

Chapter II: Alternatives

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Chapter II: Alternatives

A. General Descriptions of the Alternatives

1. *Alternative A*

Alternative A would continue present management practices and present levels of resource use based on the existing Northwest Management Framework Plan (MFP) (BLM 1982) and other management decision documents. Valid decisions contained in the Northwest MFP would be implemented if not already completed. Direction contained in existing laws, regulation, and policy would also continue to be implemented, sometimes superseding provisions in the Northwest MFP. The current levels, methods, and mix of multiple use management of public land in the planning area would continue, and resource values would receive attention at present levels. In general, most activities would be analyzed on a case-by-case basis and few uses would be limited or excluded as long as they were consistent with State and Federal laws. Fire would be managed consistently with the Alaska Land Use Plan Amendment for Wildland Fire and Fuels Management (BLM 2004b, 2005c).

2. *Alternative B*

Alternative B lays the groundwork for active management to facilitate resource development. In this alternative, constraints to protect resource values or habitat would be implemented in very specific geographic areas rather than across the planning area or in special designations. All Alaska Native Claims Settlement Act (ANCSA) (d)(1) withdrawals would be revoked on lands retained in long-term Federal ownership, increasing the potential for mineral exploration and development. Seasonal stipulations for oil and gas leasing in caribou habitat would not apply under this alternative (Appendix A). Travel and trail restrictions would be minimized. One Special Recreation Management Area (SRMA) would be identified in the Squirrel River to focus management on recreational use. In other areas, recreation management would focus on dispersed recreation and management of permits. Management of State- and Native-selected lands would be mostly custodial.

3. *Alternative C*

Alternative C emphasizes active measures to protect and enhance resource values. Production of minerals and services would be more constrained than in Alternative B or D, and in some areas, uses would be excluded to protect sensitive resources. Areas of Critical Environmental Concern (ACECs) and SRMAs are identified, and specific measures proposed to protect or enhance values within these areas. Several rivers are recommended suitable for designation under the Wild and Scenic River Act. Limited areas are proposed for off-highway vehicles (OHVs) to protect habitat, soil and vegetation resources. Most ANCSA (d)(1) withdrawals are revoked but some would be replaced with new withdrawals in order to protect or maintain resource values. Most anadromous streams and all ACECs would be closed to mineral entry

and location. Areas suitable for mineral material disposal would be very limited. This alternative treats lands selected by the State and by Native or village corporations as if these lands were to be retained in long-term Federal ownership.

4. *Alternative D*

Alternative D, which is the BLM preferred alternative, emphasizes a moderate level of protection, use, and enhancement of resources and services. Constraints to protect resources would be implemented, but would be less restrictive than under Alternative C. This alternative would designate one Research Natural Area (RNA), five ACECs, and two SRMAs. No rivers would be recommended as suitable for designation under the Wild and Scenic River Act. This alternative would revoke most ANCSA (d)(1) withdrawals, leaving the majority of the planning area open to mineral entry and location. The RNA would be withdrawn from mineral entry. This alternative describes interim and long-term management strategies for lands selected by the State, or Native regional or village corporations.

Alternative D represents the mix and variety of actions that the BLM believes best resolves the issues and management concerns in consideration of all values and programs, and is thus considered the BLM's Preferred Alternative.

5. *Alternatives Considered but Not Analyzed in Detail*

a) Transfer of BLM-managed Lands in the Bering Land Bridge National Preserve to the National Park Service

One organization submitted a proposal to transfer lands in the Bendeleben Mountains to Bering Land Bridge National Park and Preserve. This Draft RMP/EIS considers alternatives that provide a full range of protection for the natural and cultural resource values found on these lands. Thus this alternative was not considered further.

b) Proposed Clear Creek Hot Springs RNA

This proposal, submitted by one organization in the mid-1980s, was submitted by another organization during scoping. While this area meets the criteria for designation of an RNA set forth in 43 CFR 1610.7, the land will not be retained in BLM ownership.

c) Proposed Camp Haven Gap RNA

This proposal, submitted by one organization in the mid-1980s, was submitted by another organization during scoping. The BLM has determined that the area does not meet the criteria for designation of an RNA set forth in 43 CFR 1610.7. This Draft RMP/EIS considers alternatives that provide a full range of protection for the natural and cultural resource values found on these lands.

d) Proposed Windy Cove RNA

This proposal, submitted by one organization in the mid-1980s, was submitted by another organization during scoping. Portions of the proposed RNA are high-priority selected lands and probably will not remain in BLM ownership. In addition, the BLM has determined that portions of the area do not meet the criteria for designation of an RNA set forth in 43 CFR 1610.7. This Draft RMP/EIS considers alternatives that provide a full range of protection for the natural and cultural resource values found on these lands. Other parts of the RNA are included in the Kigluaik ACEC, which is considered in one alternative.

B. Detailed Descriptions of the Alternatives

The following narrative provides a detailed description of proposed management by four categories: Resources, Resource Uses, Special Designations, and Social and Economic Conditions. Goals are listed under each resource, resource use, or program. These are followed by a description of objectives, management actions, and allocations proposed to achieve the goals and to address issues. Goals are consistent across alternatives. Objectives, management actions, and allocations may change by alternative. Management that is common across the alternatives is presented first, followed by descriptions of management by alternative.

1. Resources

a) Air Quality and Soil and Water Resources

(1) Goals

- Air and water quality should meet or exceed local, State and Federal requirements.
- Ensure that watersheds are in, or are making significant progress toward, a properly functioning physical condition that includes stream banks, wetlands, and water quality.
- Minimize negative impacts to soils and wetland vegetation and prevent soil erosion.
- Maintain desired ecological conditions as defined by the BLM-Alaska Statewide Land Health Standards.

(2) Alternative A

This alternative would continue existing management. The Northwest MFP contains little guidance relative to management of soil, water, and air resources. Under the watershed program, a permit is required for the use of vehicles weighing over 2,000 pounds off of existing trails. This alternative also recommends that the BLM file for water rights under State law to secure water for needed BLM uses on an as-needed basis. To date, the BLM has not filed water rights in the planning area. Proposed permitted or authorized uses would be analyzed through the appropriate NEPA document. Based on this analysis, the BLM would develop mitigation to minimize impacts from proposed activities to soil, water, and air resources. The resulting mitigation measures would be included in the permit that authorized the use. The BLM would continue to comply with applicable legislation, Federal regulations, and policy relative to soil, water, and air.

(3) Management Common to All Action Alternatives (B, C, and D)

(a) Inventory and Monitoring

- Support monitoring and assessment of riparian areas for proper functioning condition, as defined in the BLM manual Technical Reference 1737-3. Use this information to develop maintenance and restoration projects. Priority areas will include rivers determined suitable

for inclusion as wild or scenic, designated ACECs, areas known to be in need of restoration, and riparian areas within anticipated or ongoing mining activity.

- Develop a water quality database in critical aquatic habitats and important recreation use areas to establish baseline values. After initial assessment, monitor water quality in these areas.
- Contract soil surveys in areas of high resource value or proposed development as needed.
- Assess impacts from OHV trails, especially in high-use areas where riparian and wetland resources are at risk.

(b) Management Decisions

- In cooperation with the appropriate Federal, State, local, or tribal requirements, identify area-wide use restrictions, or other protective measures, including the Clean Air and Water Acts, Federal wetlands and floodplain requirements.
- In order to comply with the Safe Drinking Water Act and protect the quality and quantity of drinking water, the BLM will consult with owners/operators of potentially affected, Federally-regulated public water supply systems when proposing management actions in State-designated Source Water Protection Areas. The locations of public water supply systems and Source Water Protection Areas are available from the Alaska Department of Environmental Conservation Drinking Water and Wastewater Program.
- File for water rights under State law to secure water needed for BLM uses.

(c) Land Use Requirements

Resource protection would be applied on a site-specific basis for permitted activities and uses that affect soil, water, and air based on guidelines provided in the Required Operating Procedures, as described in Appendix A. Oil and gas leases would be subject to the Oil and Gas Leasing Stipulations also listed in Appendix A.

b) Vegetation Management

(1) Goals

- Maintain the current, largely pristine nature of the Kobuk-Seward Peninsula landscape. Plant communities within the plan area generally exist in a natural mix of seral stages and species diversity, undisturbed except by natural forces generated by climate, weather, terrain, and wildlife.
- Prevent the introduction and spread of noxious and invasive plants on BLM-administered land.

(2) Alternative A

This alternative would continue existing management. The Northwest MFP contains little guidance relative to vegetation management. The permit required for the use of vehicles weighing over 2,000 pounds off of existing trails would reduce impacts to vegetation. The BLM would manage so as to maintain or improve the quality of the range through proper management of livestock and fire. Proposed permitted or authorized uses would be analyzed through the appropriate NEPA document. Based on this analysis, mitigation would be developed to minimize impacts from proposed activities to vegetative resources. The resulting

mitigation measures would be included in the permit that authorized the use. The BLM would continue to comply with applicable policy relative to management of riparian vegetation.

(3) Management Common to All Action Alternatives (B, C, and D)

(a) Inventory and Monitoring

- Complete land cover classification by extending project work to cover Point Hope, De Long Mountains, and Point Lay U.S. Geologic Survey topographic map quadrangles.
- Inventory and monitor BLM-managed lands within the plan area to document the presence of noxious and invasive plant species and prevent their spread.
- Continue to monitor permanent vegetation and fire effects transects established in the Buckland River valley, northern Nulato Hills, Selawik Hills, McCarthy's Marsh, and Death Valley to evaluate changes in vegetation in general, and specific plant communities such as lichen-rich and lichen-dominated habitats.

(b) Management Decisions

- Recognize and manage lichen-rich plant communities (lichen tussock tundra, white spruce-lichen woodland, etc.) as unique habitats due to the slow growth potential of lichen and its great importance to caribou and reindeer.
- As needed, plan and implement site-specific actions necessary to protect and manage habitat through activity-level planning and/or mitigation and stipulation guidelines.
- On a landscape scale, and in cooperation with other State, Federal, Native and private land managers, use wildland fire to protect, maintain, and enhance vegetative resources, and as nearly as possible, allow fire to function in its natural ecological role.
- Use wildland fire, prescribed fire, and mechanical treatment as appropriate to manage for a natural fire regime to support a diverse mix of habitats.
- As needed, consider managing fire to protect old growth lichen stands in caribou winter range on the Seward Peninsula and Nulato Hills through the appropriate fire management option.
- Manage for multi-aged lichen stands, which provide diversity and ecological stability, while recognizing that caribou make substantial use of old growth lichen range.
- Protect vegetation on lands underlain by continuous or discontinuous permafrost from physical damage and thermokarst erosion from uncontrolled OHV use.
- Work with others to implement the BLM's Partners Against Weeds Plan and the Strategic Plan for Noxious and Invasive Plant Management in Alaska.
- Work with the Committee for Invasive and Noxious Plant Management to develop appropriate educational materials on noxious and invasive species.
- Use integrated pest management (IPM) practices to control or eradicate noxious and invasive species. (IPM incorporates the best-suited cultural, biological, and chemical controls that will result in the least impact on the environment.)

(c) Land Use Requirements

Resource protection would be applied on a site-specific basis for permitted activities and uses that affect vegetation based on guidelines provided in the Required Operating Procedures, as described in Appendix A. Oil and gas leases would be subject to the Oil and Gas Leasing Stipulations, also listed in Appendix A.

c) Fish and Wildlife

(1) Goals

- Maintain and protect subsistence opportunities.
- Determine how the management actions, guidelines, and allowable uses prescribed in response to the other issues will affect both subsistence opportunities and resources as well as the social and economic environment.

(a) Fish

- In cooperation with the Alaska Department of Fish and Game (ADF&G), maintain and restore important migratory and resident fisheries habitat, including the maintenance of existing habitat improvements.
- Work with ADF&G to maintain or restore the fisheries potential of anadromous fish streams to support the public use and enjoyment of the resource and to promote economic stability within the planning area by managing for healthy wild populations of anadromous stocks.
- Manage habitat in a condition that will support resident species that spend all or part of their life cycles on public lands and that are of high economic, social, or scientific value to local communities or the nation.

(b) Wildlife

- Maintain sufficient quality and quantity of habitat to support healthy populations of wildlife.
- To the extent practical, mitigate impacts to wildlife species and their habitats from authorized and unauthorized uses of BLM-managed lands.
- In cooperation with ADF&G, ensure sustained populations and a natural abundance and diversity of wildlife resources.

(2) *Alternative A*

This alternative continues current management. Under the Northwest MFP, “crucial” wildlife habitats would be protected. Outside of crucial habitats, other uses would be mitigated to prevent any significant alterations in wildlife populations. Proposed permitted or authorized uses would be analyzed through the appropriate NEPA document. Based on this analysis, mitigation would be developed to minimize impacts from proposed activities. The resulting mitigation measures would be included in the permit that authorized the use.

(3) *Management Common to All Action Alternatives (B, C, and D)*

(a) Inventory and Monitoring

1. Fish

- Work cooperatively with ADF&G, USFWS, NPS, local Native corporations, and private non-profit corporations to inventory habitats and populations to help identify streams that contain anadromous and resident fish species on Federal public lands.
- Conduct habitat inventories in upper river drainages on BLM lands to extend coverage of the anadromous stream catalog. Inventory Shaktoolik, Ungalik, Inglutalik, Koyuk, Tubutulik,

Fish, Kuzitrin, Agiapuk, Buckland, Kivalina, Pah, Pick, Kukpowruk, Ipewik, and Nilik rivers; and Kiklovilik Creek (upper Selawik River).

- Determine upstream limits of Dolly Varden on public lands where data gaps exist. In particular, determine the upstream extent of Dolly Varden spawning in the Kivalina River drainage. Survey suspected spawning grounds associated with fresh water springs in the upper watershed.
- In cooperation with the State of Alaska, collect genetic samples to characterize Chinook, coho, and chum salmon stocks throughout the planning area. The Boston Creek Chinook population in the upper Fish River drainage is high priority.
- Monitor water quality in priority watersheds to assess compliance with Alaska Land Health Standards.

2. Wildlife

- Work cooperatively with State and other Federal agencies to inventory and monitor habitats and populations of important subsistence species to provide the necessary information to develop subsistence regulations and bag limits on Federal lands as required by the Federal Subsistence Board.
- Cooperate with other State and Federal agencies to identify important habitats for Special Status Species and important subsistence species.

(b) Management Decisions

1. Fish

- Use the NEPA review process to mitigate adverse effects on fisheries resources from actions permitted on public lands to ensure that habitats are maintained or restored to a condition that will support desired populations of resident and anadromous species.
- Enter into cooperative restoration projects with private, State and other Federal agencies to implement the priority restoration work identified in BLM's Norton Sound Aquatic Habitat Management Plan, the Norton Sound/Bering Strait Regional Comprehensive Salmon Plan, and the Kobuk-Seward Peninsula RMP.
- Assure land use decisions are managed in compliance with State water quality standards.
- Increase habitat productivity in streams/lakes currently utilized by anadromous fish but producing below potential.
- Incorporate the mitigation measures outlined in Required Operating Procedures in Appendix A for avoiding potential impacts to aquatic life from use of fire retardant and fire suppression foams.

2. Wildlife

- Work cooperatively with State and other Federal agencies to implement the Western Arctic Caribou Herd (WACH) Strategic Management Plan, the Seward Peninsula Muskox Cooperators Plan, Boreal Partners in Flight Landbird Conservation Plan for Alaska, and other cooperative management efforts.
- Mitigate impacts from other uses to ensure that habitats are maintained in a condition that will support desired populations of wildlife species and to reduce direct impacts on wildlife from permitted activities.
- Use wildland fire and prescribed fire to improve moose wintering habitat, but not to the detriment of caribou winter range.

- Due to their value as wildlife habitat, protect riparian and tall shrub habitats through avoidance, rehabilitation of disturbed areas, or other measures.
- Minimize, to the extent possible, the displacement of wildlife resources from traditional subsistence harvest areas.
- Additional site-specific actions needed to manage wildlife habitat will be made through activity-level planning or as mitigation on proposed activities.

(c) Land Use Requirements

All permitted activities would operate under guidelines and stipulations provided in Appendix A: Required Operating Procedures, Stipulations, and Standard Lease Terms. These procedures were developed through the EIS process and are based on current knowledge of resources in the planning area and current permitting procedures. All oil and gas leases would be subject to the Oil and Gas Leasing Stipulations also listed in Appendix A.

(4) Alternative B

As in Alternative A, appropriate mitigation measures would be developed through NEPA analysis on a case-by-case basis. In addition, this alternative proposes some inventory and monitoring of wildlife and fish habitats. Required Operating Procedures applied to all activities would provide additional protection for fish and wildlife habitat. No seasonal restrictions would be applied to oil and gas development in caribou habitat.

(5) Alternative C

This alternative would be the same as Alternative B with the exception that an activity plan would be developed for management of caribou habitat in the Nulato Hills ACEC. This plan would address fire management specific to maintaining lichen habitats for caribou.

(6) Alternative D

This alternative would be the same as Alternative B with the exception that an activity plan would be developed for management of WACH calving, insect relief, and core wintering habitat. Through this planning process, the BLM would develop additional oil and gas leasing stipulations for calving and insect relief habitat, appropriate mitigation measures for linear ROW, and fire management prescriptions for caribou winter range.

The preceding information is summarized in the following table.

Table 2-1. Fish and Wildlife—Summary of Alternatives

Resource	Alternative A	Alternative B	Alternative C	Alternative D
Caribou habitat management	Address activities in WACH herd habitats on a case-by-case basis and mitigate impacts to the extent possible.	Manage WACH calving, insect relief, and core winter habitat in the Nulato Hills subject to BLM Required Operating Procedures and oil and gas leasing stipulations with the exception that leasing stipulations #6 and #7 would not apply.	Designate WACH calving, insect relief, and core winter habitat in the Nulato Hills as ACECs. Develop an activity plan for management of caribou habitat in the Nulato Hills ACEC. This plan would address fire management specific to maintaining lichen habitats for caribou.	Designate WACH calving, insect relief and core winter habitat in the Nulato Hills as ACECs. Develop activity plan for management of WACH calving, insect relief, and core wintering habitat. Through this planning process, additional oil and gas leasing stipulations for calving and insect relief habitat, appropriate mitigation measures for linear ROW, and fire management prescriptions for caribou winter range would be developed.

d) Special Status Species

(1) Goals

- Identify, conserve, and monitor rare and vulnerable habitats and plant communities to ensure a self-sustaining persistence of Special Status Species plants within the Kobuk-Seward Peninsula RMP area.
- Ensure that proposed land uses initiated or authorized by the BLM avoid inadvertent damage to habitats supporting Special Status Species plants and plant communities.
- Manage habitats consistent with the conservation needs of Special Status Species to avoid listing any species under the Endangered Species Act and ensuring progress toward recovery of listed species.

(2) Alternative A

The alternative continues current management. The Northwest MFP does not contain any specific guidance for management of Special Status Species, which would be managed according to BLM policy, applicable laws, and Federal regulations. If actions authorized, funded, or carried out by the BLM may affect any Federally listed species or designated critical habitat, consultation under sec. 7 of the Endangered Species Act would be initiated with USFWS. Proposed permitted or authorized uses that may affect special status species are analyzed through the appropriate NEPA document. Based on this analysis, mitigation is developed to minimize impacts from proposed activities. The resulting mitigation measures are included in the permit that authorizes the use.

(3) Management Common to All Action Alternatives (B, C, and D)

(a) Inventory and Monitoring

1. Special Status Plants

- Identify botanically unexplored regions within the planning area and prioritize for floristic inventory.
- Inventory project sites for Special Status Species plants on an as-needed basis.
- Monitor Special Status Species plant populations and associated habitats for population trends and threats.
- Contribute data on Special Status Species plant locations, population numbers, and trends (and voucher specimens as needed) to the Northern Plant Documentation Center (University of Alaska Fairbanks Museum Herbarium) and Alaska Natural Heritage Program in a cooperative effort to build a statewide rare plant database.

2. Special Status Fish

- In cooperation with ADF&G, inventory habitat for Special Status fish species, and monitor priority species' population trends according to direction provided in BLM Manual 6840.
- Initiate population trend studies on BLM Sensitive Species arctic char and Dolly Varden found in the Kigluaik Mountain lakes. Establish Fall Creek Lake and Crater Lake fish population monitoring as the primary indices for the trend study.

3. Special Status Wildlife

- Identify specific areas and habitats of importance to Special Status Species, including, but not limited to: spectacled eider, Kittlitz's murrelet, yellow-billed loon, and shorebirds.
- Cooperate with other State and Federal agencies to monitor special status landbird species.

(b) Management Decisions

1. Special Status Plants

- Ensure OHV use on designated trails and OHV designations result in avoidance of locations with known populations of Special Status Species plants.
- Protect habitats of Special Status plant species from disturbance and mitigate impacts to Special Status plants from permitted activities.
- Do not authorize mineral material sales in habitats containing known populations of Special Status Species plants.
- As needed, site-specific actions necessary to manage habitat for Special Status Species plants will be made through activity-level planning, such as ACEC or SRMA management plans, or as mitigation/stipulations on proposed activities.

2. Special Status Fish

- Work with ADF&G and the State Board of Fisheries to protect the populations of Kigluaik arctic char through fishing regulations, if warranted.
- Cooperate with State and other Federal agencies in the development and implementation of recovery plans, management plans, conservation strategies, or assessments for Special Status fish species that occur on BLM-managed lands.

3. Special Status Wildlife

- Cooperate with State and other Federal agencies in the development and implementation of recovery plans, management plans, conservation strategies, or assessments for Special Status Species that occur on BLM-managed lands.
- Lands within the planning area will be managed to protect Federal and State listed, as well as candidate Threatened and Endangered species habitat, and to maintain public land health through avoidance of sensitive habitat.
- Where practical, use will be redirected, as necessary, to protect Federal and State listed and candidate Threatened and Endangered species habitat, to enhance indigenous animal population, and to otherwise maintain public land health through avoidance of sensitive habitat.

(c) Land Use Requirements

All permitted activities would operate under guidelines and stipulations provided in Required Operating Procedures in Appendix A. These procedures were developed through the EIS process and are based on current knowledge of resources in the planning area and current permitting procedures. Oil and gas leases would be subject to the Oil and Gas Leasing Stipulations also listed in Appendix A.

e) Fire Management and Ecology

(1) Goals

- Provide appropriate management response on all wildland fires, with an emphasis on firefighter and public safety. Suppression costs must be commensurate with the values to be protected.
- Use wildland fire, prescribed fire, and other treatments to maintain or restore ecological systems and to meet land use and resource management objectives.
- Prevent human-caused fires.
- Reduce risk and costs of uncontrolled wildland fire through wildland fire use, prescribed fire, manual or mechanical treatments.
- Reduce adverse effects of fire management activities.
- Continue interagency collaboration and cooperation.

(2) Alternative A

Current guidance for fire management is provided by the BLM-Alaska Land Use Plan Amendment for Wildland Fire and Fuels Management (BLM 2005c). Under this alternative, BLM would continue to cooperate and collaborate with other Federal, State, and Native land managers, and with other suppression organizations to address issues and concerns related to wildland fire management in Alaska and to implement operational decisions. Fire Management programs would emphasize the protection of human life and site-specific values while recognizing fire as an essential ecological process and natural agent of change to ecosystems. This alternative recognizes wildland fire use for resource benefit as a viable management tool. Vegetative communities would be monitored for cumulative effects of wildland fire, suppression activities, and effects of excluding fire as funding permits. Fuels management projects and prevention programs are proposed and funded on a case-by-case basis.

(3) Management Common to All Action Alternatives (B, C, and D)

(a) Inventory and Monitoring

- Monitor the number and size of wildland fires for cumulative impacts on wildlife habitat, particularly caribou winter range.
- Monitor vegetative communities for cumulative effects of wildland fire, suppression actions, and as funding permits, the effects of excluding fire from the landscape to evaluate best management practices.

(b) Management Decisions

- Use the appropriate mix of Fire Management Options and update as needed.
- Identify sensitive areas where special restrictions may be needed for fire monitoring and suppression activities.
- Identify and prioritize values at risk.
- Flight patterns and suppression activities will be prohibited around areas designated "Avoid".
- Determine number of human-caused fires and then implement an appropriate prevention program.

- Implement the most current fire management plan.
- Use wildland fire and fuels treatments to meet desired future conditions.
- The Required Operating Procedures in Appendix A will be implemented during fire management activities.
- The BLM policy for Structure Protection has been updated to clearly state District/Field Office priorities and to facilitate appropriate fire suppression actions on BLM-managed lands in the planning area. The policy can be found in Appendix E.

