

Draft Compatibility Determination

Title

Draft Compatibility Determination for Biking, Jogging and Running, and Cross-Country Skiing, Turnbull National Wildlife Refuge

Refuge Use Category

Outdoor Recreation (General)

Refuge Use Type(s)

Biking (including e-bikes)

Running and Jogging

Cross-Country Skiing

Refuge

Turnbull 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 7681, dated July 30, 1937)

" ... 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).

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System, otherwise known as 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 updates and replaces the 2007 compatibility determination for bicycling, jogging and running, and cross-country skiing with the following changes: maximum group size was increased to 10 for all covered activities while organized events or training are prohibited. Additionally, plans for a bike trail that connects the Columbia Plateau Trail with the entrance road have been abandoned due to cost and feasibility. The use is consistent with the 2007 Comprehensive Conservation Plan and associated Environmental Assessment and Finding of No Significant Impact (USFWS 2007).

What is the use?

We propose to allow bicycling, jogging and running, and cross-country skiing.

Is the use a priority public use?

No

Where would the use be conducted?

Bicycling is allowed only on 7.5 miles of designated public roadways, including the entrance road (Smith Road) and Auto Tour Route, which are primarily gravel surfaces. Bicycles are not allowed on any trails or service roads.

Running, jogging and cross-country skiing are restricted to the 3,200-acre public use area. Running and jogging would be allowed on the Auto Tour Route and trails within this area. Cross-country skiing would be allowed on the Auto Tour Route and trails but would also be allowed off-trail.

Entry on to all or portions of the refuge may be temporarily suspended and posted closed due to unusual or critical conditions affecting land, water, vegetation, wildlife populations or public safety.

When would the use be conducted?

Bicycling, jogging and running, and cross-country skiing are allowed year-round from sunrise to sunset, although some activities are limited by season. Bicycling and jogging occur primarily March through October. Cross-country skiing is limited to winters when snowfall is adequate to support skiing. Adequate snow cover occurs about one out of every three winters.

How would the use be conducted?

Bicycling, jogging and running, and cross-country skiing on the refuge will be conducted in accordance with the stipulations necessary to ensure compatibility. Bicycle travel will be limited to the entrance road and Auto Tour Route. Jogging, running, and cross-country skiing occur primarily on the Auto Tour route, Pine Lakes loop trail, Headquarters trail, and Stubblefield trail, but are allowed on other trails. Cross-country skiing is also allowed off-trail, but off-trail cross-country skiing rarely occurs. Group size is limited to ten or fewer people for all activities. The average group size is one to four participants.

This compatibility determination does not include organized or competitive events. Organized groups, competitive events, and/or group training for any type of use 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, priority public uses and, if applicable, wilderness character. Conditions will be added to the SUP on a case-by-case basis to minimize the anticipated impacts to resources from camping, 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 the use conflicts with refuge resources, other public uses, other high-priority uses, and refuge management programs, 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 the use will not be compatible.

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 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 jogging and running, bicycling, or cross-country skiing, 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.” Air quality, water quality, cultural resources, and socioeconomics 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, bicycling, and running/jogging are not priority public uses on Service lands, but because of the size, remoteness, and quality of roads and trails within the Refuge, these uses support or enhance priority wildlife-dependent uses, including hunting, 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, this use 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 Turnbull National Wildlife Refuge for cross-country skiing, bicycling, and running/jogging is expected to benefit and promulgate the Refuge's purpose 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. Bicyclists and

joggers/runners 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 users 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 and bicyclists on trails where bicycling is prohibited, dense vegetation, uneven terrain, the presence of ticks and mosquitos, and refuge law enforcement have discouraged the majority of these user groups from leaving designated areas. No damage to soils or plants or wildlife disturbance has been documented as a result of off-trail uses. The well-maintained public roadways and existing trails provide a preferred surface for recreational user groups. These activities will be monitored and would be modified or discontinued if unacceptable resource impacts are documented.

