1.1 Scope. This chapter applies to the following Service lands: Congressionally designated wilderness areas; areas currently being considered by Congress for wilderness; areas recommended for wilderness designation by the President to Congress; areas recommended for designation by the Director of the U.S. Fish and Wildlife Service (Director) and the Secretary of the Interior (Secretary); and wilderness study areas.

In Alaska, this chapter applies only to Congressionally designated wilderness areas per Section 1317(c) of the Alaska National Interest Lands Conservation Act.

1.2 Policy. Wilderness areas will be managed as a part of the entire Service land unit in compliance with the Wilderness Act, and, in Alaska, the Alaska National Interest Lands Conservation Act (ANILCA). Ecosystems and their components do not recognize administrative boundaries. Therefore, a holistic management strategy will be applied to Service lands where wilderness has been designated, identified as a study area, or recommended for inclusion in the National Wilderness Preservation System (Wilderness System).

Wilderness areas will be managed to preserve the interaction of natural processes with the land using the minimum requirements necessary to safely accomplish the Service's mission. Wilderness management activities will be planned and carried out to conform with the Wilderness Act's purpose of securing "an enduring resource of wilderness" for the American people. Activities must be compatible with the purposes for which the Service land unit was established, the goals of the respective Service lands system, Wilderness protection, and the unit's objectives. All management decisions affecting wilderness will apply the concepts of minimum requirements for the administration of the area regardless of wilderness category.

1.3 Objectives. The Service's management objectives for wilderness are to:

A. Fulfill the purposes for which the Service land system and Wilderness System were established.

B. Maintain and perpetuate an enduring resource of wilderness for future use and enjoyment as wilderness.

C. Maintain wilderness in a condition that appears to have been primarily affected by the forces of nature, with the impact of man's work substantially unnoticeable.

D. Protect and perpetuate wilderness character and values, and public values including, but not limited to, opportunities for scientific study, education, historical use, solitude, physical and mental challenge and stimulation, inspiration, and primitive recreation.

E. Gather information and carry out research, in a manner compatible with preserving the wilderness environment, to increase understanding of wilderness ecology, wilderness uses,

management opportunities, and visitor behavior, use patterns and expectations.

1.4 Authorities. Authorities listed are those that directly affect wilderness management on Service lands.

A. Wilderness Act of 1964; Public Law 88-577. Sections applicable to Service Wilderness Areas include: Section 2, Wilderness Policy; Section 3(c), (d), and (e), Wilderness Reviews; Section 4(a) and (b), Use of Wilderness Areas; Section 4(c), Prohibition of Certain Uses; Section 4(d)(1), (6), and (7), Special Provisions; Section 6(b), Contributions and Gifts; and Section 7, Annual Reports. Sections that apply to National Forest Wilderness areas established by the Act provide criteria that can be used to establish general management guidelines and policies for individual Service areas.

B. Alaska National Interest Lands Conservation Act (ANILCA) of 1980; Public Law 96-487. Sections that apply to wilderness management in Alaska include Section 304, Refuge Administration; Section 702, designation of wilderness in Alaska refuges; Section 811, Subsistence Access; Section 1010, Alaska Mineral Resources Assessment Program; Section 1107, Rights-of-Way Terms and Conditions; Section 1110, Special Access and Access to Inholding; Section 1111, Temporary Access; Section 1302, Land Acquisition Authority; Section 1310, Navigational Aids and Other Facilities; Section 1315, Wilderness Management; Section 1316, Allowed Uses; and Section 1317, Wilderness Review.

C. Title 50 Code of Federal Regulations Part 35; 43 U.S.C. § 1201.

D. Clean Air Act of November 1990; Public Law 101-548. The Service is responsible under Section 165 of the Clean Air Act (CAA) to protect the air quality related values of Class I air quality areas (Appendix 2). The Service is responsible for the review of air quality permit applications for new and modified sources that may impact Class I areas. The primary regulations that affect new major sources and modifications are the Prevention of Significant Air Quality Deterioration (PSD) regulations (40 CFR 52.21). The goals of the PSD program are "to protect, preserve, and enhance the air quality in national parks, national wilderness areas, national monuments, national seashores, other areas of special national or regional natural, recreational, scenic, or historic value" (see CAA, Section 160). The Air Quality Branch is responsible for reviewing PSD permit applications for sources that may potentially impact Class I and Class II areas administered by the Service.

E. Specific Service Wilderness Area Authorities. Public Laws 90-532, 91-504, 92-364, 93-429, 93-550, 93-632, 94-557, 95-450
96-487, 96-560, 97-211, 98-140, and 101-628.

F. National Historic Preservation Act, 16 U.S.C. § 470 et seq.

G. Archeological Resources Protection Act, 16 U.S.C. § 470aa et seq.

H. The Antiquities Act of 1906, 16 U.S.C. § 431.

I. American Indian Religious Freedom Act, 42 U.S.C. § 1996.

J. Americans with Disabilities Act of 1990, 42 U.S.C. § 12207.

K. Native American Graves Protection and Repatriation Act, 25 U.S.C. § 3001 et seq.

1.5 Stages of Wilderness Area Development.

A. The wilderness review process has three phases: inventory, study, and recommendation. We will identify lands and waters that meet the minimum criteria for wilderness (inventory), and then further evaluate the resulting WSAs (study) to determine if they merit recommendation for inclusion in the Wilderness System (recommendation).

B. Recommended Wilderness. Areas studied and found suitable for wilderness designation by both the Director and Secretary, and recommended for designation by the President to Congress. These areas await only legislative action by Congress in order to become part of the Wilderness System. Such areas are also referred to as "pending in Congress."

C. **Designated Wilderness Area**. An area designated by the United States Congress to be managed as part of the Wilderness System.

D. Additional definitions are found in Appendix 1.

1.6 Responsibilities.

A. Washington, D.C. Office. The Service's national office coordinates Congressional review of areas recommended for wilderness designation, prescribes policies for wilderness management, coordinates with other agencies in the preparation of the President's Annual Report (Annual Report) to Congress on the status of the Wilderness System, prepares the Annual Report, coordinates wilderness management policies with other wilderness management agencies (Bureau of Land Management, National Park Service, and Forest Service), and maintains routine contact with Service Regional Wilderness coordinators.

The Denver Air Quality Branch of the Division of Refuges coordinates and provides services to Regional and refuge offices concerning air quality management of wilderness areas.

B. Regional Office. The Regional Office designates a wilderness coordinator to serve as a liaison between the Washington Office and Project Leaders, provides annual information to the Washington Office sufficient for the preparation of an Annual Report to Congress, and conducts routine reviews of Service lands and coordinates the nomination of Service lands for inclusion in the Wilderness System.

C. Project Leader. The project leader manages, protects, and monitors wilderness areas in accordance with Service policy and the unit's Wilderness Management Plan (WMP), prepares the

unit's WMP, and provides annual information to the Regional Office on the status of ongoing inventories and research initiatives used to monitor wilderness areas.

1.7 Consistency. We will seek to achieve consistency in wilderness managemetn objectives, techniques, and practices on both an agency and an interagency basis. Accordingly, we will maintain effective interagency and interagency communications and will encourage, sponsor, and participate in interagency training and workshops designed to promote the sharing of ideas, concerns, and techniques related to wilderness management. This will in no way diminish and established Service wilderness standards and values.

2.1 Wilderness Evaluation. We will conduct wilderness reviews as part of the Comprehensive Conservation Planning (CCP) process (See 602 FW2, Planning), although we may conduct them at any time. The President may recommend designation of wilderness areas, but Congress reserves the authority to make final decisions on wilderness designations. In addition, Congress may direct the study of specific areas and provide other guidance on wilderness evaluations through legislation.

We will review lands for wilderness suitability consistent with provisions of the Wilderness Act, National Environmental Policy Act (NEPA), National Historic Preservation Act, and other applicable legislation.

The wilderness review process has three phases: inventory, study, and recommendation.

(l) Inventory.

We will inventory Service lands and waters to identify areas that meet the definition of wilderness as defined in the Wilderness Act, in accordance with the criteria below. Upon completion of the inventory, we will designate lands that meet the criteria as WSAs. The area must:

(1) Be affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable.

(2) Have outstanding opportunities for solitude or a primitive and unconfined type of recreation.

(3) Have at least 5,000 contiguous roadless acres or be sufficient in size as to make practicable its preservation and use in an unimpaired condition, or we could restore the wilderness character through appropriate management.

(4) Not substantially exhibit the effects of logging, farming, grazing, or other extensive development or alteration of the landscape, or we could restore the wilderness character through appropriate management, at the time of review.

(5) Be a roadless island; or

(6) Contain ecological, geological, or other features of scientific, educational, scenic or historical value.

(2) Study

a. We will study each WSA through the CCP process to analyze all values, resources, and uses within the area. The findings of the study determine whether we will recommend the area for designation as wilderness. We will evaluate lands and waters possessing the characteristics and values of wilderness, as defined in the Wilderness Act, for recommendation to the Secretary as suitable for wilderness designation based on the following considerations:

(1) The minimum size is at least 5,000 contiguous roadless acres or of sufficient size to make practicable its preservation, e.g., an area contiguous with a designated or recommended wilderness, or other undeveloped area of Service land, or land administered by another Federal agency, or any roadless island (e.g., island surrounded by water).

(2) Lands logged, farmed, grazed, or otherwise used in ways not involving

extensive development or alteration of the landscape, if at the time of review the effects of these activities are substantially unnoticeable or we could restore their wilderness character through appropriate management.

(3) Lands with established or proposed management practices that require the use of structures, motorized equipment, or motorized or mechanized transport, if they are necessary for the health and safety of visitors or protection of the wilderness resource.

(4) Lands with prior rights or privileges, such as grazing or limited commercial services, provided the operations do not involve the routine use of motorized equipment or motorized or mechanized transport, and do not involve development to the extent that the human imprint is substantially noticeable. In Alaska, routine use of motorized transport (including motorboats, airplanes, and snow machines) to support these operations is allowed in wilderness and therefore should not be used as the sole reason to not recommend the lands for wilderness designation.

(5) Lands subject to surface and subsurface mineral exploration and development, including oil and gas, only if it is likely that we will relinquish, acquire, exchange, or otherwise eliminate the mineral rights in the foreseeable future.

