snowshoeing, and running/jogging since facilities are shared with other priority public uses. No improvements are needed or planned.

### **Anticipated Impacts of the Use**

This CD includes written analyses of the environmental consequences on a resource when the impacts on that resource could be more than negligible and therefore considered an “affected resource.” Based on best professional judgement and nearly 25 years of managing these uses at the Refuge, air quality, water quality, flood plains, socioeconomics, and cultural resources will not be more than negligibly impacted by

the action and have been dismissed from further analyses.

## Potential impacts of a proposed use on the Refuge's purpose(s) and the Refuge System mission

Cross-country skiing, snowshoeing, and running/jogging are not priority public uses on Service lands per the Refuge System Improvement Act of 1997, and are generally conducted for sport and recreation. However, due to the size, remoteness, and quality of roads and trails within the Refuge, these uses support or enhance priority wildlife-dependent uses, including hunting, fishing, wildlife observation, and wildlife photography. They provide opportunities for visitors to enjoy the Refuge's resources, to gain or increase their understanding of and appreciation for fish, wildlife, wildlands ecology, the relationships of plant and animal populations within the ecosystem, and wildlife management. These uses will provide opportunities for visitors to directly observe and learn about wildlife and habitats at their own pace in an unstructured environment. These uses will enhance the public's understanding of natural resource management programs and ecological concepts to enable them to better understand the problems facing natural resources and to realize what impact the public has on wildlife resources. Additionally, the public can learn about the Service's role in conservation and better understand the biological facts upon which Service management programs are based, consequently fostering an appreciation for the importance of wildlife and habitats.

Participation in these uses is expected to contribute to a more informed public, with an enhanced stewardship ethic and greater support for wildlife conservation. Furthermore, these uses will provide an intrinsic, safe, outdoor recreational opportunity in a scenic setting, with the realization that those who come strictly for recreational enjoyment will be enticed to participate in the more enhanced facets of the visitor use program and can then become informed supporters for wildlife conservation. By allowing these uses with the stipulations described below, we will provide opportunities and facilitate programs in a manner and at locations on the Refuge that offer high quality, wildlife-dependent recreation while maintaining the current levels or increased levels of natural resource values.

Therefore, use of Little Pend Oreille National Wildlife Refuge for cross-country skiing, snowshoeing, and running/jogging is expected to benefit and promulgate the Refuge's purposes and the Refuge System's mission.

## Short-term impacts

All trail users can cause structural damage to plants and increase soil compaction and erosion. These effects are unlikely to occur on the well-defined, gravel surfaces of the public roadways and trails that utilize Refuge service roads. The well-maintained public roadways and existing trails provide a preferred surface for recreational user groups particularly when off-trail areas are wet or muddy. Effects from cross-country

skiing and snowshoeing would be negligible since these occur when vegetation is dormant and soils are frozen and/or snow-covered. These uses are assessed as having minimal short-term effects to vegetation and soils. Runners/joggers would be required to remain on public roadways or trails designated for their activity, and therefore impacts to soils and plants would be negligible. However, some runners/joggers may leave the trail, resulting in trampling of plants, soil compaction or erosion, and wildlife disturbance. Although there have been sightings of people off trails, dense vegetation, uneven terrain, the presence of ticks and mosquitos, and Refuge law enforcement have discouraged the majority of runners/joggers from leaving designated areas. No damage to soils or plants has been documented as a result of off-trail uses. These activities will be monitored and would be modified or discontinued if unacceptable resource impacts are documented.

Cross-country skiing, snowshoeing, and running/jogging can cause wildlife disturbance. The severity of disturbance varies with the wildlife species involved and the type, level, frequency, duration, and the time of year such activities occur.

#### Wildlife Response to Cross-Country Skiing and Snowshoeing:

Cross-country skiing and snowshoeing use on the Refuge is currently low and dependent on adequate snow cover. Cross-country skiing and snowshoeing are relatively quiet activities, causing minimal noise disturbance. Most skiers and snowshoers limit their use to existing trails which further minimizes their impact to Refuge wildlife. However, off-trail cross-country skiing is likely to cause only a minor amount of disturbance, due to low numbers of skiers who venture off-trail, and the fact that the use occurs outside the breeding and/or migration periods for most species of wildlife. However, if these uses were to increase substantially, trail-only restrictions would need to be considered.

