

Appendix D. Wilderness Review

D.1 Introduction

The Deer Flat National Wildlife Refuge (Refuge) comprises two units, the 10,500-acre Lake Lowell Unit, which includes the 9,000-acre Lake Lowell, and the Snake River Island Unit, which comprises 104 islands totaling about 1,060 acres (as calculated using GIS). The islands stretch along the Snake River for 113 river miles in Idaho and Oregon.

The Lake Lowell Unit supports several habitat types including riparian forest, shrub-steppe, and managed agricultural lands. Lake Lowell itself is an irrigation project managed by the Bureau of Reclamation, which operates the lake's water for agricultural purposes; the U.S. Fish and Wildlife Service (Service) manages the surface uses. The Snake River islands also support riparian and shrub-steppe/grassland habitats. Both units of the Refuge receive substantial and varied public use, while the islands are further influenced by river traffic, including all types of recreational boating.

D.2 Policy and Direction for Wilderness Reviews

Service policy ([602 FW 3.4 C.\(1\)\(c\)](#)) requires that wilderness reviews be completed as part of the comprehensive conservation planning process. This review includes the re-evaluation of Refuge lands existing during the initial 10-year review period of the Wilderness Act of 1964, as amended ([16 U.S. Code \[U.S.C.\] 1131-1136](#)), as well as new lands and waters added to the National Wildlife Refuge System (NWRS) since 1974. A preliminary inventory of the wilderness resources is to be conducted during pre-acquisition planning for new or expanded refuges ([341 FW 2.4 B.](#), Land Acquisition Planning). NWRS policy on Wilderness Stewardship ([610 FW 1-5](#)) includes guidance for conducting wilderness reviews (610 FW 4, Wilderness Review and Evaluation).

A wilderness review is the process of determining whether the Service should recommend NWRS lands and waters to U.S. Congress for wilderness designation. The wilderness review process consists of three phases: wilderness inventory, wilderness study, and wilderness recommendation.

D.2.1 Wilderness Inventory

The inventory is a broad look at a refuge to identify lands and waters that meet the minimum criteria for wilderness: size, naturalness, and outstanding opportunities for solitude or primitive and unconfined type of recreation. All areas meeting the criteria are preliminarily classified as Wilderness Study Areas (WSAs). If WSAs are identified, the review proceeds to the study phase.

D.2.2 Wilderness Study

During the study phase, WSAs are further analyzed

- For all ecological, recreational, cultural, economic, and symbolic values;
- For all resources, including wildlife, vegetation, water, minerals, and soils;
- For existing and proposed public uses;
- For existing and proposed refuge management activities within the area; and

- To assess the refuge’s ability to manage and maintain the wilderness character in perpetuity, given the current and proposed management activities. Factors for evaluation may include, but are not limited to, staffing and funding capabilities, increasing development and urbanization, public uses, and safety.

We evaluate at least an All Wilderness Alternative and a No Wilderness Alternative for each WSA to compare the benefits and impacts of managing the area as wilderness as opposed to managing the area under an alternate set of goals, objectives, and strategies that do not involve wilderness designation. We may also develop Partial Wilderness Alternatives that evaluate the benefits and impacts of managing portions of a WSA as wilderness.

In the alternatives, we evaluate:

- The benefits and impacts to wilderness values and other resources;
- How each alternative will achieve the purposes of the Wilderness Act and the NWRs;
- How each alternative will affect achievement of refuge purpose(s) and the refuge’s contribution toward achieving the Refuge System mission;
- How each alternative will affect maintenance and, where appropriate, restoration of biological integrity, diversity, and environmental health at various landscape scales;
- Other legal and policy mandates; and
- Whether a WSA can be effectively managed as wilderness by considering the effects of existing private rights, land status and service jurisdiction, refuge management activities and refuge uses, and the need for or possibility of eliminating Section 4(c) prohibited uses.

