

Appendix H

Wilderness Review

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H. Wilderness Review

H.1 Introduction

The purpose of a wilderness review is to identify and recommend to Congress lands and waters of the National Wildlife Refuge System (Refuge System) that merit inclusion in the National Wilderness Preservation System (NWPS). By Refuge System policy, wilderness reviews are elements of comprehensive conservation plans, and a recent director's memorandum (Hamilton, 2010) directs refuges to conduct wilderness reviews during the planning process. Wilderness reviews require compliance with the National Environmental Policy Act (NEPA), interagency and tribal coordination, and public involvement.

The current review was initiated in compliance with the refuge planning process outlined in U.S. Fish and Wildlife Service (Service) Manual (602 FW 3 and 4) and is conducted in accordance with Service Manual (610 FW 3, 4, and 5).¹ It includes all areas of Arctic National Wildlife Refuge (Arctic Refuge, Refuge) not designated as wilderness (about 60 percent of the Refuge) and incorporates recent information on the Refuge's resources, uses, and management concerns. Past wilderness reviews of Refuge lands, including those that pre-date ANILCA, are summarized in the appendix attached to this review (page H-30).

The wilderness review process has three phases, all of which consider public input:

1. **Inventory:** Identify lands and waters that meet the minimum criteria for wilderness. These are called Wilderness Study Areas (WSA).
2. **Study:** Evaluate WSAs to determine if they are suitable for wilderness designation. In this phase, values, resources, public uses, and Refuge management activities are considered to compare the benefits and impacts of managing an entire WSA, a portion of the WSA, or none of the WSA as a designated wilderness. The study also evaluates how designation would achieve refuge purposes and purposes of the NWPS.
3. **Recommendation:** Findings of each WSA study are used to determine if we will make a wilderness recommendation. In addition, each WSA is included in two or more of the draft Plan alternatives. Any recommendation(s) included in the Final Plan will be forwarded by the Director of the Service to the Secretary of Interior. The Secretary may forward the recommendation(s) to the President, who may transmit them to Congress. Only Congress can designate wilderness.

H.1.1 Wilderness Study Areas

This review divided the Refuge's non-wilderness lands into three WSAs: Brooks Range, Porcupine Plateau, and Coastal Plain (Map H-1).

¹ Part 610 of the Service Manual is also described as the Wilderness Stewardship Policy.



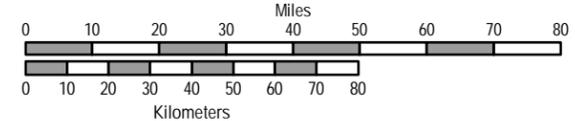
Map H-1 Arctic National Wildlife Refuge

Wilderness Study Areas

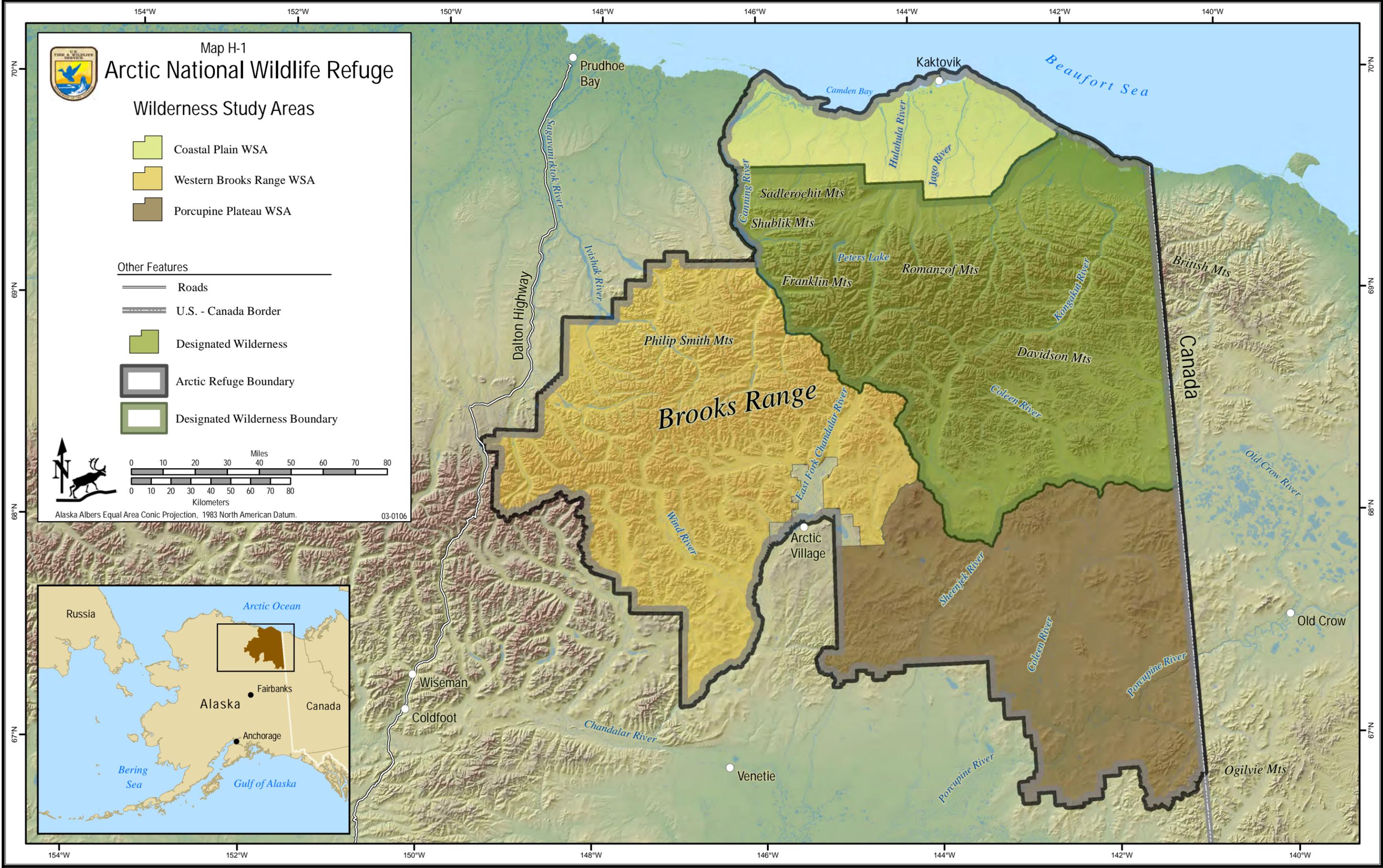
- Coastal Plain WSA
- Western Brooks Range WSA
- Porcupine Plateau WSA

Other Features

- Roads
- U.S. - Canada Border
- Designated Wilderness
- Arctic Refuge Boundary
- Designated Wilderness Boundary



Alaska Albers Equal Area Conic Projection, 1983 North American Datum. 03-0106



H.2 Inventory Phase

Three criteria derived from the Wilderness Act of 1964 and described in the Service Manual (610 FW 4) were used to determine whether the Refuge's three WSAs meet the minimum criteria of wilderness. The criteria are size, natural condition, and opportunities for solitude or primitive recreation. The following is a summary description of these criteria:

1. **Size:** Section 2(c) of the Wilderness Act defines wilderness as an area that “. . . has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition . . .”
2. **Natural condition²:** Section 2(c) of the Wilderness Act requires that an area qualified for designation “. . . generally appears to have been affected primarily by the forces of nature with the imprint of man's work substantially unnoticeable.” It also states that wilderness is “. . . an area where the earth and its community of life are untrammelled by man . . .” and that it retains its “primeval character and influence.” This does not disqualify areas that are not pristine, if alterations are not major and natural processes can largely be restored after designation. Generally, the natural condition criteria is met if the works of humans are substantially unnoticeable in the unit as a whole.
3. **Opportunities for solitude or primitive recreation:** Section 2 (c) of the Wilderness Act defines wilderness as an area that “. . .has outstanding opportunities for solitude or a primitive and unconfined type of recreation.” An area does not need to have outstanding opportunities for both elements and does not need to have outstanding opportunities on every acre. The solitude condition is met in areas where visitors can experience nature largely free of modern artifacts, managerial presence, and other reminders of society, and where they can find a high degree of privacy and isolation (610FW 1.5(BB)). The primitive recreation condition is met in areas that provide dispersed, undeveloped recreation, generally without permanent facilities (610FW 1.5 (R)).

The Wilderness Act specifies that a wilderness may also contain ecological, geological, or other features of scientific, educational, scenic, or historic value. While the qualification of a WSA does not depend on the existence of such supplemental values, their presence is considered in deciding whether or not a qualified WSA should be recommended for wilderness designation.

H.2.1 Inventory of the Brooks Range Wilderness Study Area

The Brooks Range WSA (Map H-1) is a large area of rugged relief that straddles the Continental Divide on the western side of the Refuge. It extends from the western boundary of the Refuge near the Dalton Highway to the existing Refuge wilderness, just past the East Fork of the Chandalar River. Mountain peaks and elongated ridges reach up to elevations between 6,000 and 7,500 feet (approximately 1,850 to 2,300 meters). Small glaciers are found along the divide, and many empty cirques are evidence of recent glacial retreat. The WSA contains the headwaters of the majority of rivers occurring in the western half of the Refuge, including the Ivishak and Wind Rivers that are designated as wild rivers under the Wild and

² “Natural Condition” is referred to as “naturalness” in the Service Manual

Scenic Rivers Act. The river valleys are deeply scoured glacial troughs with flanking walls as high as 3,000 feet (915 meters).