Wildlife Response to Jogging/Running: Jogging/running can impact normal behavioral activities, including feeding, reproductive, and social behavior. 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/runners 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 and runners to well-defined paths such as public roadways and established trails would reduce the potential impact of jogging/running. 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).

Wildlife Response to Bicycling: The Auto Tour Road provides a good opportunity for visitors to observe wildlife at a distance resulting in negligible behavioral effects on wildlife and habitat from human disturbance. Although bicycling has the potential to cause flushing of birds from breeding and foraging habitats, bicycling on public roadways and established trails is not anticipated to cause large disturbances to wildlife as long as riders stay predictably on the designated paths and do not directly approach wetlands or areas where wildlife congregate. This will potentially allow wildlife to habituate to the use.

Wildlife Response to Cross-Country Skiing: Refuge use by cross-country skiers is currently minimal and restricted to the Public Use Area. Most skiers 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. Impacts

of cross-country skiing to soils and plant communities is negligible due to the presence of snow cover. However, if this use were to increase substantially, restricting this use to trail only will need to be reconsidered.

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 jogging, running, and bicycling are confined to roads and trails. Long term effects to vegetation and soils from cross-country skiing would be negligible since this occurs when vegetation is dormant and soils are frozen and/or snow-covered.

Cross-country skiing, bicycling, and running/jogging could lead to long-term changes in wildlife use patterns, through either avoidance or habituation. Disturbances can compound seasonal stressors in wildlife. Examples include regularly flushing birds during nesting, exposing juvenile animals to greater predation levels, or causing mammals to flee during winter months. These disturbances can cause large amounts of stored fat reserves to be consumed. Therefore, when combined with other visitor activities in the public use, there is potential for cross-country skiing, bicycling, and running/jogging to lower individual fitness or reproductive success, affecting wildlife populations in a localized area.

However, due to the size of the refuge and the low numbers of users of these activities, long-term effects on wildlife populations or distribution are expected to be minimal. If these uses were to increase substantially, they will be reevaluated to determine if additional restrictions are needed to keep impacts at current levels.

Public Review and Comment

The draft compatibility determination will be available for public review and comment for 14 calendar days to provide comments following the day the notice is published. The public will be made aware of this comment opportunity through any or all of the following: newspapers, radio, television, postings at local libraries, letters to potentially interested people such as adjacent landowners, states, and tribes, public meetings, federal register, or other places/media outlets. State and Tribes have been asked to review and comment on the draft compatibility determination. A hard copy of this document will be posted at the Refuge Headquarters or Visitor Center (26010 S. Smith Road, Cheney, WA). It will be made available electronically on the refuge

website (<https://www.fws.gov/refuge/Turnbull/>). Please contact refuge staff via contact information available on the website 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. Bicycling, jogging and running, and cross-country skiing are restricted to the 3,200-acre public use area.
2. Joggers/runners are required to stay on trails and designated public roadways year-round.
3. Bicycling is restricted to the refuge entrance road (Smith Road), Auto Tour Route, and the Columbia Plateau Trail.
4. Groups will be limited to ten or fewer people.
5. Organized groups of more than 10 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.
6. 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.
7. A copy of 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.
8. 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
9. To ensure safety, use is restricted to daylight hours only.
10. The majority of the refuge will be managed as wildlife sanctuary where human disturbance is infrequent.

11. The Auto Tour Road will continue to meet the standards recommended by the Federal Highway Administration for multiple-use and public trails.
12. 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.
13. 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.
14. 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.

Justification

Cross-country skiing, bicycling, 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 Turnbull NWR. 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, bicycling, and running/jogging on Turnbull NWR. The relatively limited number of individual animals expected to be adversely affected as a result of cross-country skiing, bicycling, 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, bicycling, and running/jogging at Turnbull 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, bicycling, and running/jogging would be a use of Turnbull NWR through which the public can develop an appreciation for wildlife and wild lands.

Signature of Determination

Refuge Manager Signature and Date

Signature of Concurrence

Assistant Regional Director Signature and Date

Mandatory Reevaluation Date

2033

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