Site-specific fuels management actions needed to meet desired future conditions, habitat needs, or to meet protection objectives will be made through activity-level plans including:

- Modeling the impact of fire on habitat of the WACH to determine appropriate management strategies.
- Evaluating the number of human-caused fires and implementing an appropriate prevention plan.

(4) Alternative B

The alternative would be similar to Alternative A. Management options would be assessed based resource management and land use objectives. A new structure protection policy would be implemented. Fuels management and prevention programs would be developed as warranted. The need for active fuels management program would increase as the natural fire regime is effected by suppression efforts. Wildland fire use would not be allowed. Decisions in this RMP would supersede decisions in the BLM-Alaska Land Use Plan Amendment for Wildland Fire and Fuels Management (BLM 2005c).

(5) Alternative C

This alternative would be similar to Alternative B except that wildland fire use would be allowed. Management option designations would be reviewed for compliance with land use and resource management objectives identified under this alternative. A new structure protection policy would be implemented. Fuels management and prevention programs would be developed as warranted.

(6) Alternative D

This alternative would be the same as Alternative C.

The preceding information is summarized in the following table.

Table 2-2. Fire Management and Ecology—Summary of Alternatives

Resource	Alternative A	Alternative B	Alternative C	Alternative D
Fire Management and Ecology	Allow wildland fire use for resource benefit and to meet land use and resource management objectives.	Do not allow wildland fire use.	Allow “wildland fire use.” Develop an activity-level plan outlining specific prescriptions for wildland fire use.	Same as C.

f) Cultural Resources

(1) Goals

- Protect significant cultural resources on public lands.
- Manage cultural resources for a variety of uses, including scientific use, conservation for future use, public use, traditional use, and experimental use.
- Preserve important cultural resource values through stabilization and data recovery.

(2) Alternative A

Under current management, BLM works with applicants to modify proposed surface-disturbing activities to completely avoid impacts to cultural resources if possible. BLM conducts consultation with the State Historic Preservation Officer, including a determination of eligibility, only when impacts to cultural resources cannot be avoided. This is done for two reasons: it reduces the amount of compliance work needed under sec. 106 of the National Historic Preservation Act (NHPA) and usually allows an applicant to proceed in the timeliest fashion.

Areas would be selected for baseline (non-sec. 106) inventory primarily on the basis of expectations about where development might occur, but with some consideration of where concentrations of cultural resources might be expected to occur. In general, destructive forms of data recovery, such as excavation and extensive testing would be avoided, and non-destructive forms of data recovery, such as surface mapping and limited testing, would be done only as necessary for sec. 106 purposes.

Sites in the planning area would be designated for current research use, with those sites that are accessible to the public being also designated for public use. Sites would be designated for traditional use as the BLM learned about them. Presently no sites are designated for conservation for future use.

(3) Management Common to All Action Alternatives (B, C, and D)

(a) Inventory and Monitoring

- Continue to conduct inventory mandated by sec. 110 of NHPA as funds are available.
- Monitor cultural resource sites in danger of alteration or destruction from natural or human-made causes.
- Develop partnerships to achieve these ends.

(b) Management Decisions

- Ensure adequate compliance with sec. 106 of the National Historic Preservation Act for all Bureau undertakings.
- Increase our understanding of the resource base through inventory and data recovery.
- Provide resources for current and future research needs.
- Provide resources for public uses.

(c) Land Use Requirements

All permitted activities would operate under guidelines and stipulations provided in Required Operating Procedures in Appendix A. These procedures were developed through the EIS process and are based on current knowledge of resources in the planning area and current permitting procedures. Oil and gas leases would be subject to the Oil and Gas Leasing Stipulations also listed in Appendix A.

(4) *Alternative B*

Alternative B differs from Alternative A chiefly in terms of emphasis. Decisions regarding avoidance versus mitigation would be made in favor of development interests, and priorities for baseline inventory would be developed based on anticipated development. Destructive forms of data recovery would be allowed to accommodate development. Most sites would be designated for current research use, and other uses would be allowed only to the extent compatible with development.

(5) *Alternative C*

This alternative places emphasis on conservation of cultural resources. In carrying out compliance under sec. 106, preference would be given to avoidance over mitigation. Priorities for non- sec. 106 baseline inventory would be developed on the basis of where the greatest concentrations of resources are known or expected to be. Destructive means of data recovery would not be carried out, but non-destructive methods of data gathering would be employed frequently to develop better information about the resource base. At a minimum, a representative sample of cultural resources would be designated for conservation for future use.

(6) *Alternative D*

Under Alternative D, the guiding philosophy for management of cultural resources would be one of balance. Decisions regarding avoidance or mitigation would be developed by trying to weigh the anticipated value of cultural resources against the value of development and the cost of mitigation to applicants. Priorities for baseline inventory would be developed as under Alternative A. Destructive forms of data recovery would be minimized, but non-destructive data gathering would be actively pursued both in response to development and where important sites are involved. A mix of use categories would be assigned to try to provide for all uses of cultural resources in the planning area.

The preceding information is summarized in the following table.

Table 2-3. Cultural Resources—Summary of Alternatives

Resource	Alternative A	Alternative B	Alternative C	Alternative D
Avoid or mitigate impacts to significant cultural resources resulting from Bureau undertakings.	Whenever feasible, avoid impacts to cultural resources. Complete Determinations of Eligibility and sec. 106 consultation only when impacts cannot be avoided.	Make decisions regarding avoidance or mitigation based on what is most acceptable to applicants or other development interests.	Avoid impacts to cultural resources in all instances except when it is physically impossible to do so.	Decide between avoidance and mitigation by weighing the relative value of cultural resources and the effects on development interests.
Prioritize areas for non- sec. 106 inventory.	Priority assigned to broad areas because of likelihood of development impacts.	Same as A	Priority assigned based on the value of the resource. Priority will be given to areas known to include important and/or numerous sites.	Assign priorities for inventory based on a combination of expected development activities and resource values.
Determine the extent and nature of data recovery efforts.	No destructive forms of data recovery (excavation and extensive testing) and only very limited collection of artifacts. Non-destructive data recovery (mapping and other forms of recordation) generally done only as necessary for sec. 106.	Same as A, but destructive data recovery allowed to accommodate development. Conduct non-destructive data recovery in areas where development is anticipated.	Destructive data recovery allowed only to address important research topics. Conduct non-destructive data recovery in areas of known or expected high resource values.	Minimize destructive data recovery. Conduct non-destructive data recovery based on a combination of management needs and resource values.
Designate sites on public lands as suitable for current research use and for conservation for future use.	Designate most sites as suitable for current research. Assign sites to multiple use categories.	Designate most sites as suitable for current research use. Allow other uses only to the extent that they do not restrict research use.	Designate a representative sample of sites for current research use. Reserve most sites for conservation for future use.	Designate most sites for current research use. Reserve a representative sample for conservation for future use.
Designate sites on public lands as suitable for public and traditional use.	Designate suitable sites for public use in areas having general public access. Designate sites for traditional use as they are made known to us.	Same as A. Avoid public use designations where that might conflict with other resource development.	Same as A. Avoid uses that would lead to destruction or major changes in sites.	Same as A.

g) Paleontological Resources

(1) Goals

- Preserve and protect significant paleontological resources and ensure that they are available for appropriate uses by present and future generations.
- Ensure that proposed land uses initiated or authorized by BLM avoid inadvertent damage to Federal and non-Federal paleontological resources.
- Promote stewardship, conservation, and appreciation of paleontological resources through educational and outreach programs.

(2) Alternative A

Under current management, the BLM manages paleontological resources in compliance with Federal regulations and in accordance with our internal program guidance (BLM 8720 Manual and Handbook). Paleontological specimens are protected by avoiding impacts to such specimens through project redesign, project abandonment, and/or mitigation of adverse impacts through scientific recovery and analysis. The Northwest MFP does not address management of paleontological resources.

(3) Management Common to All Action Alternatives (B, C, and D)

(a) Inventory and Monitoring

- Maintain an inventory of paleontological sites and localities.

(b) Management Decisions

- Require permits for individuals or institutions conducting paleontological investigations for vertebrate fossils on BLM-managed lands and insure that fossils remain in Federal ownership.
- Prior to projects that may result in surface or sub-surface disturbance, conduct an inventory for vertebrate paleontological resources in conjunction with the inventory for cultural resources.
- Comply with Federal regulations for the protection of paleontological remains by avoiding impacts to paleontological remains through project redesign, project abandonment, and/or mitigation of adverse impacts through scientific recovery and analysis.
- Prepare paleontological resource awareness programs designed to enhance public appreciation of paleontological resource values.
- Encourage scientific use of paleontological resources by university field schools.

(c) Land Use Requirements

All permitted activities would operate under guidelines and stipulations provided in Required Operating Procedures in Appendix A. These procedures were developed through the EIS process and are based on current knowledge of resources in the planning area and current permitting procedures. Oil and gas leases would be subject to the Oil and Gas Leasing Stipulations also listed in Appendix A.

h) Visual Resources

(1) Goals

- Maintain the scenic qualities of the planning area.
- Manage scenic values in accordance with the objectives established for Visual Resource Management (VRM) classes.

(2) Alternative A

Under continuation of current management, visual resources would be managed on a project-by-project basis as no VRM classes have been established.

(3) Management Common to All Action Alternatives (B, C, and D)

(a) Inventory and Monitoring

Under all alternatives, visual resources would be managed according to established guidelines for VRM classes as described in the Visual Resources section of Chapter III. Generally, VRM Class I is more protective of scenic values and VRM Class IV is less restrictive. The visual resource contrast rating system would be used during project-level planning to determine whether or not proposed activities will meet VRM objectives.

(b) Management Decisions

Mitigation measures would be identified to reduce visual contrasts, and rehabilitation plans to address landscape modifications would be prepared on a case-by-case basis. VRM classes would be established as shown on Maps 2-1, 2-2, and 2-3. There would be no areas managed as VRM Class I under any alternative.

(c) Land Use Requirements

All permitted activities would operate under guidelines and stipulations provided in Required Operating Procedures in Appendix A. These procedures were developed through the EIS process and are based on current knowledge of resources in the planning area and current permitting procedures. All oil and gas leases would be subject to the Oil and Gas Leasing Stipulations also listed in Appendix A.

(4) Alternative B

Under Alternative B, 91 percent of the lands would be managed as VRM class IV. Smaller areas, including the Squirrel River watershed and the Kigluaik Mountains would be managed as VRM II and III areas. There would be no VRM class I.

(5) Alternative C

Alternative C would have the most restrictive VRM classifications. Approximately 54 percent of the planning area would be managed as VRM class II. Class II areas would include ACECs, the Squirrel River watershed, corridors along major rivers used as access corridors throughout the

planning area, and the Kigluaik Special Recreation Management Area. Approximately 24 percent and 22 percent of the planning area would be managed as class III and class IV respectively. There would be no VRM class I.

(6) Alternative D

Under Alternative D, 41 percent of the planning area would be managed as class III and 52 percent would be managed as class IV. A few areas including Mount Osborn RNA, the Ungalik River, the Kivalina River, and the Squirrel River would be managed as VRM class II (7 percent). There would be no VRM class I.

The preceding information is summarized in the following table.

Table 2-4. Visual Resources—Summary of Alternatives

Resource	Alternative A	Alternative B	Alternative C	Alternative D
Visual Resources	No VRM management classes assigned	Class I: 0 acres Class II: 330,000 acres Class III: 804,000 acres Class IV: 11,999,000	Class I: 0 acres Class II: 7,058,000 acres Class III: 3,178,000 acres Class IV: 2,897,000 acres	Class I: 0 acres Class II: 891,000 acres Class III: 5,444,000 acres Class IV: 6,798,000 acres

INSERT 11x17 MAP
2_1_vrm_b

INSERT 11x17 MAP
2_2_vrm_c

INSERT 11x17 MAP
2_3_vrm_d

2. Resource Uses

a) Forest Products

(1) Goals

- Manage forests and woodlands to sustain their health, productivity, and biological diversity.
- Consistent with other resource values, provide forest products for local consumption and opportunities for commercial harvests.

(2) Alternative A

Under continuation of current management, requests for forest resources would be considered on a case-by-case basis as permits were received. Forested lands would be managed for a sustained yield of forest products.

(3) Management Common to All Action Alternatives (B, C, and D)

Forest resources would be managed to ensure biodiversity, long-term productivity, and a wide spectrum of multiple uses, including scenic values, recreation, fish and wildlife habitat, watershed protection, and timber harvest. Forest product permitting would be subject to the Required Operating Procedures found in Appendix A.

(a) Inventory and Monitoring

- Conduct baseline forest inventory of plan area to determine location of both commercial and non-commercial timber, as well as old growth stands. A comprehensive baseline inventory of forest resources in the plan area is needed to provide the location of timber stands, the age and size classes, and current health.
- Coordinate with USDI Forest Service (USFS) to conduct forest health inventory in the planning area to assess the extent and type of insect and disease outbreaks.

(b) Management Decisions

- Issue permits to authorize harvest of personal use firewood and house logs consistent with 43 CFR 5400 on a case-by-case basis.
- Issue free use permits to harvest vegetative products for personal use consistent with 43 CFR 5500 on a case-by-case basis.
- Lands would be managed to maintain or achieve the following desired conditions for forest and woodlands:
 - **Open/Closed White Spruce Forest:** Occupy approximate historic range, recognizing range shifts may occur due to global climate change, and are in stable or improving condition.
 - **Open/Closed Black Spruce Forest:** Occupy approximate historic range, recognizing range shifts may occur due to global climate change, and are in stable or improving condition.

- **Black Spruce Woodland:** Occupy approximate historic range, recognizing range shifts may occur due to global climate change, and are in stable or improving condition.
- Approximately 8 percent of BLM-managed lands within the Kobuk-Seward Peninsula RMP area are forested. Much of this forest and woodland will not be aggressively managed because of lack of access, low productivity due to harsh climate, and little public demand. However, in areas where access, productivity, and public interest in forestlands support more focused management, the following guidelines will be applied:
 - **Timber stands managed for commercial production of white spruce:** These stands occur on floodplains and alluvial terraces on well-drained soils. They would be managed to maintain white spruce as the dominant tree species. This may require thinning to minimize early seral competition from other species. Beetle-killed trees within these stands would be salvaged where possible.
 - **Timber stands managed for improvement of wildlife habitat:** In mixed white spruce-paper birch/balsam poplar stands where wildlife habitat improvement is the primary objective, desired condition will be maintenance of white spruce with a component of paper birch or balsam poplar. These stands would have shrub-dominated early seral stages after harvest and/or wildland or prescribed fire, or after mechanical treatment of mature or beetle-killed white spruce. Timber stands of this type would be expected to return to late seral stage of mixed white spruce-paper birch/balsam poplar after these types of disturbances.
 - **Moose habitat:** Desired condition is a mosaic pattern of upland spruce woodland cover types interspersed with a lower seral expression dominated by alder and willow. Upland woodland cover types are mixed with stream terraces and floodplains dominated by sedges and grasses and mixed age classes of alder and willow.
 - **Caribou habitat:** For summer range, similar to description for moose habitat. For caribou winter range, desired condition is uplands spruce woodland cover type where lichen plus various forbs and graminoids dominate the ground layer.
 - **Dall Sheep habitat:** Open high-elevation grass and forb-dominated plant communities with a minor shrub or tree component.

(4) Alternative B

Under Alternative B, forested lands would be managed to provide a variety of forest products including firewood, house logs, and other forest products. The feasibility of prescribed fire, wildland fire, or salvage logging in localized areas of beetle-killed spruce would be assessed. Requests for forest products would be considered on a case-by-case basis as applications were received. Small commercial logging and firewood sales would be considered, even in special management areas.

(5) Alternative C

Under Alternative C, forested lands would be managed to provide limited personal use firewood and house logs. Stands of beetle-killed spruce would be left to decay naturally. . Allow wildland fire to function in its natural ecological role. Requests for forest products would be considered on a case-by-case basis as applications were received. No commercial logging or firewood sales would be permitted. Additional restrictions on personal use harvest of forest products would apply in special management areas, such as ACECs and suitable rivers.

Personal use firewood and house log gathering would be permitted in the Squirrel River SRMA if consistent with management objectives for the unit.

(6) *Alternative D*

Under Alternative D, forested lands would be managed to provide a sustained yield of firewood and house logs, and other forest products. The feasibility of prescribed fire, wildland fire, or salvage logging in localized areas of beetle-killed spruce would be assessed on a case-by-case basis. Small commercial logging and firewood sales would be considered in some areas, including ACECs. Personal use firewood and house log gathering, and small sales vegetative contracts would be permitted in ACECs and the Squirrel River SRMA if consistent with management objectives for the unit.

The preceding information is summarized in the following tables.

Table 2-5. Forest Products—Summary of Alternatives

Resource	Alternative A	Alternative B	Alternative C	Alternative D
Forest Products	<p>Issue permits to authorize personal firewood and house log harvest.</p> <p>Consider applications for salvage logging of beetle-killed spruce on a case-by-case basis.</p>	<p>Same as A.</p> <p>Assess feasibility of prescribed fire or salvage logging in localized areas of beetle-killed spruce timber.</p>	<p>Same as A.</p> <p>Leave stands of beetle-killed spruce to naturally decay. Allow wildland fire to function in its natural ecological role.</p>	<p>Same as A.</p> <p>Compare benefits/risks of salvage logging with prescribed fire or wildland fire in localized areas of beetle-killed white spruce timber on a case-by-case basis.</p> <p>Same as B</p>
	<p>Address proposals for commercial sales on a case-by-case basis</p>	<p>After baseline forest inventory, assess feasibility of commercial logging in selected areas. If feasible, limited commercial logging and firewood sales would be considered. Small sales vegetative contracts permitted (e.g., commercial harvest of mushrooms, Christmas trees, spruce cones, etc.)</p>	<p>No commercial logging or firewood sales will be permitted within the plan area. Small sales vegetative contracts considered on a case-by-case basis.</p>	

Table 2-6. Forest Products—Constraints on Specific Areas

Resource	Alternative A	Alternative B	Alternative C	Alternative D
Squirrel River SRMA	Same as remainder of planning area as described in column A above.	Consider commercial forest product sales on a case-by-case basis in the Squirrel River SRMA.	Same as column C. above, consistent with measures identified in the Squirrel River SRMA, except that no commercial sales permitted.	Same as column D. above, consistent with measures identified in the Squirrel River SRMA, except no commercial logging or firewood sales permitted.
ACECs/RNAs	No ACECs/RNAs	No ACECs/RNAs	Limited personal use firewood and house log harvest permitted, consistent with management objectives for ACEC/RNA. No commercial sales permitted.	Same as column D. above, if consistent with management objectives for ACEC/RNA.
Wild and Scenic Rivers	Personal use firewood and house log permits are allowed within the Squirrel River WSR study area.	No rivers determined suitable	No personal use firewood or house log harvest allowed on rivers determined suitable for WSR status. No commercial sales permitted on rivers determined suitable for WSR status.	No rivers determined suitable

b) Livestock Grazing

(1) Goals

- Resolve conflicts between livestock grazing, wildlife, and subsistence.
- Maintain and improve the quality of the range conditions.
- Manage for a sustainable level of livestock grazing with deference given to maintaining habitat needed to support desired populations of wildlife.
- Determine appropriateness of grazing of livestock for species other than reindeer.

(2) Alternative A

Under continuation of current management, livestock grazing would be managed on a case-by-case basis as permits were received. The type of livestock permitted would be limited to reindeer. Incidental grazing by pack animals associated with special recreation use permits would be considered on a case-by-case basis.

(3) Management Common to All Action Alternatives (B, C, and D)

(a) Inventory and Monitoring

- Work cooperatively with ADNR, ADF&G, NRCS, NPS, and the Federal Subsistence Program to monitor range conditions to provide the necessary information to manage herding activities. Monitor lichen utilization and condition in open and active allotments. Work with NRCS and others to assess range conditions.
- Inventory habitat to determine priority for wildlife species on an as-needed basis.

(b) Management Decisions

- Decisions identifying lands available, or not available, for livestock grazing may be revisited through a plan amendment or revision if the grazing preference or permit on those lands has been voluntarily relinquished, or if there are outstanding requests to voluntarily relinquish the grazing preference.
- If an evaluation of the Alaska Statewide Land Health Standards identifies an allotment or group of allotments where Alaska Statewide Land Health Standards cannot be achieved under any level or management of livestock use, then decisions identifying those areas as available for livestock grazing need to be revisited.
- Develop allotment management plans for open and actively used allotments that include grazing systems and fire management.
- Allow incidental grazing of pack animals associated with special recreation permits on a case-by-case basis consistent with the permitting process for special recreation use permits, Required Operating Procedures in Appendix A, and the Alaska Statewide Land Health Standards.
- Screen new reindeer or livestock grazing permit applications for potential conflicts with wildlife and subsistence, and reject applications where significant conflicts are likely to occur.
- Grazing permits would be subject to Required Operating Procedures listed in Appendix A.

(4) *Alternative B*

Under Alternative B, the entire planning area would be open to grazing. Types of livestock permitted would include both reindeer and bison. Incidental grazing by pack animals associated with special recreation use permits would be considered on a case-by-case basis.

(5) *Alternative C*

Grazing under Alternative C would be limited to the Seward Peninsula (Map 2-4). Two active grazing allotments and two vacant areas, McCarthy's Marsh and the upper Kuzitrin River, would be closed. Grazing allotment boundaries would be modified to exclude ACECs. The type of livestock permitted would be limited to reindeer. Permits for allotments where reindeer have been absent for 10 or more years due to emigration with caribou would not be renewed. Unrenewed allotments would be permanently retired from grazing. Incidental grazing by pack animals associated with special recreation use permits would be considered on a case-by-case basis.

(6) *Alternative D*

Under Alternative D, grazing would be limited to current use areas (Map 2-5). Two vacant areas, McCarthy's Marsh and the upper Kuzitrin River, would be closed. The type of livestock permitted would be limited to reindeer. Incidental grazing by pack animals associated with special recreation use permits would be considered on a case-by-case basis.

The preceding information is summarized in the following table.

Table 2-7. Livestock Grazing—Summary of Alternatives

Resource	Alternative A	Alternative B	Alternative C	Alternative D
Livestock Grazing	Allow reindeer grazing on a case-by case-basis within the planning area. 13,133,000 acres open. Of this, about 8,163,000 acres are selected.	Same as A	Allow reindeer grazing only in the following allotments: Sheldon, Karmun, Goodhope, Mt. Wick, Kakaruk, Ongtowsruk, Olanna, Shaktoolik, and Mt. Bend. (3,323,000 acres open. Of this, 2,222,000 acres are selected.) The remainder of the planning area would be closed.	Allow reindeer grazing only in the following allotments: Sheldon, Karmun, Goodhope, Buckland River, Mt. Wick, Weyiouanna, Davis, Kakaruk, Kougarok, Koyuk, Ongtowsruk, Olanna, Shaktoolik, Baldwin Peninsula, and Mt. Bend. (4,058,000 acres open. Of this, 2,948,000 acres are selected.) Remainder of the planning area would be closed.
	Grazing by other types of livestock not authorized under the MFP.	Consider livestock grazing (bison) on the Seward Peninsula on a case-by-case basis 5,219,000 acres open.	Do not allow livestock grazing (other than reindeer) within the planning area, except incidental grazing by pack animals that are associated with a SRP.	Same as C
	Renew grazing permits on a case-by-case basis, considering conflicts with wildlife and subsistence.	Same as A	Do not renew reindeer grazing permits where reindeer have been absent for 10 or more years due to emigration with caribou. Permanently retire un-renewed allotments.	Same as A
	Renew grazing permits on case-by-case basis.	Same as A	Identify allotments where permits are not to be renewed within 1 year of plan approval.	Same as A
Grazing management in ACECs	No ACECs	No ACECs	Close portions of grazing allotments w/in Nulato Hills, and Kigluaik ACECs to grazing.	Grazing would be allowed within ACECs.

INSERT 8½x11 MAP
2_4_grazing_c

INSERT 8½x11 MAP
2_5_grazing_d

c) Minerals

Lands currently under selection by the State and Native corporations are segregated from locatable mineral entry and location, and from mineral leasing to avoid potential encumbrances on selected lands prior to conveyance. These lands comprise approximately 8,163,000 million acres out of the 13,133,000 million acres currently managed by the BLM. Therefore, decisions made within this land use planning effort to “open” areas for mineral exploration or development by revoking withdrawals would not go into effect unless lands are retained long-term in Federal ownership (i.e., not conveyed to the State or Native corporations).