D.2.3 Wilderness Recommendation

If the wilderness study demonstrates that a WSA meets the requirements for inclusion in the National Wilderness Preservation System, a wilderness study report should be written that presents the results of the wilderness review, accompanied by a Legislative Environmental Impact Statement (LEIS). The wilderness study report and LEIS that support wilderness designation are then transmitted through the Secretary of the Interior to the President of United States, and ultimately to the U.S. Congress for action. Refuge lands recommended for wilderness consideration by the wilderness study report would retain their WSA status and be managed as “wilderness according to the management direction in the final CCP [comprehensive conservation plan] until Congress makes a decision on the area or we amended the CCP to modify or remove the wilderness recommendation” (610 FW 4.22 B). When a WSA is revised or eliminated, or when there is a revision in “wilderness stewardship direction, we include appropriate interagency and tribal coordination, public involvement, and documentation of compliance with NEPA [National Environmental Policy Act]” (610 FW 3.13).

The following constitutes the inventory phase of the wilderness review for Deer Flat National Wildlife Refuge.

D.3 Previous Wilderness Review

On June 21, 1972, the Director of the Bureau of Sport Fisheries and Wildlife sent a cover memo, draft wilderness study report, and mock-up brochure with a map to the Assistant Secretary of Fish, Wildlife, and Parks. The memo states that, with the Assistant Secretary’s concurrence, the Bureau

would conduct a public hearing recommending that 68 islands, constituting approximately 734 acres within the Snake River Unit of the Deer Flat National Wildlife Refuge, qualify for wilderness designation within the National Wilderness Preservation System. (At the time the memo was written, the Snake River Islands Unit included 73 islands along 110 miles of the lower Snake River.) The Assistant Secretary signed his concurrence on June 21, 1972.

The draft wilderness study report, titled “Snake River Islands Wilderness Proposal, Snake River Unit, Deer Flat National Wildlife Refuge, Idaho-Oregon,” states:

This report was prepared pursuant to the Wilderness Act, Public Law 88-577. Publication of the findings and recommendation herein should not be construed as representing either the approval or disapproval of the Secretary of the Interior. The purpose of this report is to provide information and alternatives for further consideration by the Bureau of Sport Fisheries and Wildlife, Secretary of the Interior, and other Federal agencies.

The draft wilderness study report states in its conclusion:

These refuge islands are mostly undeveloped and appear to be largely unaffected by man’s works. However, the bordering riverbanks and adjacent lands are developed and intensively cultivated. Few islands are out of sight of some sort of man-made disturbance. Developments include irrigation pumping stations, power lines, towns, bridges, industrial plants, farm buildings and feed lots which in many cases extend to the water’s edge. Since the river is relatively narrow with many of the islands in close proximity to the shore, man’s presence is clearly visible and his activity can be heard from nearly every island in the complex. Hence the opportunity for solitude is diminished, yet the value of these islands as wilderness is not invalidated by sights and sounds from outside the proposed wilderness. Rather the value of these islands is commensurately enhanced by their mere existence amidst an area where man and his works dominate the landscape. Therefore, 68 islands containing approximately 734 acres in the Snake River Unit of the Refuge are considered suitable for inclusion in the National Wilderness Preservation System.

Now, more than 16 years later, during the December 2008 preplanning phase of the Deer Flat National Wildlife Refuge CCP, the Service conducted a wilderness review of Refuge lands at Deer Flat, both the Lake Lowell and Snake River Units, including re-evaluating the findings and conclusions of the 1972 draft wilderness study report.

D.4 Lands Considered Under This Wilderness Review

All Service-owned lands and waters within the Deer Flat National Wildlife Refuge–approved boundary were considered during this review of potential wilderness areas. For purposes of the review, the Refuge’s two units are analyzed separately: (1) the Lake Lowell Unit and (2) the Snake River Unit, including 104 islands (1,200 acres) along 113 river miles from the Canyon-Ada County line, Idaho, to Farewell Bend, Oregon

D.5 Wilderness Inventory

D.5.1 Criteria for Evaluating Lands for Possible Inclusion in the National Wilderness Preservation System

The Wilderness Act of 1964, as amended (16 U.S.C. 1131-1136), provides the following description of wilderness:

A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act as an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions.