(6) Lands containing unimproved roads, structures, installations, or utility lines, if we can remove them upon the area's designation as wilderness, or if their retention is consistent with wilderness (i.e., historic structures or facilities needed for protection of wilderness resources). We may include areas containing underground utility lines if they otherwise qualify as wilderness, and maintenance of the utility lines does not require the routine use of motorized or mechanized equipment.

(7) Lands used for research, unless the research requires permanent structures or facilities not needed for wilderness management.

b. As required by the Wilderness Act, we must give public notice of a wilderness proposal; hold a public hearing; and advise the Governor of the State, the governing board of each county or borough, and Federal departments and agencies concerned of our intent and invite comment.

(3) Recommendation.

a. Prior to approval of the CCP, the RD must notify the Director of the Region's tentative wilderness suitability recommendations on WSAs or other roadless areas evaluated and include a wilderness study report that presents the results of the review and a wilderness recommendation. The study report will draw from several elements of the review process, including the CCP, the Environmental Assessment or Environmental Impact Statement, and the results of public participation.

b. **Wilderness Study Report**. The study report will contain the following information:

a. The RD's wilderness recommendation and rationale.

b. Documentation of the evaluation.

c. Evidence of public notice of the proposal, including publication in the *Federal Register*, and notices in local newspapers.

d. Evidence that we notified the governor and other concerned officials at least 30 days before public hearings were held.

e. Summary and analysis of the public hearing record and other comments received.

f. Evidence of direct notification and request for comments from the State Historic Preservation Officer regarding the presence or absence of significant cultural resources.

g. A map of the area.

[Can we be more specific? Do we need to require a minimum scale or certain features?]

h. A legal description.

I. Appropriate NEPA documentation (EIS, EA, Finding of no Significant Impact), if the wilderness review was conducted outside the CCP process.

c. Following CCP approval, the RD will transmit the following additional documentation in support of the Region's wilderness recommendation to the Director for review in preparation for the Director's recommendation to the Secretary. Documentation will include:

(1) A draft letter from the Director to the Secretary.

(2) A draft letter from the Secretary to the President.

(3) A draft letter from the President to the House and Senate.

(4) Draft legislative language.

(5) A copy of the unit's CCP and final Environmental Assessment (EA) or Environmental Impact Statement (EIS).

d. The Director will review the preliminary wilderness recommendation and supporting documentation and make the final Service recommendation for the Secretary's consideration and the President's recommendation to Congress.

e. When the Congress designates an area as wilderness, it becomes part of the National Wilderness Preservation System and we will manage it as a designated Wilderness in accordance with 610 FW.

f. If we determine that no areas qualify as WSAs, we must submit a brief report to the Director that documents the unsuitability of the lands and waters for wilderness recommendation.

B. Relationship to Acquisition Planning. When we inventory lands and resources of the proposed unit, and identify management problems, needs, and opportunities during acquisition planning, we will also include a preliminary inventory of the wilderness resources of the proposed unit in the land acquisition planning process (see 602 FW 1). We will discuss potentially suitable areas in the Land Protection Plan and associated NEPA document.

C. Review Outside of Comprehensive Management Planning Process.
At any time before or after a CCP has been developed, if additional information becomes available, if we have acquired additional lands, or if restoration activities have significantly modified Service lands, the project leader may conduct a wilderness suitability review, following the process described above.

2.4 Potential Wilderness. If your wilderness review identifies lands surrounded by or adjacent to lands recommended for wilderness designation, but that do not themselves qualify for immediate designation due to temporary nonconforming conditions, you may include them in your wilderness recommendation as potential wilderness. Your legislative proposal may recommend these lands for future inclusion in wilderness when the nonconforming conditions have been removed. If so authorized by Congress, the Secretary will designate these potential wilderness areas as wilderness with a determination published in the *Federal Register* that they meet the designation qualifications.

2.5 Interim Management of Wilderness Study Areas, Recommended Wilderness, and Potential Wilderness. We will take no action to diminish the wilderness character of potential willderness; an area under wilderness review or pending completion of the planning process; or of a recommended wilderness, pending completion of the legislative process; or of an area found suitable for wilderness, pending action by the Secretary. If we currently permit certain activities, they may continue, pending designation, if the activities do not compromise wilderness values. In Alaska, Section 1317(c) of ANILCA provides that designation of a wilderness study area or the possibility that we may designate the lands in question as wilderness in the future does not affect our normal administration of refuge areas. Management direction prescribed in the current comprehensive conservation plan for the refuge will guide the management of these areas. [Shall we strengthen this and say that, except where ANILCA applies, these areas should be managed as if they were wilderness? It seems we may have been loosely interpreting the meaning of "we will take no action to diminish the wilderness character of an area."]

2.6 Modification. Any boundary modification or adjustment of a designated wilderness area shall be recommended in accordance with the procedures contained in the Wilderness Act and the Service's CCP process. The authority to take such action rests with Congress.

3.1 General. The intent of the Wilderness Act is not to invalidate or amend laws governing the administration and management of Service lands, waters, and interests. All laws governing the administration of Service lands remain intact. However, Congress has superimposed constraints on how wilderness can be managed to meet unit objectives. Wherever a wilderness area is designated on Service lands, the preservation of wilderness character and resources becomes a statutory purpose of the unit along with the purposes for which the unit was established and is administered. Activities that do not permanently alter the natural processes that interact with the land may be permitted.

Resource management activities in wilderness will be planned and conducted to conform with the Wilderness Act's purpose of securing an enduring resource of wilderness, where natural ecological processes operate freely and the area is affected primarily by the forces of nature. Activities will emphasize the protection of natural processes and be guided by the minimum requirement concept. (See Appendix xxx)

The following policies provide guidance for specific management activities. Wilderness managers must use their best judgement in applying these policies and guidelines to particular situations. Uses and values will vary between wilderness areas and often between different parts of an individual wilderness.

Minimum Requirement. All management decisions affecting wilderness must be consistent with the minimum requirement concept. This concept is a documented process used to determine if administrative activities affecting wilderness resources or the visitor experience are necessary and how to minimize impacts. The minimum requirement concept will be applied as a two-step process that determines:

• Whether or not the proposed management action is appropriate or necessary for administration of the area as wilderness; and does not pose a significant impact to wilderness resources and character; and

• The techniques and type of equipment needed to ensure that impact to wilderness resources and character is minimized.

In accordance with this policy, managers will apply the minimum requirement concept in the context of wilderness management planning as well as to all other administrative practices, proposed special uses, scientific activities and equipment use in wilderness. When determining minimum requirement, the potential disruption of wilderness character and resources will be considered before, and given significantly more weight than, economic efficiency and convenience. If a compromise of wilderness resources or character is unavoidable, only those actions that preserve wilderness character and/or have localized, short-term adverse impacts will be acceptable. These actions should be rare and temporary.

While managers have flexibility in identifying the method used to determine minimum requirement within the approved wilderness management plan, the method used must clearly weigh the benefits and impacts of the proposal, document the decision process, and be supported by an appropriate environmental compliance document. Refuges with no approved wilderness management plan must develop a separate process to determine minimum requirement until the plan is finally approved. Refuges will complete a minimum requirement analysis on those administrative practices and equipment uses that have the potential to impact wilderness resources or values. The minimum requirement concept cannot be used to rationalize permanent roads or inappropriate or unlawful uses in wilderness.

Administrative use of motorized equipment or mechanical transport will be authorized only:

• If determined by the manager to be the minimum requirement needed by management to achieve the purposes of the area as wilderness, including the preservation of wilderness character and values, or

• In emergency situations (search and rescue) involving the health or safety of persons actually within the area. Such management activities will be conducted in accordance with all applicable regulations, policies, and guidelines, including minimum requirement protocols as practicable.

Such management activities will also be conducted in accordance with all applicable regulations, policies, and guidelines and, where practicable, will be scheduled to avoid creating adverse resource impacts or conflicts with visitor use. Furthermore, only those managers who have attended the Arthur Carhart Wilderness Training Center national wilderness stewardship course may make a minimum requirement decision.

3.2 Administration.

A. Use of Motorized Equipment.

(1) Under 16 U.S.C. § 1133(c) motorized equipment use in wilderness areas is prohibited, except as authorized by the Act itself or other Federal statute. One exception granted in the Act is that motorized equipment may be used when necessary to meet minimum requirements for the administration of the area (including emergency measures for the health and safety of persons within the area) for the purposes of the Wilderness Act. The determination of when motorized equipment constitutes the minimum requirement must be documented in each unit's approved WMP or in a specific determination approved by the RD. Examples of special situations include:

(a) Emergency situations involving public health and safety, including search and rescue operations, criminal pursuit, and hazardous material spills.

(b) Activities essential to accomplishing unit purposes, only after a minimum requirement analysis has been performed and documented. Examples may include: supplying water by truck to bighorn sheep water tanks if the tanks dry up and the only means of supplying water is by hauling it; the landing of helicopters for endangered species habitat management or surveys; or

airlifting composting toilets.
[Need better examples]

(2) Use of motorized equipment by the public. Use of motorized equipment by the public on wilderness is prohibited except for:

(a) Access to inholdings effectively surrounded by wilderness.

(b) Removal of aircraft wreckage when nonmotorized methods are unsuitable.

(c) Access authorized by ANILCA and 43 CFR Part 36 in Alaska wilderness.

B. Mechanical Transport. Mechanical transport (definition, Appendix 1) may only be used if it is the minimum requirement necessary to meet unit purposes and wilderness objectives safely and without long-term impairment to the area's wilderness character. Mechanical transport is prohibited in the routine administration of the wilderness except where Congress specifically authorizes such use in the establishing laws or in other laws such as ANILCA. The determination of when mechanical transport constitutes the minimum requirement must be documented through a written minimum requirement analysis or in a specific determination approved by the RD.

However, in Alaska, as discussed below, the minimum requirement concept for mechanical transport has no application to local rural residents engaged in travel for subsistence purposes.

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On wilderness lands in Alaska, the use of snow machines, motorboats (excluding airboats), airplanes, and nonmotorized surface transportation methods are permitted for traditional activities and for travel to and from villages and homesites, subject to reasonable regulations to protect the land's natural and other values (Sections 811 and 1110 of ANILCA and 50 CFR § 36.12). Any access restrictions will require appropriate notice and public hearings in the vicinity of the affected area. The State of Alaska and private landowners shall be allowed adequate access to their land, including areas of subsurface rights, for economic or other purposes when the land is effectively surrounded by wilderness. Such rights are subject to reasonable regulations to protect resource values.