(1) *Leasable Minerals*

(a) Fluid Leasable Minerals

1. Goals

- The public lands and Federal mineral estate will be made available for orderly and efficient exploration, development, and production of fluid leasable mineral resources (includes oil, natural gas, tar sands, coal bed methane, and geothermal steam), unless withdrawal or other administrative action is justified in the national interest.
- All fluid leasable minerals actions will comply with goals, objectives, and resource restrictions (mitigations) to protect other resource values in the planning area.

2. Alternative A

Currently there are no mineral leases on BLM-managed lands within the planning area. Some BLM lands are closed to leasing because of State or Native selections, Public Land Order (PLO), or underlying ANCSA (d)(1) withdrawals. Under Alternative A, no withdrawal review would occur and all ANCSA (d)(1) withdrawals would remain in place, pending some legislation or unrelated management direction. Map 3-26 shows areas open for mineral leasing, pending State or Native selections. For the purposes of analysis, it is assumed that under Alternative A no leasing would occur, as appropriate NEPA analysis must be completed and approved before Federal oil and gas lease sales can take place. However, where oil and gas is being drained from lands otherwise unavailable for leasing, there is implied authority in the agency having jurisdiction of those lands to grant authority to the BLM to lease such lands.

- Areas open to leasing subject to the terms and conditions of the standard lease form and BLM stipulations and required operating procedures: 2,821,000 acres, of which none is State- or Native-selected.
- Areas open to leasing, subject to minor constraints such as seasonal restrictions: 0 acres (none).
- Areas open to leasing, subject to major constraints such as No Surface Occupancy (NSO): 24,000 acres. These lands include those specified in PLO 6477 : Pah, Shaktoolik, Ungalik, Inglutalik, Tubutulik, Kuzitrin, Fish, and west bank of Noatak River.
- Areas closed to leasing: 10,288,000 acres, which includes the Squirrel River Wild and Scenic River Study Area, areas closed by PLO, and those areas closed by ANCSA (d)(1) withdrawals.

3. Management Common to All Action Alternatives (B, C, and D)

a. Management Decisions

- Leasing would be subject to BLM standard lease terms and BLM-Alaska's stipulations and Required Operating Procedures with the exception in Alternative B that seasonal lease stipulations for caribou would not apply (Lease #6 and #7).
- Lands under selection by the State and Native corporations would be segregated from mineral leasing. The categories and constraints identified below only apply on lands retained in long-term Federal ownership.
- Stipulations prescribed for Federal mineral development, in split-estate situations, apply only to the development of the Federal minerals. These stipulations do not dictate surface management.
- Wild river portions of Wild and Scenic River corridors would be closed to the operation of the mineral leasing laws.
- Wild and Scenic Rivers managed as scenic river areas could be available for leasing, exploration, and development, so long as these uses do not adversely affect free flow, water quality, or the river's outstandingly remarkable values.
- Consider all geothermal leasing, Plan of Operations for exploration, or applications for development on a case-by-case basis.
- 24,000 acres of Federal oil and gas leasable lands are subject to NSO per PLO 6477: 300-foot NSO setback in the Pah River, Shaktoolik River, Ungalik River, Inglutalik River, Tubutulik River, Kuzitrin River, Fish River and west bank of Noatak River.
- In areas open to leasing subject to major constraints such as NSO, geophysical, exploration, and other temporary activities would be allowed subject to the BLM-Alaska stipulations and ROPs.
- Through NEPA analysis done at the time of a lease sale, this RMP may be amended to change NSO constraints.
- Coalbed natural gas development would be authorized by the same process as oil and gas.
- Geothermal resources would be available for leasing in areas open to oil and gas leasing. Areas closed to oil and gas leasing are also closed to geothermal leasing.
- All areas closed to fluid mineral leasing would be closed to geophysical exploration.

As described in BLM Manual 1624, Federal oil and gas resources (including coalbed natural gas) fall into one of four categories that become increasingly restrictive:

- **Open Subject to Standard Lease Terms and Conditions:** These are areas where it has been determined through the planning process that the standard terms and conditions of the lease form are sufficient to protect other land uses or resource values. In these areas, the BLM-Alaska's Stipulations and Required Operating Procedures (Appendix A) would also apply unless specifically excluded under a particular alternative.
- **Open Subject to Seasonal or Other Minor Constraints:** These are areas where it has been determined that moderately restrictive lease stipulations may be required to mitigate impacts to other land uses or resource values. Category 2 leases frequently involve timing limitations such as restricting construction activities in designated big game habitats, or controlled surface use stipulations such as creating a buffer zone around a critical resource.
- **Open Subject to NSO or Other Major Constraints:** These are areas where it has been determined through the planning process that highly restrictive lease stipulations are necessary to protect resources. Category 3 leases may prohibit the construction of

well production and support facilities. These areas can be subject to directional drilling, if technologically and economically feasible.

- **Closed to Leasing:** These are areas where it has been determined that other land uses or resource values cannot be adequately protected, and appropriate protection can be ensured only by closing the land to leasing through either statutory or administrative requirements.

b. Implementation Decisions

- Conditions of Approval (COA) for Applications for Permit to Drill would allow necessary impacts in order for development to be technically feasible or economically viable.
- Exceptions to lease stipulations and COAs would be allowed when site-specific analyses showed impacts to sensitive resources were within acceptable limits.
- Well spacing requirements for oil and gas resource protection would defer to the Alaska Oil and Gas Conservation Commission guidance with consideration for surface resource values.

4. Alternative B

- Areas open to leasing subject to the terms and conditions of the standard lease form, and BLM stipulations and ROPs: 13,109,000 acres, of which approximately 8,143,000 acres are State- or Native-selected. Under this alternative, Oil and Gas Leasing Stipulations #6 and #7 (Appendix A) would not apply.
- Areas open to leasing, subject to minor constraints such as seasonal restrictions: 0 acres (none). Under this alternative, Oil and Gas Leasing Stipulations #6 and #7 (Appendix A) would not apply.
- Areas open to leasing, subject to major constraints such as NSO: 24,000 acres. These lands include those specified in PLO 6477: Pah, Shaktoolik, Ungalik, Inglutalik, Tubutulik, Kuzitrin, and Fish rivers, and west bank of Noatak River.
- Areas closed to leasing: 0 acres (none).

Map 2-6 shows areas that would be open for fluid mineral leasing, pending State and Native selections.

5. Alternative C

- Areas open to leasing subject to the terms and conditions of the standard lease form, and BLM stipulations and ROPs: 1,764,000 acres, of which 1,428,000 acres are State- or Native-selected.
- Areas open to leasing, subject to minor constraints such as seasonal restrictions: 5,353,000 acres of which approximately 3,592,000 acres are State- or Native-selected.
- Areas open to leasing, subject to major constraints such as NSO: 71,000 acres, 41,000 of which is State- or Native-selected land. These lands include portions of the following rivers that are outside of the closed areas: a) 300-foot setback as specified in PLO 6477; Pah, Shaktoolik, Ungalik, Inglutalik, Tubutulik, Kuzitrin, and Fish rivers, and west bank of Noatak River; b) 300-foot setback from bankfull stage on either side of tributaries of above mentioned rivers (including Boston Creek); and c) 300-foot setback from bankfull stage on both sides of the upper portion mainstems and tributaries of the following rivers: Agiapuk, Buckland, Squirrel, Omar, Kivalina, Pick, Kukpowruk, Ipewik, and Nilik rivers, Kiliovilik Creek (Upper Selawik), and Koyuk River including East Fork.

- Areas closed to leasing: 5,945,000 acres, 3,096,000 acres of which are State- or Native-selected. These lands include: a) Nulato Hills; b) WACH insect relief/calving habitat; c) Squirrel River (PLO 5179); d) Kigluaik Mountains; e) McCarthy's Marsh; and f) Upper Kuzitrin River.

Map 2-7 shows areas that would be open to oil and gas leasing, pending State and Native selections.

6. Alternative D

- Areas open to leasing subject to the terms and conditions of the standard lease form and BLM stipulations and ROPs: 6,951,000 acres, 5,067,000 acres of which are State- or Native-selected.
- Areas open to leasing, subject to minor constraints such as seasonal restrictions: 6,144,000 acres, 3,069,000 acres of which are State- or Native-selected. These lands include: a) Squirrel River SRMA; b) caribou, waterfowl, and moose habitat in McCarthy's Marsh, upper Kuzitrin River; c) winter habitat for WACH in south Nulato Hills, and d) calving and insect relief habitat for WACH.
- Areas open to leasing, subject to major constraints such as NSO: 38,000 acres, 20,000 acres of which are State- or Native-selected. These lands include: a) 300-foot setback from bankfull stage on rivers identified PLO 6477 (see Management Common to All Action Alternatives (B, C, and D) on page 2-40); b) 300-foot setback from bankfull stage on Boston Creek, Koyuk River, Peace River, Agiapuk River, and upper Kivalina River.
- Areas closed to leasing: 0 acres.

Map 2-8 displays areas that would be open to oil and gas leasing, pending State and Native selections.

The preceding information is summarized in the following table.

Table 2-8. Fluid Leasable Minerals—Summary of Alternatives

Resource	Alternative A	Alternative B	Alternative C	Alternative D
<p>Closed to Fluid Mineral Leasing</p>	<p>Approximately 10,288,000 acres of Federal oil and gas leasable lands are currently closed to leasing because of State or Native selections, underlying ANCSA (d)(1) withdrawals, or other PLO. This includes about 1 million acres in the Nulato Hills closed under PLO 6477.</p>	<p>0 acres closed to leasing. Revoke all ANCSA (d)(1) withdrawals.</p>	<p>5,945,000 acres closed to leasing. Of this, 3,096,000 acres are selected. In addition to the area identified in Alternative D, the following areas would be closed fluid mineral leasing if retained in Federal ownership: 1) WACH Insect relief/calving habitat 2) Squirrel River (PLO 5179) 3) Kigluaik Mountains 4) McCarthy's Marsh 5) Upper Kuzitrin River 6) Nulato Hills</p>	<p>0 acres closed to leasing. BLM would recommend revocation of most ANCSA (d)(1) withdrawals to allow for leasing on land retained in Federal ownership.</p>
<p>Open with No Surface Occupancy (NSO) Stipulations and Similar Major Constraints</p>	<p>24,000 acres open subject to lease stipulations such as NSO. Parts of PLO 6477 would be retained. This PLO implements a 300-foot NSO setback in the Pah River, Shaktoolik River, Ungalik River, Tubutulik River, Kuzitrin River, Fish River and west bank of Noatak River. No Federal leases currently occur on BLM-managed lands within the planning area.</p>	<p>24,000 acres open subject to lease stipulations such as NSO and site-specific constraints described in BLM-Alaska's Stipulations and Required Operating Procedures. That part of PLO 6477 described in Alternative A would be retained. Additional 300-foot NSO setbacks would be established on the following rivers: 1) tributaries of the Pah, Shaktoolik, Ungalik, Inglutalik, Tubutulik, Kuzitrin, Fish, and Noatak rivers. 2) on both sides of the upper portion mainstems and tributaries of the following rivers: Agiapuk, Buckland, Squirrel, Omar, Kivalina, Pick, Kukpowruk, Ipewik, and Nilik rivers and Kiliovilik Creek (Upper Selawik), Koyuk River including East Fork.</p>	<p>71,000 acres open subject to lease stipulations such as NSO and site-specific constraints described in BLM-Alaska's Stipulations and Required Operating Procedures. That part of PLO 6477 described in Alternative A would be retained. Additional 300-foot NSO setbacks would be established on the following rivers: 1) tributaries of the Pah, Shaktoolik, Ungalik, Inglutalik, Tubutulik, Kuzitrin, Fish, and Noatak rivers. 2) on both sides of the upper portion mainstems and tributaries of the following rivers: Agiapuk, Buckland, Squirrel, Omar, Kivalina, Pick, Kukpowruk, Ipewik, and Nilik rivers and Kiliovilik Creek (Upper Selawik), Koyuk River including East Fork.</p>	<p>38,000 acres (of this 20,000 acres is selected) open to leasing consideration subject to lease stipulations such as NSO and site-specific constraints described in BLM-Alaska's stipulations and Required Operating Procedures including the following areas: 300-foot NSO setbacks on Boston Creek, Koyuk River, Peace River, Agiapuk River, and upper Kivalina River. That part of PLO 6477 described in Alternative A would be retained.</p>

Resource	Alternative A	Alternative B	Alternative C	Alternative D
Open with Seasonal or other Minor Constraints	No Federal leases currently occur on BLM-managed lands within the planning area.	0 acres (0%)	5,353,000 acres, of which 3,591,000 acres are State- or Native-selected.	6,144,000 acres, of which 3,069,000 acres are State- or Native-selected.
Big Game Seasonal Constraints	No Federal leases currently occur on BLM-managed lands within the planning area.	Oil and gas leasing stipulations #6 and #7 from Appendix A would not apply under this alternative.	WACH winter range and muskox habitat is subject to seasonal constraints. WACH calving and insect relief areas are closed.	Minor constraints would apply in the following areas: 1) Squirrel River SRMA; 2) McCarthy's Marsh; 3) Upper Kuzitrin River; 4) Nulato Hills 5) WACH calving and insect relief habitat. Additional stipulations may be developed through activity plans for WACH habitats.
Open Subject to Standard Lease Stipulations	No Federal leases currently occur on BLM-managed lands within the planning area.	13,109,000 acres, of which 8,143,000 acres are State- or Native-selected.	1,764,000 acres, of which 1,428,000 acres are State- or Native-selected.	6,951,000 acres, of which 5,067,000 acres are State- or Native-selected.

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(b) Solid Leasable Minerals

1. Goals

- The public lands and Federal mineral estate will be made available for orderly and efficient exploration, development, and production of solid leasable mineral resources (includes coal and oil shale, and non-energy leasable minerals (potassium, sodium, phosphate, and gilsonite), unless withdrawal is justified in the national interest.
- All solid leasable minerals actions will comply with goals, objectives, and resource restrictions (mitigations) to protect other resource values in the planning area.

2. Alternative A

There are currently two preferential right coal leases in the planning area. Both are 10-year leases and were issued in 1999. Some BLM lands are closed to leasing because of State or Native selections or underlying ANCSA (d)(1) withdrawals. Under Alternative A, no withdrawal review would occur and all ANCSA (d)(1) withdrawals would remain in place, pending some legislation or unrelated management direction. Map 3-26 shows areas open for mineral leasing, pending State or Native selections. For the purposes of analysis, it is assumed that under Alternative A no leasing would occur as appropriate NEPA analysis must be completed and approved before Federal lease sales can take place.

Under Alternative A, all unleased BLM-managed lands in the planning area would be open to coal exploration and non-energy leasable mineral exploration.

- Areas open to coal exploration and non-energy leasable mineral prospecting: 13,133,000 acres of which 8,163,000 acres are State- or Native- selected.
- Areas closed to exploration and non-energy leasable mineral prospecting: 0 acres (none).

3. Management Common to All Action Alternatives (B, C, and D)

All BLM-managed lands within the planning area subject to leasing under 43 CFR 3400.2 would be open to coal exploration and study. The coal screening process (as identified by 43 CFR 3420.1-4) has not been conducted in this planning area therefore leasing is deferred. Interest in exploration or leasing of Federal coal would be handled on a case-by-case basis. If an application for a coal lease should be received in the future, an appropriate land use and environmental analysis, including the coal screening process, would be conducted to determine whether or not the coal areas are acceptable for development and for leasing under 43 CFR 3425. The Kobuk-Seward RMP would be amended as necessary.

- Leasing would be subject to BLM standard lease terms and BLM-Alaska's stipulations and Required Operating Procedures (Appendix A).
- Coal and oil shale exploration and leasing would comply with the Mineral Leasing Act of 1920, as amended, the Surface Mining Control and Reclamation Act of 1977, the Federal Coal Leasing Amendments Act of 1976, the Mineral Leasing Act for Acquired Land of 1947, as amended, the National Environmental Policy Act of 1969 (NEPA), the Federal Land Policy and Management Act of 1976 (FLPMA), coal regulations, and coal planning criteria.
- The objective for management of the Federal coal resources in the KSP planning area is to provide opportunity for development of Federal coal consistent with the policies of the Federal coal management program, with environmental integrity, with national energy needs, and with related demands. With appropriate limitations and mitigation requirements for the protection of other resource values, all BLM-managed public lands and Federal coal

lands in the KSP planning area, except for those lands identified as closed (see Table 2-9 on page 2-54), would be open to coal resource inventory and exploration to help identify coal resources and their development potential.

- Should coal operations be developed on Federal lands, an agreement would likely be developed between the State and the Office of Surface Mining defining the regulatory role of the State in these mining operations (30 CFR 745).
- Oil shale would be leased on a case-by-case basis. Currently regulations for a commercial oil shale and tar sands leasing program do not exist. The Energy Policy Act of 2005 directs the Secretary to promulgate regulations for a commercial oil shale leasing program and authorizes the Secretary to conduct lease sales in states that show an interest.
- Non-energy leasable minerals exploration and leasing would comply with the Mineral Leasing Act of 1920, as amended, the Mineral Leasing Act for Acquired Land of 1947, as amended, the Federal Land Policy and Management Act of 1976 (FLPMA), the Reorganization Plan No. 3 of 1946, non-energy leasable minerals regulations and planning criteria.
- Non-energy leasable minerals would be leased on a case-by-case basis and subject to 43 CFR 3500.
- Lands under selection by the State and Native corporations would be segregated from mineral leasing. The categories and constraints identified below would only apply on lands retained in long-term Federal ownership.
- Stipulations prescribed for Federal mineral development in split-estate situations would only apply to the development of the Federal minerals. These stipulations would not dictate surface management.
- Identify special conditions, if any, that must be met during subsequent more detailed planning, lease sale, or post-lease activities, including measures required to protect other resource values.
- Only those BLM-managed public lands that have development potential may be identified as acceptable for further consideration for coal leasing.

Unless specifically closed to coal exploration, all unleased BLM-managed public lands within the planning area subject to leasing under 43 CFR 3400.2 would be open for coal exploration through the issuance of an exploration license. Coal exploration would be subject to BLM-Alaska's stipulations and ROPs.

Unless specifically closed to non-energy, all unleased BLM-managed public lands within the planning area subject to leasing under 43 CFR 3503 would be open for prospecting and exploration. Non-energy leasable minerals prospecting and exploration would be subject to BLM-Alaska's stipulations and ROPs.

4. Alternative B

Under Alternative B, all unleased BLM-managed lands in the planning area would be open to coal exploration and non-energy leasable mineral prospecting subject to BLM-Alaska Required Operating Procedures.

- Areas open to coal exploration and non-energy leasable mineral prospecting: 13,133,000 acres of which 8,163,000 acres are State- or Native-selected.
- Areas closed to exploration and non-energy leasable mineral prospecting: 0 acres (none).

5. Alternative C

Under Alternative C, more than half of the BLM-managed lands in the planning area would be open to coal exploration and non-energy leasable mineral prospecting subject to BLM-Alaska Required Operating Procedures (Map 2-9). Approximately 45 percent of the planning area would be closed to provide additional protection to important wildlife habitats and anadromous streams.

- Areas open to coal exploration and non-energy leasable mineral prospecting: 7,117,000 acres, of which approximately 5,018,000 acres are State- or Native- selected.
- Areas closed to exploration: 6,016,000 acres, of which approximately 3,138,000 acres are State- or Native- selected. These lands include: a) All ACECs/RNAs; b) 300-foot setback per PLO 6477: Pah, Shaktoolik, Ungalik, Inglutalik, Tubutulik, Kuzitrin, and Fish rivers, and west bank of Noatak River; c) 300-foot setback from bankfull stage on either side of tributaries of above mentioned rivers (including Boston Creek); d) 300-foot setback from bankfull stage on both sides of the upper portion mainstems and tributaries of the following rivers: Agiapuk, Buckland, Squirrel, Omar, Kivalina, Pick, Kukpowruk, Ipewik, and Nilik rivers, Kiliovilik Creek (Upper Selawik), and Koyuk River including East Fork.

6. Alternative D

Under Alternative D, most of the BLM-managed lands in the planning area would be open to coal exploration and non-energy leasable mineral prospecting subject to BLM-Alaska Required Operating Procedures (Map 2-10). About 60 percent of the BLM-managed land in the planning area would be closed to provide additional protection to caribou habitat in the Nulato Hills and several anadromous streams.

- Areas open to coal exploration and non-energy leasable mineral prospecting: 12,074,000 acres, of which approximately 7,906,000 acres are State- or Native-selected.
- Areas closed to coal exploration and non-energy leasable mineral prospecting: 1,059,000 acres, of which approximately 250,000 acres are State- or Native-selected. These lands include: a) northern Nulato Hills; b) 300-foot setback on the following rivers: Pah, Shaktoolik, Ungalik, Inglutalik, Tubutulik, Kuzitrin, and Fish rivers, and west bank of Noatak River; c) 300-foot setback from mean high water mark on Boston Creek, Koyuk River, Peace River, Agiapuk River, and upper Kivalina River.

The preceding information is summarized in the following table.

Table 2-9. Solid Leasable Minerals—Summary of Alternatives

Resource	Alternative A	Alternative B	Alternative C	Alternative D
Open to coal exploration and non-energy leasable minerals prospecting	13,133,000 acres open (100%)	13,133,000 acres open (100%)	7,117,000 acres open (55%). Of this, 5,018,000 are selected.	12,074,000 acres open (92%). Of this, 7,906,000 acres are State- or Native-selected.
Closed to coal exploration and non-energy leasable minerals prospecting	0 acres closed	0 acres closed	6,016,000 acres closed (45%). Of this 3,138,000 are State- or Native-selected. In addition to those lands identified in Alternative D, the following would be closed if retained in Federal ownership: 1) Kigluiak Mountain ACEC; 2) McCarthy's Marsh ACEC; 3) Kuzitrin ACEC; 4) southern Nulato Hills 5) 300-foot setback on either side of tributaries of Pah, Shaktoolik, Ungalik, Inglutalik, Tubutulik, Kuzitrin, and Fish rivers, and west bank of Noatak River; 6) 300-foot setback on both sides of the upper portion mainstems and tributaries of the following rivers: Agiapuk, Buckland, Squirrel, Omar, Kivalina, Pick, Kukpowruk, Ipewik, and Nilik rivers and Kilovilik Creek (Upper Selawik), Koyuk River including East Fork.	1,059,000 acres closed (8%). Of this, 250,000 acres are State- or Native-selected. The following areas would be closed if retained in Federal ownership: 1) northern Nulato Hills; 2) 300-foot setback on the Pah, Shaktoolik, Ungalik, Inglutalik, Tubutulik, Kuzitrin, and Fish rivers, and west bank of Noatak River as described in PLO 6477; 3) 300-foot setback on Boston Creek, Koyuk River, Peace River, Agiapuk River, and upper Kivalina River.

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INSERT 11x17 MAP
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(2) Locatable Minerals

(a) Goals

- Maintain or enhance opportunities for mineral exploration and development while maintaining other resource values.

(b) Alternative A

Under current management, 30 percent of BLM-managed lands are currently open to mineral entry due to PLO 6477, which partially revoked the ANCSA (d)(1) withdrawals. Parts of the Lisburne and Selawik Mining Districts are open to metaliferous mineral entry only (Map 3-29). State and Native selected lands are currently segregated. This plan will not affect segregations against mineral entry due to State and Native selection. Mining activities are currently taking place on some BLM-managed lands because valid existing rights or certain areas were excluded from ANCSA (d)(1) withdrawals or State and Native selections.

Under Alternative A, no withdrawal review would occur and all ANCSA (d)(1) withdrawals would remain in place. The Fairbanks District Office and Anchorage Field Office would continue to administer active claims through Plans of Operations, but potential for future exploration and development on BLM-managed lands would be limited. Map 3-29 shows areas open for locatable mineral entry, pending State or Native selections.

- Areas open to mineral entry: 3,875,000 acres, of which 243,000 acres are State- or Native-selected.
- Areas closed to mineral entry: 9,258,000 acres including the Squirrel River Wild and Scenic River Study Area and areas closed by ANCSA (d)(1) withdrawals.

(c) Management Common to All Action Alternatives (B, C, and D)

- Mining of locatable minerals would be subject to the surface management regulations found in 43 CFR 3809. Surface occupancy under the mining laws would be limited to uses incident to the mining operation. Bonding would be required in accordance with BLM policy.
- Mining related disturbances would be rehabilitated, on active and inactive workings, as required by 43 CFR 3809 and in accordance with BLM policy.
- All operations would require filing a Plan of Operations with BLM. The Plan would have to be approved prior to commencement of on-the-ground activities. Specific measures that would be utilized to minimize surface impacts and to facilitate rehabilitation and revegetation of mined areas can be found in Required Operating Procedures in Appendix A.
- Areas withdrawn from mineral location in which valid existing rights are being exercised would require the filing of a Plan of Operations.
- Mining activities within withdrawn areas, including ANCSA (d)(1) withdrawals, would require proof of a valid discovery for surface-disturbing activities (including occupancy) to occur.