This WSA, and particularly its river valleys and northern and southern foothills, possesses high wildlife values. Wilderness dependent species include brown bear, wolf, wolverine, Dall's sheep, and gyrfalcon. Moose are found along riparian areas. Much of the Central Arctic caribou herd seasonally inhabits the area north of the Continental Divide, while the valleys south of the divide provide important wintering habitat for both the Porcupine caribou herd and the Central Arctic herd. South flowing drainages support populations of chum and Chinook salmon while lake trout, Dolly Varden, Arctic char, burbot, Arctic grayling, northern pike, and several species of whitefish are found in the area. The WSA's ecological integrity enables all native species to maintain their natural behavior, interactions, cycles, and ecological roles.

H.2.1.1 Wilderness Criteria

Size – The Brooks Range WSA meets the wilderness size criteria. It encompasses 5.4 million acres, comprising 28 percent of the Refuge. Within its boundaries are 66 conveyed Native allotments totaling 8,133 acres. There are also two Doyon, Limited Native corporation inholdings containing 81,120 acres of conveyed land and 4,103 acres of selected land. The Brooks Range WSA is roadless.

Natural condition – This WSA meets the natural condition criteria, exhibiting high levels of both apparent natural qualities and ecological integrity. Arctic Village borders the WSA and the western boundary comes within one-half mile of the Dalton Highway; however, there are no roads or permanent inhabitants within the WSA. The Old John Lake area has a concentration of 20 Native allotments, several of which have cabins. There are a few cabins on other scattered Native allotments. The Refuge maintains two cabins on Big Ram Lake, which are infrequently used for administrative purposes. Subsistence and recreational activities are the primary uses of the WSA, none of which have affected its natural condition.

Opportunities for solitude or primitive recreation – The Brooks Range WSA provides outstanding opportunities for both solitude and primitive recreation. The WSA's remoteness and vast size enables visitors to travel for days or weeks without encountering other people or substantial evidence of the modern world, other than an occasional brief sighting of aircraft overhead. There are no recreational developments, bridges, established trails, or signs in the WSA. The WSA provides unsurpassed opportunities for adventurous trips and the experience of challenge, exploration, isolation, self-reliance, and independence. However, Refuge lands within two miles of Old John Lake and Arctic Village, including the village's airport, generator complex, and daily use areas, lack the qualities of solitude and primitive recreation. No real sense of these qualities can be experienced in such close proximity to an active community. At the extreme western edge of the WSA visitors can hear and see vehicles on the Dalton Highway and see the Trans-Alaska Pipeline. These effects are not disqualifying.

Supplemental values – The Brooks Range offers dramatic alpine scenery, sheer walls of folded and faulted rock, broad valleys, waterfalls, expansive aufeis fields, and innumerable other features that await the visiting explorer. Features of particular note include the Atigun Gorge, an eight-mile-long scenic canyon. The Gorge is accessible from the Dalton Highway and has become one of the most popular recreational use areas in the Brooks Range. Two designated wild rivers, the Ivishak and Wind, begin and flow through this WSA. This WSA encompasses

much of the traditional homeland and contemporary subsistence use area of Gwich'in people residing in Arctic Village and Venetie.

H.2.1.2 Brooks Range Wilderness Study Area Conclusion

With the exception of a 39,549-acre area in the vicinity of Arctic Village, Old John Lake, and a travel corridor between them (Map H-2), all Refuge lands and waters within the Brooks Range WSA are exemplary in the degree to which they meet Wilderness Act criteria. The WSA also possesses many supplemental values. Wilderness characteristics of this WSA will be maintained through the Minimal Management category of the 1988 Plan or, upon approval, the Revised Plan (see Chapter 2). If Congress designates the WSA, then it will be managed through the Wilderness Management category of the Revised Plan and according to the provisions of the Service's wilderness stewardship policy (FW 610 1,2).

H.2.2 Inventory of the Porcupine Plateau Wilderness Study Area

The Porcupine Plateau WSA (Map H-1) is located south of the Brooks Range and extends from just east of the East Fork of the Chandalar River to the Canadian border. It is an area of scattered mountains and rolling hills. Northern and higher elevation taiga areas include expanses of alpine tundra and stands of scattered spruce. The WSA is dominated by broad valleys with extensive stands of spruce and broadleaf forest and riverine communities dotted with shallow lakes and wetlands. The Sheenjek (a designated wild river), Coleen, Rapid, and Salmon Trout Rivers are major tributaries draining into the Porcupine River.



The Porcupine Plateau WSA provides vast, unaltered habitat for brown and black bears, moose, and many species of furbearers, including wolf, wolverine, and marten. It is particularly important to the Porcupine caribou herd as a wintering area and as a spring and fall migratory route. This WSA provides some of the best nesting areas for the American peregrine falcon in Alaska. The Porcupine River is an important migratory corridor for salmon between the Yukon River and spawning grounds in Canada. Each year a large run of fall chum salmon and smaller runs of coho and Chinook salmon move through this pathway. The Porcupine River, and at least three of its tributaries, provide salmon spawning habitat within the WSA. The WSA's ecological integrity enables all native species to maintain their natural behavior, interactions, cycles, and ecological roles.

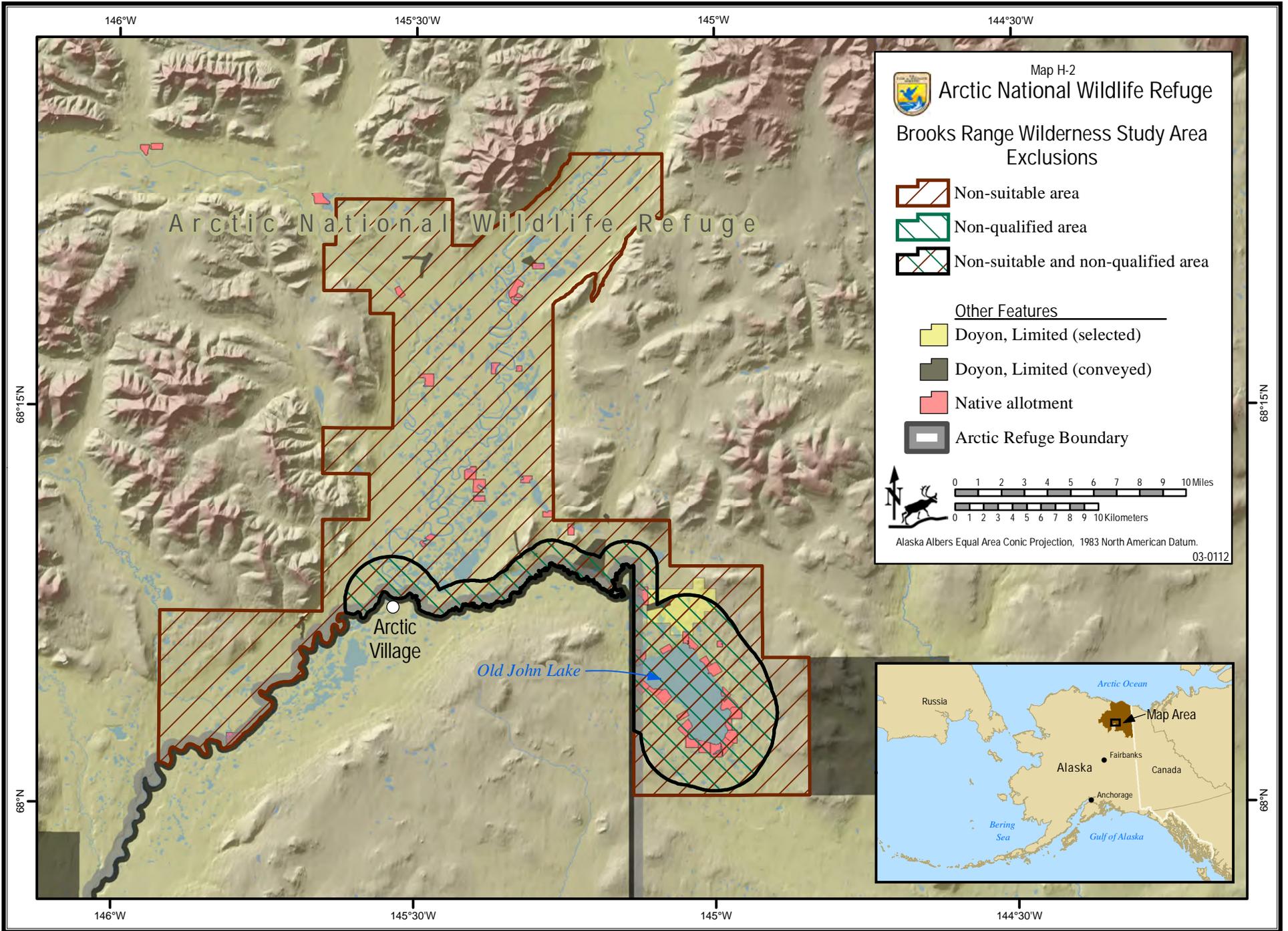
H.2.2.1 Wilderness Criteria

Size – The Porcupine Plateau WSA meets the wilderness size criteria. It is a roadless expanse of 4.4 million acres comprising 23 percent of the Refuge. Within its boundaries are 15,466 acres of mostly Native-owned private land. These inholdings include 12 conveyed Native allotments totaling 1,080 acres, one conveyed Native corporation parcel of 14,356 acres, the 29.86-acre Canyon Village town site, and 56 acres of a 108-acre military site.