Access for the disabled will be allowed in accordance with Section 507(c) of the Americans with Disabilities Act of 1990 (P.L. 101-336). (See 630 FW 1, Public Use and Definitions, Appendix 1)

D. Facilities. A decision to construct, maintain, or remove an administrative facility will be based primarily on whether the facility is required to preserve wilderness character or values or is essential to ensure public safety, not on consideration of administrative convenience, economy of effort, or convenience to the public. Maintenance or removal of historic structures will comply with cultural resource protection policies (Refer to 1.4 Authorities, Sections F, G, H, I, J, K).

(1) Road Closures and Eradication. Roads in existence at the time of wilderness designation will be evaluated in the WMP. Abandoned roads within wilderness may be used as trails or restored to natural conditions. Unpaved trails and trail bridges may be provided where they are essential for resource protection or where significant safety hazards exist during normal use periods. Where it is necessary to restore sites that have been significantly altered by human activity (removal of buildings, road closures, etc.), the restorations should be accomplished using the minimum tool necessary. Native plant species may be planted; however, regeneration by natural succession is preferred to plantings if soil and climate conditions permit.

(2) Buildings and Other Structures. Facilities essential to accomplish unit purposes or protect the wilderness area (such as wildlife watering areas, enclosures, patrol cabins, heliports, airstrips, or temporary fencing) may be permitted, but they should be located outside wilderness. In all instances, facilities should be designed and constructed using native materials, so as to blend into the natural landscape. Existing structures, buildings, or sites that, after consultation with the State Historic Preservation Officer and in the opinion of the Regional Director, meet the criteria for listing in the National Register of Historic Places, will also be permitted.

Facilities not essential to accomplish unit purposes or protect the wilderness area should be removed and the site should be restored. Removal and restoration should be accomplished using the minimum tool necessary. Removal must be carried out in accordance with 36 CFR, Part 800, the regulations for implementing the National Historic Preservation Act.

E. Commercial Uses. Wilderness-oriented commercial services, such as guiding and outfitting that contribute to achieving public enjoyment of wilderness values or that provide opportunities for primitive and unconfined types of recreation, may be authorized so long as they are not in conflict with unit purposes and are managed in concert with Service policies (see 630 FW 7).

In Alaska, ANILCA authorizes the use of temporary campsites, tent platforms, shelters, and other temporary facilities related to the authorized taking of fish and wildlife if they are not detrimental to unit purposes or the wilderness character of the area. Included are temporary facilities used by guides, outfitters, commercial fishermen, and transporters. Such facilities and equipment must be constructed, used, and maintained in a manner consistent with the protection of the wilderness values of the area. All new facilities are to be constructed of materials that blend with the landscape. Such facilities will be managed through Special Use Permits.

In Alaska, campsites, cabins, motorized vehicles, and aircraft landings directly related to commercial fishery operations are permitted. However, these facilities and activities must be consistent with unit purposes and must not constitute an expansion beyond the level of such activity in 1979.

F. Mineral Exploration and Development.

(1) Alaska Wilderness. Section 1010 of ANILCA, the Alaska Mineral Resource Assessment Program, requires the Secretary to assess oil, gas, and other mineral potential on all public lands in Alaska, including wilderness. The mineral assessment program may include, but is not limited to, techniques such as side-looking radar and core and test drilling (does not include exploratory drilling of oil and gas test wells).

Geological and geophysical exploration activities that do not require the use of motorized equipment, may be permitted on designated wilderness areas if they are compatible with unit purposes and can be conducted in a manner that will preserve the wilderness character of the area.

(2) Wilderness Outside Alaska. Nothing in this policy shall be applied so as to contravene or nullify valid rights vested in holders of mineral interest on Service wilderness areas. All claimants must comply with reasonable conditions for the protection of wilderness values. Mineral development or exploration activities should be conducted without interfering with the operation of the unit or disturbing wildlife. Use and occupancy of the area must be kept to the minimum necessary for conducting efficient mineral operations. Persons conducting mineral operations must comply with all applicable Federal and State laws and regulations for protecting wildlife and administering the area. Structures and equipment must be removed from the area when they are no longer needed. When operations are completed, the area shall be restored as nearly as possible to its previous condition.

G. Other Uses. Existing uses of wilderness areas that do not conform to wilderness policy or existing facilities, such as lighthouses and underground pipelines, will be identified when wilderness proposals are presented to Congress. If the establishing act does not contain guidance on the management of such uses or facilities, they should be evaluated for historical significance and utility for accomplishing wilderness or refuge purposes. Management decisions concerning maintenance, removal, and use of structures, more than 50 years old or of particular historical value, must be made in consultation with the Regional Historic Preservation Officer for the Service. If the building or other structure is determined to be eligible for listing on the National Register of Historic Places under the procedures established in 36 CFR, Part 60, the building should normally be retained and maintained using the minimum requirement policy, although it may be adapted for uses specifically permitted by the Wilderness Act. Any decision to demolish a historic building or allow it to deteriorate naturally, must be made in consultation with the Regional Historic Preservation Officer.

If a structure is not historically significant, it may be maintained for continued use if it meets the minimum requirement policy or if it is necessary for a use specifically permitted by the Wilderness Act, ANILCA, or by the law designating the wilderness. A structure that does not qualify for retention will be removed. In maintaining or modifying existing structures, native materials should be used to the extent feasible to make the structures as unobtrusive as possible.

New facilities identified in Section 1310 of ANILCA may be established on wilderness areas in

Alaska after consultation between the head of the requesting Federal agency and the Secretary, and in accordance with such terms and conditions mutually agreed upon to minimize the adverse effects of such facilities.

Existing defense facilities may be operated and maintained on wilderness areas. New facilities may be permitted only if no alternative site exists outside wilderness boundaries and after consultation and agreement between the appropriate department or agency heads. Military exercises and other activities are not allowed in wilderness areas.
[What's the citation for this?]

Wilderness status does not alter the U.S. Coast Guard's right of access to operate lighthouses; however, motorized vehicles may be used only if they are the minimum requirement .

3.3 Resource Management

A. Water Management and Prospecting. Prospecting for water and the establishment of new reservoirs, water conservation works, power projects, transmission lines, and other facilities needed in the public interest, and the subsequent maintenance of such facilities may be permitted if specifically authorized by Congress. Such special authorization is not required for range and wildlife water enhancements, discussed later. The Service's conclusions and recommendations in connection with such proposals must be based upon comprehensive environmental analysis, in full compliance with NEPA. The final EIS requires the Director's approval. Any recommendation in favor of the proposal must be based upon a clear showing that the public values to be gained exceed the values that would be lost, and that the need cannot be met outside the wilderness. The determination of how water prospecting, development, and management will be carried out must be documented in each refuge's approved WMP.

B. Research and Management Surveys. Research and management surveys are permitted and encouraged when conducted in a manner to preserve the wilderness character and further the management, scientific, and educational purposes of the area. Research and monitoring devices and methods that temporarily infringe on the wilderness environment may be used if alternative methods and locations are not available, and if they represent the minimum requirement . Non-Service research activities may be allowed pursuant to the terms and conditions of a Special Use Permit.

Helicopter and fixed-wing aircraft overflights may be used to conduct approved wilderness related research and management surveys. Aircraft use must minimize disturbance to wildlife and other users. Time of day, season of the year, route, flight altitude, and landing location should be considered. In Alaska, motorized boats and snowmobiles are authorized for travel in wilderness. Landing of fixed-wing aircraft within Alaska wilderness is also permitted by law. Helicopter use in Alaska wilderness is allowed only where the use of helicopters was established prior to designation of the wilderness area, subject to the conditions of a Special Use permit, or by the Service as a minimum requirement .

All studies must be conducted so as to preserve the natural character of the wilderness. Aerial

counts and observations of wildlife are permissible for wildlife management. Capturing and monitoring of animals, radio telemetry, and temporary installations may be permitted if they are essential to studies that cannot be accomplished elsewhere. To the extent practicable, structures must be constructed of native materials or camouflaged to make them blend with the natural surroundings.

C. Inventories. Inventories of wilderness resources, including fish, wildlife, habitat, vegetation, air quality, and recreational use are integral to long-term wilderness management. Baseline inventories should be conducted for key wilderness resources. The baseline data provides the frame of reference for the limits of acceptable change (LAC) process used in the WMP. Inventories also provide management with the information necessary to evaluate management actions and the effect people have on wilderness resources. Inventories must be conducted using the minimum requirement. The project leader is responsible for identifying the minimum requirement through the WMP process. See 701 FW 2, Inventories/Population Management.

D. Habitat Maintenance, Alteration, and Restoration. Habitat manipulation may be permitted if it corrects or alleviates adverse impacts caused by human influence or will help protect or recover a threatened or endangered species, and does not degrade wilderness character, does not endanger the integrity of archeological resources, and is performed using the minimum tool necessary. Improvements, such as erosion control structures, may be used to restore watersheds where deteriorated soil and hydrologic conditions, caused by human use or influence, create a serious threat or loss of wilderness values. For habitat manipulation to benefit populations that cross wilderness boundaries, the first priority will be actions outside wilderness.

Development and structures necessary for fish and wildlife management which existed before wilderness designation (e.g., flow-maintenance dams, water developments, water diversion devices, ditches and associated structures) may be permitted to remain in operation only if they can be shown to be essential to meet minimum requirements for the administration of the area as wilderness. The removal of debris that impedes the movement of fish on primary spawning streams may be permitted, {Anybody know what the deal is with this? - why would we allow it?} but only in a manner that preserves the wilderness resource. Only nonmotorized equipment will be used to clear debris, except where motorized equipment constitutes the minimum requirement or as may be provided for by ANILCA in Alaska.

Hand or aerial seeding of native species may be permitted after disturbances, such as wildfire, to restore natural plant communities where natural revegetation is either not expected to occur, or the rate is not expected to adequately protect the soil or hydrology.

E. Threatened and Endangered Species. Actions deemed necessary to protect or recover threatened or endangered species, including habitat manipulation and special protective measures, may be implemented in wilderness. However, it must be documented that the actions cannot be done as effectively outside wilderness, and only after a minimum requirement analysis has been performed and documented.