State- and Native-selected lands are currently segregated. This plan would not affect segregations against mineral entry due to State and Native selection.

(d) Alternative B

Under Alternative B, all ANCSA (d)(1) withdrawals would be revoked and the entire planning area would be open to locatable mineral entry and location subject to the 3809 and 3175 regulations and Required Operating Procedures.

- Areas open to mineral entry and location: 13,133,000 acres, of which 8,163,000 acres are State- or Native-selected.
- Areas closed to mineral entry and location: 0 acres (none).

(e) Alternative C

Under Alternative C, about 50 percent of the BLM-managed lands within the planning area would be closed to mineral entry and location to provide additional protection to sensitive areas. In areas identified for closure to mineral entry and location that are under an existing ANCSA (d)(1) withdrawal, the withdrawal would be retained until a new withdrawal for the stated purpose could be implemented. Areas not currently under an existing withdrawal would also be included in the new withdrawal for the stated purpose.

- Areas open to mineral entry and location: 6,498,000 acres, of which 4,652,000 acres are State- or Native-selected.
- Areas closed to mineral entry and location: 6,635,000 acres, of which 3,505,000 acres are State- or Native-selected. These areas include: a) WACH caribou insect relief habitat; b) Squirrel River SRMA; c) Kigluaik ACEC; d) McCarthy's Marsh ACEC; e) Upper Kuzitrin ACEC; f) Nulato Hills ACEC; g) 300-foot setback as specified in PLO 6477 on the Pah, Shaktoolik, Ungalik, Inglutalik, Tubutulik, Kuzitrin, and Fish rivers, and west bank of Noatak River; h) 300 feet on either side of tributaries of above mentioned rivers (including Boston Creek); i) 300 feet on both sides of the mainstems and tributaries of the following rivers: Agiapuk, Buckland, Squirrel, Omar, Kivalina, Pick, Kukpowruk, Ipewik, and Nilik rivers, Kiliovilik Creek (Upper Selawik), Koyuk River including East Fork.

Map 2-11 shows areas that would be open to locatable mineral entry and location, pending State and Native selections.

(f) Alternative D

Under Alternative D, less than 1 percent of the BLM-managed lands within the planning area would be closed to mineral entry and location to provide additional protection to sensitive areas. In areas identified for closure to mineral entry and location that are under an existing ANCSA (d)(1) withdrawal, the withdrawal would be retained until such time as a new withdrawal for the stated purpose can be implemented. Areas not currently under an existing withdrawal would also be included in the new withdrawal for the stated purpose.

- Areas open to mineral entry and location: 13,034,000 acres, of which 8,067,000 acres are State- or Native-selected.
- Areas closed to mineral entry and location: 99,000 acres, of which 89,000 acres are State- or Native-selected. These areas include: a) Mount Osborn RNA; b) 300-foot setback from bankfull stage on either side of the Ungalik River as identified in PLO 6477; c) 300-foot setback from bankfull stage on both sides of Boston Creek and upper Kivalina River.

Map 2-12 shows areas that would be open to locatable mineral entry and location, pending State and Native selections.

The preceding information is summarized in the following table.

Table 2-10. Locatable Minerals—Summary of Alternatives

Resource	Alternative A	Alternative B	Alternative C	Alternative D
Closed Areas	<p>About 70% of the BLM lands are currently withdrawn from mineral entry and location due to ANCSA (d)(1) withdrawals or State and Native selections. This plan would not affect segregations against mineral entry and location due to State and Native Selection. Mining activities are currently taking place on some BLM-managed lands because of valid existing rights or because certain areas were excluded from ANCSA (d)(1) withdrawals or State and Native selections.</p>	<p>0 acres closed</p> <p>Revoke all ANCSA (d)(1) withdrawals.</p> <p>Open all areas, subject to 3809 surface regulations.</p>	<p>6,635,000 acres closed (50%). Of this, 3,505,000 acres are State- or Native-selected.</p> <p>Add the following to the list in D:</p> <ol style="list-style-type: none"> 1) Squirrel River SRMA; 2) Kigluak ACEC (includes the Mount Osborn RNA); 3) McCarthy’s Marsh ACEC; 4) Upper Kuzitrin ACEC; 5) Nulato Hills ACEC; 6) 300 feet on the: Pah, Shaktoolik, Inglutalik, Tubutulik, Kuzitrin, Fish, and west bank of Noatak River as specified in PLO 6477; 7) 300 feet on either side of tributaries of above mentioned rivers; 8) 300 feet on both sides of the mainstems and tributaries of the following rivers: Agiapuk, Buckland, Squirrel, Omar, Pick, Kukpowruk, Ipewik, and Nilik rivers, Kiliovilik Creek (Upper Selawik), and Koyuk River including East Fork. (Map 2-11). 	<p>99,000 acres closed (1%). Of this, 89,000 acres are State- or Native-selected.</p> <p>The following areas would be closed to mineral entry and location:</p> <ol style="list-style-type: none"> 1) Mount Osborn RNA 2) 300-foot setback on both sides of the Ungalik River as identified in PLO 6477 3) 300-foot setback both sides of Boston Creek and upper Kivalina River. <p>All (d)(1) withdrawals outside of these areas that exclude mineral entry would be modified or revoked to allow locatable mineral entry. (Map 2-12).</p>
Open Areas	<p>All BLM-managed lands not closed by PLO or segregation (about 30% of BLM lands in plan area)</p>	<p>13,133,000 acres open (100%), of which 8,163,000 are State- or Native-selected.</p>	<p>6,498,000 acres open</p>	<p>13,034,000 acres open (99%). Of this 8,067,000 area are State- or Native-selected.</p>

Resource	Alternative A	Alternative B	Alternative C	Alternative D
<p>Areas Open to Metaliferous Mineral Location Only</p>	<p>Under current PLOs, 243,000 acres in the Lisburne and the Selawik Mining Districts are open to metaliferous location only. (Map 3-29)</p>	<p>All lands presently closed to non-metaliferous location will be opened to entry and location for all locatable minerals. (Map 3-29)</p>	<p>Lands in the Selawik Mining District currently closed to non-metaliferous location will be opened to entry and location for all locatable minerals. Lands in the Lisburne Mining District will remain closed to non-metaliferous entry and location.</p>	<p>Lands presently closed to non-metaliferous location will be opened to entry and location except in the areas identified above as closed.</p>

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3) Mineral Materials

(a) Goal

Make lands, including Federally administered surface/minerals and split estate, available for mineral material disposal.

(b) Alternative A

Under current management, lands, including Federally administered surface/minerals and split estate, are available for disposal for salable mineral materials (sand, gravel, etc.) unless specifically closed by Public Land Order. Mineral material sales are considered on a case-by-case basis, with specific operating terms and conditions developed through the NEPA process, except for small sales (less than 50,000 cubic yards) which are categorically excluded.

(c) Management Common to All Action Alternatives (B, C, and D)

- Mining of salable material would be subject to the Mineral Materials Disposal regulations found in 43 CFR 3600. Bonding would be required in accordance with BLM contract regulations.
- All operations are required to file a Plan of Operations with BLM. The Plan would have to be approved prior to commencement of on-the-ground activities.
- Plans of operations would incorporate the appropriate guidelines listed in the Required Operating Procedures (ROPs).
- Mineral material sales on selected lands would require concurrence of the potential, future landowner and proceeds from the sale placed into escrow.
- Free use permits would not be issued for resources on selected lands.
- Material sales on certificated Native allotments are the purview of the Bureau of Indian Affairs (BIA) and its successor agency.
- Material sales on un-certificated Native allotments would not be permitted (43 CFR 3601.1-2(b)).
- Material sales on split estate would require concurrence of the surface owner.
- Mineral materials sales are not permitted on pre-1955 mining claims (POL-167) and subject to non-interference with the mining operation on post 1955 mining claims.

(d) Alternative B

Under Alternative B, approximately 13.1 million acres (100 percent) of BLM-managed lands, including Federally administered surface/minerals and split estate would be made available for salable mineral material disposal. Mineral material sales would occur in accord with the terms and conditions of the sales contract/permit, which would incorporate applicable Required Operating Procedures in Appendix A.

(e) Alternative C

Under Alternative C, approximately 12,861,500 acres (98 percent) of BLM-managed lands, including Federally administered surface/minerals and split estate would be made available for salable mineral material disposal. Mineral material sales would occur in accord with the terms and conditions of the sales contract/permit, which would incorporate applicable Required Operating Procedures in Appendix A. Sale of mineral materials from riverbed, ocean beach/lagoon and lakeshore would not be permitted. In addition, the following areas would be

excluded from mineral material sale or development: BLM-managed land in McCarthy’s Marsh ACEC and Kigluaik ACEC (429,100 acres).

(f) Alternative D

Under this alternative, mineral materials would be managed in the same way as described under Alternative B.

The preceding information is summarized in the following table.

Table 2-11. Mineral Materials—Summary of Alternatives

Resource	Alternative A	Alternative B	Alternative C	Alternative D
Mineral Materials	All lands are available unless closed by PLO.	13,133,000 acres open (100%)	12,861,500 acres open (98%) 271,500 acres closed (2%)	Same as Alternative B
	Sale of mineral materials from riverbed, ocean beach/lagoon and lakeshore will be permitted on a case-by-case basis.	Same as Alternative A	Sale of mineral materials from riverbed, ocean beach/lagoon and lakeshore will not be permitted.	Same as Alternative A

d) Recreation Management

(1) Goal

On BLM-managed lands, improve access to appropriate recreation opportunities, ensure a quality outdoor experience, and enjoyment of natural and cultural resources, and provide for and receive fair value in recreation.

(2) Alternative A

This alternative would continue current management as identified in the Northwest MFP. The area would be managed for dispersed recreational use. Recreational activities would be monitored on a casual basis. Public use trail shelters may be constructed if funding is available. No special recreation management areas would be designated. Conflicts due to increasing recreational use levels in the Squirrel River and other areas would not be addressed. The Iditarod National Historic Trail (INHT) management plan would be implemented. The Salmon Lake Campground would continue to be maintained.

(3) Management Common to All Action Alternatives (B, C, and D)

(a) Inventory and Monitoring

- Inventory lands for recreational opportunities and monitor changes in use patterns. Priority areas for monitoring would include Special Recreation Management Areas (SRMA), rivers determined suitable for designation as wild or scenic, the Iditarod NHT, and identified recreation management zones within the Extensive Recreation Management Area (ERMA).
- Monitor special recreation permit holders and sport uses affecting game resources for their effect on recreation opportunity.
- Monitor dispersed recreation within the planning area for any resource damage or user conflicts.

(b) Management Decisions

- Implement the Iditarod NHT Management Plan.
- Maintain the Salmon Lake Campground and access road.
- Outside of SRMAs and Recreation Management Zones, applications for Special Recreation Permits (for commercial use) would be handled on a case-by-case basis.
- Public use shelters would be considered on a case-by-case basis. Existing structures would be evaluated and if determined suitable, considered for public use shelters. New cabins may also be constructed.
- The Squirrel River would be designated as an SRMA.

(4) Alternative B

Under Alternative B, most of the planning area would be an ERMA managed for dispersed recreational use. The vast majority of the planning area would be managed as semi-primitive non-motorized Recreation Opportunity Spectrum class. Public use shelters or other recreation facilities may be constructed on a case-by-case basis. The Iditarod NHT management plan would be implemented.

The Squirrel River would be designated as an SRMA (859,000 acres) and conflicts between users would be addressed by limiting the number of guides and outfitters allowed to operate in the area (Map 2-13). The number of visitor use days associated with guides and outfitters would be limited.

(5) *Alternative C*

Management under this alternative would be similar to Alternative B except for in the areas discussed below (Map 2-14).

(a) Squirrel River SRMA

The Squirrel River would be designated as an SRMA (859,000 acres). Conflicts between users would be addressed using a variety of methods: 1) the number of guides, outfitters, and air transporters would be limited; 2) the number of commercial and non-commercial visitor use days would be limited between August 1 and September 30; and 3) all visitors to the SRMA would be required to obtain a permit August 1-September 30.

(b) Salmon Lake/Kigluaik SRMA

The Kigluaik Mountains and Salmon Lake campground would be designated as an SRMA (290,000 acres). The SRMA would be managed as a semi-primitive motorized area, except those portions adjacent to the Nome road system, which would be managed as roaded natural. Existing facilities would be maintained, and new facilities, such as shelter cabins, trails and interpretive signs, to enhance visitor use and safety might be developed. Helicopter and fixed-wing aircraft use would be allowed to provide for recreation use unless user conflicts require mitigation. Limitations might be placed on visitor use levels through development of an activity-level plan. Transporters would not be required to obtain a permit if requirements under 43 CFR 2932.12(a) are met.

(c) Extensive Recreation Management Area

The remainder of the planning area would be an ERMA that would be classified as semi-primitive motorized and managed for dispersed recreational use. Within the ERMA additional management attention on commercial recreational use would be focused on the following areas, based upon current use levels, safety, resource impacts, operator tolerance, and quality of recreational experience: Koyuk, Inglutalik, Ungalik, Agiapuk, and Buckland rivers, Nulato Hills, Fish River/McCarthy's Marsh, and Bendeleben Mountains (Map 2-14). Management actions in these areas might include limiting the number of visitor use days associated with Special Recreation Permits, requiring transporters to obtain a permit, and limiting development of facilities to enhance visitor use.

(6) *Alternative D*

Management under this alternative would be similar to Alternative B except for in the areas discussed below (Map 2-15).

(a) Squirrel River SRMA

The Squirrel River (859,000 acres) would be managed as semi-primitive motorized under the Recreation Opportunity Spectrum system. A Recreation Area Management Plan (RAMP) would

be developed to address recreational use, taking into consideration current use levels, safety, resource impacts, operator tolerance, and quality of recreational experience. Using a public process, the BLM would develop management objectives and strategies for the Squirrel River, such as: limitations on total number of visitor use days and number of commercial operators; instituting additional permitting requirements; instituting seasonal closures or limitations on OHV use; and determining the appropriate level of facility development.

During the interim between approval of this RMP and the development of the RAMP, outfitters and guides would be managed at the 2004/2005 use level (10 guides). Other users (transporters and general public) would have no set limits on use during this interim period.

(b) Salmon Lake/Kigluaik SRMA

The Salmon Lake/Kigluaik SRMA would be managed the same as under Alternative C except that no limits on visitor use days would be implemented.

The following table summarizes the preceding information. Appendix C summarizes overall management for proposed SRMAs.

The preceding information is summarized in the following table.

Table 2-12. Recreation Management—Summary of Alternatives

Resource	Alternative A	Alternative B	Alternative C	Alternative D
Special Recreation Management Areas	No SRMAs currently designated.	859,000 acres (7%) Designate the following: 1) Squirrel River SRMA	1,149,000 acres (9%) Designate the following: 1) Squirrel River SRMA (859,000 acres) 2) Salmon Lake-Kigluaik SRMA (290,000 acres)	Same as C
Squirrel River SRMA	No SRMA designated The Squirrel River watershed would be managed for dispersed recreational use. No major actions would be taken to enhance recreational opportunities or to limit visitor use days.	The Squirrel River SRMA would be managed as semi-primitive motorized. Major actions include: -Limit number of commercial guiding operations to 10. -Limit number visitor use days for commercial guiding operations to 1,400 from August 1 to September 30. -No limits on VUD remainder of the year. -Develop appropriate method to allocate guiding permits, such as lottery, sealed bid, or ranking criteria. Would revise if commercial services board takes measures that effectively resolve the conflicts.	The Squirrel River SRMA would be managed as semi-primitive motorized. Major actions include: - August 1-September 30: require all users to obtain permit (maximum 2,000 visitor use days (VUD) during this time period). -August 1-September 30: Allocate 840 VUD to commercial guiding and 1,160 VUD to air taxi and non-commercial uses. -No limits on VUD remainder of the year. -Density goals based on 1 camp per 10 river miles in river corridor and three per township in upland areas -Limit number of commercial guiding operations to 6. -Require air taxi operators to obtain permit and limit number of air taxi operators to 5 per year. -Develop appropriate method to allocate air taxi operator and guiding permits, such as lottery, sealed bid, or ranking criteria.	The Squirrel River SRMA would be managed as semi-primitive motorized under ROS. Major actions include: Develop Recreation Area Management Plan (RAMP) w/in 5 years to address recreational use taking into consideration current use levels, safety, resource impacts, operator tolerance, and quality of recreational experience. Using a public process, develop management objectives and strategies, such as limitations on total number of visitor use days; limiting number of camps/river mile or per upland area; permitting requirements; limitations on number of commercial operators; seasonal closures or limitations on OHV use; and facility development. Interim management: Manage for 2004/2005 use levels of 10 guides.

Resource	Alternative A	Alternative B	Alternative C	Alternative D
<p>Salmon Lake-Kigluaik Mountain SRMA</p>	<p>No SRMA designated No major actions would be taken to enhance recreational opportunities or to limit visitor use days.</p>	<p>Same as A</p>	<p>Salmon Lake-Kigluaik SRMA: 1) Salmon Lake campground managed as roaded natural. Existing facilities may be enhanced to provide for increased visitor use. 2) Kigluaik Mountains: -managed as semi-primitive motorized and roaded natural. - permit facilities to enhance visitor use and safety. In portions of the SRMA, facilities would be limited to foot and pack animal trails, cross-country ski trails, and interpretative signs. -Helicopter and fixed-wing aircraft use would be allowed to provide for recreation use until user conflicts required mitigation; -May implement limits on number of visitor use days through activity-level plan. -Transporters would not be required to obtain a permit if requirements under CFR 43 2932.12(a) are met.</p>	<p>Salmon Lake-Kigluaik SRMA: 1) Salmon Lake campground managed as roaded natural. Existing facilities may be enhanced to provide for increased visitor use. 2) Kigluaik Mountains managed as semi-primitive motorized and roaded natural. - permit facilities to enhance visitor use and safety. In portions of the SRMA, facilities would be limited to foot and pack animal trails, cross-country ski trails, and interpretative signs. -Helicopter and fixed wing aircraft use would be allowed to provide for recreation use until user conflicts require mitigation. -No limits on visitor use days -Transporters would not be required to obtain a permit if requirements under CFR 43 2932.12(a) were met.</p>

Resource	Alternative A	Alternative B	Alternative C	Alternative D
<p>Extensive Recreation Management Area (ERMA)</p>	<p>The planning area would be managed for dispersed recreational use.</p>	<p>The ERMA will be classified as semi-primitive motorized and managed for dispersed recreational use.</p>	<p>ERMA will be classified as semi-primitive motorized and managed for dispersed recreational use. Additional management attention will be focused on the following areas.</p> <p>Koyuk, Inglutalik, Ungalik rivers; Nulato Hills, Fish River/McCarthy's Marsh, Bendeleben Mountains:</p> <ul style="list-style-type: none"> - limit number of SRP user days (up to 120 VUD per area) based upon current use levels, safety, resource impacts, operator tolerance, and quality of recreational experience. -Require transporters to obtain a permit. -No facilities would be developed or permitted to enhance visitor use. <p>Agiapuk and Buckland rivers:</p> <ul style="list-style-type: none"> -limit number SRP user days (up to 100 VUD per area) based upon current use levels, safety, resource impacts, operator tolerance and quality of recreational experience. -No facilities would be developed or permitted to enhance visitor use. <p>(Map 2-14)</p>	<p>Same as B</p>
<p>Iditarod National Historic Trail (INHT)</p>	<p>Manage under existing cooperative agreements and the INHT Management Plan</p>	<p>Same as A. In addition, acquire trail segments or easements from willing sellers as funding permits.</p>	<p>Same as B</p>	<p>Same as B</p>

INSERT 11x17 MAP
2_13_srma_b

INSERT 11x17 MAP
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INSERT 11x17 MAP
2_15_srma_d

e) Travel Management/OHV

(1) Goals

- Manage trails to provide access to public lands, recreation, and subsistence resources.
- Manage the use of OHVs to minimize resource impacts and reduce user conflicts.

(2) Alternative A

Under this alternative, current management of OHVs would continue. No OHV designations would be in place as required by BLM Handbook and Executive Orders 11644 and 11989. Use of OHVs weighing more than 2,000 pounds would require a permit. No OHV management plans would be developed.

(3) Management Common to All Action Alternatives (B, C, and D)

(a) Inventory and Monitoring

- Inventory trails and conduct condition assessments on BLM-managed lands to identify existing trails and assess resource impacts. This information would be used in implementation-level designation of specific trails and to prioritize trail maintenance needs.
- Monitor use to ensure OHV designations and regulations under 43 CFR 8341.1 are adhered to.
- Priority areas for inventory and monitoring would include: SRMAs, RNAs, ACECs, and suitable rivers.

(b) Implementation-level Planning

Implementation level plans would be completed for areas designated as SRMAs and ACECs. These plans would include an inventory of trails in the area, and describe specific resource concerns or conflicts, as well as specific trail designations and limitations. The process used to develop these plans would include public participation and coordination with the State, Boroughs, Native corporations, and other Federal agencies.

(c) Management Decisions

- Determine OHV area designations of Open, Limited, or Closed to OHV activities.
- Manage OHVs consistent with 43 CFR subpart 8341.1 Conditions of Use.
- Develop informational brochures on OHV restrictions and designations.

(d) Land Use Requirements

Permitted activities and uses that involve cross-country use of vehicles exceeding the maximum GVWR, or in areas limited to existing or designated trails, would include stipulations that minimize impacts to resources. Specific operating procedures related to OHVs can be found in Required Operating Procedures in Appendix A.

(e) Access

1. ANCSA 17(b) Easements

The BLM would continue to review and reserve sec. 17(b) easements under the law and regulations to ensure legal access to publicly owned lands while the remainder of the ANCSA corporations' land entitlements are conveyed. On-the-ground management of easements is the responsibility of the public landowner the easement accesses; i.e.. the BLM, National Park Service, or the U.S. Fish and Wildlife Service. The State of Alaska accepts management of 17(b) easements accessing its lands on a case-by-case basis, but has not done so in this planning area.

The BLM is committed to working with the landowner, State and other Federal agencies. Subject to availability of funds, personnel, and approval, the BLM would locate, mark, and monitor easements and help educate easement users to understand the rights reserved to the United States and the rights of the private landowner, with priority based on:

- Easements accessing lands that will be permanently managed by the BLM or that are important to BLM programs.
- Easements receiving high use.
- Easements required to implement an activity or implementation plan.
- Easements where landowners support the activity allowed by the easement.
- Easements where maintenance or education would mitigate environmental damage to the easement or BLM-managed lands.

These criteria would be used to prioritize other discretionary actions, such as maintenance on 17(b) easements. Realignment of reserved 17(b) easements will be considered on a case-by-case basis to resolve on-the-ground issues.

Authorization from the BLM is not usually necessary prior to use of a 17(b) easement. However, it must be kept in mind that 17(b) easements are reserved on specific routes for specific kinds of vehicles, sometimes with seasonal restrictions. For example, summer use of a winter-use-only easement, driving off an easement, or using a vehicle not allowed on the easement is a trespass against the Native corporation, not against the BLM.

Some 17(b) easements are made discontinuous by private lands, usually Native allotments. Acquisition of easements across or around these lands would be from willing landowners on a case-by-case basis as the need or opportunity arose, and as funds allowed.

2. R.S. 2477

The State of Alaska recognizes approximately 650 R.S. 2477 routes statewide. The assertion of these routes has not been recognized by the United States and current BLM policy is to defer any processing of R.S. 2477 assertions except where there is a demonstrated, compelling, and immediate need to make a determination. In such cases, the Secretary of Interior would make the determination in consultation with the BLM. Land use planning does not affect valid R.S. 2477 rights or future assertions.

R.S. 2477 ROWs that were determined valid by a court of competent jurisdiction, or recognized administratively by the Department of the Interior, would be noted to the Master Title Plats as appropriate.

All proposals for OHV management would be consistent with sec. 811(b) of ANILCA, which allows for "...appropriate use for subsistence purposes of snowmobiles, motorboats, and other means of surface transportation traditionally employed for such purposes by local residents, subject to reasonable regulation."

(4) Alternative B

Under this alternative, the entire planning area would be designated as "limited" to OHV use. The limitations would consist of seasonal weight restrictions. Between June 1 and October 31, cross-country use of OHVs having a GVWR of 2,000 lbs or less would be allowed. Between November 1 and May 31, cross-country OHV use would be allowed during periods of adequate snow/ice conditions with no weight restriction. Qualified subsistence users would have to comply with OHV designations. Both State- and Native-selected lands would have the same OHV designations as unencumbered BLM lands. No travel management areas are identified.