#### Wildlife Response to Running/Jogging:

Running/Jogging can affect normal behavioral activities of wildlife, including feeding, reproductive, and social behaviors. Studies have shown that ducks and shorebirds are sensitive to jogging activity (Burger 1981, 1986). Rapid movement by joggers is more disturbing to wildlife than slower moving hikers (Bennett and Zuelke 1999). However, joggers tend to spend less time in a particular area than pedestrians and are less likely to directly approach or otherwise disturb wildlife.

Since wild animals show greater flight response to humans moving unpredictably than to humans following a distinct path (Gabrielsen and Smith 1995), the effects of human disturbance can be reduced by restricting jogging and other human activity to an established trail and having disturbance free nesting and foraging areas for wildlife (Korschgen and Dahlgren 1992, Fox and Madsen 1997). Restricting joggers to well-defined paths such as public roadways and established trails would reduce the potential impact of running/jogging. Limiting group size would also decrease disturbance from this use since group size has been found to increase wildlife response to disturbance (Geist et al. 2005, Yosef 2000).

Overall, the short-term impacts from these uses is expected to be minor, due to the relative low-level of anticipated use, the relatively large size of the Refuge, and stipulations imposed on the use. These uses would generally cause negligible animal mortality or disturbance, or habitat destruction; no introduction of contaminants; and no introduction of non-native species.

### Long-term impacts

The structural damage to plants, soil compaction and erosion caused by trail use have the potential to cause cumulative long-term effects to Refuge resources. However, long-term effects to vegetation and soils would be minor, given the low level of the uses; and the fact that running/jogging are confined to roads and trails. Long-term effects to vegetation and soils from cross-country skiing and snowshoeing would be negligible since these occur when vegetation is dormant and soils are frozen and/or snow-covered.

The long-term effects of wildlife disturbance from cross-country skiing, snowshoeing, and running/jogging are more difficult to assess but may include altered behavior, decreased vigor or productivity, or death of individuals; altered population abundance, distribution, or demographics; and altered community species composition and interactions. Disturbances can compound seasonal stressors in wildlife. Examples include regularly flushing birds during nesting, exposing juvenile animals to greater predation levels, causing mammals to flee during winter months, or causing large amounts of stored fat reserves to be consumed. Over time, these disturbances could lead to long-term changes in wildlife use patterns through either avoidance or habituation. When combined with other visitor activities in the public use, there is potential for cross-country skiing, snowshoeing, and running/jogging to lower individual fitness or reproductive success, thereby affecting wildlife populations in a localized area.

However, while impacts of the use can be serious for individual plants and animals and perhaps localized rare populations, they are generally of little significance to populations or species, landscape integrity, or regional biological diversity. Moreover, unless a localized, rare population is impacted by a single impacted site, the intensity, size, and distribution of impacts are not relevant to the significance of impacts assessed at large spatial scales (Cole 1989). The effects on wildlife from disturbance, displacement, and habituation have been well documented and studied in other areas (e.g., Cole, 2004; Cole & Knight, 1990) and impacts are generally short-term and minor. Due to the size of the Refuge and the low numbers of users participating in these activities, long-term effects on wildlife populations or distribution are therefore expected to be minimal.

### Mitigation of Potential Impacts:

To prevent or minimize these potential long-term impacts, Refuge staff would work to ensure that visitors follow stipulations through law enforcement, Refuge and

volunteer presence, and various forms of outreach. Refuge staff and law enforcement would regularly assess roads, trails, and support facilities for safety and quality of visitor experience, wildlife disturbance, cultural resources, and impacts to soil and vegetation. The Refuge would also monitor these areas for non-native invasive species and implement appropriate control measures. If use levels are resulting in unacceptable impacts to Refuge resources, visitor experience, or public safety, the use may be modified or relocated to prevent additional impacts and restore habitat.