F. Chemical Treatment. Chemical treatment may be permitted when necessary to prepare lands

or waters for the reestablishment of indigenous species, to protect or recover Federally listed threatened or endangered species, or to correct undesirable conditions resulting from human activity. Care will be taken to use chemicals that will have the least impact on nontarget species and on the wilderness environment. Fertilizers for the purpose of artificially enhancing fisheries resources will not be permitted.

G. Fish and Wildlife Population Management. Fish and wildlife populations in wilderness will be maintained at levels consistent with sound management principles and in conformance with the unit's purposes and objectives. Population management will protect the natural biological diversity and natural processes and any actions will require minimum requirement analysis and documentation.

(1) Transplanting Wildlife. Transplants (removal, reintroduction, or supplemental introductions) of wildlife in wilderness may be permitted if necessary to perpetuate or recover a threatened or endangered species, or to restore the population of an indigenous species eliminated or severely reduced by human influences, if it is determined to be the minimum requirement necessary and if it cannot be accomplished outside of wilderness.

Transplants shall be made in a manner compatible with wilderness. Motorized methods and temporary holding and handling facilities may be permitted if they are the minimum requirement necessary to accomplish an approved transplant.

Introduction of new exotic species is not permitted. Established exotic species (e.g., chukar partridge) do not need to be eliminated if elimination, while desirable, is no longer practicable. However, we will not encourage reproduction or range expansion.

(2) Fish Stocking. Fish stocking may be permitted to reestablish or maintain an indigenous species adversely affected by human influence, or to protect or recover a threatened or endangered species. Bodies of water that naturally contain no fish or other aquatic species will not be stocked with any species. Species selected for stocking will be determined jointly by the Service and the appropriate State agency. Exotic fish species shall not be stocked. Fish that may be stocked include:

(a) Federally listed threatened or endangered indigenous species.

(b) Indigenous Species: Every effort will be made to use local genetic strains. Species traditionally stocked before wilderness designation may continue to be managed if compatible with refuge purposes, including maintaining the wilderness. However, continued stocking of such species must be approved by the Director. Lakes and streams devoid of fish will not be considered for stocking. Aerial stocking of fish may be permitted in wilderness where this practice was established before wilderness designation and has been determined to be the minimum requirement necessary. [Do we want to leave this as is?]

(3) Spawn Taking. The collection of fish spawn may be permitted when alternative sources are unavailable or unreliable, or where spawn taking was an established practice before wilderness

designation and wilderness values are not being degraded. Motorized equipment will not be used to assist in collecting and removing spawn. Use of techniques and facilities necessary to take spawn, which were in existence before wilderness designation [Do we want to leave this as is?], may continue as provided for in the WMP.

(4) Population Sampling. Scientific sampling of fish and wildlife populations may be essential to the protection of natural populations in wilderness and is permitted. Only methods compatible with the wilderness environment will be used. These include gill netting, battery-operated electro-fishing, and other proven techniques of non-motorized, non-mechanical population sampling.[Non-aquatic examples?]

H. Pest and Disease Control. Wilderness areas will be managed so as to be affected primarily by the forces of nature with minimal human intervention. However, the regulation or control of certain plants, predators, rodents, and disease outbreaks may be necessary under certain circumstances.

(1) Fish and Wildlife Damage Control. Fish and wildlife damage control in wilderness may be necessary to protect Federally listed threatened or endangered species, to prevent transmission of disease or parasites affecting other wildlife and humans, to protect wilderness resource values. Control measures will be guided by established Service policy, and may include lethal and nonlethal methods, depending upon need, justification, location, conditions, efficiency, and applicability of State and Federal laws. Control will be directed at the individual animals causing the problem, using only the minimum tool necessary to solve the problem.

(2) Plant Control. Exotic plants and noxious weeds as identified by a State or county board may be controlled to restore natural conditions or where such plants pose a serious economic threat to private property and where control measures can be carried out without compromising wilderness character or resource values, as determined by a minimum requirement analysis. Vegetation manipulation may be required to meet unit purposes, and may be permitted where it is consistent with natural processes, e.g., the use of prescribed fire to duplicate the effects of wildfire. [Do we want to leave this as is?]

(3) Insects and Disease. Insects and disease are regarded as natural components of the wilderness ecosystem and will normally not be artificially controlled. Exceptions may include situations where they pose a threat to human health, a threat to high value resources on adjacent nonwilderness lands, or where lack of control would result in unacceptable impacts on other wilderness resources (including threatened or endangered species).

I. Grazing. Livestock grazing, where established prior to designation of a wilderness unit, may be permitted to continue in accordance with provisions prescribed in 50 CFR, Parts 29 and 35.9. Permitted livestock numbers will not be greater than those utilizing the wilderness prior to establishment and may be less, as dictated by the fish and wildlife habitat and wilderness resource management requirements of the area.

The maintenance, reconstruction, and relocation of only those livestock management

improvements and structures that existed at the time the wilderness was designated may be permitted. The use of motorized or mechanical equipment will not be approved, except for purposes such as rescuing sick animals or the placement of feed in emergencies, and only if it is the minimum necessary. Noncommercial grazing of trail stock incidental to recreational use of wilderness may be authorized in accordance with the conditions, outlined in the WMP, that ensure protection of wilderness resources.

J. Cultural and Historic Resources. Cultural and historic resources, such as archeological sites, historic trails or routes, or historic structures are a unique and nonrenewable part of the wilderness resource. Burial plots or commemorative features, such as plaques or memorials, that are within the wilderness may be retained, but no new additions may be made unless authorized by Federal statute, existing reservations, or retained rights. Native American religious areas and other ethnographic resources will be inventoried and protected. Native Americans will be permitted nonmotorized access within wilderness for sacred or religious purposes in accordance with other wilderness access regulations and procedures.

Prior to any management decisions affecting wilderness areas which might affect the practice of a Native American religion, appropriate Native American traditional religious leaders must be notified and consulted. Such consultation is mandated by the American Indian Religious Freedom Act, 42 U.S.C. § 1996, and will be coordinated through the Regional Archeologist.

Scientific study of archeological sites is allowed in wilderness areas, but permits for such work must be issued in consultation with the Regional Archeologist.

Historic buildings or other structures may also qualify as a cultural resource. Decisions concerning maintenance or removal of structure located in wilderness areas should be made as provided in Section 3.2D and 3.2G above.

K. Air Quality Protection. The Clean Air Act (CAA) charges the Secretary of the Interior and refuge managers with an "affirmative responsibility" to protect from adverse impacts of air pollution the wilderness areas of the Service designated "Class I," under the Act. The CAA itself designates 21 refuge units as mandatory Class I areas, which includes all national wilderness areas over 5000 acres that were in existence on August 7, 1977.

The Secretary of the Interior, as the Federal Land Manager, and refuge managers have responsibilities under the CAA to participate in the review of major sources of air pollution and the development of regulatory programs in order to protect air quality related values (including visibility) of any lands within the Class I area.

The Clean Air Act establishes a national goal of remedying any existing and preventing any future manmade visibility impairment in mandatory Class I areas where visibility is an important value. The CAA charges the EPA with promulgating regulations to provide for reasonable progress toward the national goal. The CAA and EPA's regulations allow or require Federal land managers to: (1) identify Class I areas where visibility is an important value; (2) identify integral vistas; (3) consult with responsible regulatory agencies during the development of visibility

protection plans; (4) identify areas with existing visibility impairment; (5) identify sources suspected of causing or contributing to impairment; (6) concur or not concur on any EPA decisions to exempt a source from best available retrofit technology requirements; and (7) assess whether new major stationary sources or major modifications might have an adverse impact on air quality related values, including visibility, in Class I areas.

3.4 Public Use Guidelines.

A. General. Wilderness areas are set aside for, among other things, the use and enjoyment of the public in a way that will leave the areas unimpaired for future generations. A wide variety of activities, including hiking, hunting, fishing, wildlife viewing, photography, and nature education, are allowed. The Service will encourage and support those uses of wilderness that preserve its natural resources and character. Where use conflicts occur, those that depend upon a wilderness environment are preferred. Wilderness areas may be closed to public uses if the uses are determined to be incompatible with unit purposes, including the maintenance of wilderness values. The WMP will establish indicators, standards, conditions, and thresholds above which management actions will be taken to reduce impacts. The Service will monitor resources and document use.

Public use management of wilderness areas includes preventing their degradation by human use and restoring those areas that have become degraded. Where public use is permitted, overuse can occur, resulting in unacceptable damage to the wilderness resource (both physical and social values). Habitats especially susceptible to damage, such as desert and tundra, must be identified and protected. Wilderness areas near populated areas warrant particularly close scrutiny to maintain wilderness values and avoid overuse.

B. Preserving the Wilderness Experience. Wilderness management will be directed to provide opportunities for primitive and unconfined types of recreation. A wilderness experience for many recreationists involves freedom from rules and regulations. Visitors should only be managed when necessary to preserve wilderness resources, values, experiences, and opportunities. Only the minimum regulation necessary (minimum requirement) to achieve unit purposes should be used. Education should be the first priority whenever possible.

(1) Visitor Responsibilities. Visitors must be encouraged, educated, and prepared to enjoy the wilderness on its own terms, making demands on themselves rather than on the land. Facilities should not be provided for visitor comfort and convenience. Users must accept certain risks, including potential dangers from wildlife, weather, terrain, and other natural conditions that comprise a primitive wilderness experience. The Service will not eliminate or control risks that are normally associated with a wilderness experience.

(2) Direct and Indirect Methods. If visitor use threatens to impair an area's wilderness character and resources or threatens public health and safety, managers must act to control that use. Either direct or indirect management actions may be taken to reduce visitor impacts. However, indirect methods, e.g., information and education, trail design, rehabilitation or removal of improvements, change of access, and use of obstacles, are preferred. When practical, they

should be implemented first. Direct regulatory methods (e.g., permit/registration systems; limits on party size, length of stay or number of users: activity or site restrictions) should be used along with indirect methods when necessary to reduce or eliminate human disturbance.