(5) Alternative C

Under this alternative, the entire planning area would be designated as "limited" to OHV use (Map 2-16). Between May 15 and October 31, OHVs would be limited to designated trails with a maximum 2,000 pound GVWR limitation. Use of OHVs off of designated trails would be allowed for subsistence harvests by qualified subsistence users. Between November 1 and May 14 cross-country use of OHVs weighing 2,000 pounds or less GVWR would be allowed during periods of adequate snow and ice conditions. Both State- and Native-selected lands would have the same OHV designations as unencumbered BLM lands. Within designated ACECs, additional OHV limits might be developed in area-specific plans based on resource values and management objectives for each unit. Limitations could include limiting use to designated trails, seasonal restrictions or closures, and weight limits. Travel Management Areas for Alternative C are shown in the following table.

Table 2-13. Travel Management Areas for Alternative C

Travel Management Area	RMP Decision	Implementation Decisions
Squirrel River SRMA (859,000 acres)	Limited OHV designation	May 15-October 31: closed to OHV use -November 1-May 14: Cross-country use of OHVs weighing 2,000 pounds or less GVWR would be allowed during periods of adequate snow/ice conditions. -guides and outfitters would not be allowed to use OHVs May 15-October 31
Kigluaik ACEC	Limited OHV designation	-May 15-October 31: OHVs would be limited to designated trails with a maximum 2,000 lb GVWR limitation. -November 1-May 14: Cross-country use of OHVs weighing 2,000 pounds or less GVWR would be allowed during periods of adequate snow/ice conditions.
WACH calving/insect relief ACEC	Limited OHV designation	Deferred to activity plan
Nulato Hills ACEC	Limited OHV designation	Deferred to activity plan
McCarthy's Marsh ACEC	Limited OHV designation	Deferred to activity plan

Travel Management Area	RMP Decision	Implementation Decisions
Kuzitrin River ACEC	Limited OHV designation	Deferred to activity plan
Remainder of BLM lands	Limited OHV designation	-May 15-October 31: OHVs would be limited to designated trails with a maximum 2,000 lb GVWR limitation. -November 1-May 14: Cross-country use of OHVs weighing 2,000 pounds or less GVWR would be allowed during periods of adequate snow/ice conditions.

(6) Alternative D

Under this alternative, the planning area would be designated as “limited” to OHV use (Map 2-17). Outside of ACECs, RNAs or SRMAs, cross-country use of OHVs having a GVWR 2,000 pounds or less would be allowed yearlong. Use off of designated or existing trails would be allowed for subsistence harvests by qualified subsistence users. Interim management would apply to selected lands until conveyances were completed. Any lands selected by the State or Native Corporations would be managed as “limited” to OHV use that is consistent with the State’s current Generally Allowed Uses regulations (11 AAC 96.020 and 96.025), which limit OHVs to 1,500 lbs "curb weight" and direct OHV users to stay on existing trails whenever possible and to minimize surface damage and disturbance of vegetation and soils. Travel Management Areas for Alternative D are shown on Map 2-15 and in the following table.

Table 2-14. Travel Management Areas for Alternative D

Travel Management Area	RMP Decision	Implementation Decisions
Squirrel River SRMA (859,000 acres)	Limited OHV designation	Deferred to activity plan. Develop a RAMP that will include appropriate limitations on OHV use in the Squirrel River. Limitations may include limiting use to designated or existing trails, seasonal restrictions or closures, and weight limits. State-selected lands would be managed consistent with the State’s Generally Allowed Uses.
Salmon Lake-Kigluaik SRMA	Limited OHV designation	Deferred to activity plan. Initially under interim management for selected lands, OHV use would be consistent with the State’s current Generally Allowed Uses regulations. If substantial lands remain in BLM management after conveyances, an OHV management plan would be developed. Limitations may include limiting use to designated or existing trails, seasonal restrictions, seasonal closures, and weight limits.
Remainder of BLM lands	Limited OHV designation	-Cross-country use of OHVs having a GVWR of 2,000 lbs or less would be allowed yearlong. - Any lands selected by the State or Native corporations would be managed as “limited” to OHV use that is consistent with the State’s current Generally Allowed Uses regulations (11 AAC 96.020 and 96.025). -Additional OHV limits may be developed in area-specific plans based upon resource values and management objectives for each unit. Limitations may include limiting use to designated or existing trails, seasonal restrictions or closures, and weight limits.

The preceding information is summarized in the following table.

Table 2-15. Travel Management/OHV—Summary of Alternatives

Resource	Alternative A	Alternative B	Alternative C	Alternative D
<p>Assign OHV designations in the Planning Area</p>	<p>The planning area would remain undesignated (13,133,000 acres)</p> <p>The current MFP requires a permit for use of OHVs with a gross vehicle weight rating (GVWR) greater than 2,000 lbs.</p>	<p>The planning area would be designated as "limited" (13,133,000 acres).</p> <p>June 1-October 31: Cross-country use of OHVs having a GVWR of 2,000 pounds or less would be allowed.</p> <p>November 1-May 31: Cross-country OHV use would be allowed during periods of adequate snow/ice conditions with no weight restriction.</p>	<p>The planning area would be designated as "limited" (13,133,000 acres).</p> <p>May 15-October 31: OHVs would be limited to designated trails with a maximum 2,000 lb GVWR limitation.</p> <p>November 1-May 14: Cross-country use of OHVs weighing 2,000 pounds or less GVWR would be allowed during periods of adequate snow/ice conditions.</p> <p>ACECs: Additional OHV limits may be developed in area-specific plans based on resource values and management objectives for each unit. Limitations may include limiting use to designated or existing trails, seasonal restrictions or closures, and weight limits.</p>	<p>The planning area would be designated as "limited" (13,133,000 acres).</p> <p>Yearlong: Outside of ACECs, RNAs or SRMAs, cross-country use of OHVs having a GVWR of 2,000 pounds or less would be allowed.</p> <p>ACECs, RNAs, and SRMAs: Additional OHV limits may be developed in area-specific plans based upon resource values and management objectives for each unit. Limitations may include limiting use to designated or existing trails, seasonal restrictions or closures, and weight limits.</p>
<p>Allow the use of OHVs for subsistence purposes</p>	<p>Qualified subsistence users would have to comply with OHV designations</p>	<p>Use off of designated or existing trails would be allowed for subsistence harvests by qualified subsistence users.</p>	<p>Same as C</p>	<p>Same as C</p>

Resource	Alternative A	Alternative B	Alternative C	Alternative D
Assign OHV Designations to State- and Native-Selected Lands in the Planning Area	Selected lands within the planning area would remain undesignated.	Selected lands would have the same OHV designations as unencumbered BLM lands (as described above).	Selected lands would have the same OHV designations as unencumbered BLM lands (as described above).	Selected lands within the planning area would be designated as "limited" During Interim Management: Any lands selected by the State or Native corporations would be managed as "limited" to OHV use that is consistent with the State's current Generally Allowed Uses regulations (11 AAC 96.020 and 96.025), which limit OHVs to 1,500 lbs "curb weight," and direct OHV users to stay on existing trails whenever possible and minimize surface damage and disturbance of vegetation and soils.
Sign existing roads/trails	None	None	Existing/Designated trails would be marked within five years of plan approval.	Same as C
Monitoring	Monitor use to ensure OHV weight limits and regulations under 43 CFR subpart 8341.1 are adhered to.	Same as A	Monitor use to ensure OHV weight limits and regulations under 43 CFR subpart 8341.1 are adhered to. Additional monitoring and enforcement capability to keep use on designated trails.	Monitor use to ensure OHV weight limits and regulations under 43 CFR subpart 8341.1 are adhered to. Additional monitoring efforts will be needed.

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INSERT 11x17 MAP
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f) Renewable Energy

(1) Goals

Make BLM-managed lands available for development of renewable energy sources.

(2) Alternative A

Currently the BLM has no permits issued for these types of facilities. Two areas have been classified for hydropower, both on the Seward Peninsula south of Imuruk Basin. Salmon Lake was designated a power site in 1950 by Power Site Classification 403 as amended by PLO 2061. Power Site Reserve 726 designated Pass Creek as a Powersite Reserve in 1919. Both sites are selected by either or both the State and Native corporations. Requests for permits to develop renewable energy sources would be considered on a case-by-case basis.

(3) Management Common to All Action Alternatives (B, C, and D)

(a) Management Decisions

As described in Chapter III, potential exists within the planning area for development of renewable energy sources. Currently, the BLM has no permits or leases issued for these types of facilities within the planning area. However, two sites have been classified for hydropower. Applications for permits or leases to develop renewable energy sources on BLM-managed lands would be considered on a case-by-case basis, subject to requirements described under Lands and Realty, Management Common to All Action Alternatives (B, C, and D) on page 2-92.

(b) Land Use Requirements

Permits for development of renewable energy would include stipulations that minimize impacts to resources. Specific operating procedures can be found in Required Operating Procedures in Appendix A.

g) Lands and Realty Actions

(1) Goals

- Meet public needs for use authorizations such as ROW, leases, and permits while minimizing adverse impacts to other resource values
- Retain public lands with high resource values in public ownership
- Adjust land ownership to consolidate public land holdings, acquire lands with high public resource values, and meet public and community needs
- Acquire and maintain access to public lands where needed to improve management efficiency, facilitate multiple use, and promote the public's enjoyment of these lands in coordination with other Federal agencies, State and local governments, and private landowners

(2) Alternative A

Under Alternative A, the Lands and Realty program would continue in its current role of supporting other BLM programs, providing for land use authorizations, and supporting the BLM-Alaska State Office in conveyances. No specific lands would be identified for disposal, exchange, or acquisition. Land use authorizations such as FLPMA leases and permits would continue to be dealt with on a case-by-case basis, as would other unauthorized uses, such as trespass cabins. Withdrawal review would not occur for ANCSA (d)(1) withdrawals or other smaller administrative withdrawals. Some uses would continue to be constrained by such withdrawals. There are two legislatively designated corridors within the planning area: from Deering to Nome-Taylor Highway (ANILCA Sec. 201(2)); and Bornite to the Dalton Highway (ANILCA 201(4)(b)).

(3) Management Common to All Action Alternatives (B, C, and D)

(a) Land Disposals

1. FLPMA Sales

Public lands meeting one of more of the following criteria could be disposed of through FLPMA sales:

- A tract that was acquired for a specific purpose and that is no longer required for that or any other Federal purpose.
- A tract whose disposal would serve important public objectives. This could include, but is not limited to, expansion of communities and economic development. Disposal would proceed only when such objectives could not be achieved prudently or feasibly on other than public lands and when such objectives outweighed other public objectives and values (e.g., recreation and scenic values) that might justify maintaining such a tract in Federal ownership.
- A tract that, because of its location or other characteristics, is difficult and uneconomic to manage and is not suitable for management by another Federal agency. Note: Lands identified for disposal under this authority that were selected by either the State or a Native corporation would have to be adjudicated before the BLM would entertain a sale. By identifying these lands for disposal, we are merely saying that if these lands become

unencumbered by selections within the life of the plan, then they would then become suitable for disposal under this authority, having been properly identified through the planning process.

Lands not to be disposed of include:

- Lands withdrawn from the public land laws or segregated by State or Native selection.
- Land within mining claims of record under sec. 314 of FLPMA.
- Land specifically identified for retention.

(b) Other Disposals

1. Recreation and Public Purposes Act

- Selected lands identified for disposal under this authority would have to be fully adjudicated before BLM would entertain a sale. By identifying these lands for disposal, we are merely saying that if these lands become unencumbered within the life of the plan, then they would be suitable for disposal under this authority.
- In most instances, BLM would first lease lands under this act and would only convey the lands after the project was constructed in compliance with an approved development and management plan. One important exception to this is tracts for proposed sanitary landfills, which would always be sold; not leased.
- Application for tracts to be used as sanitary landfills would only be conveyed with a clause that would prohibit reversion to the Federal government.
- Existing leases would be converted to patents if the lands were used for sanitary landfills.

2. Airport and Airway Improvement Act of September 3, 1982

Process Airport conveyances as requested by the Federal Aviation Administration (FAA). Each conveyance would contain appropriate covenants and reservation requested by FAA. As a condition to each conveyance, the property interest conveyed would revert to the Federal government in the event the lands were not developed for airport or airway purposes or were used in a manner inconsistent with the terms of the conveyance.

3. Exchanges

BLM will strive to process mutually benefiting public interest land exchanges. Exchanges are authorized in Alaska by FLPMA, ANCSA, and ANILCA. When considering public interest, full consideration would be given to efficient management of public lands and to important objectives including: protection of fish and wildlife, cultural resources, wilderness and aesthetic values, enhancement of recreational opportunities, consolidation of mineral and timber holdings for more logical and efficient management, expansion of communities, promotion of multiple-use values, and fulfillment of public needs. Exchanges would not be actively sought until State and Native entitlements were fulfilled.

4. Acquisitions

Acquire private lands through purchase or exchange with willing owners. Acquisition would be pursued within areas identified for long-term Federal management and retention when such acquisition advanced the programs of the Secretary, including access. Consider acquisition of parcels along the Iditarod NHT through purchase or exchange with willing owners. When feasible, BLM would acquire less than fee title to property if management goals could be

achieved. BLM would acquire access for discontinuous 17(b) easements as the need and opportunity arose.

(c) Land Use Authorizations

1. FLPMA Leases

All FLPMA leases would be at fair market value. Cabins or permanent structures used for private recreation could not be authorized under this authority. Proposals to lease cabins used for commercial uses (such as guiding or trapping) would be subject to the following criteria:

- Proximity to other private property or existing authorized structures.
- Proximity to existing transportation routes or systems.
- Documentation of the profitability/reliance of the trapping lifestyle.

2. R&PP Leases

R&PP leases would not be issued for sanitary landfill purposes. Existing leases for sanitary landfill purposes could be converted to patents without a reverter clause.

3. Permits

Permits cover occupancy, use, or development of a site. Specific exclusion areas are listed in Table 2-16 on page 2-97. In general: Cabin or permanent structure permits could not be issued for private recreation uses.

Trapping shelters would be authorized by short-term (three years maximum) sec. 302 permits renewable at the discretion of the BLM and tied to the applicant's ability to show actual use for profitable trapping purposes. Guide shelters would only be authorized in conjunction with Special Recreation Permits issued under FLPMA authority. The same criteria described above for cabin leases would be used during consideration of issuance of such permits. Military maneuver permits would be considered on a case-by-case basis.

4. Unauthorized Use, Occupancy, or Development

Trespass cabins may become the property of the U.S. Government and be managed as administrative sites, as emergency shelters, or as public use cabins. Possible management actions on trespass cabins include:

- Removal of the structure.
- Relinquishment to the United States for management purposes.
- Authorization by lease or permit for legitimate uses if consistent with identified area goals and objectives.
- Under numbers 2 and 3, the criteria listed above for cabins under Lease and Permits would be used. Criteria for prioritizing unauthorized cases would be as follows:
 - Situations involving new trespass, public safety, public complaints.
 - Areas identified for long-term Federal management: highest priority, or other unencumbered lands.
 - Selected lands on which resources are being removed without authorization or where resource damage is occurring.
 - Other selected lands.

5. Rights-of-way

Rights-of-way (ROWs) would be located near other ROW or on already disturbed areas to the extent practical.

6. Selected Lands

Regarding use authorizations, selected lands would be treated as follows:

- **Native-selected:** Prior to issuance of a use authorization, the applicant would be required to obtain the non-objection of the Native corporation. If the corporation objected to the proposal, BLM would proceed with issuance only if the State Director deemed the proposal to be in the public good.
- **State-selected:** In accordance with 906(k) of ANILCA, BLM would request concurrence from the State prior to issuance of any use authorization. BLM could then incorporate comments in the terms and condition of the use authorization if such comments comply with Federal laws and regulations. If the State objected, BLM would not issue the use authorization. If the proposal were on land which was not available within the meaning of the Statehood Act but which had been top-filed by the State pursuant to 906 (e) of ANILCA, a letter of concurrence would not be required.

7. Required Operating Procedures

Land use authorizations would be subject to measures identified in the Required Operating Procedures in Appendix A.

(4) Alternative B

Alternative B, would be very similar to Alternative A in that most land use authorizations would be dealt with on a case-by-case basis. No areas would be identified for permit or lease avoidance or exclusion. Tracts of land meeting the criteria outlined in Management Guidance Common to All Alternatives would be available for disposal except where prohibited by PLO or where lands were identified for retention. Once conveyances were completed, large blocks of BLM lands would be retained in Federal ownership (Map 2-18). BLM would consider acquisition of parcels along the Iditarod NHT through purchase or exchange with willing owners. Exchanges would not be actively sought out until land conveyances were completed. All BLM-managed lands would be available for occupancy permits except where prohibited by PLO. The Red Dog-Kuchiak Mine Corridor would be designated (Map 2-19). ANCSA (d)(1) withdrawals would be revoked throughout the planning area. The lands in the Squirrel River would be opened to mineral entry and leasing. No areas would be identified for ROW avoidance or exclusion. Communication site ROWs would be considered on a case-by-case basis. Hot springs leases would be considered.

(5) Alternative C

Under Alternative C, land use authorizations would be limited, particularly in ACECs and rivers determined to be suitable for designation as wild and scenic. No lands would be available for disposal through FLPMA sales, R&PP disposal, or other FLPMA disposals. FLPMA and R&PP leases would be authorized on a case-by case basis except in designated ACECs. Occupancy permits would not be authorized in ACECs or suitable rivers except for administrative sites, government use, or research. ANCSA (d)(1) withdrawals would be revoked except in those

areas identified for withdrawal from locatable minerals (Map 2-11). In these areas, (d)(1) withdrawals would be retained until a new withdrawal for the stated purpose was completed. The Squirrel River would continue to be closed to mineral entry and leasing. ACECs and NSO areas on anadromous streams would be designated as ROW avoidance areas (Map 2-7). Communication site ROWs would be limited to existing sites. Hot springs leases would be prohibited.

(6) *Alternative D*

Under this alternative, land use authorizations would generally be allowable on BLM-managed lands and would be considered on a case-by-case basis subject to Required Operating Procedures. Any lands remaining in BLM management in the immediate vicinity of Nome and Kotzebue after conveyances were completed would be available for disposal through FLPMA sale. Specific tracts meeting the criteria outlined in Management Guidance Common to All Alternatives would be available for disposal under other disposal authorities except for those lands identified for retention. Once conveyances were completed, large blocks of BLM land would be retained in Federal ownership (Map 2-18). FLPMA and R&PP leases would be authorized on a case-by case except in designated ACECs and RNAs. Occupancy permits would not be authorized in ACECs, RNAs, or suitable rivers except for administrative sites, government use, or research. ANCSA (d)(1) withdrawals would be revoked except in those areas identified for withdrawal from locatable minerals (Map 2-12). In these areas, (d)(1) withdrawals would be retained until a new withdrawal for the stated purpose was completed. The Squirrel River would be opened to mineral entry and leasing. The Nulato Hills ACEC would be designated as a ROW avoidance area (Map 2-21). Communication site ROWs would be limited to the three existing sites within the Kigluaik Mountains. In other parts of the planning area, communication site ROW would be considered on a case-by-case basis. As in Alternative C, hot springs leases would be prohibited.

The preceding information is summarized in the following table.

Table 2-16. Lands and Realty—Summary of Alternatives

Resource	Alternative A	Alternative B	Alternative C	Alternative D
R&PP Disposal	Lands may be disposed of following the petition/classification procedures in 43CFR 2740.	Same as A	No lands available for R&PP disposal	Same as A
FLPMA sales	No lands currently identified for disposal. Under PLO 6477 300-foot setbacks on the Pah, Noatak, Shaktoolik, Ungalik, Inglutalik Tubutulik, Kuzitrin, and Fish rivers are withdrawn from sale.	Specific tracts meeting the criteria outlined in Management Guidance Common to All Alternatives would be available for disposal except where prohibited by PLO or where lands are identified for retention.	No land available for FLPMA sales	Any tracts remaining in BLM ownership within the following townships around Nome and Kotzebue would be available for sale: Kateel, T17N, R18W; T17N R17W; T18N R17W; T11S, R33W; T11S, R34W.
Other FLPMA Disposals	No lands currently identified for disposal. Under PLO 6477 300-foot setbacks on the Pah, Noatak, Shaktoolik, Ungalik, Inglutalik Tubutulik, Kuzitrin, and Fish rivers are withdrawn from sale.	Specific tracts meeting the criteria outlined in Management Guidance Common to All Alternatives would be available for disposal except for those lands identified for retention.	No lands will be available for disposal	Same as B
Lands Identified for retention	None	Once conveyances are complete, retain large blocks of BLM land and the Iditarod NHT (Map 2-18) 9,089,000 acres for retention, of which 4,420,000 acres is selected	Same as B	Same as B

Resource	Alternative A	Alternative B	Alternative C	Alternative D
FLPMA and R&PP Leases	Considered case-by-case. Leases are excluded from 300-foot setbacks on the Pah, Noatak, Shaktoolik, Ungalik, Inglutalik Tubutulik, Kuzitrin, and Fish rivers under PLO 6477.	Allow on a case-by-case basis except where prohibited by PLO.	Allow FLPMA and R&PP leases on a case-by-case basis except where prohibited by PLO and in ACECs/RNAs (approximately 5.6 million acres of ACECs)	Same as C
Occupancy Permits	Considered case-by-case except where prohibited by PLO.	All lands available for permits on a case-by-case basis except where prohibited by PLO.	Make occupancy permits available on a case-by-case basis except in ACECs/RNAs (approximately 5 million acres) and rivers determined to be suitable for designation as wild and scenic. Within ACECs and suitable rivers, occupancy permits may be issued for administrative sites, government use, or research.	Same as C
ANCSA (d)(1) Withdrawals	ANCSA (d)(1) withdrawals in place on selected lands. Closed to mineral location or leasing.	Revoke all (d)(1) withdrawals and make the lands available to the full spectrum of the land laws.	Revoke (d)(1) withdrawals except in those areas identified for withdrawal from locatable minerals. In these areas, (d)(1) withdrawals would be retained until a new withdrawal for the stated purpose is completed.	Revoke (d)(1) withdrawals except in those areas identified for withdrawal from locatable minerals. In these areas, (d)(1) withdrawals would be retained until a new withdrawal for the stated purpose is completed.
Rights-of-way corridors	Two legislatively designated routes from Deering to Nome - Taylor Highway (ANILCA Sec. 201(2); Bornite to the Dalton Highway (ANILCA 201(4)(b))	Same as A, plus designate Red Dog-Kuchiak Mine Corridor (as proposed by ASRC)	Same as A.	Same as A

Resource	Alternative A	Alternative B	Alternative C	Alternative D
Rights-of-way exclusion or avoidance areas	None designated	Same as A	Designate the following areas as avoidance areas (5,602,000 acres): 1) ACECs/RNAs 2) 300-foot NSO setbacks on rivers (not to preclude crossing of rivers.) 3) locatable mineral withdrawals on identified streams	Designate the Nulato Hills ACEC (2,044,000 acres) as an avoidance area.
Communication site ROW	Considered case-by-case	Same as A	Limit to existing communication sites.	Limit to the three existing sites within the Kigluaik Mountains. Consider elsewhere on case-by-case basis.
Squirrel River Withdrawal	Withdrawn for study as wild and scenic river. Withdrawal expires 11/17/2007. Unselected lands become subject to PLO 5179, which segregates against mineral entry and leasing.	Open lands in the Squirrel River to mineral entry and leasing.	Keep PLO 5179 in place	Same as B
Hot Springs leases	Considered case-by-case	Same as A	Prohibit leases	Same as C

INSERT 11x17 MAP
2_18_lands_retention

INSERT 8½x11 MAP
2_19_lands_corridor

3. Special Designations

a) Areas of Critical Environmental Concern and Research Natural Areas

(1) Goals

To highlight areas where special management attention is needed to protect and prevent irreparable damage to important historic, cultural, and scenic values, fish or wildlife resources or other natural systems or processes through designation of Areas of Critical Environmental Concern (ACECs) or Research Natural Areas (RNAs).

(2) Alternative A

Under this alternative, there are no designated ACECs or RNAs.

(3) Management Common to All Action Alternatives (B, C, and D)

(a) Management Decisions

- Designation of an ACEC or RNA would not encumber selected lands within the proposed boundary. Selected lands would be managed to maintain the resource values of the lands until conveyance. The ACEC or RNA management prescription would not attach to conveyed lands. Following adjudication of all selections, special management area boundaries might need to be adjusted.
- Additional site-specific actions or monitoring needed to manage ACECs would be made through ACEC-specific planning.
- Over the short-term, the Kigluaik Mountains would not be designated as an ACEC or RNA. After conveyances were completed, if sufficient lands remained in BLM ownership, it would be designated.
- A mining Plan of Operations would be required on any mining activity within an ACEC.