Natural condition – This WSA meets the natural condition criteria, exhibiting high levels of both apparent natural condition and ecological integrity. Several Native allotments have cabins that are used seasonally or intermittently. On Refuge lands, there are 13 permitted cabins used in support of the trapping activities of six trappers. One couple, whose occupancy predates ANILCA, permanently resides in this WSA and uses five of the permitted cabins. Cabins in this WSA are of log construction, widely dispersed, mostly hidden from view by forest cover, and do not substantially affect the area's natural condition. Along the area's southwest boundary is an unoccupied 100-acre military site. It consists of five 500-square-foot gravel pads, a frame building, several small structures, generators, and several miles of underground seismic cable. A 1950s bulldozer trail parallels a section of the Coleen River before crossing into Canada. It is recovering and becoming less apparent from the ground; however, two abandoned tractor trailers and other heavy debris are found along the trail. While not disqualifying, these are the only visual intrusions that diminish the WSA's apparent natural condition. The Refuge plans to continue to remove debris along the bulldozer trail, which will enhance the natural quality of the WSA.

Opportunities for solitude or primitive recreation – This WSA provides outstanding opportunities for both solitude and primitive recreation. The Sheenjek (a designated wild river), Coleen, and Porcupine Rivers provide outstanding opportunities for float trips and hunting, fishing, and hiking in a primitive setting. There are no recreational developments, bridges, established trails, or signs in the WSA. The WSA provides unsurpassed opportunities for adventurous trips and the experience of challenge, exploration, isolation, self-reliance, and independence. Although those floating the Porcupine River, especially during the hunting season, may occasionally encounter a motorboat, those who hunt or hike off the river rarely meet anyone or find evidence of civilization.

Supplemental values – The Porcupine River is an important feature in the WSA. Historically, it was used as a major travel route for prehistoric people and the region's first explorers and traders. The river is still an important transportation corridor for subsistence hunters and others traveling to and from Canada. The ramparts along the northern section of the river



146°W

145°30'W

145°W

144°30'W

68°15'N

68°15'N

68°N

68°N

146°W

145°30'W

145°W

144°30'W



Map H-2

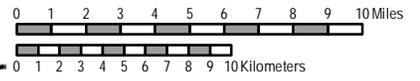
Arctic National Wildlife Refuge

Brooks Range Wilderness Study Area Exclusions

-  Non-suitable area
-  Non-qualified area
-  Non-suitable and non-qualified area

Other Features

-  Doyon, Limited (selected)
-  Doyon, Limited (conveyed)
-  Native allotment
-  Arctic Refuge Boundary



Alaska Albers Equal Area Conic Projection, 1983 North American Datum.

03-0112



have outstanding geologic and scenic interest. The river has been recognized as one of the State's outstanding scenic complexes and provides particularly important nesting habitat and viewing opportunities for peregrine falcons and golden eagles. The Sheenjek River (a designated wild river) flows through the eastern portion of the WSA.

H.2.2.2 Porcupine Plateau Wilderness Study Area Conclusion

All Refuge lands and waters within the Porcupine Plateau WSA meet the three Wilderness Act criteria. This WSA is exemplary in the degree to which it meets the criteria, with the exception of localized impacts associated with trapping cabins and a 1950s bulldozer trail. Wilderness characteristics of this WSA will be maintained through the Minimal Management category of the 1988 Plan or, upon approval, the Revised Plan (see Chapter 2). If Congress designates the WSA, then it will be managed through the Wilderness Management category of the Revised Plan and according to the provisions of the Service's wilderness stewardship policy (FW 610 1,2).

H.2.3 Inventory of the Coastal Plain Wilderness Study Area

The Coastal Plain WSA (Map H-1) is comprised of the portion of the Arctic Refuge Coastal Plain not presently designated as wilderness. The Coastal Plain WSA is sometimes called the "1002 Area" after the section of ANILCA in which it is described. Extending from the northern foothills of the Brooks Range to the Beaufort Sea, the WSA includes 121 miles (79 percent) of the Refuge's coastal habitat. The WSA encompasses bluffs, lagoons, and salt marshes, and extends out to the extreme low water line along beaches, barrier islands, spits, and river deltas at the Refuge's northern boundary. South of the varied coastal ecology, the gently rising plain contains a mosaic of tundra habitats, including a scattering of shallow lakes and ponds, and sedge, grass, and low shrub communities. Many clear streams and glacial rivers flow through the WSA, with the Canning and Staines rivers forming its western boundary and the Aichilik River defining its eastern edge.

This WSA is the most biologically productive part of the Refuge and contains important habitats for a great diversity and abundance of life. Terrestrial, aquatic, and estuarine habitats provide an important calving ground for the Porcupine caribou herd; post-calving habitats for the Porcupine and Central Arctic caribou herds; nesting habitats for hundreds of thousands of migratory birds and vital fall staging areas for lesser snow geese, shorebirds, and waterfowl; spawning, rearing, and overwintering habitats for six common resident and anadromous species of fish; migration and feeding areas for at least 19 fish species; and critical feeding (fall) and denning (winter) habitats for polar bears. Other high-interest mammals inhabiting the WSA include muskox, grizzly bear, moose, wolf, wolverine, seals, beluga whales, and occasionally bowhead whales. The WSA's ecological integrity enables all native species to maintain their natural behavior, interactions, cycles, and ecological roles.

H.2.3.1 Wilderness Criteria

Size –The Coastal Plain WSA meets the wilderness size criteria. It encompasses 1.4 million acres comprising 7.3 percent of the Refuge. Private lands within the Coastal Plain WSA include 90,107 acres of conveyed and 4,358 acres of selected Native corporation land in the vicinity and south of Kaktovik. There are 29 Native allotments, seven of which lie within the

boundaries of Native corporation lands. Most of the others are on the coast or along the Hulahula River.

Natural condition –With the exception of lands and waters near Kaktovik, this roadless WSA meets the natural condition criteria, exhibiting high levels of both apparent natural quality and ecological integrity. Within the area are three types of visual impacts that are relatively minor in the WSA as a whole and thus not disqualifying. Along the coast, structures at the former Camden Bay, Beaufort Lagoon, and Demarcation Point Distant Early Warning Line sites have been removed, but gravel pads and some concrete foundations remain. Scattered sections of seismic trails from the 1984–1985 oil and gas exploration project are visible, mostly from the air; their natural recovery continues. A few structures have been constructed on privately owned Native allotments. Except for the village of Kaktovik, which lies along the Refuge’s northern boundary³, there are no permanent inhabitants within the WSA.

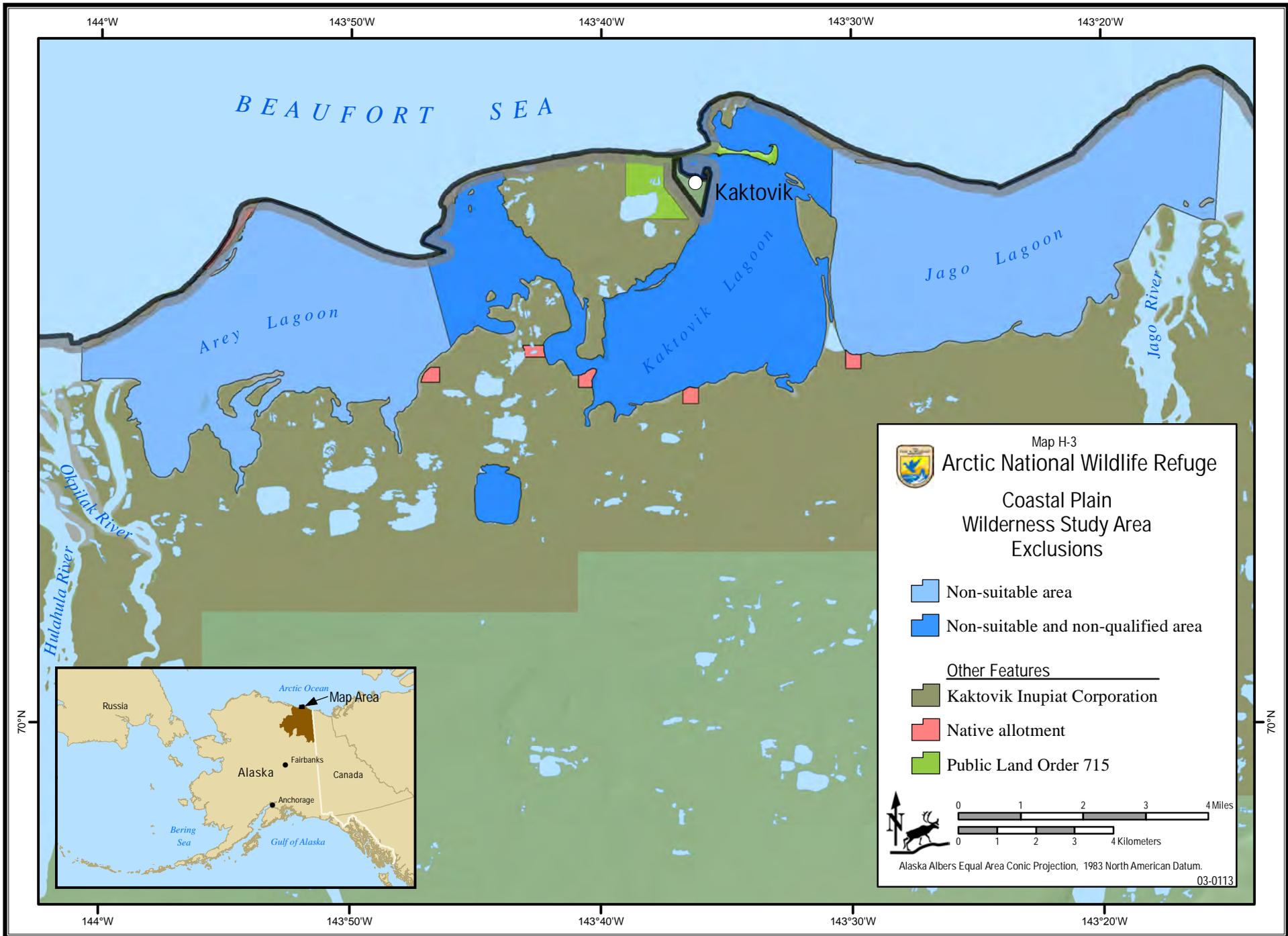
Opportunities for solitude or primitive recreation –This WSA provides outstanding opportunities for both solitude and primitive recreation, with the exception of the lagoon areas within two miles of Kaktovik (Map H-3). This 9,978-acre area is so close to the sights and sounds of the community that no real sense of solitude or primitive recreation is available. Hence, this area is not qualified for consideration of wilderness status. Otherwise, the WSA’s expansive openness provides inspiring views of the Brooks Range and the Arctic Ocean, and exceptional opportunities to view wildlife. Its size and remoteness enables river floaters, sea kayakers, hikers, and campers to go for days without encountering others or substantial evidence of the modern world other than the occasional brief sighting of aircraft. There are no recreational developments, bridges, established trails, or signs in the WSA. The WSA provides unsurpassed opportunities for adventurous trips and the experience of challenge, exploration, isolation, self-reliance, and independence.