(3) Education. Wilderness managers will develop and maintain an effective education program designed to promote public appreciation and respect for an area's wilderness character and resources without stimulating an unacceptable demand for use. The public should be educated about wilderness laws and policies, the values of wilderness, ecological processes, risks and precautions, and ways to minimize visitor impacts on wilderness. These efforts should cultivate wilderness use ethics, point out the limitations of wilderness to accommodate human use, and encourage visitors to apply minimum-impact or no-trace use techniques.

(4) Monitoring. Adequate information about public use is important in wilderness management. The condition of resources will be monitored in every wilderness area to identify the potential need for and results of management actions. The monitoring program will identify human impacts to physical resources and social values. The program should determine whether the opportunities for primitive and unconfined types of recreation are improving, deteriorating, or remaining stable. Managers should familiarize themselves with and apply the LAC process when appropriate (see 630 FW 2).

C. Public Use Facilities. Public use facilities should be located outside of wilderness. The need to locate facilities in the wilderness area must be documented in the WMP. Visitor use facilities may be installed if they are the minimum requirement necessary to protect the health and safety of the public or the wilderness resource. The facilities must be essential to disperse visitors, protect refuge and wilderness resources, prevent or correct unsanitary conditions, reduce other hazards, or otherwise control unacceptable conditions in the wilderness.

Permanent shelters are prohibited. However, simple rustic shelters, platforms, or cabins may be provided for public health and safety if they are the minimum requirement . All new facilities will be constructed of materials that blend with the wilderness landscape. In Alaska, previously existing public use cabins may continue to be used and may be constructed, maintained, or replaced subject to restrictions necessary to preserve the area's wilderness character. ANILCA Section 1315(d) requires the Secretary to notify the House Committee on Interior and Insular Affairs and the Senate Committee on Energy and Natural Resources of the intention to remove an existing or construct a new public use cabin or shelter in wilderness.

In Alaska, the use of temporary campsites, tent platforms, shelters, other temporary facilities, and equipment directly related to the taking of fish and wildlife may continue. New facilities may also be built if they are constructed of materials that blend and are compatible with the surrounding landscape. However, ANILCA Section 1316(b) provides that the Service may, after adequate notice, deny establishment and use of new facilities for these activities if they are determined to be a significant expansion of existing facilities or uses which would be detrimental to the unit's purposes, including wilderness values.

(1) Trails. Trails within and leading to wilderness serve an important function in achieving

management objectives and protecting wilderness resources by aiding in controlling public use and ensuring public safety. As with other improvements, trails should be developed only where they are needed to protect the wilderness resource, fulfill unit purposes, or for the safety of users. Locating and establishing trails should be based on specific goals and objectives in the WMP. Trail construction must minimize surface disturbance and blend into the natural setting.

(2) Bridges. Rustic bridges and walkways, made of native materials and designed to blend with the environment, are permitted where they are the minimum requirement essential for public safety, to protect fragile or vulnerable habitats, and where there are no alternative access points. Bridges must be built to applicable standards (Reference?) and maintained for safety.

(3) Signs. Signs in wilderness will be minimized. Wilderness boundaries will be posted where appropriate to inform the public. Directional signs made of rustic materials may be permitted for visitor safety. Other types of signs are allowed only when necessary to provide for public health and safety. Signs with general or interpretive information will be placed outside of wilderness areas. Alternatives for disseminating information, e.g., brochures, maps, and audio cassettes, should be considered.

(4) Hunting and photography blinds. Construction of blinds for hunting or photography will be discouraged. Permanent blinds are prohibited. However, simple screens made of dead natural material found in the locale may be permitted if they are dismantled at the end of each use period. Commercially built, artificial blinds must be carried in and out.

In Alaska, where public safety dictates, permanent blinds may be used for bear viewing programs.

D. Angling, hunting, and trapping. These activities are legitimate wilderness pursuits subject to all applicable State and Federal laws and regulations.

E. Organized events. Organized events not dependent on the area's wilderness character or values will be prohibited. Historically significant events like the Iditarod dog sled race in Alaska, which have previously been permitted to pass through but not exclusively reside on the wilderness area, may be allowed to continue as long as such use will not significantly degrade the wilderness resources of the area.

F. Technical Rock Climbing. Technical rock climbing that occurs incidental to a wilderness visit is acceptable to the extent that the activity is consistent with the primary purposes of the unit. Technical climbing activities that visually alter (i.e., placement of bolts, colored webbing and chalk marks) or physically alter (i.e., removing loose rock by prying, scaling, or other means) the natural features of the landscape may not be permitted.

Because of changes in climbing technology, measures that will successfully mitigate impacts to wilderness values will be evaluated in the unit's WMP. The WMP will determine the extent to which the climbing activity is consistent with provisions of the Wilderness Act and Service policy.

The use of power drills and other electro-mechanical or pneumatic devices and the placement of

permanent, fixed anchors are precluded by the Wilderness Act and are therefore prohibited.

G. Other Public Uses. The Wilderness Act allows for commercial outfitting, guide and transportation services for horseback riding, hiking, mountain climbing, river floating, and other activities. The activities should be conducted in accordance with provisions of the unit's WMP and regulations. Recreational mineral collecting is prohibited. Where campfires are permitted and the use of fuel wood from within the wilderness is authorized in the WMP, wood cutting will be limited to dead and down material. The use of cooking stoves should be encouraged.
[Do we need to address "extreme sports or other sports fads?]

H. Access for the Disabled. Wheelchairs (see definitions Appendix 1) may be used by those whose disability requires a wheelchair for locomotion. However, no special accommodations, construction of facilities or modification of lands are required on the part of the Service. Provision for such accommodations outside or adjacent to the wilderness should be considered in order to assist those wishing to enter the area.

4.1 General. All wildland fires on Service lands, including wilderness areas, are either wildfires or prescribed fires (Definitions, Appendix 1). All wildfires will receive an appropriate suppression response in accordance with the minimum requirement concept. Prescribed fires, including prescribed natural fire, may be used as a management requirement when included in an approved Fire Management Plan (FMP). Wildfire suppression standards and prescribed fire use within the wilderness must be addressed in general terms within the WMP. Fire in a wilderness area falls under the same policy requirements as fire in a nonwilderness area. However, some additional considerations exist when determining suppression strategies or prescribed fire use in wilderness.

A. Prescribed fire should be used where fire is a natural part of the ecosystem and is necessary to accomplish wilderness management objectives.

B. The suppression strategy selected should ensure that fire will not escape the wilderness or pose a threat to human life, property, or non-Service lands. Specific guidance on fire management policy, fire management plans, and prescribed burning is contained in Fire Management, Part 621 FW 1-3. Policy on wildland fire suppression is contained in Emergency Operations 095 FW 3. The Fire Management Handbook contains detailed guidance on FMP development.

C. When a Service wilderness area is contiguous with lands administered by another Federal agency, a joint FPM will be developed. This plan should receive periodic review and should contain agreement on decision-making processes and criteria for prescribed versus wildfire, suppression strategies, and tactics to be employed.

4.2 Wildfire. The appropriate suppression response should be determined by considering the least-cost options for suppression and the values at risk. The minimum requirement concept should be the guiding factor in determining the appropriate suppression response and strategy to be used. Specific suppression direction should be included in the FMP and developed in conjunction with the fire management officer.

4.3 Prescribed Fire.

A. Prescribed fire may be employed within the wilderness area to fulfill unit purposes.

B. Prescribed Natural Fire (PNF) may be used as long as the requirements for conducting a PNF program are met. The principal PNF objective in a wilderness area is to allow fire to play its natural role in the ecosystem.

C. Prescribed fire or PNF use within the wilderness must be included in an approved FMP and a prescribed fire plan must be developed for any prescribed fire.

D. Management-ignited prescribed fire should be planned to minimize impacts on visibility during periods of heavy visitor use as well as avoiding adverse effects on other air quality related values.

5.1 Wilderness Management Planning. Wilderness management direction is developed as part of the CCP process required by 602 FW 1. The WMP, a step-down plan, guides the preservation, management, and use of a particular wilderness. The WMP describes the relationship between wilderness management objectives and unit purpose(s), system goals, and unit objectives. The plan also establishes indicators, standards, conditions, or thresholds that will trigger management actions to reduce or prevent impacts on the wilderness. The WMP will be developed with public involvement and will contain specific, measurable management objectives that address the preservation of wilderness-dependent cultural and natural resource values in order to achieve the public purposes of the Wilderness Act and other appropriate legislation. The WMP should not unduly duplicate information in the CCP , but should follow from it, clarifying the application of wilderness management directives to the wilderness units contained within the larger unit covered by the CCP .

5.2 Objectives.

A. Ensure that the wilderness resource is fully addressed in the unit's WMP.

B. Ensure that management activities within each wilderness are in harmony with the wilderness resource and the spirit of the Wilderness Act.

C. Provide an opportunity for public involvement.

5.3 Policy. Management direction for each designated wilderness must be stated in a WMP, either as an independent operational plan or as part of a more comprehensive document (see 602 FW 2, Management Planning). Each wilderness is unique as established by law, so each should be addressed as a separate management area.

5.4. Wilderness Management Plan Contents. The WMP shall include, at a minimum (see Appendix 3 for outline):

A. Management direction in accordance with 50 CFR 35 and ANILCA, as applicable.

B. Objectives for the wilderness area and their relationship to the unit's purposes, system goals, or unit objectives. Wilderness objectives are derived from applicable laws, including the Wilderness Act, legislation establishing the wilderness, purpose(s) for which the unit was established, applicable Service goals, and the unit objectives.
C. Description of the current or baseline situation of the wilderness resource, including a description of the wilderness area, natural resource conditions, management activities, existing facilities, and public use levels and activities.

D. Description of proposed management actions and a schedule of implementation, including funding and staff required to administer the area. The implementation schedule includes a list of

specific actions needed to accomplish WMP objectives, general prioritization of the action items, and target dates for completion.

E. Identification of research needs and monitoring requirements to determine whether wilderness management objectives are met.

5.5 Public Involvement. Opportunities for meaningful public involvement will be provided during the WMP process. Methods to obtain public involvement may vary depending on the particular situation (see 110 FW 1, Public Participation).

5.6 Plan Review and Approval. The WMP is subject to approval by the RD, who may redelegate the authority (see 602 FW 2, Management Planning). The approval page will be retained as a matter of record at the front of this plan, which is considered a section of Part ? of the unit's CCP .