(4) Alternative B

Under this alternative, no areas would be proposed for designation as ACEC or RNA.

(5) Alternative C

Under this alternative, 5,591,000 acres would be designated as ACECs in five separate areas (Map 2-20).

(a) Kigluaik Mountains

The Kigluaik Mountains would be designated as an ACEC to include 298,000 acres, most of which is currently selected by the State. In addition to measures described in Appendix A: Required Operating Procedures, measures identified within the ACEC to protect scenic,

cultural, botanical, and geological values would include the following (see also Table B-1 in Appendix B): 1) OHVs would be limited to designated trails May 15 to October 31; 2) the area would be closed to locatable and leasable mineral entry, and mineral material disposal; 3) commercial recreational use would be limited; 4) the area would be designated as a ROW avoidance area; 5) communication site ROW would be limited to the existing sites; 6) once conveyances were completed, remaining lands would be retained in Federal management; and 7) the area would be closed to grazing.

(b) Western Arctic Caribou Herd Calving and Insect Relief Habitat

The WACH calving and insect relief habitats would be designated as an ACEC to include approximately 2,893,000 acres, 70 percent of which is currently State- or Native- selected. In addition to measures described in Appendix A: Required Operating Procedures, measures identified within the ACEC to protect caribou habitat would include the following (Table B-2 in Appendix B): 1) OHVs would be limited to designated trails May 15 to October 31; 2) the area would be closed to locatable and leasable mineral entry; 3) the area would be designated as a ROW avoidance area; 4) once conveyances were completed, remaining lands would be retained in Federal management; and 5) the area would be closed to grazing.

(c) Nulato Hills

The Nulato Hills would be designated as an ACEC to include approximately 2,044,000 acres, most of which is unencumbered BLM land. In addition to measures described in Appendix A: Required Operating Procedures, measures identified within the ACEC to protect caribou and anadromous fish habitats would include the following (Table B-5 in Appendix B): 1) OHVs would be limited to designated trails May 15 to October 31; 2) the area would be closed to locatable and leasable mineral entry; 3) commercial recreational use would be limited; 4) the area would be designated as a ROW avoidance area; 5) FLPMA and R&PP leases would not be allowed; 6) lands would be retained in Federal management; 7) the area would be closed to grazing; and 8) a fire management plan would be developed to protect lichen habitats for caribou winter range.

(d) McCarthy's Marsh

McCarthy's Marsh would be designated as an ACEC to include approximately 131,000 acres, most of which is currently selected by the State. In addition to measures described in Appendix A: Required Operating Procedures, measures identified within the ACEC to protect wildlife habitats and botanical values would include the following (Table B-3 in Appendix B): 1) OHVs would be limited to designated trails May 15 to October 31; 2) the area would be closed to locatable and leasable mineral entry; 3) the areas would be closed to mineral material sales; 4) commercial recreational use would be limited; 5) the area would be designated as a ROW avoidance area; 6) once conveyances were completed, remaining lands would be retained in Federal management; 7) the area would be closed to grazing; 8) a fire management plan would be developed to protect lichen habitats for caribou winter range; and 9) FLPMA & R&PP leases would not be allowed.

(e) Kuzitrin River

The Kuzitrin River would be designated as an ACEC to include approximately 141,000 acres, 89 percent of which is currently selected by the State. In addition to measures described in Appendix A: Required Operating Procedures, measures identified within the ACEC to protect wildlife habitats and botanical values would include the following (Table B-4

in Appendix B): 1) OHVs would be limited to designated trails May 15 to October 31; 2) the area would be closed to locatable and leasable mineral entry; 3) FLPMA & R&PP leases would not be allowed; 4) the area would be designated as a ROW avoidance area; 5) once conveyances were completed, remaining lands would be retained in Federal management; and 6) the area would be closed to grazing.

(6) *Alternative D*

Under this alternative, approximately 4.9 million acres would be designated as ACECs in five separate areas, and 84,000 acres would be designated as an RNA (Map 2-21).

(a) Mount Osborn (Kigluaik Mountains)

Under this alternative, instead of designating the Kigluaik Mountains as an ACEC, the Mount Osborn area would be designated as an RNA (84,000 acres). Because almost the entire area is currently selected by the State, the RNA designation would not attach until conveyances were complete or the selections were dropped. At that time, if there were sufficient land remaining in BLM ownership, it would be designated as a RNA. In addition to measures described in Appendix A: Required Operating Procedures and Oil and Gas Leasing Stipulations, measures identified within the RNA to protect scenic, cultural, botanical, and geological values would include the following (Table B-1 in Appendix B): 1) The area would be designated as "limited" OHV designation. Until conveyances were completed, OHVs would be managed consistently with the State's generally allowable uses. Once conveyances were complete or the selections were relinquished, an OHV management plan would be developed to outline limitations on OHV use; 2) the area would be closed to locatable mineral entry; 3) FLPMA and R&PP leases would not be allowed; 4) communication site ROW would be limited to the existing sites; 5) remaining lands would be retained in Federal management.

(b) Western Arctic Caribou Herd Calving and Insect Relief Habitat

The WACH calving and insect relief habitats would be designated as an ACEC to include 2,893,000 acres, approximately 70 percent of which is currently State- or Native- selected. In addition to measures described in Appendix A: Required Operating Procedures and Oil and Gas Leasing Stipulations, measures identified within the ACEC to protect caribou habitat would include the following (Table B-2 in Appendix B): 1) OHVs would be limited to 2,000 pounds GVWR; 2) the area would be open to leasable mineral entry subject to seasonal restrictions and additional stipulations that would be developed through activity-level planning; 3) FLPMA and R&PP leases would not be allowed; 4) once conveyances were completed, remaining lands would be retained in Federal management; 5) the area would be closed to grazing; 6) an ACEC management plan would be developed to include more specific measures and leasing stipulations to protect caribou and their habitat from future development activities, such as ROW and leasable mineral exploration and development. This plan would be developed through a public process and provide opportunity for public input into proposed management actions.

(c) Nulato Hills

Under this alternative, four separate ACECs would be designated in the Nulato Hills, most of which is unencumbered BLM land. The northern part of the Nulato Hills would be designated as the Nulato Hills ACEC for caribou. The southern end of the Nulato Hills would be designated as the Ungalik River ACEC, the Inglutalik River ACEC, and the

Shaktoolik River ACEC. The measures described in Required Operating Procedures and Oil and Gas Leasing Stipulations in Appendix A, (Table B-5 in Appendix B), would apply to all four ACECs.

Nulato Hills ACEC (1,081,000 acres): Additional measures identified within the ACEC to protect caribou habitat would include the following: 1) OHVs would be limited to 2,000 pounds GVWR; 2) the area would be open to leasable mineral entry subject to stipulations that would be developed through activity-level planning; 3) FLPMA and R&PP leases would not be allowed; 4) lands would be retained in Federal ownership; 5) lands not within existing grazing allotments would be closed to grazing; 6) an ACEC management plan would be developed to include more specific measures to protect caribou and their habitat. This plan would also include recommendations on fire management to protect lichen habitats from fire; and 7) the area would be designated as a ROW avoidance area.

Ungalik River ACEC (264,000 acres), Inglutalik River ACEC (466,000 acres), and Shaktoolik River ACEC (234,000 acres): Additional measures identified within the ACEC to protect anadromous fish habitat would include the following: 1) OHVs would be limited to 2,000 pounds GVWR; 2) a 300-foot setback along the Ungalik River would be withdrawn from locatable mineral entry; 3) FLPMA and R&PP leases would not be allowed; 4) 300-foot NSO setbacks for leasable minerals would be established on both sides of all three rivers and their tributaries; 5) lands would be retained in Federal management; and 6) lands not within existing grazing allotments would be closed to grazing.

The preceding information is summarized in the following table and in Appendix B.

Table 2-17. Areas of Critical Environmental Concern and Research Natural Areas—Summary of Alternatives

Resource	Alternative A	Alternative B	Alternative C	Alternative D
Special Areas Considered	No ACECs or RNAs currently designated	No ACECs or RNAs proposed	Proposed ACECs: 5,591,000 acres (43%) (Map 2-20)	Proposed ACECs: 4,938,000 acres (38%) Proposed RNA: 84,000 acres (Map 2-21)
Kigluaiik Mountains	No designation	No designation	Designate the Kigluaiik ACEC (382,000 acres) to protect scenic, cultural, botanical, and geologic values. -Mostly State-selected land north of Nome	If substantial lands remain BLM ownership after conveyances are complete, designate the Mount Osborn RNA (84,000 acres) to protect scenic, geologic, and botanical values. -Mostly State-selected land north of Nome
WACH calving and Insect Relief Habitat	No designation	No designation	Designate the WACH calving and insect relief habitat as an ACEC (2,893,000 acres) to protect the calving grounds and important insect relief habitats. -Mixture of unencumbered BLM, State- and Native-selected lands west of NPR-A	Same as C. As discussed under management common to all alternatives, designation of an ACEC would not encumber selected lands within the boundary. -Mixture of unencumbered BLM, State- and Native-selected lands west of NPR-A
Nulato Hills	No designation	No designation	Designate the Nulato Hills ACEC (2,044,000 acres) to protect core winter range for the Western Arctic caribou herd and anadromous fish habitat. Mostly unencumbered BLM land east of the Seward Peninsula	Designate the following areas as ACECs: 1) Nulato Hills ACEC (1,081,000 acres) to protect core winter range for the WACH 2) Shaktoolik River ACEC (234,000 acres) to protect anadromous fish habitat 3) Ungalik River ACEC (264,000 acres) to protect anadromous fish habitat 4) Inglutalik River ACEC (466,000 acres) to protect anadromous fish habitat. Mostly unencumbered BLM land east of the Seward Peninsula
McCarthy's Marsh	No designation	No designation	Designate the McCarthy's Marsh ACEC (131,000 acres) to protect caribou, moose, anadromous fish, and waterfowl habitat. -Mostly State-selected lands south of Bendeleben Mountains	No designation
Upper Kuzitrin River	No designation	No designation	Designate the Upper Kuzitrin River ACEC (141,000 acres) to protect caribou, moose, and waterfowl habitat. -Mostly State-selected lands adjacent to Bering Land Bridge NP	No designation

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INSERT 11x17 MAP
2_21_acec_d

b) Wild and Scenic Rivers

(1) Goals

- Pursuant to the BLM's interim management policies, manage the Squirrel WSRA Sec. 5(a) study river to protect wild river values until fall 2007 while Congress considers the study's recommendation and finding that the river is not suitable for designation as a component of the National Wild and Scenic Rivers System.
- Identify and recommend for designation any rivers in the planning area that are suitable for designation as components of the National Wild and Scenic Rivers System.
- Identify and develop protection strategies for outstanding river-related values in the planning area.
- Protect water quality.

(2) Alternative A

Under this alternative, no rivers would be recommended as suitable for designation under the Wild and Scenic Rivers Act. Pursuant to the BLM's interim management policies, the BLM would continue to manage the Squirrel River WSRA Sec. 5(a) study river to protect wild river values until fall 2007 while Congress considers the study's recommendation and finding that the river is not suitable for designation as a component of the National Wild and Scenic Rivers System.

(3) Management Common to All Action Alternatives (B, C, and D)

(a) Inventory and Monitoring

Continue monitoring in cooperation with other programs to protect the outstandingly remarkable values in the Squirrel River study area through summer and fall of 2007.

(b) Management Decisions

Pursuant to the BLM's interim management policies, manage the Squirrel River WSRA Sec. 5(a) study river to protect wild river values until fall 2007 while Congress considers the study recommendation and finding that the river is not suitable for designation as a component of the National Wild and Scenic Rivers System.

(4) Alternative B

Under this alternative, no rivers would be recommended as suitable for designation under the Wild and Scenic Rivers Act.

(5) Alternative C

Under this alternative, the rivers listed in Table 2-18 on page 2-115 and shown on Map 2-22 would be recommended as suitable for designation as wild under the Act.

(6) *Alternative D*

This alternative would be the same as Alternative B.

The preceding information is summarized in the following table.

Table 2-18. Wild and Scenic Rivers—Summary of Alternatives

Resource	Alternative A	Alternative B	Alternative C	Alternative D
Squirrel River WSRA Sec 5(A) study area	Continue existing management to protect outstandingly remarkable values until Congress makes a decision on the non-suitability finding (2007)	Same as A	Same as A. Plus increase field patrols and level of monitoring of commercial operators, including hunting guides and air-taxi operators. Establish monitoring protocols for campsites.	Same as A
Protect outstandingly remarkable values on rivers other than the Squirrel River.	Continue existing management	Same as A	Monitor sensitive river areas. Withdraw sensitive high-value river corridor areas from mining and surface occupation for oil and gas development.	Same as A
Eligible rivers suitable for designation	None	None recommended as suitable	Recommend the following rivers as worthy additions to the National Wild and Scenic Rivers System: Kivalina River, Fish River (McCarthy's Marsh), Upper Buckland and Fish River (tributary of upper Buckland), Ungalik, Shaktoolik, Inglutalik, Koyuk/Peace/East Fork, Tubutulik, Agiapuk, Kiliovilik, and Niik/Ipewik/Kukpik to be managed as wild river areas.	Same as B
Rivers determined suitable for designation	None	No suitable rivers	Withdraw suitable river areas from mining and surface occupation for oil and gas development. Gage suitable rivers to establish instream flow baselines. Apply for water rights to protect instream flows in suitable rivers.	No suitable rivers
Free-flowing rivers	Continue existing management	Same as A	Prohibit dams and significant diversions throughout public lands in the planning area.	Same as A
Protect water quality in streams	Continue existing management	Continue existing management	Increase monitoring and enforcement of Clean Water Act. Develop and implement a water quality monitoring plan for suitable river areas. Consider if there are areas where ground-water monitoring or modeling would be appropriate to identify and anticipate effects on stream water quality due to draw-down or pollution of ground water.	Develop and implement a water quality-monitoring plan for high-value river areas.

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4. Social and Economic

a) Public Safety

(1) Abandoned Mine Lands and Hazardous Materials Management

(a) Goals

- Protect public health and safety and environmental resources by minimizing environmental contamination from chemical, biological and radiological sources on public lands and BLM-owned or -operated facilities.
- Comply with Federal and State oil and hazardous materials management laws and regulations.
- Maintain the health of ecosystems through location, assessment, cleanup, and restoration of contaminated sites.
- Manage oil and hazardous materials related risks, costs and liabilities
- Integrate environmental protection and compliance with all environmental statutes into all BLM activities.

(b) Alternative A

The BLM would continue to comply with Federal and State oil and hazardous materials management laws and regulations. As sites were discovered, they would be remediated. The Northwest MFP does not provide any guidance on hazardous materials management or abandoned mine lands.

(c) Management Common to All Action Alternatives (B, C, and D)

- Work cooperatively with other Federal and State governmental agencies, Tribal governments, general public, Native corporations, industry, and advocacy groups to protect public health and safety and environmental resources.
- Prioritize known sites for cleanup, making sites on lands awaiting conveyance a high priority.
- Conduct remediation actions on identified sites in accordance with applicable laws and policy.
- Comply with all appropriate laws and regulations regarding hazardous materials.
- Do not permit unauthorized storage, treatment, or disposal of hazardous waste on public lands.
- Respond to hazardous materials incidents and sites using standard operating procedures.
- Develop appropriate stipulations and required operating procedures for BLM-permitted activities to minimize the probability of contamination of public lands with hazardous materials

5. *Subsistence*

a) **Goals**

Maintain and protect subsistence opportunities. Determine how the management actions, guidelines, and allowable uses prescribed in response to the other issues will affect both subsistence opportunities and resources and the social and economic environment.

- Maintain sufficient quality and quantity of habitat to support healthy populations of important subsistence species of fish and wildlife.
- Through the Federal Subsistence Board and Office of Subsistence Management effectively manage subsistence harvests (by working with the local Regional Advisory Councils and subsistence users), including a strategy to implement/enforce a “rural priority” should one be necessary.
- Ensure that rural residents engaged in subsistence use have reasonable access to subsistence resources on public lands.
- To the extent possible, minimize displacing resources from traditional harvest areas (displacement that occurs as a result of permitted activity, such as oil and gas exploration, and extensive research projects, etc.).
- Avoid and minimize user conflicts over multiple-use resources (i.e., sport, commercial, subsistence).

b) **Alternative A**

Under this alternative the BLM would continue to manage subsistence in accordance with sec. 802 of ANILCA. Before the BLM approves any action, the effect of such use, occupancy, or disposition on subsistence uses and needs would be evaluated in compliance with Sec. 810 of ANILCA. The Northwest MFP does not provide any specific direction on subsistence management other than compliance with sec. 810. However, the decision under wildlife to protect wildlife habitat and to mitigate impacts of other uses on wildlife provides support for the subsistence program. Under this alternative, most activities would be analyzed on a case-by-case basis and few uses would be limited or excluded. This alternative provides few constraints on activities that have the potential to negatively affect subsistence resources.

c) **Management Common to All Alternatives (A, B, C, and D)**

Subsistence is an atypical resource/program in that the opportunity for subsistence uses by rural residents on public lands in Alaska is assured by law [sec. 802(1) of ANILCA]. As a result, decisions made in this RMP will not affect the BLM’s role in administration of subsistence on Federal public lands. Under all alternatives, the BLM would continue to carry out or participate in the following administrative functions.

Involve Subsistence Users in Issues Identification: Ten Regional Advisory Councils were established in sec. 100.22 of the Subsistence Management Regulations for Public Lands in Alaska as an administrative structure to provide a “meaningful voice” for subsistence users in the management process. BLM field staff members, along with those

of other agencies, meet twice each year with the Regional Councils to identify emerging issues in conservation, allocation, and appropriate regulation of subsistence harvests.

Manage Land/Habitat, Assess Impacts to Subsistence: ANILCA sec. 810 establishes a distinct set of requirements for assessment of potential impacts to subsistence from Federal land decisions. These supplement the discussion of potential impacts to subsistence resources and uses found as part of conventional NEPA environmental reviews.

Monitor Resource Populations Use for Subsistence Purposes: When these monitoring efforts are focused on key subsistence resources, they are a major contribution to the quality of subsistence management efforts.

Develop Interagency Subsistence Management Regulations and Policies: With heavy reliance on Regional Council input and interagency coordination, the development of subsistence regulations is a multi-step process.

Manage Subsistence Harvests: Although regulatory authority for subsistence management rests with the Federal Subsistence Board, implementation and enforcement of Federal subsistence hunting and fishing opportunities rests largely on local Federal agency field staff. Tasks include distribution of Federal regulation booklets, responding to questions, issuing Federal subsistence permits, contacting hunters in the field, and assisting in tallying permit and harvest reports.

d) Management Common to All Action Alternatives (B, C, and D)

(1) Inventory and Monitoring

Work cooperatively with State and other Federal agencies to inventory and monitor habitats and populations of important subsistence species to provide the necessary information to develop subsistence regulations and bag limits on Federal lands, as required by the Federal Subsistence Board.

(2) Management Decisions

- Through the BLM-Alaska's Stipulations and Required Operating Procedures (ROPs) create mitigation measures for permitted activities that serve to minimize impacts to subsistence. Mitigation may include avoidance of specific areas or limitations on season of use.
- Work with the State and other Federal agencies to obtain information from local residents on the cultural significance and relative importance of BLM lands for subsistence purposes.
- Require infrastructure be constructed in such a way that it does not impede access (i.e., pipelines, roads, buildings, etc.).
- Create mitigation measures and/or required operating procedures for permitted activities so as to minimize displacement of subsistence resources.
- Set a limit on the number of hunting guide permits to be issued within the Squirrel River and upper Koyuk River.
- Create "good neighbor" recreational guidelines.
- Create non-extractive commercial use permit Stips and ROPs.
- Through OHV designations, ensure reasonable access for subsistence use.

C. Summary and Comparison of Effects on Resources by Alternatives

Table 2-19 summarizes the direct, indirect, and cumulative effects under each alternative for all resources, where effects were found (refer to Chapter IV).

Table 2-19. Summary and Comparison of Effects on Resources by Alternatives

Alternative A	Alternative B	Alternative C	Alternative D
EFFECTS ON AIR QUALITY			
<p>Overall, impacts to air quality would be low and air quality should remain in attainment throughout the planning area. Smoke from wildland fire would have short-term effects on air quality and visibility. Mining may have localized impacts on air quality due to dust and airborne deposition of heavy metals.</p>	<p>Impacts to air quality would be low and air quality should remain in attainment. Impacts would be higher than under Alternative A as the amount of mineral development would increase. However, the amount of locatable mineral development would still be low and impacts would be minor and localized. Oil and gas development would occur, potentially leading to air quality impacts from the emissions of hydrocarbons and byproducts of combustion or wind-borne particulates. In situ burning as part of a cleanup of spilled crude oil or diesel fuel would temporarily adversely affect air quality. Emissions in the general area of ongoing North Slope oil production have not been shown to violate air quality standards; emissions resulting from this alternative would be small compared to the emissions from Prudhoe Bay and Kuparuk oil field production and would account for a minimal percentage of the emissions generated by current North Slope oil production.</p>	<p>The level of impact would be similar to Alternative A. Impacts to air quality would be low and air quality should remain in attainment throughout the planning area. No oil and gas development would occur and other mining activity would be limited to a few small placer mines.</p>	<p>The level of impact would be similar to Alternative B. Overall, impacts to air quality would be low, and air quality should remain in attainment throughout the planning area. Mining, and oil and gas development would occur at the same level as under Alternative B and impacts from these activities would be the same.</p>
<p>Cumulative Effects: Cumulative air quality impacts may result from the emissions of hydrocarbons and byproducts of combustion. These impacts may be regionally additive (e.g., increased concentrations of specific pollutants) or synergistic (e.g., chemical reactions that form ozone), and could degrade air quality. Ambient air quality on the North Slope of Alaska, however, is relatively pristine even though oil and gas exploration, development, and production have been under way for more than 30 years. Oil and gas development under this plan would be small compared to Prudhoe Bay and Kuparuk oil field production; projected emissions from the alternatives would account for only a small percentage of current and projected emissions on the North Slope. Development of regional roads and access would have impacts along the entire length of road, including increased airborne particulates, especially during construction.</p>			

Alternative A	Alternative B	EFFECTS ON SOIL RESOURCES	Alternative C	Alternative D
<p>Given the low level of surface disturbing activities and recreational use, impacts to soils would be minor. Potential impacts from mining include disturbance and redistribution of gravel, overburden, and soil materials. The structure of the soil profile and the stability of the floodplain can be destroyed and require decades to recover. Where OHV trails traverse wetlands, repeated use may lead to thermokarst subsidence, water diversions, and ponding. Where trails cross streams, riparian soil may be altered or destroyed, increasing soil loss and sedimentation.</p>	<p>Effects would be similar to Alternative A but, would occur over a larger area as mineral development would increase. Locatable mineral development would still be low and impacts minor and localized. Potential impacts of oil development include melting of permafrost (thermokarst), disruption of natural drainage patterns, increased erosion and sedimentation, and removal of gravel. Heavy traffic and digging associated with spill cleanup damages soil when the ground surface is not frozen. Impacts from cleanup when the tundra is unfrozen may be greater than the impact of the spilled oil. OHV designations would be less restrictive, allowing for the use of heavier vehicles during the winter. Impacts would be greater than under Alternative A but still small and localized, given the low level of OHV use.</p>	<p>Given the low level of surface disturbing activities and recreational use, impacts to soils would be minor. OHVs would be limited to designated roads and trails. Impacts from OHV use would still occur but would be lower than under Alternative A.</p>	<p>Impacts would be similar to Alternative B. Anticipated mineral development and associated impacts would be the same. Impacts from OHV use would be similar to Alternative A and somewhat less than under Alternative B as OHVs greater than 2,000 pounds GVWR would not be allowed. In addition, OHVs may be limited to existing or designated trails in some areas, further reducing the potential for impacts.</p>	<p>Cumulative Effects: Effects to soil resources would largely result from surface disturbing activities that degrade the vegetative cover over the ice-rich permafrost soils, resulting in thermokarst erosion and subsidence. This is especially true in wetland soils, along the stream banks, and lakeshores, where water would accelerate the removal of the melting ice-rich soil, resulting in increased sediment erosion and changes to stream channel and bed morphology. Thermokarst erosion could also result from the cumulative effect of seismic and exploration activity when less than ideal snow conditions expose tussock tundra to surface disturbance during winter months. In oil spill cleanups, heavy traffic and digging are common, resulting in damaged soils. Oil-spill cleanup mitigates impacts on soils only if cleanup methods and operations are carefully controlled and they minimize surface disturbance. The impacts to soil resources from surface disturbing activities during oil-spill cleanup when the tundra is unfrozen may be greater than the impact of the spilled oil, as the area affected may not be limited to that area immediately adjacent to and covered by the spill. Impacts from thermokarst may take years to develop; it could be decades before the impacts to soils are ameliorated. Adherence to the Stips and ROPs for all permitted operations would prevent the unnecessary long-term disturbance to soils. Development of regional roads and access would have impacts including soil compaction and thermokarst erosion, stream diversions, impoundments, and increased sediments runoff.</p>