Supplemental values – The Sadlerochit Springs on the eastern edge of the Sadlerochit Mountains is notable for its warm water aquifer and unusually lush vegetation. It supports wood ferns and other plants not generally found in the Arctic, including the farthest north stand of balsam poplar in Alaska. This WSA also encompasses much of the traditional homeland and contemporary subsistence use area of the Kaktovik Iñupiat people.

H.2.3.2 Coastal Plain Wilderness Study Area Conclusion

With the exception of the area within two miles of Kaktovik (Map H-3), all lands and waters within the Coastal Plain WSA are exemplary in the degree to which they meet all of the Wilderness Act criteria. The wilderness values of this WSA will be maintained through the Minimal Management category of the 1988 Plan or, upon approval, the Revised Plan (see Chapter 2). If Congress designates the WSA, then it will be managed through the Wilderness Management category of the Revised Plan and according to the provisions of the Service’s wilderness stewardship policy (FW 610 1,2).

³ Kaktovik is not part of Arctic Refuge even though the town site is physically inside the boundaries of the Refuge. The Refuge boundary surrounds the town site, creating a “doughnut-hole” within the Refuge.



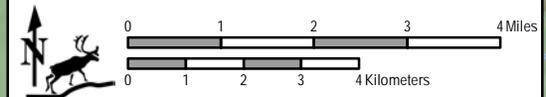
Map H-3

Arctic National Wildlife Refuge

**Coastal Plain
Wilderness Study Area
Exclusions**



- Non-suitable area
 - Non-suitable and non-qualified area
- Other Features
- Kaktovik Inupiat Corporation
 - Native allotment
 - Public Land Order 715



Alaska Albers Equal Area Conic Projection, 1983 North American Datum.

03-0113

H.3 Study (Suitability) Phase

Each of the three WSAs meets the minimum criteria for wilderness with the exception of the identified non-qualified areas adjacent to Arctic Village and Kaktovik. In the study phase, qualified areas in each WSA were evaluated to determine if they are suitable for wilderness designation and whether they could be practicably managed as wilderness. To address suitability, Refuge staff examined how wilderness designation would benefit or impact:

- Achieving Refuge’s purposes
- Achieving the Refuge System mission
- Achieving the purposes of the Wilderness Act and the NWPS
- Maintaining biological integrity, diversity, and environmental health at various landscape levels
- Refuge operations

The study phase compares the benefits and impacts of designating each WSA as wilderness to the no-action alternative of maintaining Minimal Management for each WSA. Minimal Management includes most of the same protections for wilderness characteristics as designated wilderness, and it includes most of the same limitations on public uses and Refuge management activities. With only a few exceptions, lands under Minimal Management and those in designated wilderness have been managed in much the same manner.

The major difference between Minimal Management and the management of designated wilderness is that wilderness designation confers statutory protection. This protection could only be changed by an act of Congress. Because provisions of the Wilderness Act are rooted in law, they are more binding upon the Service than those prescribed by administrative management categories adopted through comprehensive conservation plans. Minimal Management is an administrative category subject to change, and areas currently managed as Minimal Management could become less protective through future revisions to the Plan or a with a Plan amendment. Designated wilderness and the other Plan management categories are predicated on substantially different time scales. The Plan defines “long-term” as the life of the document (15–20 years), while the Wilderness Act speaks to “future generations” and “an enduring resource.” Thus, designated wilderness represents a more permanent commitment to perpetuating the Refuge’s natural conditions and processes and wilderness-associated recreational opportunities.

Designated wilderness is managed to a higher standard of wilderness character and requires more restraint on the part of managers than lands managed under the Minimal Management category. For example, in designated wilderness, Service field work adheres more stringently to Leave No Trace principles, and the Refuge more closely scrutinizes commercial operations and their compliance with permit conditions. In addition, Service policy requires a Minimal Requirement Analysis (MRA) (Chapter 2, Section 2.4.20) for all management and research activities in designated wilderness⁴.

⁴ An MRA is a written decision making process to determine if an administrative activity proposed for designated wilderness is necessary to administer the area as wilderness and is necessary to accomplish the purposes of the Refuge, including Wilderness Act purposes. If the MRA finds the activity permissible, then tools or techniques are selected to minimize impacts.

In summary, wilderness designation would provide the most assurance that WSAs would remain undeveloped and untrammled. It is not possible to know if, or how, Minimal Management might change during the life of the Plan or beyond. Therefore, the analysis in this review can only compare the benefits of designating WSAs as wilderness to managing them under the Minimal Management provisions described in Chapter 2 of the Plan.

The study includes a description of the beneficial and detrimental effects of wilderness designation on Refuge purposes. These purposes, described in Chapter 1, include the Refuge's three 1960 Executive order purposes applicable to the original 8.9-million-acre Arctic National Wildlife Range and the four 1980 ANILCA purposes that apply to the entire Refuge. Because the wildlife purposes from the executive order and ANILCA are complementary, this review combines them as a single wildlife purpose.

H.3.1 Suitability of the Brooks Range Wilderness Study Area

H.3.1.1 Achieving Refuge Purposes

Fish, wildlife, and their habitats – The Refuge's wildlife purposes mandate conservation of wildlife and their habitats in their natural diversity. Wildlife includes all indigenous species, with their natural behaviors, interactions, and cycles continuing. Wilderness designation would provide the Brooks Range WSA with greatest long-term assurance that these qualities of the area's wildlife would be perpetuated. Subject to the provisions of management emergencies (Chapter 2, Section 2.4.2), wilderness would essentially preclude alterations of habitats to favor one species over another and would best protect the free-functioning of the ecological systems and natural processes in which wildlife are embedded. Potential effects of wilderness designation on wildlife research are discussed under Refuge Operations (Section H. 3.1.5).

Wilderness – By definition, wilderness designation preserves wilderness values, including natural scenic conditions, intact ecological processes, and the inherent wild character of its various life forms. Designation would require Refuge management to be more attentive to these qualities and would likely increase public scrutiny of any proposed actions that might diminish them. Wilderness designation could better protect the area's undeveloped character by potentially precluding structures and installations, such as radio repeater stations, where they are unnecessary for meeting Refuge purposes, including the purposes of the Wilderness Act.

The Refuge has high scientific value as a "natural laboratory" where largely undisturbed wildlife and natural processes can be studied. Wilderness designation would best assure perpetuation of the conditions central to the Refuge's scientific value. However, the use of certain research methods and tools could be limited because of designation, and this would lessen the scientific value for some studies.

As with the rest of the Refuge, the Brooks Range WSA holds symbolic and existence values for many people who find satisfaction in just knowing the area exists and will be passed on to future generations. While many such values are not quantifiable, they are nonetheless real for many people. Wilderness designation would confer greater overall long-term protection to the resources underlying these intangible values and increase Refuge management's recognition and consideration of them.



Recreation – The Refuge’s recreation purpose includes provision for a range of activities in a natural, undeveloped setting. Activities include backpacking, river floating, camping, hunting, fishing, wildlife observation, and photography. Adventure, challenge, exploration, discovery, solitude, independence, and self-reliance are important aspects of visitor experience. A recent visitor study (Christensen and Christensen 2009) found these dimensions continue to be highly important to visitors.