5.7 Wilderness Management Plan Completed Prior to Development of Unit Comprehensive Management Plan. An individual WMP completed prior to the development of the unit's CCP may be incorporated into the comprehensive management plan if it:

A. Is current and valid.

B. Is appropriately referenced and discussed in the CCP .

C. Was prepared in accordance with the NEPA process including appropriate public involvement.

5.8 Wilderness Management Plan Revision. The WMP will be reviewed during routine unit programmatic evaluations. At a minimum, this plan will be reviewed every 5 years, and if necessary, will be revised following the procedure outlined in 602 FW 2. Revision of wilderness management direction requires appropriate public involvement and conformance with NEPA.

5.9 Limits of Acceptable Change (LAC). The LAC system is a framework for establishing acceptable and appropriate resource and social conditions in recreation settings. LAC is a useful wilderness management planning requirement for identifying acceptable levels of change in response to use and alerting managers to the need for action to protect wilderness values when changes exceed standards. While LAC commonly is used to manage recreational use of wilderness, the concept applies to any factor that can influence or change desired conditions, including fire, grazing, mining, or impacts on air quality.

The LAC process consists of four major components: (1) the specification of acceptable and achievable resource and social conditions, defined by a series of measurable parameters; (2) an analysis of the relationship between existing conditions and those judged acceptable; (3) identification of management actions judged to best achieve desired conditions; and (4) a program of monitoring and evaluating management effectiveness. These components are broken down into nine planning steps. Guidance in use of the LAC process can be found in *Stankey, George H.;*

Cole, David N.; Lucas, Robert C.; Petersen, Margaret E.; Frissell, Sidney S. 1985. The Limits of Acceptable Change (LAC) system for wilderness planning. Gen. Tech. Rep. INT-176. Ogden, UT: U.S. Department of Agriculture, Forest Service, Inter-mountain Forest and Range Experiment Station. 37 p.

5.10 Lands Contiguous With Those of Another Federal Agency. When a Service wilderness area is contiguous with lands administered by another Federal agency, efforts will be made to coordinate the wilderness area management planning with the neighboring agency. Joint management plans with all involved agencies are encouraged. A joint FMP will be developed pursuant to 910 DM 1.6B(1)(a).

5.11 Legal Description and Map. A legal description and map shall be prepared by the Regional Director for each wilderness.

APPENDIX 1

DEFINITIONS

Adequate Access. The combination of routes and modes of travel that the Service has determined will have the least impact on the wilderness resource, and will serve the reasonable purposes for which State or private land is held or used.

Exotic Species. Any species that is not native.

Fixed Anchors. A device placed to assist navigation of a natural feature by climbing or repelling. The device may be affixed by drilling or otherwise modifying natural features for its placement. The device is left behind for the use of others, or abandoned once placed. Common fixed anchors include bolts, hangers, chains, webbing and glued holds.

Indigenous or Native Species. Any species that naturally occurs in the wilderness area (not introduced by humans).

Mechanical Transport. Any contrivance for moving people or material on or over land, water, or air that has moving parts, provides a mechanical advantage to the user, and is powered by a living or nonliving power source. This includes, but is not limited to, sailboats, hang gliders, parachutes, bicycles, game carriers, carts, and wagons. It does not include wheelchairs when used by those whose disabilities require wheelchairs for locomotion. It also does not include skis, snowshoes, rafts, canoes, sleds, travois, or similar primitive devices without moving parts.

Minimum Requirement . The minimum requirement is that combination of methods, equipment, or administrative practice necessary to successfully and safely accomplish refuge purposes, or required in emergency situations for public health and safety, with the least impact on the wilderness resource.

Motorized Equipment. Machines that use a motor, engine, or other nonliving power source. This includes, but is not limited to, chain saws, aircraft, snowmobiles, generators, motor boats, and motor vehicles. It does not include small battery or gas-powered devices such as shavers, wristwatches, flashlights, cameras, stoves, or other similar small equipment. Motorized wheelchairs used as defined under mechanical transport are not included.

Permanent Improvement. A structural or nonstructural improvement that remains at a particular location for more than one field season. Permanent improvements include trails, toilet buildings, cabins, fences, fire grates, and instrumentation.

Prescribed Fire. The application of fire to wildland fuels to achieve planned resource management objectives.

Prescribed Natural Fire (PNF). Fires ignited by natural causes (usually lightening) which are

permitted to burn under specific environmental conditions, in preplanned locations, with adequate fire management personnel and equipment available to achieve defined resource objectives.

Prospecting for Water Resources. The act of drilling or digging to locate underground water supplies.

Roadless. The absence of roads that have been improved and maintained by mechanical means to ensure relatively regular and continuous use. A way maintained solely by the passage of vehicles does not constitute a road.

Temporary Structure. Any structure that is easy to dismantle, could be removed completely from a site between periods of actual use, and must be removed at the end of each session of use if the intervening non-use period is greater than 30 days.

In Alaska, in accordance with Section 1316(a) of the Alaska National Interest Lands Conservation Act, temporary campsites, tent platforms, shelters, and other temporary facilities and equipment directly and necessarily related to the taking of fish and wildlife may be permitted. Upon termination of such activities, but not upon regular or seasonal cessation, the permittee may be required to remove such structures.

Unit. The Congressionally designated wilderness area within a refuge. A single refuge may contain one or more designated wilderness areas or units.

Untrammeled. In the context of the Wilderness Act, an untrammeled area is one where human influences do not impede the free play of natural forces or interfere with natural processes in the ecosystem.

Valid Existing Right. A property right in existence on the date of the wilderness designation or on such date as provided for in the Act that designated an area as wilderness; that was created by a legally binding conveyance, lease, deed, contract, or other document; or as otherwise provided by Federal law.

Wheelchair. A device designed solely for use by a mobility-impaired person for locomotion, that is suitable for use in an indoor pedestrian area; includes motorized wheelchairs.

Wilderness. An area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. 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 and that (1) is affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least 5,000 acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

Wilderness-Dependent Activity. An activity that requires a large, substantially unchanged natural environment. Without wilderness, the activity would be greatly compromised or impossible. Impacts caused by the activity are minor and temporary. Functioning ecosystems and pristine aesthetics are integral aspects of a wilderness-dependent activity.

Wildfire. A free-burning fire requiring a suppression response; all fire, other than prescribed fire, that occurs on wildlands.

APPENDIX 2

U.S. FISH AND WILDLIFE SERVICE
NATIONAL WILDLIFE REFUGE (NWR) SYSTEM
MANDATORY CLASS I WILDERNESS AREAS

RNESS NAME	UNIT WILDERNESS AREA IS PART OF	STATE	WILDER ACR
Bering Sea	Alaska Maritime NWR	AK	81,3
Simeonof	Alaska Maritime NWR	AK	25,6
2 (upland)			
8 (water)			
Tuxedni	Alaska Maritime NWR	AK	6,4
Chassahowitzka	Chassahowitzka NWR	FL	23,3
St. Marks	St. Marks NWR	FL	17,3
Okefenokee	Okefenokee NWR	GA/FL	353,9
Wolf Island	Georgia Coastal Complex	GA	5,1
Island (4519)			
sland (593)			
Egg Island (14)			
Breton	Breton NWR	LA	5,0
Moosehorn	Moosehorn NWR	ME	7,3
nds Unit 2706			
Unit 4680			
Seney	Seney NWR	MI	25,1
Mingo	Mingo NWR	MO	7,7
Red Rock Lakes	Red Rock Lakes NWR	MT	32,3
Medicine Lake	Medicine Lake NWR	MT	11,8
U L Bend	Charles M. Russell NWR	MT	20,8
Brigantine	Edwin B. Forsythe NWR	NJ	6,6
Bosque del Apache	Bosque del Apache NWR	NM	30,3
dera (5289)			
Well (5139)			
San Pascual (19,859)			
Salt Creek	Bitter Lake NWR	NM	9,6
Swanquarter	Mattamuskeet Complex	NC	8,7
Lostwood	Des Lacs Complex	ND	5,5

RNESS NAME	UNIT WILDERNESS AREA IS PART OF	STATE	WILDER ACR
Wichita Mountains	Wichita Mountains NWR	OK	8,5
- Charons Garden (5723)			
- North Mountain (2847)			
Cape Romain	Cape Romain NWR	SC	29,0

610 FW 1
APPENDIX 3

WILDERNESS MANAGEMENT PLAN OUTLINE

I. Introduction.

A. Wilderness establishment, including contents of pertinent laws, date of establishment, any changes from Secretary's recommendation, pertinent committee report discussion, and special provisions.

B. Relationship of wilderness to unit's other purposes, system goals, and unit objectives.

C. Wilderness management objectives, including protection of the air quality related values of Class I wilderness areas.

II. Description of the Wilderness Area.

A. Legal and narrative description of the area.

B. Map displaying Service land unit boundary and wilderness area boundary.

C. Discussion of natural resources.

III. Public Involvement. Describe public involvement activities and provide a summary and analysis of comments received and how the plan responds to them.

IV. Management. Provide detailed discussions of existing and planned biological, public use, cultural resource, and administrative management activities and permitted uses. If an activity is specifically authorized by legislation, it should be noted. Limits of acceptable change should be identified and discussed.

V. Research. Describe any past and current research, and identify research needs.

VI. Funds and Personnel. Provide a discussion of staff and funds needed to manage the wilderness.

VII. Monitoring. Identify monitoring requirements and thresholds for action, including procedures for measuring baseline air quality.

VIII. Implementation Schedule. Prioritization of action items, target dates for completion, staff assignments, and funding requirements.

IX. Compatibility Determination

X. Review and Approval.

XI. Appendix.

A. A copy of the Wilderness Act.

B. A copy of the legislation establishing the wilderness.

C. Service wilderness regulations (50 CFR 35), except Alaska.

D. Wilderness study report for the wilderness.

E. NEPA documentation, if applicable.

F. Public hearing record from wilderness study.

G. Congressional hearing record.

H. Congressional committee report accompanying the authorizing legislation.

S.Morton, R-1 , 4/24/98

DRAFT

FOREST PLAN PROTOCOLS FOR WILDERNESS STEWARDSHIP

I Introduction. National guidance for planning the stewardship of classified Wilderness is quite broad. It resides in several sources:

1. The Wilderness Act of 1964.
2. 36 CFR 219.18 Wilderness Management: "Forest planning shall provide direction for the management of designated wilderness and primitive areas in accordance with the provisions of 36 CFR part 293. In particular, plans shall---(a) Provide for limiting and distributing visitor use of specific areas in accord with periodic estimates of the maximum levels of use that allow natural processes to operate freely and that do not impair the values for which wilderness areas were created; and (b) Evaluate the extent to which wildfire, insect, and disease control measures may be desirable for protection of either the wilderness or adjacent areas and provide for such measures when appropriate."
3. 36 CFR 293 Wilderness-Primitive Areas, referred to in 2. above, codifies the Wilderness Act and provides direction and subsequent license to accomplish the objectives contained therein.