The following criteria for identifying areas as wilderness are outlined in Section 2(c) of the Wilderness Act and are further expanded upon in NWRS policy (610 FW 4). The first three criteria are evaluated during the inventory phase; the fourth criterion is evaluated during the study phase.

- Generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable;
- Has outstanding opportunities for solitude or a primitive and unconfined type of recreation;
- Has at least five thousand acres of land or is of a sufficient size as to make practicable its preservation and use in an unimpaired condition; and
- May also contain ecological, geological, or other features of scientific, educational, scenic, or historic value.

Criterion 3 is further defined in Section 3(c) of the Wilderness Act as (1) a roadless area of 5,000 contiguous acres or more, or (2) a roadless island. "Roadless" is defined as the absence of improved roads suitable and maintained for public travel by means of four-wheeled, motorized vehicles that are intended for highway use.

D.5.2 Process of Analysis

The following evaluation process was used in identifying the suitability of Refuge units for wilderness designation:

- Determination of Refuge unit sizes;
- Assessment of the units' capacity to provide opportunities for solitude or primitive and unconfined recreation; and
- Assessment of "naturalness" of Refuge units.

More detail on the actual factors considered and used for each assessment step follows.

D.5.2.1 Unit Size

Roadless areas meet the size criteria if any one of the following standards applies:

- An area with over 5,000 contiguous acres solely in the Service's ownership.
- A roadless island of any size. A roadless island is defined as an area surrounded by permanent waters or an area that is markedly distinguished from the surrounding lands by topographical or ecological features.
- An area of less than 5,000 contiguous Federal acres that is of sufficient size as to make practicable its preservation and use in an unimpaired condition, and of a size suitable for wilderness management.
- An area of less than 5,000 contiguous Federal acres that is contiguous with a designated wilderness, recommended wilderness, or area under wilderness review by another Federal wilderness managing agency such as the Forest Service, National Park Service, or Bureau of Land Management.

D.5.2.2 Outstanding Solitude or Primitive or Unconfined Recreation

A designated wilderness area must provide outstanding opportunities for solitude, or a primitive and unconfined type of recreation. Possession of only one of these outstanding opportunities is sufficient for an area to qualify as wilderness, and it is not necessary for one of these outstanding opportunities to be available on every acre. Furthermore, an area does not have to be open to public use and access to qualify under these criteria.

Opportunities for solitude refer to the ability of a visitor to be alone and secluded from other visitors in the area. Primitive and unconfined recreation means nonmotorized, dispersed outdoor recreation activities that are compatible and do not require developed facilities or mechanical transport. Primitive recreation activities may provide opportunities to experience challenge and risk, self-reliance, and adventure.

D.5.2.3 Naturalness and Wildness

The naturalness and wildness criterion states that the area must generally appear to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable. This criterion must be evaluated in the context of current natural conditions and societal values and expectations without compromising the original intent of the Wilderness Act. It is well recognized that there are few areas remaining on the planet that could be truly classified as primeval or pristine, with even fewer, if any, existing in the conterminous United States. Likewise, few areas exist that do not exhibit some impact from anthropogenic influences, be it noise, light, or air pollution; water quality or hydrological manipulations; past and current land management practices; road or trails; suppression of wildfires; invasions by nonnative species of plants and animals; or public uses. While allowing for the near-complete pervasiveness of modern society on the landscape, the spirit of the Wilderness Act is to protect lands that still retain the wilderness qualities of (1) natural, (2) untrammeled, and (3) undeveloped. These three qualities are cornerstones of wilderness character. For areas proposed or designated as wilderness, wilderness character must be monitored to determine baseline conditions and must thereafter be periodically monitored to assess the condition of these wilderness qualities. Proposed and designated wilderness areas by law and policy are required to maintain wilderness character through management and/or restoration in perpetuity.