Alternative A	Alternative B	Alternative C	Alternative D
<p>Impacts to water would be localized and minor. Mineral development has the potential to impact water resources through disturbance to soils. Soil removal can increase stream sedimentation and turbidity and decrease stream channel stability. The stability of the floodplain can be destroyed and may require decades for recovery. Where OHV trails traverse wetlands thermokarst subsidence, water diversions, and ponding may occur. Where trails cross streams, riparian soil and vegetation may be altered or destroyed, increasing soil loss and sedimentation into aquatic habitats and resulting in diminished water quality. Impacts from other types of activities would be negligible under this alternative.</p>	<p>Effects would be similar to Alternative A but, would occur over a larger area as mineral development would increase. Locatable mineral development would still be low and impacts minor and localized. Impacts from oil development include water withdrawal from lakes, removal or compaction of snow cover on lakes and rivers, contamination of water from temporary surface storage of drilling mud and cuttings, disturbance of stream banks or shorelines and subsequent melting of permafrost (thermokarst), blockages of natural channels and floodways that disrupt drainage patterns, increased erosion and sedimentation, and removal of gravel from rivers and lakes. Improper location of gravel-removal operations can result in alteration of stream channel or lake configuration, stream-flow hydraulics or lake dynamics, erosion and sedimentation, and ice damming and aufeis formation. A large oil spill would have negative impacts on water quality if the oil reached a tundra pond or river.</p>	<p>Effects would be similar to Alternative A. Implementation of the ROPs would help mitigate impacts to water resources. Impacts from OHV use would be somewhat less as OHVs would be restricted to designated roads and trails during the snow-free period. This alternative has the most restrictive OHV designations.</p>	<p>Effects would be similar to Alternative B. Implementation of the ROPs would help mitigate impacts to water resources. Impacts from OHV use would be somewhat less as OHVs weighing more than 2,000 pounds GVWR would not be allowed, and additional OHV limitations may be applied in ACECs and SRMAs.</p>
<p>EFFECTS ON WATER RESOURCES</p>			
<p>Cumulative Effects: Overall, effects of oil spills on water resources on the North Slope, because the spills have been small and cleanup and rehabilitation efforts have generally been successful, have not been significant. Small spills could exceed the acute-toxic level a day or less and chronic criteria could be exceeded for less than a month. Development of regional roads and access would impact water resources. These impacts would occur along the entire length of road and include stream diversions, impoundments, increased sediments runoff, especially during construction.</p>			

Alternative A	Alternative B	Alternative C	Alternative D
<p>Mineral development may negatively impact vegetation by removing the vegetative mat, re-routing stream flow, covering vegetation with gravel, and compacting soils. Long-term surface disturbance increases the potential for introduction of noxious and invasive plants. OHV use may destroy the vegetation mat, compact soils, accelerate permafrost melt, and lead to soil erosion and ponded water, crushing plants and degrading their habitats. Livestock grazing may negatively impact vegetation by trampling, cratering to organics or mineral soil, and over-browsing. These impacts would be localized and minor. Impacts from other activities would be negligible.</p>	<p>Effects would be similar to Alternative A but, would occur over a larger area as the level of mineral development would increase. Locatable mineral development would still be low with localized impacts. Potential impacts of oil development include: compression of the vegetation mat; broken shrubs and crushed tussocks from seismic activity; mortality of plants due to oil spills; compression of the tundra mat and localized die-off of plants under ice roads and pads; and destruction of vegetation on up to 417 acres from facility development. OHV designations would be less restrictive, allowing for the use of heavier vehicles slightly increasing the potential for impacts. More lands would be open to grazing and alternative forms of livestock would be considered. Overall, there could be a small increase in grazing pressure and trampling effects on riparian and tundra vegetation. The potential for introduction and spread of noxious and invasive weeds could increase somewhat.</p>	<p>Impacts to vegetation from mineral development would be similar to Alternative A. Some areas would be closed to mineral entry and location, reducing the potential for impacts. Impacts from OHV use would be somewhat less than under Alternative A because OHVs would be restricted to designated trails. Impacts from grazing would be the lowest under this alternative. Grazing would be limited to a smaller area as four grazing allotments would be closed and grazing would be restricted to the Seward Peninsula.</p>	<p>Impacts to vegetation from mineral development would be the same as Alternative B. Impacts from OHV use would be similar to Alternative A and somewhat less than under Alternative B as OHVs greater than 2,000 pounds GVWR would not be allowed. In addition, OHVs may be limited to existing or designated trails in some areas, further reducing the potential for impacts. Impacts from grazing would be limited to a smaller area as two grazing allotments would be closed, and grazing would be limited to the Seward and Baldwin peninsulas. Reindeer would be the only type of livestock allowed.</p>
EFFECTS ON VEGETATION MANAGEMENT			
<p>Cumulative Effects: Increased levels of mineral development on State and private lands, combined with similar activities on BLM-managed lands could result in cumulative surface disturbance with adverse effects on riparian and tundra vegetation over the long-term. Dispersed recreation effects from gradual increases in amount and frequency of OHV travel, remote landing sites for bush aircraft, campsites, plus potential new recreation facilities and trails may have minor adverse and cumulative impacts to riparian and tundra vegetation on BLM-managed lands throughout the planning area. The potential for displacement of native vegetation by noxious and invasive weeds will increase as the level of surface disturbance to once-intact habitat rises.</p>			

Alternative A	Alternative B	Alternative C	Alternative D
<p>Mineral development, road construction, fire, and OHV use may impact fish. Erosion into streams and rivers from surface disturbance leads to increased turbidity and sedimentation, which can inhibit feeding and spawning success. Activities associated with mining may increase erosion and disrupt water flow patterns, and has the potential to increase pollution in streams. Fire can cause increased siltation, higher water temperature, altered water quality, changes in nutrient input, and changes in permafrost, leading to altered hydrology. OHV impacts come from increased stream bank disturbance which decreases stream bank stability, and additional trails, which may gather runoff and rut, thereby leading to increased erosion and subsequent sedimentation into streams. These impacts would be localized and most likely minor.</p>	<p>EFFECTS ON FISH</p> <p>Effects from mineral development would be similar to Alternative A, but would occur over a larger area as the level of mineral development would increase. Locatable mineral development would still be very limited and impacts would most likely be minor. Impacts to fish from seismic activities include stress and damage to overwintering habitat. Impacts from pad, road, and pipeline construction associated with oil development include increased erosion and sedimentation, subsurface and surface flow disruption, and increased pollution in runoff. These impacts would be localized and would most likely not have population level effects. Given the small volume of oil typically involved in spills, as well as the safety requirements and stringent clean-up protocols, oil spills would most likely not have a measurable long-term impact on fish populations. Impacts from fire would be the same as Alternative A.</p>	<p>Effects from mineral development and fire would be the same as Alternative A. Impacts from OHV use would be somewhat less than under Alternative A because OHVs would be restricted to designated trails.</p>	<p>Impacts to fish from mineral development would be the same as Alternative B. Impacts from OHV use would be similar to Alternative A and somewhat less than under Alternative B as OHVs greater than 2,000 pounds GVWR would not be allowed. In addition, OHVs may be limited to existing or designated trails in some areas, further reducing the potential for impacts. Impacts from fire would be the same as Alternative A.</p>
<p>Cumulative Effects: A continuation of current water and land use practices, by private, State, and other Federal agencies would continue to affect fish habitat within the planning area. Higher intensity OHV use and mineral development or exploration on lands upstream from BLM-managed lands within a watershed could continue to be a concern due to sediment and water quality issues that influence the quality of fish habitat downstream from the source. Habitat improvement gains through more intensive management of recreation activities as proposed under Alternatives C and D could be offset or enhanced by regulatory sport-fishing changes made by ADF&G. Coordinating with regional planning actions and conducting interagency watershed planning efforts could help protect important fisheries values in watersheds such as the Kigluaik Mountains, Kivalina River, and Squirrel River.</p>			

Alternative A	Alternative B	Alternative C	Alternative D
EFFECTS ON WILDLIFE			
<p>Low levels of harvest of forest products, livestock grazing, mineral exploration, land use authorizations, and dispersed recreational and OHV use would have minor localized effects on wildlife. Impacts would include stress and disturbance of wildlife, and degradation of habitat. Impacts would not have population level effects.</p>	<p>Increased mineral exploration and development would increase the level of impacts to wildlife and their habitat. Impacts from placer mining would be minor (up to 50 acres) but greater than under Alternative A. Oil and gas development (517 acres long term disturbance) would occur, resulting in impacts to wildlife and habitat, particularly caribou. Impacts from recreation would be the same as Alternative A. Impacts from OHV use would be similar to Alternative A but slightly higher as heavier vehicles may be used during the winter. Impacts from grazing would be increased as the area open to livestock would be larger and classes of and reindeer, increasing the potential for disease transmission to wildlife.</p>	<p>Impacts to wildlife would be the lowest under this alternative. No mineral development would occur thus there would be no impacts to wildlife. Impacts from recreation and OHV use would be reduced compared to Alternative A as OHVs would be restricted to designated trails. Within SRMAs, levels of recreational use would be limited, resulting in fewer impacts to wildlife. Impacts from livestock grazing would be the lowest of any alternative as several areas would be closed to grazing. Several ACECs would be designated to provide additional management emphasis in important wildlife habitats.</p>	<p>Impacts would be the same as Alternative B except for impacts from livestock grazing which would be reduced. The lands open to grazing would be larger than under Alternative C but less than under Alternative A and B. Class of livestock allowed would be limited to reindeer, reducing the risk of disease transmission. Several ACECs would be designated to provide additional management emphasis in important wildlife habitats.</p>
<p>Cumulative Effects: The combination of ongoing and future oil and gas development occurring on both State and Federal lands on the North Slope, oil and gas development in the northern portion of the planning area, and possibility of solid mineral exploration and development in the same region, would have cumulative impacts on the WACH. Depending on the location of development, these impacts may include: short or long-term disturbance to caribou calving habitat, insect relief habitat, and migratory routes; disruption of caribou movements; stress and disturbance impacts to caribou during all seasons of the year; possible reductions in herd productivity. Any new development would result in additive impacts to the herd. If significant activity occurred within the calving grounds or important insect relief habitat, these impacts could be significant. Construction of a road in the Howard Pass area would also affect caribou movements and if open to public use, would greatly increase access into caribou habitat. Privatization of State or Native Corporation lands has the potential to negatively affect wildlife and wildlife habitat by opening up areas to private development. Development of regional roads would have the potential to negatively affect wildlife, particularly caribou and other big game species. These impacts would include habitat fragmentation, increased access into wildlife habitats, increased disturbance impacts, increased potential for mortality (road kills), and possible alteration of behavior or movement patterns of wildlife.</p>			

Alternative A	Alternative B	Alternative C	Alternative D
<p align="center">Alternative B EFFECTS ON FIRE MANAGEMENT AND ECOLOGY</p> <p>The biggest potential impact to Fire Management is in areas where fire exclusion is being attempted. Long-term fire suppression in the boreal forest results in additional biomass being added to the organic layer and the creation of large homogeneous stand of flammable fuels, usually black spruce. The end result is larger more severe fires that may be outside the range of natural variability. Attempts at fire exclusion impacts other resources long-term and with potentially high impact effects. For example, attempts at fire exclusion in the range of the WACH wintering range could result in significant portions of their range burning in one fire event, limiting the carrying capacity of their range. If fuels management projects are proposed in the future, the impact on the fire program would be in the form of time commitment for preparation and budgetary for implementation.</p>			
<p>Cumulative Effects: Wildland fire management is done on an interagency basis and across administrative boundaries. There are several areas in that are in the Full and Critical Management Options that are adjacent to BLM-managed lands. How fire is managed on these lands over the long-term may influence the effects of fires on adjacent BLM land.</p>			
<p align="center">Alternative B EFFECTS ON CULTURAL RESOURCES</p>			
<p>Federal undertakings and unauthorized uses may cause irreversible disturbance and damage to cultural resources. Few impacts are anticipated from authorized activities due to the remoteness of most BLM-managed lands and the nature of most permitted activities. Mining activity is limited to small placer mines. Impacts to cultural resources from authorized uses would be avoided through project redesign or mitigated through data recovery. There is some potential for impacts from unauthorized activities, but it is difficult to estimate the extent, as the cost of monitoring is prohibitive.</p>	<p>Impacts from uses other than mineral development would be negligible. Impacts from mineral development would be greater than under Alternative A. Development of oil resources would result in surface disturbance that could impact cultural resources (417 acres disturbed by construction of oil field facilities plus 50-100 acres disturbed through extraction of gravel) An additional 4,979 acres of short-term disturbance would result from gathering lines, delineation wells, and distribution pipeline. Most of these features would be built during the winter, minimizing surface disturbance, but drilling for Vertical Support Members and any sections of buried pipeline would have potential for disturbance or destruction of cultural resources. This development would occur in the northern part of the planning area, where numerous prehistoric sites are known to be located.</p>	<p>Impacts to cultural resources would be the same as Alternative A.</p>	<p>Impacts to cultural resources would be the same as Alternative B.</p>
<p>Cumulative Effects: Cumulative impacts to cultural resources could occur through incremental degradation of the resource base from a variety of sources which reduce the information and interpretive potential of historic and prehistoric properties, or which affect traditional cultural values important to Native Americans. Much of the anticipated development within the planning area would occur on lands that are not covered by Federal cultural resource laws. As a result, there could be losses to the regional resource base that could potentially limit management options within the planning area.</p>			

Alternative B EFFECTS ON PALEONTOLOGICAL RESOURCES		Alternative C	Alternative D
Alternative A	<p>Federal undertakings and unauthorized uses may cause irreversible disturbance and damage to paleontological resources. Impacts from authorized use would be mitigated through project redesign and specimen recovery. Geologic formations with exposures containing vertebrate and non-vertebrate fossils would be impacted from natural agents, unauthorized public collection, and vandalism. Impacts would stem almost exclusively from unauthorized uses and natural causes. Lack of knowledge about paleontological resources in the planning area, makes it difficult to estimate the extent and nature of impacts.</p> <p>Cumulative Effects: Cumulative impacts to paleontological resources could result from development on non-BLM managed lands and from natural agents and unauthorized uses throughout the area.</p>	<p>Impacts to paleontological resources would be the same as Alternative A.</p>	<p>Impacts to paleontological resources would be the same as Alternative B.</p>
Alternative A	<p>Visual resources would be managed on a project-by-project basis as no visual management classes have been established. Surface disturbing activities such as fire, mineral development and OHV use, and authorizations that result in facility or infrastructure construction such as powerlines or roads can negatively impact visual resources. Few impacts are anticipated from authorized activities due to the remoteness of most BLM-managed lands and the nature of most permitted activities.</p> <p>Cumulative Effects: Continued development of OHV trails, roads, recreational facilities, mining activities, overland explorations, and fire management may lead to changes to existing visual resources by altering basic visual elements of form, line, color and texture at the landscape level. These changes will influence the design of similar projects on adjacent BLM lands where repeating these basic elements is an objective of the visual resource management class.</p>	<p>Impacts to paleontological resources would be the same as Alternative A.</p>	<p>Impacts to visual resources would be similar to Alternative B but somewhat less because VRM management classes are slightly more restrictive.</p>
Alternative B	<p>Alternative B anticipates the greatest amount of resource development and adopts the least-restrictive VRM classes. Effects to visual resources could occur over a larger area than under Alternative A due to increased mineral developed. Impacts from activities associated with the development of oil and gas would primarily be associated with the construction of support facilities. Gravel mining to support such development would have additional impacts. Impacts for visual resources from authorized activities may be higher under this alternative because it has the least restrictive VRM management classes.</p>	<p>Alternative C anticipates the lowest level of resource development and adopts VRM classes that would be the most restrictive. Impacts would be the lower than under Alternative A because VRM management classes have been established. Impacts would be lower than Alternative B or D because more restrictive VRM management classes have been established and very little mineral development would occur.</p>	<p>Impacts to visual resources would be similar to Alternative B but somewhat less because VRM management classes are slightly more restrictive.</p>
Alternative C	<p>Alternative C anticipates the greatest amount of resource development and adopts the least-restrictive VRM classes. Effects to visual resources could occur over a larger area than under Alternative A due to increased mineral developed. Impacts from activities associated with the development of oil and gas would primarily be associated with the construction of support facilities. Gravel mining to support such development would have additional impacts. Impacts for visual resources from authorized activities may be higher under this alternative because it has the least restrictive VRM management classes.</p>	<p>Alternative C anticipates the lowest level of resource development and adopts VRM classes that would be the most restrictive. Impacts would be the lower than under Alternative A because VRM management classes have been established. Impacts would be lower than Alternative B or D because more restrictive VRM management classes have been established and very little mineral development would occur.</p>	<p>Impacts to visual resources would be similar to Alternative B but somewhat less because VRM management classes are slightly more restrictive.</p>
Alternative D	<p>Alternative D anticipates the lowest level of resource development and adopts the most restrictive VRM classes. Impacts would be the lower than under Alternative A because VRM management classes have been established. Impacts would be lower than Alternative B or C because more restrictive VRM management classes have been established and very little mineral development would occur.</p>	<p>Alternative D anticipates the lowest level of resource development and adopts the most restrictive VRM classes. Impacts would be the lower than under Alternative A because VRM management classes have been established. Impacts would be lower than Alternative B or C because more restrictive VRM management classes have been established and very little mineral development would occur.</p>	<p>Alternative D anticipates the lowest level of resource development and adopts the most restrictive VRM classes. Impacts would be the lower than under Alternative A because VRM management classes have been established. Impacts would be lower than Alternative B or C because more restrictive VRM management classes have been established and very little mineral development would occur.</p>

Alternative A	Alternative B	Alternative C	Alternative D
EFFECTS ON WILDERNESS CHARACTERISTICS			
<p>Due to the remoteness of BLM lands, and the low levels of authorized activities, wilderness characteristics would be maintained on the vast majority of BLM-managed lands. Impacts to wilderness characteristics would be minimal and site specific. Authorized activities may negatively affect wilderness characteristics. Activities that alter the watershed, such as mineral development, would negatively affect naturalness. Activities that involve large numbers of people, aircraft, or vehicles would negatively affect opportunities for solitude, and or primitive/ unconfined recreation. Generally, these effects would be short-term, lasting only until the activity is over.</p>	<p>Due to the remoteness of BLM lands, and the low levels of authorized activities, wilderness characteristics would be maintained on most BLM-managed lands. Impacts to wilderness characteristics would increase somewhat compared to Alternative A primarily due to the projected increase in mineral development. Oil and gas development would result in year-long human activity. Impacts would be the most intense at and around development and production facilities during construction. After construction, structures, human presence, and associated activity and noise would have adverse impacts on solitude, naturalness, or primitive/unconfined recreation. Because production would occur over a long period, impacts would be long-term. These long-term, adverse impacts are expected to be greatest within 2 miles of facilities.</p>	<p>Impacts to wilderness characteristics would be similar to Alternative A but somewhat less as VRM management classes would be adopted and OHV use would be limited to designated trails. Under this alternative, 11 river systems would be determined suitable for designation as wild. Interim management of these rivers to maintain values would have a positive impact on naturalness. Management actions implemented in designated ACECs would have a positive impact on naturalness.</p>	<p>Impacts to wilderness characteristics would be similar to Alternative B but may be somewhat less as more restrictive VRM management classes and OHV designations would be adopted. Management actions implemented in designated ACECs would have a positive impact on naturalness.</p>
<p>Cumulative Effects: Short-term impacts, such as green trails and disturbance from noise and other activities would not accumulate. Impacts from long-term or permanent facilities such as roads, major trails, pipelines and gravel road/pads, would accumulate and would result in the long-term loss of solitude, naturalness, or primitive/unconfined recreation. Under Alternative B, long-term impacts would be expected to affect an area of approximately 108,000 acres, or 1% of BLM-managed lands in the planning area. Considering past, present and future development, total cumulative impacts could affect an area one to three times greater. This would depend on many factors, some of which are unforeseen at this time. Cumulative impacts the Squirrel River and other popular rivers in the planning area, will be more significant than impacts elsewhere.</p>			

Alternative A	Alternative B	EFFECTS ON FOREST PRODUCTS	Alternative C	Alternative D
<p>Locatable and salable mineral development may result in minor to moderate impacts to forested lands in the East Ambler, Central Omar-Kiana, and South Seward Peninsula areas by clearing of trees as part of mine site development. Impacts would be minimal as little mining is anticipated. Recreational use will have low-level impacts on forests such as firewood harvest and use of standing dead or live trees for camp structures. OHV use will cause damage to low-growing tree seedlings and saplings, especially white and black spruce. Impacts to forest subsistence include a slight increase of firewood and house log use, plus a low negative impact on tree seedling and sapling growth from OHV use, particularly snowmachine use. Under this alternative, forested areas could be allowed to burn or considered for protection from wildland fire to achieve specific forestry objectives. Risk of human-caused wildfire may increase slightly.</p>	<p>Impacts from locatable and salable minerals would be similar to Alternative A but possibly greater in extent because slightly more mining activity is anticipated (additional 30-50 acres of disturbance). Impacts from OHV use would be similar to those occurring under Alternative A. Impacts from fire and fire management would be similar to those discussed under Alternative A, except that the application of wildland fire use would not be allowed. The overall impact to availability of forest products due to the difference in management practices would be minimal as prescribed fire could be used to meet specific forestry objectives.</p>	<p>Impacts from mining would potentially be lower than Alternative A as areas closed to mineral entry would include proportionally more forested lands. Impacts from recreation would be the same as Alternative A, except use of firewood and standing dead or live trees may decrease slightly due to limitations on visitor use in some areas. More restrictive limits on OHV use would decrease the potential for negative impacts to seedlings and saplings. This change would be minimal as additional limitations would not apply to snowmachines. Management of the Nulato Hills ACEC would be beneficial to forest resources. Impacts from fire would be similar to Alternative A. The emphasis on allowing wildland fire to function in its natural ecological role, may reduce protection of forest harvest sites from fire. Opportunity for house log harvest may be slightly less. Opportunities for harvest of morel mushrooms may be slightly higher.</p>	<p>Impacts from mining would be the same as Alternative B. Impacts from recreation would be the same as Alternative C. Due to the development of specific OHV limitations within ACECs and SRMAs the overall negative impact to tree seedlings and saplings and forest soils from OHV use may decrease slightly. Impacts from fire would be the same as Alternative A.</p>	<p>Impacts from mining would be the same as Alternative B. Impacts from recreation would be the same as Alternative C. Due to the development of specific OHV limitations within ACECs and SRMAs the overall negative impact to tree seedlings and saplings and forest soils from OHV use may decrease slightly. Impacts from fire would be the same as Alternative A.</p>
<p>Cumulative Effects: Ongoing spruce beetle damage and the potential for more intense wildland fires may shift forest stand composition towards a higher percent of young trees, and a more diverse mix of tree ages within stands. Early seral shrub-dominated plant communities may increase, interspersed with recovering forest communities. The overall amount of mature forest timber will likely decrease during the life of the plan. An increase in number and sophistication of OHVs will result in a small amount of continued damage to naturally revegetating or colonizing tree seedlings and saplings. As village populations rise the use of firewood and house logs will also increase. Increased mineral development on adjacent State and Native-owned lands may result in conversion of forested plant communities to tundra landscapes of sparse grasses, sedges, forbs, or shrublands. This could shift subsistence and wildlife use of forest product resources more strongly towards BLM-managed forest habitats.</p>				