Wilderness designation would not change the current character of the recreational experience. In accordance with the provisions of ANILCA, current means of access, including motorboat, snowmobile, and aircraft use, would continue. In areas where aircraft landings are causing or may cause damage to sensitive surfaces, protective limitations are more likely to be implemented in wilderness. Overall, wilderness would provide the best assurance of long-term protection for the recreational setting and experiences valued by visitors. In particular, designation would decrease the likelihood that recreational developments such as bridges or signs would be placed in the area.

Approximately 700 recreationists visit the Brooks Range WSA each year, and this number would not be expected to change with designation. In the medium to long term, protection of natural and experiential conditions could require management intervention, such as placing limits on the number of visitors in areas of concentrated public use (e.g., on some river corridors). Designation could also serve to encourage behaviors that better protect natural conditions, such as Leave No Trace practices.

International treaty obligations – This purpose requires that the area be managed to help fulfill treaty obligations related to the conservation of fish, wildlife, and birds that inhabit Alaska, Canada, and many other nations (Appendix A). As discussed in the Wildlife Purpose section, wilderness designation would likely enhance the long-term protection of all indigenous wildlife, including treaty species. As discussed in Refuge Operations (Section H. 3.1.5), research on treaty species would be subject to an MRA. The MRA could result in modified research protocols, tools, and techniques to minimize the potential impacts of research on wilderness character.

Subsistence – The Refuge’s subsistence purpose provides the opportunity for continued subsistence uses by local residents. These uses serve to meet residents’ physical, economic, traditional, and other needs. Wilderness designation would provide further long-term protection for the lands, wildlife, and other resources subsistence users depend on and would serve to perpetuate the natural conditions in which subsistence cultures evolved. Whether the Brooks Range WSA is designated wilderness or managed under Minimal Management, serious declines in subsistence species could be addressed as a management emergency. However, stronger justification for management actions such as predator control would be required in designated wilderness (see Chapter 2, Section 2.4.2, Management Emergencies).

Current methods and patterns of motorized and non-motorized access would not be affected if the Brooks Range WSA were to be designated as wilderness. The use of temporary structures such as tent camps, tent frames, and fish drying racks would continue. Subsistence use of cabins would continue, although requests for construction or location of new cabins would receive greater scrutiny. Some subsistence users would view the wilderness overlay on their homeland as complementary to their cultural perspective; others would view wilderness as a foreign concept and at variance with their traditional beliefs. In general, subsistence uses in wilderness would continue as they have under Minimal Management, and the subsistence purpose would continue to be met.

Water quality and necessary water quantity – This purpose recognizes that protection of water resources is central to conservation of fish, wildlife, and ecosystems. It establishes a Federal reserved water right for surface waters and groundwater within the area. Wilderness status would provide an additional layer of protection for water resources. As discussed in Refuge Operations (Section H. 3.1.5), research related to water resources would be subject to an MRA; some water research protocols, tools, and techniques might need to be modified to minimize the potential impacts of research on wilderness character.

H.3.1.2 Achieving the Refuge System Mission

The mission of the 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.”

Arctic Refuge has a distinctive role in the Refuge System—exemplifying the qualities of natural condition, wild character, and ecological wholeness. Wilderness designation of this WSA would provide the greatest assurance that the Brooks Range area would remain unaltered and essentially free of the intent to control or manipulate the land, its creatures, and natural processes, thereby ensuring the area retains its ecological integrity now and for future

generations. Designation would achieve the purposes of the Refuge System while expanding the range of landscapes, integrity, and values (tangible and intangible) held within it.

H.3.1.3 Purposes of the Wilderness Act and National Wilderness Preservation System

The Wilderness Act states that the purpose of wilderness areas and the NWPS is “to secure for the American people of present and future generations the benefits of an enduring resource of wilderness.” The purpose of designation is to protect and preserve an area’s wilderness character, as described in the Service Manual (610 FW 1.13.). Designation of the Brooks Range WSA would further these purposes by adding an area to the NWPS that exemplifies wilderness character and the full range of its tangible and intangible qualities and experience opportunities. Wilderness status would provide the greatest assurance that the wilderness-associated benefits the area provides would be enduring and available to future generations.

H.3.1.4 Maintenance of Biological Integrity, Diversity, and Environmental Health

Service policy requires that refuges maintain existing levels of biological integrity, diversity, and environmental health as defined in the Refuge Manual (601 FW 3). Currently, in the Brooks Range WSA, these qualities are unaltered and comparable to historic conditions to an exceptional degree in the Refuge System. Wilderness status, with its mandate for maintaining natural and untrammeled conditions, would complement the policy requirement for maintaining these qualities and would further provide statutory protection for them. Should management actions or public uses be proposed that would affect these qualities, they would be much less likely to be approved if the area were designated.

H.3.1.5 Refuge Operations

Wilderness would have a negligible effect on most Refuge operations in the Brooks Range WSA as currently conducted. If designated, all administrative activities in the area would require an MRA, which would take staff time to conduct. However, routine operations, such as public use monitoring, law enforcement, and most fish and wildlife surveys, would only require periodic updating of an initial programmatic MRA; thus, the long-term time commitment would be minimal. Research projects involving intrusive methods or tools need to meet the MRA requirement. In particular, the placement of structures or installations and the use of motorized equipment or helicopters would need to be justified as meeting the minimum requirement. They would not be allowed if they do not serve Refuge purposes, including wilderness, and if their benefits are not commensurate with impacts. Wilderness status could increase support and elevate funding priority for management and research projects that address public use impacts or threats such as climate change.

Management actions and research projects proposed by the Service, the State, or other cooperators would be permitted and encouraged, provided they use the minimum means to accomplish their intent and they are necessary to protect Refuge resources, including the wilderness resource. Wilderness designation would not affect the jurisdiction or responsibilities of the State with respect to wildlife, although actions would need to be consistent with maintaining wilderness character; for some activities, an MRA may be required. Wilderness would provide the highest and most permanent level of protection for

natural conditions and processes in the Brooks Range WSA, enhancing the scientific value of the area. For some approved projects, the cost of this benefit would be some inconvenience and less efficiency, and the need for more advanced planning, flexibility, and restraint.

H.3.1.6 Evaluation of Manageability for the Brooks Range Wilderness Study Area

To be recommended for designation, the Brooks Range WSA must be capable of being effectively managed as wilderness. In determining manageability, the Service considers factors such as land status and Service jurisdiction, existing inholdings and private rights, Refuge management activities, and public uses.

The Service owns over 98 percent of the Brooks Range WSA. Within it are 66 conveyed Native allotments, each 40–160 acres in size, for a total of 8,133 acres. Their current and foreseeable use is consistent with wilderness purposes. Sale to private parties could potentially result in commercial or other development that could detract from the wilderness characteristics of their immediate area. The Service will continue to offer to purchase inholdings from willing sellers when funding is available.

There are no known external threats that would affect this WSA's manageability as wilderness. Twenty-nine percent (81.2 miles) of the WSA is bounded by Arctic Refuge lands, 37 percent (234 miles) is bounded by State lands, 20.3 percent (128 miles) is bounded by Native-owned lands, and 13.6 percent (85.7 miles) is bounded by Bureau of Land Management (BLM) lands.

Refuge management activities as they relate to wilderness are described in Refuge Operations (Section 3.1.5). In general, current and foreseeable actions would not interfere with management of the area as wilderness, although in some cases, the methods and tools used may require some modification. There are no RS 2477 rights-of-way claimed for this WSA.

The current public uses are largely wilderness-associated and would not interfere with management of the area as wilderness. However, a 181,077-acre area around Arctic Village (Map H-2) has been determined to be not suitable for wilderness designation. This area is in addition to the areas around and between Arctic Village and Old John Lake that were found not qualified for wilderness status. The area proximate to Arctic Village is non-suitable because it is a high-use area for Arctic Village residents, and some activities such as firewood and house log cutting could make it difficult to manage as wilderness. Motorized activity is frequent in this area. It also contains a large number of inholdings. Arctic Village, the nearest community, is 5 to 20 miles from wilderness-suitable lands, depending on the direction. The qualified and suitable portion of this WSA totals 5,719,523 acres, or approximately 29 percent of the Refuge.

In summary, the Brooks Range WSA is sufficiently large, protected, and distant from substantial threats to enable almost all of it to be managed as wilderness. With the exception of the non-qualified and non-suitable areas identified in Maps H-2 and H-3, this WSA is highly suitable for wilderness designation.

H.3.1.7 Wilderness Recommendation for the Brooks Range Wilderness Study Area

The Brooks Range WSA as depicted in Map H-1 has been determined to be suitable and is preliminarily recommended for wilderness designation. A recommendation is included in three

of the draft Plan alternatives. Any recommendations included in the Final Plan will be forwarded by the director of the Service to the Secretary of Interior. The Secretary may forward the recommendation(s) to the President, who may transmit them to Congress. Only Congress can designate wilderness.

H.3.2 Suitability of the Porcupine Plateau Wilderness Study Area

H.3.2.1 Achieving Refuge Purposes

Fish, wildlife, and their habitats – The Refuge’s wildlife purposes mandate conservation of wildlife and their habitats in their natural diversity. Wildlife includes all indigenous species, with their natural behavior, interactions, and cycles continuing. Wilderness designation would provide the Porcupine Plateau WSA with greatest long-term assurance that these qualities of the area’s wildlife would be perpetuated. Subject to the provisions of Management Emergencies (Chapter 2, Section 2.4.2), wilderness would essentially preclude alterations of habitats to favor one species over another and would best protect the free-functioning of the ecological systems and natural processes in which wildlife are embedded. Potential effects of wilderness designation on wildlife research are discussed in the Refuge Operations (Section H.3.2.5).