Defining the first two qualities (natural and untrammeled) requires a knowledge and understanding of the ecological systems that are being evaluated as potential wilderness. Ecological systems have three primary attributes—composition, structure, and function. Composition refers to the components that make up an ecosystem, such as the habitat types, native species of plants and animals, and

abiotic (physical and chemical) features. These contribute to the diversity of the area. Structure is the spatial arrangement of the components that contributes to the complexity of the area. Composition and structure are evaluated to determine the naturalness of the area. Function refers to the processes that result from the interaction of the various components both temporally and spatially, and the disturbance processes that shape the landscape. These processes include but are not limited to predator-prey relationships, insect and disease outbreaks, nutrient and water cycles, decomposition, fire, wind storms, flooding, and both general and cyclic weather patterns. Ecological functions are evaluated to determine the wildness or untrammeled quality of the area.

The third quality assessment is whether an area is undeveloped. Undeveloped refers to the absence of permanent structures such as roads, buildings, dams, fences, and other human-made alterations to the landscape. Exceptions can be made for historic structures or structures required for safety or health considerations, providing they are made of natural materials and are relatively unobtrusive on the landscape.

General guidelines used for evaluating areas for wilderness potential during this wilderness inventory process include:

- The area should provide a variety of habitat types and associated abiotic features, as well as a nearly complete complement of native plants and wildlife indicative of those habitat types. Nonnative and invasive species should constitute a negligible portion of the landscape.
- The area should be spatially complex (vertically and/or horizontally) and exhibit all levels of vegetation structure typical of the habitat type, have an interspersed of these habitats, and provide avenues for plant and wildlife dispersal.
- The area should retain the basic natural functions that define and shape the associated habitats, including but not limited to flooding regimes, fire cycles, unaltered hydrology and flowage regimes, and basic predator-prey relationships including herbivory patterns.
- Due to their size, islands may not meet the habitat guidelines in the first two points above. Islands should, however, exhibit the natural cover type with which they evolved, and should continue to be shaped and modified by natural processes. Islands should be further analyzed during the study portion of the review, if they provide habitat for a significant portion of a population or key life cycle requirements for any resources of concern or listed species.
- Potential wilderness areas should be relatively free of permanent structures or human-made alterations. Areas may be elevated to the study phase if existing structures or alterations can be removed or remediated within a reasonable time frame, and prior to wilderness recommendation to the Secretary of the Interior.

D.5.2.4 Supplemental Values

The Wilderness Act states that an area of wilderness may contain ecological, geological, or other features of scientific, educational, scenic, or historical value. Supplemental values of the area are optional, but the degree to which their presence enhances the area's suitability for wilderness designation should be considered. The evaluation should be based on an assessment of the estimated abundance or importance of each of the features.

D.6 Inventory Summary and Conclusion

Based on this inventory, the Lake Lowell Unit does not meet any of the basic criteria for inclusion in the National Wilderness Preservation System. The islands within the Snake River Unit meet the size criterion but do not meet the criteria for naturalness and wildness, nor do they provide outstanding opportunities for solitude or primitive or unconfined recreation. Based on this summary and conclusion, further evaluation of these lands under the wilderness study phase is unwarranted. Table D-1 summarizes the evaluation and conclusion for each unit.

Table D-1. Results of Wilderness Inventory for Deer Flat National Wildlife Refuge

Refuge Unit	Lake Lowell Unit	Snake River Islands Unit
(1) Unit Size: has at least 5,000 acres of land or is of sufficient size to make practicable its preservation and use in an unconfined condition, or is a roadless island	No	Yes
(2) Naturalness and wildness: generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable	No	No
(3a) Outstanding opportunities for solitude	No	No
(3b) Outstanding opportunities for primitive and unconfined recreation	No	No
(4) Contains ecological, geological, or other features of scientific, educational, scenic, or historical value	N/A	N/A
Area qualifies as a wilderness study area (meets Criteria 1,2, and 3a, or 3b)	No	No

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