   293.2 Objectives: " Except as otherwise provided in the regulations in this part, National Forest Wildernesses shall be so administered as to meet the public purposes of recreational, scenic, scientific, educational, conservation, and historical uses; and it shall also be administered for such other purposes for which it may have been established in such a manner as to preserve its wilderness character. In carrying out such purposes, National Forest Wilderness resources shall be managed to promote, perpetuate, and where necessary, restore the wilderness character of the land and its specific values of solitude, physical and mental challenge, scientific study, inspiration, and primitive recreation. To that end: (a) Natural ecological succession will be allowed to operate freely to the extent feasible. (b) Wilderness will be made available for human use to the optimum extent consistent with the maintenance of primitive conditions. (c) In resolving conflicts in resource use, wilderness values will be dominant to the extent not limited by the Wilderness Act, subsequent establishing legislation, or the regulations in this part."

   293.3 Control of Uses: (a)" To the extent not limited by the Wilderness Act, subsequent

legislation establishing a particular unit, or the regulations in this part, the Chief, Forest Service, may prescribe measures necessary to control fire, insects, and disease and measures which may be used in emergencies involving the health and safety of persons or damage to property and may require permits for, or otherwise limit or regulate, and use of National Forest land, including, but not limited to, camping, campfires, and grazing of recreation livestock."

4. Forest Service Manual (FSM) 2322 --Wilderness Planning. "Wilderness management direction is prepared as a part of the forest planning process as required by 36 CFR part 219 and FSM 1922. Planning is also done in compliance with the National Environmental policy Act (FSM 1950 and FSH 1909.15). Implementation of the forest plan is accomplished through development of implementation schedules that include projects and activities designed to achieve and comply with the management standards and guidelines established for the designated wilderness."

2322.01 - Authority. Authority to conduct wilderness managment planning is found in the National Forest Management Act (16 U.S.C. 1600) and 36 CFR 219.

2322.02 - Objectives. 1. "Ensure that the wilderness resource is fully integrated into the Forest Land and Resource Management Plan. 2. Ensure that other resources and activities within each wilderness are coordinated and in harmony with the wilderness resource."

2322.03 - Policy. 1." Management direction for each wilderness must be stated in the forest plan as mamagement area prescriptions with associated standards and guidelines. Each wilderness is unique as established by law; therefore, each will be identified as a separate management area. 2. The wilderness component of the forest plan shall include, as a minimum, the following:

a. Management direction in accordance with 36 CFR 219 and 36 CFR 293.

b. Display of the relationships and coordination between the wilderness resource and other resources and activities present in the wilderness, as well as activities outside of wilderness that affect the management of the wilderness. Resources and other elements to be addressed include: recreation (including visitor education), forest cover, forage, fish and wildlife, federally listed threatened or endangered flora or fauna, domestic livestock, soil and water (including weather modification), minerals, historical and cultural resources, fire, land ownership, insect and diseases, air quality, other agency use, the trail system (including trailheads), signing, communication, and research.

c. Monitoring requirements for determining whether prescriptions, standards, and guide-

lines are met.

3. Individual wilderness management plans completed prior to the writing of the forest plan may be incorporated as an entity into the forest plan if they:

a. have been prepared in accordance with the NEPA process (FSM 1950).

b. Are considered current and valid.

c. Are appropriately referenced to and discussed in the forest plan.

d. Provide at least the same level of direction and guidance as would be found in the completed forest plan.

4. Management direction shall be consistent for each wilderness that occurs in more than one State, Region, or National Forest.

5. In some instances, the law designating a specific wilderness requires preparation of a wilderness management plan. These specified plans are integrated into the forest plan when completed before the forest planning process. If a wilderness plan is required subsequent to adoption of the forest plan, the required plan should not duplicate information contained in the forest plan. it should tier from and ultimately be appended to the Forest Land and Resource Management Plan."

5. FSM 2323.13g - Outfitter and Guide Operations, states "Address the need for and role of outfitters in the forest plan. The plan must address the type, number, and amount of recreation use that is to be allocated to outfitters." (the outfitted public).

From the sources identified above, it is apparent that sufficient latitude exists to tailor appropriate wilderness direction to any specific issue or condition in any of the Region's wildernesses. Wilderness stewardship and forest plan direction should, as their ultimate goal, provide a clear picture of a desired future condtion against which to monitor, help resolve specific issues, and improve current conditions needing improvement.

II Organization of Forest Plan Direction: Providing wilderness direction in the forest plan is a step-down process. It begins with revisiting the Analysis of the Management Situation to determine its current validity. If not, it needs to be updated. Scoping needs to be redone and management concerns and public issues identified. Alternatives will be crafted later to respond to the issues in varying degrees.

The first level of the step-down process is providing forest-wide wilderness direction. This direction would apply to the entire wilderness, treating it as one management area. it may be broad enough to apply to all wildernesses on a Forest, although each wilderness should be assigned a unique management area number. Within each wilderness there may exist several zones, ranging from the portal or transistion zone to succeedingly more primitive settings. From two to four zones are common.

Direction for each zone only adds or changes desired conditions, standards and guidelines to differentiate from the step above it, in order to achieve a desired result. The desired result is normally one of providing a setting for increasing opportunities for solitude and challenge, two of the more scarce outcomes afforded the wilderness visitor today. Physical-biological conditions may also require a change in the desired setting. For example, if unique cultural resource sites or clear evidence of effects on threatened or endangered species are documented, it may require a special zone.

Thus, the forest plan direction follows this outline:

1. Wilderness-Wide Management Area
   - A. Desired future condition
   - B. Goals
   - C. Objectives
   - D. Standards
   - E. Guidelines
   - F. Monitoring

Repeat A-F for each of several zones, if used. It is common to use two to four zones, termed transistion, semi-primitive, primitive, and pristine, in increasing order of remoteness. Not all wildernesses afford the opportunity for all zones, based on size, proximity to urbanization, current use patterns, and the role of the particular wilderness in the broad spectrum of wildernesses in the National Wilderness Preservation System. See Exhibit I for definitions of terms and sample statements for items A-F.

III Discussion of Wilderness Capacity: 36 CFR 219.18 (a) states "Provide for limiting and distributing visitor use of specific areas in accord with periodic estimates of the maximum levels of use that allow natural processes to operate freely and that do not impair the values for which wilderness areas were created."

FSM 2323.13g states "...The plan must address the type, number, and amount of recreation use that is to be allocated to outfitters." (the outfitted public)

These two sources of direction require that thought be given to the concept of capacity, with at least broadly stated qualitative and/or quantitative allocations resulting from the analysis.

Recreational use of wilderness is increasing. As population grows, the societal segment seeking more primitive settings will continue to increase. As crowding and evidence of use increases, these visitors are displaced to less crowded areas and are replaced by people willing to accept that setting. As use continues to increase, the cycle repeats itself again and again. Eventually, the resource and social conflicts escalate. Proper planning must anticipate and minimize these situations, preferably before they get out of control.

Capacity determinations originate from desired management area condtions, goals, objectives and standards/guidelines. These provide a picture of the setting which leads to an expected experience. When several zones are utilized in wilderness direction, each will normally have a differenct capacity. it is the Forest Plan alternatives whcih display the different amounts of each zone in various mixes which

in turn aggregates to differing total capacities by alternative. An alternative which emphasizes larger acreages of pristine conditions and low use levels will have considerably less capacity than an alternative which allocates larger acreages to a semi-primitive catagory.

For suggested methods of determining capacity, see Exhibit II.

EXHIBIT I

DEFINITIONS AND EXAMPLES OF WILDERNESS DIRECTION

Desired Future Condtion: The desired future condition (DFC) for wilderness has its roots in the language of the Wilderness Act(s), the Code of Federal Regulations (36 CFR 293), and the Forest Service manual (FSM) chapter 2320.

Forest-wide or Wilderness-wide DFC (brief example): "The Wilderness Management Area (MA ?) is preserved and protected in its natural condition, with ecological structure and function intact to the greatest extent of any lands on the Forest. The wilderness is valued as a natural laboratory for learning from the natural and historical treasures it contains. It offers the visitor the opportunity to find varying degrees of solitude and rely on primitive skills in a challenging setting."

Transition zone DFC: "This zone extends from the wilderness portal into the Wilderness, normally along a principal travel route. It may be the only oprtion of Wilderness that many visitors traverse, or the zone through which the visitors pass enroute to the interior of the wilderness. Larger numbers of people may be encountered, but the basic natural values should remain unmodified. When located near to populated areas, the transition zone may serve as a destination for day hikers simply seeking a healthful outdoor experience with nature."

Semi-Primitive Zone DFC: " Moving beyond the transition zone, the wilderness character sharpens. Trails become quieter and the visitor has a sense of leaving the urban areas far behind, while entering into the challenges of self-reliance. The natural world is unfolding its sights and sounds around each bend in the trail. In this zone it is likely a night's stay will be necessary."

Primitive Zone DFC: "Pushing farther into the wilderness, on or off trails, the visitor will normally encounter other people only occasionally. Trips of several days minimum are normally required. "

Pristine Zone DFC: " This is the zone which offers the most remote experience available in wilderness. It requires more effort, time, and skills to negotiate. Visitors should expect to generally be alone with their group. Off-trail travel is common and the few trails traversing the pristine zone may be infrequently maintained. In larger Wildernesses, experiencing much of the pristine zone may require a week's time or more. "

Forest-wide Wilderness Goal Statements - broad outcomes

"---Manage wilderness so that ecosystem structure and function are the result of natural processes within the range of natural variability and succession."

"---Provide outstanding opportunties for solitude or a primitive and unconfined recreational experience."

"---Protect and preserve historical and cultural resources found in Wilderness."