Wilderness – By definition, wilderness designation preserves wilderness values, including natural scenic conditions, intact ecological processes, and the inherent wild character of its various life forms. Designation would require Refuge management to be more attentive to these qualities and would likely increase public scrutiny of any proposed actions that might diminish them. Wilderness designation could better protect the area’s undeveloped character by potentially precluding structures and installations, such as radio repeater stations, where they are unnecessary for meeting Refuge purposes, including the purposes of the Wilderness Act.



The Refuge has high scientific value as a “natural laboratory” where largely undisturbed wildlife and natural processes can be studied. Wilderness designation would best assure perpetuation of the conditions central to the Refuge’s scientific value. However, the use of certain research methods and tools could be limited because of designation, and this would lessen the scientific value for some studies.

As with the rest of the Refuge, the Porcupine Plateau WSA holds symbolic and existence values for many people who find satisfaction in just knowing the area exists and will be passed on to future generations. While many such values are not quantifiable, they are nonetheless real for many people. Wilderness designation would confer greater overall long-term protection to the resources underlying these intangible values and increase Refuge management’s recognition and consideration of them.

Recreation – The Refuge’s recreation purpose includes provision for a range of activities in a natural, undeveloped setting. Activities include backpacking, river floating, camping, hunting, fishing, wildlife observation, and photography. Adventure, challenge, exploration, discovery, solitude, independence, and self-reliance are important aspects of visitor experience. A recent visitor study (Christensen and Christensen 2009) found that these dimensions continue to be highly important to visitors.

Wilderness designation would not change the current character of the recreational experience. In accordance with the provisions of ANILCA, current means of access, including motorboat, snowmobile, and aircraft use, would continue. In areas where aircraft landings are causing or may cause damage to sensitive surfaces, protective limitations are more likely to be implemented in wilderness. Overall, wilderness would provide the best assurance of long-term protection for the recreational setting and visitor experience dimensions. In particular, designation would decrease the likelihood that recreational developments such as bridges or signs would be placed in the area.

Approximately 160 recreationists visit the Porcupine Plateau WSA each year, and this would not be expected to change with designation. In the medium to long term, protection of natural and experiential conditions could require management intervention, such as placing limits on the number of visitors in areas of concentrated public use (e.g., on some river corridors). Designation could also serve to encourage behaviors that better protect natural conditions, such as Leave No Trace practices.

International treaty obligations – This purpose requires that the area be managed to help fulfill treaty obligations related to the conservation of fish, wildlife, and birds that inhabit Alaska, Canada, and many other nations (Appendix A). As discussed in the Wildlife Purpose section, wilderness designation would likely enhance the long-term protection of all indigenous wildlife, including treaty species. As discussed in Refuge Operations (Section H. 3.2.5), research on treaty species would be subject to an MRA. The MRA could result in modified research protocols, tools, and techniques in order to minimize the potential impacts of research on wilderness character.

Subsistence – The Refuge’s subsistence purpose provides the opportunity for continued subsistence uses by local residents. These uses serve to meet residents’ physical, economic, traditional, and other needs. Wilderness designation would provide further long-term protection for the lands, wildlife, and other resources subsistence users depend on and would serve to perpetuate the natural conditions in which their cultures evolved. Whether the Porcupine Plateau WSA is designated wilderness or managed under Minimal Management, serious declines in subsistence species could be addressed as a management emergency.

However, stronger justification for management actions such as predator control would be required in designated wilderness (see Chapter 2, Section 2.4.2, Management Emergencies).

Current methods and patterns of motorized and non-motorized access would not be affected if the Porcupine Plateau WSA were to be designated as wilderness. The use of temporary structures such as tent camps, tent frames, and fish drying racks would continue. Subsistence use of cabins would continue, although requests for construction or location of new cabins would receive greater scrutiny. Some subsistence users would view the wilderness overlay on their homeland as complementary to their cultural perspective; others would view wilderness as a foreign concept and at variance with their traditional beliefs. In general, subsistence uses in wilderness would continue as they have under Minimal Management, and the subsistence purpose would continue to be met.

Water quality and necessary water quantity – This purpose recognizes that protection of water resources is central to conservation of fish, wildlife, and ecosystems. It establishes a Federal reserved water right for surface waters and groundwater within the area. Wilderness status would provide an additional layer of protection for water resources. As discussed in Refuge Operations (Section H. 3.2.5), research related to water resources would be subject to an MRA; some water research protocols, tools, and techniques might need to be modified to minimize the potential impacts of research on wilderness character.

H.3.2.2 Achieving the Refuge System Mission

The mission of the 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.”

Arctic Refuge has a distinctive role in the Refuge System—exemplifying the qualities of natural condition, wild character, and ecological wholeness. Wilderness designation of this WSA would provide the greatest assurance that the Porcupine Plateau area would remain unaltered and essentially free of the intent to control or manipulate the land, its creatures, and natural processes, thereby ensuring the area retains its ecological integrity now and for future generations. Designation would achieve the purposes of the Refuge System while expanding the range of landscapes, integrity, and values (tangible and intangible) held within it.

H.3.2.3 Purposes of the Wilderness Act and National Wilderness Preservation System

The Wilderness Act states that the purpose of wilderness areas and the NWPS is “to secure for the American people of present and future generations the benefits of an enduring resource of wilderness.” The purpose of designation is to protect and preserve an area’s wilderness character, as described in the Service Manual (610 FW 1.13.). Designation of the Porcupine Plateau WSA would further these purposes by adding an area to the NWPS that exemplifies wilderness character and the full range of its tangible and intangible qualities and experience opportunities. Wilderness status would provide the greatest assurance that the wilderness-associated benefits the area provides would be enduring and available to future generations.

H.3.2.4 Maintenance of Biological Integrity, Diversity, and Environmental Health

Service policy requires that refuges maintain existing levels of biological integrity, diversity, and environmental health as defined in the Refuge Manual (601 FW 3). Currently, in the Porcupine Plateau WSA, these qualities are unaltered and comparable to historic conditions to an exceptional degree in the Refuge System. Wilderness status, with its mandate for maintaining natural and untrammeled conditions, would complement the policy requirement for maintaining these qualities and would further provide statutory protection for them. Should management actions or public uses be proposed that would affect these qualities, they would be much less likely to be approved if the area were designated.

H.3.2.5 Refuge Operations

Wilderness would have a negligible effect on most Refuge operations in the Porcupine Plateau WSA as currently conducted. If designated, all administrative activities in the area would require an MRA, which would take staff time to conduct. However, routine operations, such as public use monitoring, law enforcement, and most fish and wildlife surveys, would only require periodic updating of an initial programmatic MRA, thus the long-term time commitment would be minimal. Research projects involving intrusive methods or tools need to meet the MRA requirement. In particular, the placement of structures or installations and the use of motorized equipment or helicopters would need to be justified as meeting the minimum requirement. They would not be allowed if they do not serve Refuge purposes, including wilderness, and if their benefits are not commensurate with impacts. Wilderness status could increase support and elevate funding priority for management and research projects that address public use impacts or threats such as climate change.

Management actions and research projects proposed by the Service, the State, or other cooperators would be permitted and encouraged, provided they use the minimum means to accomplish their intent and they are necessary to protect Refuge resources, including the wilderness resource. Wilderness designation would not affect the jurisdiction or responsibilities of the State with respect to wildlife, although actions would need to be consistent with maintaining wilderness character; for some activities, an MRA may be required. Wilderness would provide the highest and most permanent level of protection for natural conditions and processes in the Porcupine Plateau WSA, enhancing the scientific value of the area. For some approved projects, the cost of this benefit would be some inconvenience and less efficiency, and the need for more advanced planning, flexibility, and restraint.

H.3.2.6 Evaluation of Manageability for the Porcupine Plateau Wilderness Study Area

To be recommended for designation, the Porcupine Plateau WSA must be capable of being effectively managed as wilderness. In determining manageability, the Service considers factors such as land status and Service jurisdiction, existing inholdings and private rights, Refuge management activities, and public uses.

The Service owns over 99 percent of the Porcupine Plateau WSA. Within it are 12 Native allotments, each 40–160 acres in size, for a total of 1,080 acres. Their current and foreseeable use is consistent with wilderness purposes. Sale to private parties could potentially result in commercial or other development that could detract from the wilderness characteristics of the

immediate area. The Service will continue to offer to purchase inholdings from willing sellers when funding is available.

There are no known external threats that would affect this remote area's manageability as wilderness. The nearest community, Chalkyitsik, is 21 miles from the WSA. Along the area's southwest boundary is an unoccupied 100-acre military site. It consists of five 500-square-foot gravel pads, a frame building, several small structures, generators, and several miles of underground seismic cable. Its presence and infrequent servicing does not affect manageability of the area. Thirty-five percent (206.3 miles) of the WSA is bounded by Arctic Refuge lands, 28.7 percent (167.3 miles) is bordered by Yukon Flats Refuge lands, 15.3 percent (89.3 miles) is bordered by Canada, 12.2 percent (71.2 miles) is bordered by Native-owned lands, and 8.5 percent (89.3 miles) is bordered by BLM lands.

Refuge management activities as they relate to wilderness are described in Refuge Operations (Section 3.2.5). In general, current and foreseeable actions would not interfere with management of the area as wilderness, although in some cases, the methods and tools used may require some modification.