## **Public Review and Comment**

The draft compatibility determination will be available for public review and comment for 14 calendar days following the day the notice is published. The public will be made aware of this comment opportunity through our social media outlets and letters to potentially interested parties. A hard copy of this document will be posted at the Refuge Headquarters at 1310 Bear Creek Road, Colville, WA 99114. It will be made available electronically on the Refuge website at [https://www.fws.gov/refuge/little\\_pend\\_oreille/](https://www.fws.gov/refuge/little_pend_oreille/). Please let us know if you need the documents in an alternative format. Concerns expressed during the public comment period will be addressed in the final Compatibility Determination.

## **Determination**

Is the use compatible?

Yes

### **Stipulations Necessary to Ensure Compatibility**

1. Runners/joggers are required to stay on trails and designated public roadways year-round.
2. Groups will be limited to 25 or fewer people.
3. Organized groups of more than 25 individuals, competitive events, and/or group training for any of these uses may be considered for a Special Use Permit by the Refuge Manager on a case-by-case basis.
4. The permittee and all associated personnel agree to conduct activities in a safe manner, in compliance with all Refuge regulations and policies, and with precaution to avoid damage to resources, property, or personnel. Refuge staff will not be held responsible for loss of, or damage to, equipment.
5. A copy of the Special Use Permit must be in the permittee or associate's possession at all times while exercising the privileges of the Permit. A copy of the Permit must be shown to any USFWS employee or Federal law enforcement officer upon request.
6. To ensure safety, use is restricted to daylight hours only. Activities requiring

access between sunset and sunrise would require a Special Use Permit or be managed by Refuge staff.

7. Failure to abide by any part of the Special Use Permit; violation of any Refuge-related provision or Code of Federal Regulations; or violation of any pertinent state regulation (e.g., fish or game violation) will, with due process, be considered grounds for revocation of the permit and could result in denial of future permit requests for lands administered by the USFWS. This provision applies to all persons working under the authority of the permit.
8. Visitors are prohibited from collecting and removing any archaeological or historic artifacts, samples, or mementos from the Refuge. If cultural resources, or archaeological or historic artifacts are encountered, leave the item(s) in place and contact the Refuge Manager or nearest USFWS employee.
9. Directional, informational, and interpretive signs will be posted and maintained to keep visitors on roads and trails as well as help educate the public on minimizing wildlife and habitat disturbance.
10. Regulations will be available at information kiosks on site, through a Refuge brochure, and will be posted on the Refuge website. Regulations are also available by contacting Refuge staff for information.
11. Refuge staff and volunteers will monitor uses to ensure compatibility, refine user estimates, and evaluate compliance. Potential conflicts between user groups will also be evaluated. The Refuge will maintain an active law enforcement presence to ensure visitor compliance with all Refuge rules and regulations.

## **Justification**

Cross-country skiing, snowshoeing, and running/jogging, as outlined in this compatibility determination, would not conflict with national policy to maintain the biological diversity, integrity, and environmental health of Little Pend Oreille National Wildlife Refuge. Based on the stipulations outlined above, it is anticipated that wildlife populations will find sufficient food resources and resting places such that their abundance and use of the Refuge will not be measurably lessened as a result of allowing cross-country skiing, snowshoeing, and running/jogging on Little Pend Oreille NWR. The relatively limited number of individual animals expected to be adversely affected as a result of cross-country skiing, snowshoeing, and running/jogging will not cause wildlife populations to materially decline, the physiological condition and production of species present will not be impaired, their behavior and normal activity patterns will not be altered dramatically, and their overall welfare will not be negatively impacted. Based on available science and best professional judgement, the Service has determined that cross-country skiing, snowshoeing, and running/jogging at Little Pend Oreille NWR, in accordance with the stipulations provided here, would not materially interfere with or detract from



the National Wildlife Refuge System mission or the purposes of the Refuge. Rather, appropriate and compatible cross-country skiing, snowshoeing, and running/jogging would be a use of Little Pend Oreille NWR through which the public can develop an appreciation for wildlife and their habitats, as well as the role of the National Wildlife Refuge System in resource conservation.