Forest-wide Wilderness Management Objectives - more specific results to be achieved

"Protect the opportunities for challenge and risk."

"When appropriate, restore the effects of past human damage to resources, places, or natural processes."

"Identify current threats to wilderness character, outside or inside the Wilderness, and take appropriate action to reduce or eliminate it."

Wilderness Standards: Standards are statements written to achieve the desired condition. They are based in law, regulation, policy, and/or courses of action stemming from a decision by a deciding official. Achievement of standards is mandatory in order to comply with forest plan direction.

Examples of Forest-wide Wilderness Standards:

Timber Management: "Commercial timber harvest is prohibited."

Minerals Mangement: "Wildernesses are unavailable for oil and gas leasing."

Structures: " Prohibit man-made structures except those needed for resource protection, those listed as historic, or determined to be the minimum necessary for administration."

Fire Suppression:" Tractors are prohibited unless approved by the Regional Forester."

Wilderness Guidelines: Guidelines are statements which describe preferred levels of accomplishment, courses of action, or acceptable levels of impact. They may specify a threshhold which, when exceeded, will move the wilderness away from the desired future condition.

Examples of Forest-wide Wilderness Guidelines:

Recreation: "Maximum party size is 20 people and 20 head of livestock, except by permit."

" There should be no more than 3 other parties encountered per day, 80% of the time."

" Camping is not permitted closer than 100 feet from the shores of lakes."

Fire:" Emphasize the role of natural fire. Management ignitions may be approved where natural ignitions cannot be allowed to play their natural role."

Exotic Plants: " Integrated pest management strategies are appropriate, utilizing all available tools to

minimize infestations. Treatments which accomplish objectives with the least effect on all wilderness values are preferred."

Range: " Utilization by recreation livestock will not exceed 40% by weight on bunchgrass."

Wilderness Indicators are specific attributes which are measureable, observable parameters which can by monitored, i.e. number of encounters, number of campsites visible from a place, forage utilization, etc.

Wilderness Threshholds are the points at which indicator-based monitoring shows a standard or guideline is not being met. Exceeding a threshhold will normally result in an appropriate management action. From 1-3 threshholds (increasing levels) are appropriate.

Example of Threshholds:

Level 1 Actions Appropriate	Level 2 Actions Appropriate	Level 3 Actions Appropriate
Guidelines not exceeded in past 3 years.	Guidelines exceeded up to 25 % of time.	Guidelines exceeded more than 25 % of time.

Management Actions are techniques, responses, or regulations which are put into effect in order to maintain or improve on-the-ground wilderness conditions. They may be triggered when threshholds are exceeded, moving from more indirect methods to more direct controls.

Example of Mgnt. Actions - Recreational Stock Use

Indicator	Level 1 Actions	Level 2 Actions	Level 3 Actions
Utilization of bunchgrass 40% by weight.	Educate visitors on proper use of recreation stock.	Restrict grazing within areas exceeding standards to 1/3 of grazing season.	Require certified supplemental feed all season.

Recreation Stock Use - Threshholds

Level 1	Level 2	Level 3
Guidelines not exceeded and trend is stable.	Utilization of bunchgrass is 40 - 55 % in 2 of past 3 years. Trend is downward.	Utilization is greater than 56 % in 2 of past 3 years and rangeland health is declining.

Wilderness planning can utilize the Recreation Opportunity Spectrum (ROS) classification system to help manage various outcomes. The Wilderness Recreation opportunity Spectrum (WROS) provides a refinement of the ROS for use in wilderness. The Limits of Acceptable Change (LAC) opportunity classes do the same. Others have suggested the concept of Wilderness Resource Zones (WRZ's), combining elements of naturalness with desired social objectives. From experience we have learned that the naturalness objectives tend to be wilderness-wide, while the social outcomes properly become more limiting deeper into wilderness.

While some have argued that there should be only one wilderness-wide outcome (i.e. no zoning), in practice it is generally not practicable due to Congressionally designated boundary locations, unless the boundary is itself in a fairly remote location. From 2-4 zones are common, with 3 being perhaps the easiest to clearly differentiate.

RELATIONSHIP OF PLANNING/MANAGEMENT ZONES

ROS	Semi-Primitive Non Motorized (SPNM)		Primitive (P)	
WROS	Transition	Semi-Primitive	Primitive	Pristine
LAC Opp Classes	4	3	2	1
Wild. Res. Zones (WRZ)	Transition	Primitive		Wild

Forests should analyze their wilderness situation and determine their preferred nomenclature.

When a nomenclature is selected, and desired conditions, goals, objectives, standards, and guidelines are prepared, the Forest Planning process should display several alternatives as percentage mixes of each zone. Thus, it will be apparent where and how much of the wilderness will be managed under each option.

EXAMPLES OF ALTERNATIVE MIXES

(Using WROS nomenclature)

Alternative	Transition	Semi-Primitive	Primitive	Pristine
	%	%	%	%
A	5	10	10	75
B	10	15	15	60
C	15	0	15	70
D	1	10	14	75
E	2	0	10	88

F	0	5	5	90
G	10	40	0	50
H	15	20	65	0

Preferred alternatives which favor the higher percentages of pristine designations must manage commensurately to protect the experience provided by that designation. It is the catagory that offers the increasingly rarest of wild experiences in the National Wilderness Preservation System.

EXHIBIT II

CAPACITY DISCUSSION AND DETERMINATION

The opportunity to set direction for Northern Region Wildernesses occurs during programmatic revisions of the Forest Plan or through amendments arising from project level decisions. Considerable resources, energy, and time are required to set direction in either case, but the wilderness resource of the Northern Region is worth the investment. The broadscale assessment of capacity lends itself to the analysis performed during Forest Plan revision. It results in an allocation decision, the public can understand the cumulative effects, and oversight can be provided at the Regional level. Direction will also be set for the ensuing 10-15 years, a task which will be increasingly difficult to do the longer it is delayed.

The most precious wilderness settings to protect in the Northern Region are the places which yet offer the visitor a near solitary, often remote experience. These places normally occur in wilderness zones labled pristine, wild, LAC Opportunity Class 1, etc. The desired condition, standards and guidelines written for them should set appropriate limits to not allow degradation of such places to a low common denominator.

Numerical capacity determinations are frequently a subject of controversy. It is better to be proactive and establish some capacity which may be realized in the future but which does not immediately limit use today. The Northern Region generally has a better opportunity to do this than some other Regions.

Suggested Methods:

<u>The ROS Coefficient Method</u> (credit for some of this discussion goes to the San Juan NF, Region 2)

The Recreation Opportunity Spectrum (ROS) planning tool describes areas of the wilderness in terms of the experience that can be expected. The ROS has subsets or zones within wilderness as described earlier. Recreation capacities are developed in terms of People At One Time (PAOT's) or Recreation Visitor Days (RVD's). PAOT's represent the number of people within a given area at a point in time, whereas RVD's sum the total use over a given time period. The maximum number of PAOT's that an area can sustain is based on social, physical, and biological conditions or limiting factors. Those conditions are driven by the desired condtion, goals, objectives, standards and guidelines in the Forest Plan.

Recreation use coefficients are derived from a mathematical equation that sets a minimum spacing between people within an area or on a trail or river. Number of acres or miles, multiplied by an appropriate coefficient, calculates the PAOT capacity. Coefficients vary by the ROS zones and by the type of terrain or vegetation present. They are lowest for the most remote, pristine areas, and gradually increase

for the day-use portal zones. They mauy also be different for high alpine areas, lightly forested areas, and the deep forest. The principle is that terrain and vegetation tend to screen visitors from others, thereby slighty raising the coefficients in such settings.

Coefficients are properly stated in the Forest Plan. The National coefficents in the ROS Users Guide may be used or local ones may be developed. Because recreation use does not generally occur in a regulated or consistent pattern, the mathematical results are only a starting point.

Additional factors may be applied, such as lower coefficients for early and late season use, or higher for peak season use. Thus, a weighted coefficient may be used which reflects this.

Once the coefficients are determined, the actual useable acres are determined. Often, this ia a small fraction of the total Wilderness, but reflects where people actually are.

The length of season is determined and included as a multiplier. The result is a capacity based on spacing, use pattern, actual use area, and length of season.

Once the theoretical capactiy is determined, limiting factors may be considered, sucha s sensitive wildlife habitats, limited number of campsites, desired campsite occupancy rates, etc., in order to reach a maximum use level.

If it is helpful to compartmentalize a wilderness into geopgraphic areas in order to complete these determinations, that should be done.

The Limits of Acceptabel Change (LAC) Method

If a Wilderness has LAC zoning and indicators with standards/guidelines in effect, the capactiy can become the amount of use which stays within the most limiting of the standards/guidelines. An example of this method of computation is included in the Northern Region Guidebook on Outfitting-Guiding on page A-24.

The Inventory Method

For lack of a better term, this "inventory method" is based on perhaps a simpler, practical, ground-based approach. It relies on local knowledge of an area and what factors limit use. It requires an inventory of trails, available campsites, destinations, knowledge of use patterns, other resource limiting factors, parking lot capacities, known areas of visitor conflicts, etc. The current visitor use levels should be known in order to determine if these experienced levels are acceptable, and what amount of change will still produce the desired condition. Assembling this data together with the Forest Plan standards/guidelines can result in a "practical capacity."

Setting Capacity (or Allocation) For Outfitted Operations

This is required by FSM 2323.13g, as stated earlier. It is best accomplished after looking at total use in the wilderness. it is combined with a Wilderness-wide or Forest-wide needs assessment for outfitted operations. The needs assessment will involve a qualitative and quantitative discussion of the type of

outfitted activities in existence today as well as looking at what future opportunities may be proposed. Which type of operations are more suited to requiring specialized knowledge, skill, and equipment? Is the service reasonably available to those who need it? Historical levels can serve as guidance. There is subjectivity in establishing the percent of total use by activity which should reasonably be allocated to the outfitted public, but it is properly a Forest Plan decision and should be addressed.

For activities requiring specialized ability and equipment, and high safetly concerns, such as whitewater rafting and mountain climbing, a split between the outfitted and non-outfitted publics closer to 50-50 is an appropriate starting point. Other activities may appropriately be more in the range of 5-30% outfitted at the Forest's discretion. See also the Guidebook on Outfitter-Guide Administration for further discussion and examples.