The State of Alaska has identified four travel routes in this WSA that it believes may be claimed as highway rights-of-way under Revised Statute 2477 (Appendix E). These are approximately 91 miles, 50 miles, 23 miles, and 11 miles in length. Should these routes be determined valid and developed as roads, their use by motorized vehicles would affect the wilderness values of adjacent lands. In the unlikely event that a permanent road is developed, the roadway would need to be removed from wilderness status.

The current public uses are largely wilderness-associated and would not interfere with management of the area as wilderness.

In summary, the Porcupine Plateau WSA is sufficiently large, protected, and distant from substantial threats to enable it to be managed as wilderness. This WSA is highly suitable for wilderness designation.

H.3.2.7 Wilderness Recommendation for the Porcupine Plateau Wilderness Study Area

The Porcupine Plateau WSA as depicted in Map H-1 has been determined to be suitable and is preliminarily recommended for wilderness designation. A recommendation is included in two of the draft Plan alternatives. Any recommendations included in the Final Plan will be forwarded by the director of the Service to the Secretary of Interior. The Secretary may forward the recommendation(s) to the President, who may transmit them to Congress. Only Congress can designate wilderness.

H.3.3 Suitability of the Coastal Plain Wilderness Study Area

H.3.3.1 Achieving Refuge purposes

Fish, wildlife, and their habitats – The Refuge’s wildlife purposes mandate conservation of wildlife and their habitats in their natural diversity. Wildlife includes all indigenous species, with their natural behaviors, interactions, and cycles continuing. Wilderness designation would provide the Coastal Plain WSA with greatest long-term assurance that these qualities of the area’s wildlife would be perpetuated. Subject to the provisions of Management Emergencies (Chapter 2, Section 2.4.2), wilderness would essentially preclude alterations of habitats to favor one species over another and would best protect the free-functioning of the ecological systems and natural processes in which wildlife are embedded. Potential effects of wilderness designation on wildlife research are discussed in Refuge Operations (Section H. 3.3.5).

Wilderness – By definition, wilderness designation preserves wilderness values, including the area’s natural scenic conditions, intact ecological processes, and the inherent wild character of its various life forms. Designation would require Refuge management to be more attentive to these qualities and would likely increase public scrutiny of any proposed actions that might diminish them. Wilderness designation could better protect the area’s undeveloped character by potentially precluding structures and installations, such as radio repeater stations, where they are unnecessary for meeting Refuge purposes, including the purposes of the Wilderness Act.

The Refuge has high scientific value as a “natural laboratory” where largely undisturbed wildlife and natural processes can be studied. Wilderness designation would best assure perpetuation of the conditions central to the Refuge’s scientific value. However, the use of certain research methods and tools could be limited because of designation, and this would lessen the scientific value for some studies.



As with the rest of the Refuge, the Coastal Plain WSA also holds symbolic and existence values for many people who find satisfaction in just knowing the area exists and will be passed on to future generations. While many such values are not quantifiable, they are nonetheless real for many people. Wilderness designation would confer greater overall long-term protection to the resources underlying these intangible values and increase Refuge management's recognition and consideration of them.

Recreation – The Refuge's recreation purpose includes provision for a range of activities in a natural, undeveloped setting. Activities include backpacking, river floating, camping, hunting, fishing, wildlife observation, and photography. Adventure, challenge, exploration, discovery, solitude, independence, and self-reliance are important aspects of visitor experience. A recent visitor study (Christensen and Christensen 2009) found these dimensions continue to be highly important to visitors.

Wilderness designation would not change the current character of the recreational experience. In accordance with the provisions of ANILCA, current means of access, including motorboat, snowmobile, and aircraft use, would continue. In areas where aircraft landings are causing or may cause damage to sensitive surfaces, protective limitations are more likely to be implemented in wilderness. Overall, wilderness would provide the best assurance of long-term protection for the recreational setting and experience dimensions valued by visitors. In particular, designation would decrease the likelihood that recreational developments such as bridges or signs would be placed in the area.

Approximately 250 recreationists visit the Coastal Plain WSA each year, and this number would not be expected to change with designation. In the medium to long term, protection of natural and experiential conditions could require management intervention, such as placing limits on the number of visitors in areas of concentrated public use (e.g., on some river corridors). Designation could also serve to encourage behaviors that better protect natural conditions, such as Leave No Trace practices.

International treaty obligations – This purpose requires that the area be managed to help fulfill treaty obligations related to the conservation of fish, wildlife, and birds that inhabit Alaska, Canada, and many nations (Appendix A). As discussed in the Wildlife Purpose section, wilderness designation would likely enhance the long-term protection for all indigenous wildlife, including treaty species. As discussed in Refuge Operations (Section H. 3.3.5), research on treaty species would be subject to an MRA. The MRA could result in modified research protocols, tools, and techniques in order to minimize the potential impacts of research on wilderness character.

Subsistence – The Refuge's subsistence purpose provides the opportunity for continued subsistence uses by local residents. These uses serve to meet residents' physical, economic, traditional, and other needs. Wilderness designation would provide further long-term protection for the lands, wildlife, and other resources subsistence users depend on and would serve to perpetuate the natural conditions in which their cultures evolved. Whether the Coastal Plain WSA is designated wilderness or managed under Minimal Management, serious declines in subsistence species could be addressed as a management emergency. However, stronger justification for management actions such as predator control would be required in designated wilderness (see Chapter 2, Section 2.4.2, Management Emergencies).

Current methods and patterns of motorized and non-motorized access would not be affected if the Coastal Plain WSA were to be designated as wilderness. The use of temporary structures such as tent camps, tent frames, and fish drying racks would continue. Subsistence use of

cabins would continue, although requests for construction or location of new cabins would receive greater scrutiny. Some subsistence users would view the wilderness overlay on their homeland as complementary to their cultural perspective; others would view wilderness as a foreign concept and at variance with their traditional beliefs. In general, subsistence uses in wilderness would continue as they have under Minimal Management and the subsistence purpose would continue to be met.

Water quality and necessary water quantity – This purpose recognizes that protection of water resources is central to conservation of fish, wildlife, and ecosystems. It establishes a Federal reserved water right for surface waters and groundwater within the area. Wilderness status would provide an additional layer of protection for water resources. As discussed in Refuge Operations (Section H. 3.3.5), research related to water resources would be subject to an MRA; water research protocols, tools, and techniques could be modified to minimize the potential impacts of research on wilderness character.

H.3.3.2 Achieving the Refuge System Mission

The mission of the 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.”

Arctic Refuge has a distinctive role in the Refuge System— exemplifying the qualities of natural condition, wild character, and ecological wholeness. Wilderness designation of this WSA would provide the greatest assurance that the Porcupine Plateau area would remain unaltered and essentially free of the intent to control or manipulate the land, its creatures, and natural processes, thereby ensuring the area retains its ecological integrity now and for future generations. Designation would achieve the purposes of the Refuge System while expanding the range of landscapes, integrity, and values (tangible and intangible) held within it.

H.3.3.3 Purposes of the Wilderness Act and National Wilderness Preservation System

The Wilderness Act states that the purpose of wilderness areas and the NWPS is “to secure for the American people of present and future generations the benefits of an enduring resource of wilderness.” The purpose of designation is to protect and preserve an area’s wilderness character, described in the Service Manual 610 FW1.13. Designation of the Coastal Plain WSA would further these purposes by adding an area to the Refuge System that exemplifies wilderness character and the full range of its tangible and intangible qualities and experience opportunities. Overall, the contribution of this area to the NWPS would be high. Wilderness status would provide the greatest assurance that the wilderness-associated benefits the area provides would be enduring and available to future generations.

H.3.3.4 Maintenance of Biological Integrity, Diversity, and Environmental Health

Service policy requires that refuges maintain existing levels of biological integrity, diversity, and environmental health as defined in the Refuge Manual (601 FW 3). Currently, in the Coastal Plain WSA, these qualities are unaltered and comparable to historic conditions to an

exceptional degree in the Refuge System. Wilderness status, with its mandate for maintaining natural and untrammeled conditions, would complement the policy requirement for maintaining these qualities and would further provide statutory protection for them. Should management actions or public uses be proposed that would affect these qualities, they would be much less likely to be approved if the area was designated.

H.3.3.5 Refuge Operations

Wilderness would have a negligible effect on most Refuge operations in the Coastal Plain WSA as currently conducted. If designated, all administrative activities in the area would require an MRA, which would take staff time to conduct. However, routine operations, such as public use monitoring, law enforcement, and most fish and wildlife surveys, would only require periodic updating of an initial programmatic MRA, thus the long-term time commitment would be minimal. Research projects involving intrusive methods or tools need to meet the MRA requirement. In particular, the placement of structures or installations and the use of motorized equipment or helicopters would need to be justified as meeting the minimum requirement. They would not be allowed if they do not serve Refuge purposes, including wilderness, and if their benefits are not commensurate with impacts. Wilderness status could increase support and elevate funding priority for management and research projects that address public use impacts or threats such as climate change.

Management actions and research projects proposed by the Service, the State, or other cooperators would be permitted and encouraged provided they use the minimum means to accomplish their intent and they are necessary to protect Refuge resources, including the wilderness resource. Wilderness designation would not affect the jurisdiction or responsibilities of the State with respect to wildlife, although actions would need to be consistent with maintaining wilderness character; for some activities, an MRA may be required. Wilderness would provide the highest and most permanent level of protection for natural conditions and processes in the Coastal Plain WSA, enhancing the scientific value of the area. For some approved projects, the cost of this benefit would be some inconvenience and less efficiency, and the need for more advanced planning, flexibility, and restraint.