## **Signature of Determination**

Refuge Manager Signature and Date

## **Signature of Concurrence**

Assistant Regional Director, NWRS, Pacific Region 1 Signature and Date

## **Mandatory Reevaluation Date**

2034

## **Literature Cited/References**

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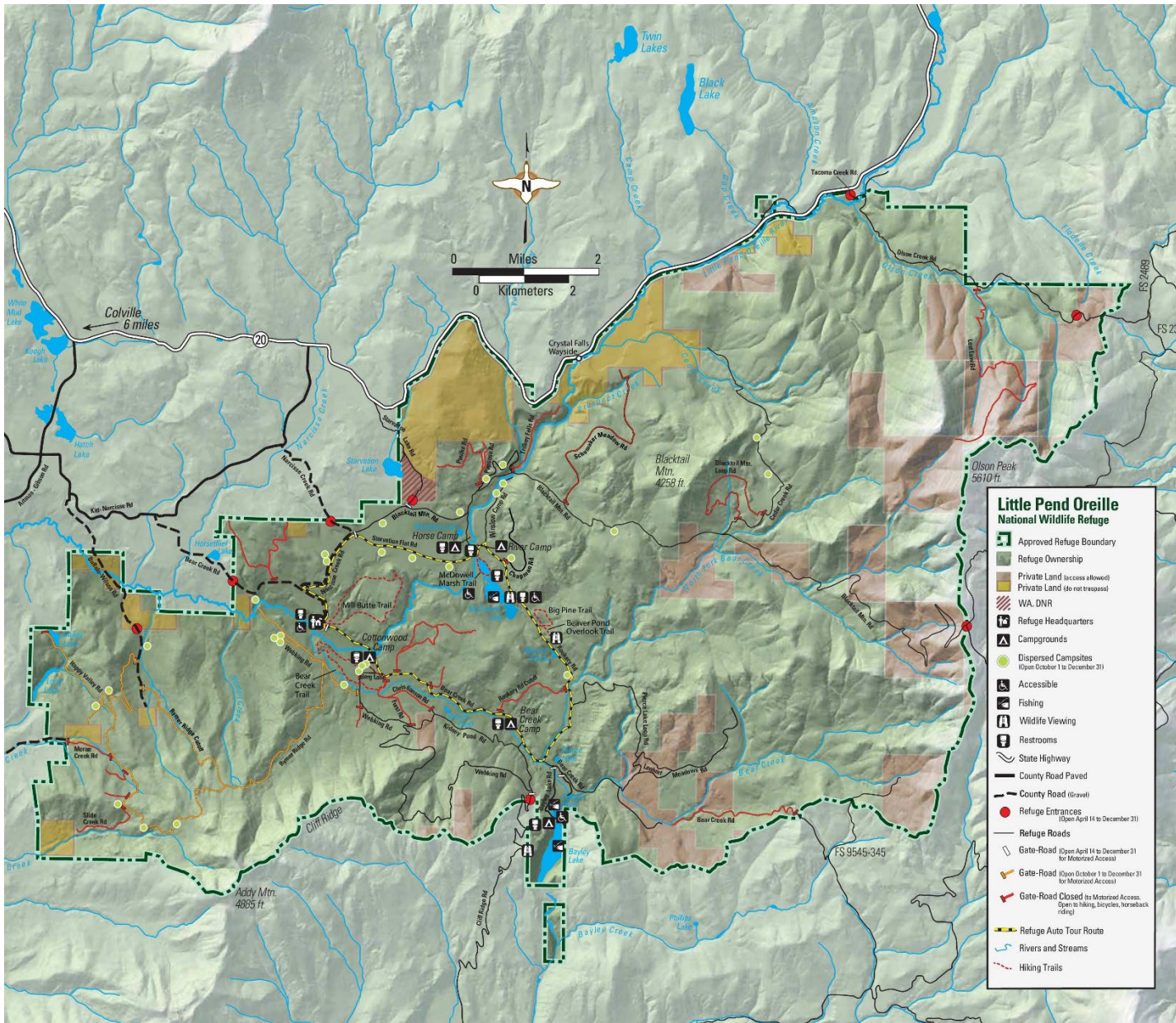


Figure 1. Public access, Little Pend Oreille National Wildlife Refuge