H.3.3.6 Evaluation of Manageability for the Coastal Plain Wilderness Study Area

To be recommended for designation, the Coastal Plain WSA must be capable of being effectively managed as wilderness. In determining manageability, the Service considers factors such as land status and Service jurisdiction, existing inholdings and private rights, Refuge management activities, and public uses.

The Service owns nearly 94 percent of the Coastal Plain WSA. Within it are 29 Native allotments, each 40–160 acres in size, for a total of 1,520 acres. Their current and foreseeable use is consistent with wilderness purposes. Sale to private parties could potentially result in commercial or other development that could detract from the wilderness characteristics of the immediate area. The Service will continue to offer to purchase inholdings from willing sellers when funding is available.

There are no known external threats that would affect the area's manageability as wilderness, although potential oil development beyond the area's western boundary or nearby in the Beaufort Sea could adversely affect the area's wilderness characteristics for the life of the

development. Forty-six percent (126.9 miles) of the area is bordered by the Beaufort Sea, 36 percent is bordered by Arctic Refuge lands, and 17 percent (60.2 miles) is bordered by non-refuge lands.

Refuge management activities as they relate to wilderness are described in Refuge Operations (Section 3.3.5). In general, current and foreseeable actions would not interfere with management of the area as wilderness, although in some cases, the methods and tools used may require some modification.

The State of Alaska has identified three travel routes in this WSA that it believes may be claimed as highway rights-of-way under Revised Statute 2477 (see Appendix E). They are approximately 22 miles, 1.4 miles, and .03 miles in length. Should these routes be determined valid and be developed as roads, their use by motorized vehicles would affect the wilderness values of adjacent lands. In the unlikely event that a permanent road is developed, the roadway would need to be removed from wilderness status.

The current public uses are largely wilderness-associated and would not interfere with management of the area as wilderness. However, a 29,160-acre area of lagoon waters near Kaktovik (Map H-3) has been determined to be not suitable for wilderness designation. This area is in addition to and adjacent to the waters near Kaktovik that were found to be not qualified for wilderness status. This area is non-suitable because it is a high-use area for Kaktovik and sees frequent use of motorized vehicles. Kaktovik, the only village that uses this WSA, is 6–18 miles from wilderness-suitable lands.

In summary, the Coastal Plain WSA is sufficiently large, protected, and distant from substantial threats to enable almost all of it to be managed as wilderness. With the exception of the non-qualified (9,978 acres) and non-suitable areas (29,160 acres) identified in Map H-4, this WSA is highly suitable for wilderness designation. The qualified and suitable portion of this WSA totals 1,607,433 acres, or approximately eight percent of the Refuge.

H.3.3.7 Wilderness Recommendation for the Coastal Plain WSA

The Coastal Plain WSA as depicted in Map H-4 has been determined to be suitable and is preliminarily recommended for wilderness designation. A recommendation is included in two of the draft Plan alternatives. Any recommendations included in the Final Plan will be forwarded by the director of the Service to the Secretary of Interior. The Secretary may forward the recommendation(s) to the President, who may transmit them to Congress. Only Congress can designate wilderness.

H.4 References cited

- Christensen, N. and L. Christensen. 2009. Arctic National Wildlife Refuge visitor study: The characteristics, experiences, and preferences of refuge visitors. Christensen Research, Missoula, Montana.
- Clough, N.K., P.C. Patton, and A.C. Christiansen, editors. 1987. Arctic National Wildlife Refuge, Alaska, coastal plain resource assessment: Report and recommendation to the Congress of the United States and final legislative environmental impact statement. U.S. Fish and Wildlife Service, U.S. Geological Survey, and Bureau of Land Management, Washington, D.C., USA.
- Hamilton, S. 2010. Memorandum from Service Director Sam D. Hamilton to Regional Director, Region 7, January 28, 2010. Alaska national wildlife refuge wilderness reviews. U.S. Fish and Wildlife Service, Washington, D.C., USA
- Turner, J.F., 1991. Director, U.S. Fish and Wildlife Service to Assistant Secretary for Fish and Wildlife and Parks. Wilderness proposals for national wildlife refuges in Alaska. U.S. Fish and Wildlife Service, Washington, D.C., USA
- U.S. Department of the Interior. Undated. Arctic National Wildlife Range, Alaska: Wilderness proposal. U.S. Fish and Wildlife Service, Arctic National Wildlife Refuge, Fairbanks, Alaska, USA.
- U.S. Department of the Interior. 1978. Draft environmental impact statement: Proposed arctic wilderness, Alaska. U.S. Fish and Wildlife Service, Arctic National Wildlife Refuge, Fairbanks, Alaska, USA. U.S.
- U.S. Fish and Wildlife Service. 1988. Arctic National Wildlife Refuge final comprehensive conservation plan, environmental impact statement, wilderness review, and wild river plans. U.S. Fish and Wildlife Service, Region 7, Anchorage, Alaska, USA.
- U.S. General Accounting Office. 1989. Alaska wildlife refuges: Restrictive criteria used to recommend additional wilderness. Publication GAO/RCED-89-155. General Accounting Office, Washington, D.C., USA.
- Wilderness and Wild Rivers Planner. 1982. Wilderness evaluation of the 1002C area. U.S. Fish and Wildlife Service, Arctic National Wildlife Refuge, Fairbanks, Alaska, USA.

H.5 Appendix: Previous Wilderness Reviews

Pursuant to the Wilderness Act of 1964, the Service conducted a wilderness review of all lands within the 8.9-million acre Arctic National Wildlife Range (Arctic Range) in the early 1970s. The final report (U.S. Department of the Interior, undated) and the supporting draft environmental impact statement (U.S. Department of the Interior 1978) concluded the entire area had “outstanding wilderness qualities” and was suitable for inclusion within the NWPS with the following exceptions: the land occupied by Kaktovik; an adjacent 4,359-acre military withdrawal; 69,120 acres in the vicinity of Kaktovik that would be selected by Native village and regional corporations; 10 acres surrounding the G. William Holmes Research Station at Peters Lake; and 10-acre, 456-acre, and 420-acre tracts surrounding the former Demarcation Point, Camden Bay, and Beaufort Lagoon former Distant Early Warning Line sites, respectively. (The building complexes at these sites have since been removed.)

Action on the wilderness proposal was held up—first pending a decision on the route of a proposed arctic gas pipeline, then pending debate on the “(d)(2)” provisions of ANILCA. In the late 1970s, it was decided that pending ANILCA legislation would be the vehicle for determining which areas Congress might designate as wilderness. In 1980, ANILCA designated all the original Arctic Range as wilderness, except a portion of the Coastal Plain (now unofficially called the “1002 Area”). In 1982, an informal wilderness review of the Refuge’s coastal plain was conducted (Wilderness and Wild Rivers Planner 1982), and it concluded the entire area except for the Distant Early Warning Line sites (now largely restored) met the requirements for wilderness classification.

Wilderness reviews were a major component of the Refuge’s 1988 Plan (Service 1988). That process formally examined all non-wilderness portions of the Refuge except for the 1002 Area. Consideration of the 1002 Area was deferred to a separate environmental study, as required by Section 1004 of ANILCA, resulting in a document known as the Coastal Plain Resource Assessment (Clough et al. 1987). The 1987 assessment analyzed the area’s wilderness qualities, finding that “with the exception of the two abandoned Distant Early Warning Line sites on the coast, the entire 1002 Area meets these [wilderness] criteria.” Although a wilderness designation alternative was considered, the assessment recommended to Congress a full oil and gas leasing alternative. Since that time, Congress has debated numerous bills that would either open the 1002 Area to oil and gas development or preserve it as wilderness.

In analyzing the wilderness suitability of non-1002 lands, the 1988 Plan divided the remaining non-wilderness areas of the Refuge into two wilderness inventory units: Brooks Range and Porcupine Plateau. Seven criteria derived from the Wilderness Act of 1964 were used in evaluating the wilderness qualities of these units: land ownership, natural integrity, apparent natural condition, opportunities for solitude, opportunities for primitive recreation, size, and the presence of special or unique features.

As a result of this analysis, the 1988 Plan concluded that both units met all seven wilderness criteria and were suitable for wilderness designation. However, the record of decision did not recommend either area as wilderness.

In September 1989, the General Accounting Office issued a report that concluded the Service had used overly restrictive criteria in evaluating potential wilderness for Alaskan refuges and did not meet congressional intent in regard to ANILCA Section 1317 (wilderness reviews). The report featured Arctic Refuge as a case study, noting that the 1988 comprehensive conservation planning team’s preferred alternative was to recommend 9.7 million acres for

wilderness designation and that a “vast majority” of public comments favored adding more wilderness to the Refuge. In response to the General Accounting Office report, Service Director John Turner revisited the issue in January 1991, and revised the Service’s recommendations for new wilderness for seven Alaskan refuges. He recommended to the Department of the Interior an additional 5.2 million acres for wilderness designation in Arctic Refuge, noting that “the public has been almost unanimous in its support for additional wilderness for the Arctic Refuge” (Turner 1991). That recommendation included the entire Brooks Range review unit. The recommendation has not been acted upon.