Alternative A	Alternative B	Alternative C	Alternative D
<p>Most authorized uses would have negligible impacts on grazing. Subsistence activities have a minor impact as reindeer are occasionally killed by hunters looking for caribou. Fire management could impact reindeer range. Lichens, primary winter forage for reindeer, are slow to recover from fires. There may be an opportunity to reduce impacts to lichens through fire management. Social and economic conditions have the potential to strongly impact livestock grazing. Conditions may develop that are much more or much less favorable to herding. These conditions are largely unrelated to BLM management. The most important factor impacting reindeer grazing is the distribution of the WACH. When the caribou migrate north, reindeer are apt to migrate with them. Reindeer numbers have an inverse relationship with the number of caribou in the region. This is an impact outside of BLM's control.</p>	<p>Impacts from most other authorized uses and fire would be the same as Alternative A. Approximately 13.1 million acres of BLM managed lands throughout the planning area would be open for consideration of livestock grazing, which would include bison as a class of livestock. If supported by social and economic conditions, and the distribution of the WACH, the opportunity for grazing businesses could increase slightly over the life of the plan. Leasable mineral development could negatively affect grazing by destroying habitat and displacing free-ranging livestock, if livestock were to be in the area of development. There are currently no livestock in the portion of the planning area where development is forecasted, but under this alternative livestock grazing could be permitted in these areas.</p>	<p>Impacts from activities other than grazing management would be the same as Alternative A. Opportunities for grazing businesses would be reduced compared to Alternative B as only 3.3 million acres of BLM-managed lands on the Seward Peninsula would be open to grazing. The remainder of the planning area would be closed. Reindeer grazing permit renewals and new applications would be rejected where significant conflicts with wildlife or subsistence are likely to occur. Permits for allotments that have not had reindeer for 10 or more years due to conflicts with caribou would not be renewed and the allotments would be permanently retired.</p>	<p>Impacts would be similar to Alternative B, except bison would not be an allowable class of livestock. Opportunities for grazing businesses would be higher than Alternative C and lower than Alternative B. Grazing would be considered on 4.1 million acres of BLM-managed land on the Seward Peninsula. The remainder of the planning area would be closed. Reindeer grazing permit renewals and new applications would be rejected where significant conflicts with wildlife or subsistence are likely to occur. Allotments that have not had reindeer for 10 or more years would not be permanently retired.</p>
<p>EFFECTS ON LIVESTOCK GRAZING</p> <p>Cumulative Effects: There would be no cumulative impacts on grazing.</p>			

Alternative A	Alternative B	EFFECTS ON FLUID LEASABLE MINERALS	Alternative C	Alternative D
<p>The lack of NEPA analysis and retention of ANCSA (d)(1) withdrawals would preclude oil and gas leasing. Under this alternative no oil and gas exploration and development would occur, rendering these resources unavailable for future generations.</p>	<p>Alternative B provides the greatest opportunity for leasable mineral development. Approximately 13.1 million acres (+99% of BLM-managed land) would be open to mineral entry subject to the ROPs and Stips. Oil and Gas Stips #6 and #7 would not apply, suggesting zero acres would be open with minor constraints, such as timing or seasonal limitations. About 23,800 acres would be subject to NSO, the total of individual 300-foot setbacks on select rivers. Setbacks may limit exploration and development. The added cost of directional drilling could render the project uneconomical or it could be technically unfeasible. Consequently, these resources would be unavailable for future generations. None of the planning area would be closed to oil and gas leasing. Areas with moderate to high potential for oil and gas which are State- or Native-selected, may be conveyed to the selecting entities. However, potential does exist for the leasing of oil and gas on BLM-managed lands.</p>	<p>Under Alternative C, land restrictions would significantly diminish interest in the fluid mineral resources. Only 1.8 million acres (13% of BLM-managed land) would be open subject to the ROPs and Stips. About 5.4 million acres (41%) would be open subject to minor constraints on caribou winter range and muskox habitat. About 181,000 acres (1%) would be open to leasing subject to NSO, the total of individual 300-foot setbacks on select rivers. As in Alternative B, these NSO areas could limit exploration and development. Approximately 5.8 million acres (44%) would be closed to oil and gas leasing. Closing these areas to leasing would preclude oil and gas development and render these resources unrecoverable. Given these constraints, no oil and gas development would occur under this alternative.</p>	<p>Alternative D provides the second greatest opportunity for leasable mineral development. About 7 million acres (53% of BLM-managed land) would be open subject to the ROPs and Stips. About 6.1 million acres (47%) would be open subject to minor constraints. Some of the acreage subject to minor constraints includes lands that have a high oil and gas occurrence potential rating. These constraints would limit exploration and development during specific time periods and increase recovery costs. Approximately 38,000 acres (less than 1%) would be subject to NSO Impacts from NSO would be the same as Alternative B.</p>	<p>Cumulative Effects: Impacts would be greatest under Alternatives B and D as no leasing would occur in Alternative A, and high potential areas are closed in Alternative C. There could be a reduction in lease value resulting from the application of stipulations and regulations and increased operating costs. Restrictions on Federal leases could impact leasing and development of adjacent non-Federal leasable minerals. An area on the cusp of showing economical development could become non-profitable by imposing restrictive guidelines, resulting in the displacement mineral activities to adjacent landowners. On the other hand, under Alternatives B and D leasing of Federal minerals, could encourage leasing of private or State minerals. Roads resulting from exploration and development could increase interest in exploration on BLM-managed lands.</p>

Alternative A	Alternative B	Alternative C	Alternative D
<p>Alternative A</p> <p>About 13.1 million acres (+99% of BLM-managed lands) would be available for coal exploration and non-energy leasable mineral prospecting. Selected lands, unless specifically closed, are open to coal exploration. The only area not available for exploration would be two existing coal leases. There currently are two preferential right coal leases in the planning area, both located within the Cape Beaufort Field. The leases expire in 2009 unless development was to occur. Further leasing under any of the alternatives would require additional NEPA analysis, including the coal screening process outlined in 43 CFR 3425.</p>	<p>Alternative B</p> <p>Alternative B is the same as Alternative A except exploration and prospecting would be subject to the ROPs. With no closure restrictions to the lands under this alternative, coal exploration and general resource inventories would be maximized to their full potential.</p>	<p>Alternative C</p> <p>EFFECTS ON SOLID LEASABLE MINERALS</p> <p>Restrictions on exploration and development would diminish interest in such activities. About 7.2 million acres (55%) would be available for coal exploration and non-energy leasable mineral prospecting subject to the ROPs. Closed lands encompass nearly 5.9 million acres (45%), including ACECs and a 300-foot setback on selected rivers. These closures would eliminate potential exploration in areas that possess geologic potential for coal and other non-energy leasable minerals. Consequently, these resources would be unrecoverable. Given these constraints, it is assumed that little to no coal exploration or non-energy leasable mineral prospecting would take place under this alternative.</p>	<p>Alternative D</p> <p>About 12.0 million acres (92%) would be available for coal exploration and non-energy leasable mineral prospecting subject to the ROPs. About 1.1 million acres (8%) would be closed to coal exploration, including 300-foot setbacks on selected rivers and the Nulato Hills ACEC. These closures could have a negative effect on the exploration for non-energy leasable minerals by precluding access to a known energy resource. In areas where solid leasable minerals overlap with closures, the resource would be unrecoverable. However, areas of overlap are not considered to be substantial. Exploration and prospecting could occur under this alternative.</p>
<p>Cumulative Effects: Cumulative impacts to coal exploration and non-energy leasable mineral prospecting could occur through development of infrastructure by adjacent land owners. Infrastructure would be provided if coalbed natural gas exploration and development were to occur on non-BLM lands. Up to 11 coalbed natural gas wells could be drilled on non-BLM lands with the produced gas piped to a nearby village.</p>			

Alternative A	Alternative B	Alternative C	Alternative D
<p>No withdrawal review would occur and current ANCSA (d)(1) withdrawals would remain in place on about 70% of BLM-managed lands. The potential for future exploration and development on BLM-managed lands would be limited. Once the conveyance process is completed, these withdrawals would continue to discourage mining interests and prevent exploration and evaluation of mineral potential. Much of this land has been unavailable for mineral assessment for more than 30 years. In the meantime markets for new commodities have developed, ore deposit theory has advanced significantly, and new mining and milling processes which are less expensive, more efficient and environmentally friendly have been developed.</p>	<p>EFFECTS ON LOCATABLE MINERALS</p> <p>This alternative would have the fewest impacts on locatable mineral development. About 13.1 million acres would be opened to mineral entry. Revocation of withdrawals would result in increased exploration and development activity, pending State and Native conveyances. Development of mineral deposits on State and private lands could encourage exploration onto adjacent Federal land. Given the limited mineral potential on Federal lands, and mining operation locations mostly on private and conveyed lands, it is expected that no more than 5 new, small placer mines would develop over the life of the plan. It is further expected that no new hard rock mines on Federal land would develop to production, mostly due to the long (more than 20 years) development time needed to bring a hard rock mine from discovery to production. Administration of Notices and Plans of Operations, compliance, and mine reclamation would continue.</p>	<p>Less potential exists for mineral exploration and development under Alternative C due to recommended withdrawals of ACECs, RNAs, and 300-foot setbacks along selected rivers. About 6.5 million acres would be open to locatable mineral entry. Some mining activity could continue to occur on valid existing claims, but new development would be doubtful based on proposed area-wide constraints. Restrictions would discourage further expenditure of funds in the planning area. The BLM would continue to regulate surface disturbing activities on valid Federal claims through Notices and Plans of Operations, and ROPs would be implemented. Before a plan of operations could be approved on withdrawn lands, a validity examination would have to be conducted to verify that there is a discovery of a valuable mineral deposit on the claims in question.</p>	<p>About 13 million acres would be open to mineral entry. Impacts would be similar to Alternative B except for 99,000 acres proposed for withdrawal. This includes setbacks on three rivers and the Mount Osborn RNA. Potential for development of known graphite occurrences in the Kigluaiik Mountains would be curtailed by withdrawal of this RNA. The Ungalik River contains known placer gold occurrences and the proposed setback cuts through a producing placer province. Potential for development of known mineral resources would be curtailed.</p>
<p>Cumulative Effects: Impacts that are individually minor may cumulatively reduce exploration and production of commodities from BLM-managed land. Factors that affect mineral extraction and prospecting, such as permitting and permitting delays, regulatory policy, public perception, travel management, transportation, mitigation measures, proximity to sensitive areas, low commodity prices, taxes, and housing and other necessities for workers are mostly issues over which the BLM has no control. These factors result in additional costs and/or permitting delays that can individually or cumulatively add additional costs to projects. Lack of access could reduce the amount of mineral exploration and development that may occur. Mineral resources in other ownerships may not be developed if the adjacent BLM lands are withdrawn from mineral entry because the deposit may not be economically feasible to develop if only a portion is available for development. Overall, Alternative C would be the most restrictive to mineral development and could result in the most cumulative impacts. Alternative C proposes the most acres be withdrawn from mineral entry, the most areas limited or closed to motorized travel, and the highest protection to other resources to the preclusion of use of locatable mineral deposits, both placer and hard rock, on BLM-managed lands.</p>			

Alternative A	Alternative B	Alternative C	Alternative D
<p>Development of mineral materials sites would not be constrained except as restricted by interim management guidelines for selected lands. No unencumbered Federal lands would be closed to mineral material sales and permits.</p>	<p>Impacts would be the same as Alternative A except the ROPs would apply to mineral material sales.</p>	<p>EFFECTS ON MINERAL MATERIALS Development of mineral materials sites on BLM-managed lands would most likely be severely constrained under Alternative C. Some Federal lands (271,500 acres) would be closed to mineral material sales and permits. More importantly limitations on the type of mineral material deposit that could be developed would amount to a de-facto closure of public lands to the operation of this program.</p>	<p>Impacts would be the same as Alternative B.</p>
<p>Cumulative Effects: Under Alternative C the closure of two ACECs to sale/permit of mineral materials as well as the additional restriction on types of mineral material deposits that may be mined would essentially close all BLM-managed land to mineral materials development and production.</p>			

Alternative A	Alternative B	Alternative C	Alternative D
<p>No SRMAs would be designated under Alternative A. Recreational opportunities would be primarily limited to independent remote backcountry experiences and through guided tours. Semi-primitive motorized recreation opportunities would be maintained on lands currently undesignated for OHV use.</p>	<p>Under Alternative B, more land would be available for mineral development which could potentially affect recreation opportunity and experience. Given the limited amount of mineral development anticipated, effects would be minor. In the Squirrel River SRMA, the number of special recreation permits (SRP) issued would be limited, impacting the sport hunter who relies upon guided hunts. Limiting use levels could also enhance the experience for the sport hunter desiring a more primitive experience. This could also negatively impact commercial service providers by limiting their potential client base. OHV designations allowing for the use of larger vehicles would benefit users wanting to use those types of vehicles. It could also have negative impacts on other users who prefer a more primitive experience.</p>	<p>SRMAs would be designated in the Squirrel River and Kigluaik Mountains. Impacts to recreation in would be similar to those in Alternative B but would affect a larger area. The establishment of visitor use limits in specific areas would help ensure the quality of recreation experiences for commercial and non-commercial users. However, establishment of visitor use limits may limit recreational opportunities for some as well as opportunities for commercial development for others. Impacts to commercial recreation in the Squirrel River would be similar Alternative B but more restrictive. OHVs would be limited to designated trails, diminishing the opportunity for free and unrestricted OHV use.</p>	<p>As in Alternative C, SRMAs would be designated in the Squirrel River and Kigluaik Mountains. The establishment of visitor use limits in these areas would help ensure the quality of recreation experiences for commercial and non-commercial users. But may also limit opportunities. Specific limitations would be developed in RAMPs, making the impact somewhat unknown at this time. OHV designations would preserve semi-primitive motorized recreation opportunities in most of the planning area.</p>
<p>EFFECTS ON RECREATION MANAGEMENT</p>			
<p>Cumulative Effects: The planning area currently provides a diversity of recreation opportunities which are expected to continue over the life of the plan regardless of the alternative selected. The largest influence on recreation experience is use of OHVs. Without management and some limitations on OHV use, recreation experiences will trend towards semi-primitive motorized and roaded natural. However, much of the planning area is dominated by steep topography, wetlands, dense vegetation and remote settings with no road infrastructure, making it inaccessible to most OHVs. These areas will continue to provide for primitive recreation experiences, regardless of which alternative is selected. Helicopter-supported commercial recreation ventures and winter snowmachine use have the potential to alter experiences in some of these areas. There continues to be a need for facilities to provide positive recreation experiences for motorists traveling the Nome Road System. The State continually struggles with funding to support construction and maintenance of facilities such as waysides and outhouses. Facilities for remote and dispersed recreation safety and comfort (such as remote cabin facilities) are also in need. Alternatives C and D may address these needs, but without a well-funded State or Federal recreation program, this rapidly growing need would not be met.</p>			

Alternative A	Alternative B	Alternative C	Alternative D
<p>There are no OHV designations in place in the planning area. Use of vehicles over 2,000 pounds GVWR requires a permit.</p>	<p>The planning area would be designated as "Limited" to OHV use. The lifting of the 2,000 pound GVWR limit during the winter months will increase the potential for travel by allowing use of larger OHVs in an unrestricted environment. This is the only alternative where vehicles larger than 2,000 pounds could travel on BLM-managed lands without a permit. More lands would be open to mineral entry under this alternative, potentially creating improved access. Given the level of mineral development anticipated, these effects would be minor.</p>	<p>EFFECTS ON TRAVEL MANAGEMENT/OHV The planning area would be designated as "Limited" to OHV use. OHV use would be restricted to designated trails during the snow-free period and keep the current maximum 2,000 pound GVWR limit during the winter. The current free and unrestricted OHV use in the planning area would be diminished. Proposed restrictions would impact users by strictly limiting OHV use where no limits have been in place before. There may be areas users will have difficulty reaching due to the lack of designated trails. In designated ACECs or SRMAs, further limitations may be placed upon OHV use. Non local users who visit the planning area primarily during the summer/fall months would be affected the most. This alternative would impact OHV and travel use more than any other alternative.</p>	<p>The planning area would be designated as "Limited" to OHV use. A maximum 2,000 pound GVWR would apply yearlong. Selected lands would be managed consistent with the ADNR's Generally Allowable Uses on State Lands. In designated ACECs, RNAs, and SRMAs further limitations may be placed on OHV use. The current fee and unrestricted OHV use would be somewhat diminished compared to Alternative A. Impacts from mineral development would be the same as Alternative A.</p>
<p>Cumulative Effects: OHV use and travel in the planning area is somewhat restricted due to limits on State and BLM-managed lands, and land ownership patterns. There is limited public access to BLM-managed lands and there is little in this plan that will help alleviate this situation. While a small road system outside of Nome exists, it accesses largely private and State lands. Common to all alternatives, access to public lands could become more difficult as Native corporation entitlements are met and they exercise their private property rights. The BLM would maintain existing 17(b) easements and would extend those easements across Native-selected lands where trails currently exist to ensure reservation of easements when conveyance occurs. Future access is somewhat contingent on the resolution of State-recognized R.S. 2477 routes, particularly where they cross Native lands. Whether or not access routes to public land would be maintained in the long-term as a result of those determinations cannot be resolved in this planning effort.</p>			

Alternative A	Alternative B	Alternative C	Alternative D
EFFECTS ON LANDS AND REALTY			
<p>Management of vegetation, fish, wildlife, special status species, cultural and paleontological resources may result in restrictions or additional mitigation, increasing the cost of projects. A permit is required for the use of vehicles exceeding 2,000 pounds GVWR. Historically, demand for these permits has been low. Lands proposed for disposal need to be inventoried for the presence of hazardous materials. The presence of contaminants may lead to modification or abandonment of a disposal action, or remediation in the form of cleanup and removal of the contaminants.</p>	<p>Impacts would be similar to Alternative A. In addition, requirements to meet VRM management classes could increase project cost. VRM classes are the least restrictive under this alternative. More lands would be available for mineral development, potentially resulting in a greater demand for land use authorizations such as ROW. Possible commercial harvest of forest resources may increase the need for land use authorizations. However, given the level of development likely to occur, these additional impacts would be minor. ROPs and Stips would restrict land uses in certain areas. Emphasis for land acquisition would be the Iditarod National Historic Trail (INHT).</p>	<p>Impacts would be similar to Alternative A. VRM management classes are the most restrictive under this alternative. OHV use is most restricted under this alternative thus more permits would be required for the use of larger vehicles. ROPs and Stips would restrict land uses in certain areas. Emphasis for land acquisition would be the INHT.</p>	<p>Impacts would be similar to Alternative A. Impacts from VRM would be less than Alternative C but more than Alternative D. Impacts from mineral development would be the same as Alternative B. ROPs and Stips would restrict land uses in certain areas. Emphasis for land acquisition would be the INHT.</p>
<p>Cumulative Effects: Effects from disposal, acquisition, and exchange proposals described for BLM-managed lands in any alternative are minor compared to conveyances to Native corporations and the State of Alaska. The recently signed Alaska Lands Transfer Acceleration Act (P.L. 108-452) will facilitate the conveyance process, with a target of completing conveyances by 2009. Once entitlements are met, land exchanges may be considered to consolidate land ownership patterns. The number of land use authorizations, particularly rights-of-way and permits, is a function of demand for these uses. Additional future development of adjacent Federal, State, and private lands would likely result in additional requests for and approval of land use authorizations for facilities such as roads, utilities, and communication sites.</p>			
Alternative A	Alternative B	Alternative C	Alternative D
EFFECTS ON AREAS OF CRITICAL ENVIRONMENTAL CONCERN AND RESEARCH NATURAL AREAS			
<p>No ACECs or RNAs exist in the planning area.</p>	<p>No ACECs or RNAs are proposed.</p>	<p>Five ACECs would be managed to protect relevant and important values (Appendix B). Impacts to these values are discussed under the various resource management programs such as Fish and Wildlife Management.</p>	<p>Five ACECs and one RNA would be managed to protect relevant and important values (Appendix B). Impacts to these values are discussed under the various resource management programs such as Fish and Wildlife Management.</p>
<p>Cumulative Effects: Cumulative impacts could have a wide range of effects on the different resources that are intended to benefit from the various ACECs and RNAs proposed. These impacts largely stem from actions that are not guided by BLM management decisions. Values within certain ACECs could be diminished by cumulative impacts in the unlikely scenario in which numerous development projects occur within or adjacent to them.</p>			

Alternative A	Alternative B	Alternative C	Alternative D
<p>The Squirrel River Study Area will be managed to monitor and protect wild river values until fall of 2007, pursuant to BLM interim management policies, while congress considers the study recommendation finding the river area non-suitable for addition to the national wild and scenic rivers system.</p>	<p>EFFECTS ON WILD AND SCENIC RIVERS</p> <p>The Squirrel River Study Area will continue to be managed under interim management until released by Congress. No other river segments would be considered suitable.</p>	<p>The Squirrel River Study Area will continue to be managed under interim management until released by Congress. Eleven river segments would be considered suitable for designation as wild. Outstandingly remarkable values in these rivers would be protected.</p>	<p>Impacts would be the same as Alternative B.</p>
<p>Cumulative Effects: No cumulative impacts are anticipated under any alternative.</p>			
Alternative A	Alternative B	Alternative C	Alternative D
<p>The Iditarod National Historic Trail (INHT) would continue to be managed under existing cooperative agreements and comprehensive management plan. OHV use, particularly during the snow-free season could impact the trail itself. If damage to the trail is sufficient to cause concern, trail improvement work may be undertaken. Potential impacts to the INHT would be avoided or mitigated to the extent possible.</p>	<p>EFFECTS ON IDITAROD NATIONAL HISTORIC TRAIL</p> <p>In addition to continuation of current management, BLM would consider acquisition of parcels along the INHT. There would be beneficial impacts from consolidation of trail ownership. VRM management classes would be established, further protecting the viewshed along the trail.</p>	<p>Impacts would be the same as Alternative B.</p>	<p>Impacts would be the same as Alternative B.</p>
<p>Cumulative Effects: No cumulative impacts are anticipated under any alternative.</p>			
Alternative A	Alternative B	Alternative C	Alternative D
<p>EFFECTS ON PUBLIC SAFETY (ABANDONED MINE LANDS AND HAZARDOUS MATERIALS MANAGEMENT)</p> <p>Economic conditions can lead to the abandonment of mining activities, resulting in abandonment of potentially hazardous substances, solid wastes and petroleum products mine sites. These products and wastes result in potential environmental liabilities and physical hazards. Federal funds may be expended to clean up and remediate an abandoned site or reclamation claims being made against a bond if available. Any increase of human activity has the potential for increasing the likelihood of spills or unauthorized waste disposal activities. Additional future impacts to lands are associated with negotiation of alternative cleanup levels for existing hazardous materials management sites. Under this process, less stringent cleanup levels are authorized by the State. Often these may also include institutional controls such as a long-term monitoring program or land use restrictions based on contaminants that still may be present.</p>			
<p>Cumulative Effects: No cumulative impacts are anticipated under any alternative.</p>			

Alternative A	Alternative B	Alternative C	Alternative D
<p>Income generated by BLM expenditures and reindeer grazing would have minimal effects on the regional economy.</p>	<p>EFFECTS ON SOCIAL AND ECONOMIC CONDITIONS</p> <p>In addition to BLM expenditures and livestock grazing, oil development will have economic effects, particularly in the North Slope Borough. Within the Borough up to 60 new jobs could result during the oil field development stage. Up to 600 jobs could accrue to the rest of Alaska and 200 to non-resident workers. Up to 50 new jobs may be created due to locatable mineral development. Although, the benefit on the local economy would likely be low, since non-area residents may hold a majority of these jobs. These increases in employment will have a low effect statewide, as the addition to the 300,600 jobs comprising the total State employment for November 2005 (ADLWD 2005b) is only about 2 tenths of 1%. Royalties and tax revenue from leases and operations may partially offset revenue decreases the North Slope Borough experiences as other oil fields age.</p>	<p>Impacts would be the same as Alternative A.</p>	<p>Impacts would be essentially the same as Alternative B.</p>
<p>Cumulative Effects: Under Alternatives B and D, oil development in northwest Alaska, outside of NPR-A would generate additional revenue to the Boroughs, the State, and the Federal government. The cumulative gains in direct employment would include additive jobs in petroleum exploration, development, and production, plus oil-spill cleanup activities. The direct employment would generate indirect and induced employment and associated personal income for all the workers. As much as 30% of the North Slope workforce in the classification of oil and gas workers commutes from outside Alaska. Workers commuting to residences outside the State would not generate economic effects of indirect and induced employment or expenditure of income in the State and would have a negligible effect on the economy of the rest of the U.S. Other developments in the planning area resulting from forestry, recreation, grazing, and mining are considered to have little cumulative economic effect under any alternative.</p>			

Alternative A	Alternative B	Alternative C	Alternative D
<p>Activities restricting subsistence practices, access, and resources would affect a large percentage of the local population. Arguably, creation of jobs and income provide positive effects on the environmental justice population. Under all alternatives the effects of recreation, forestry, and grazing would be similar.</p>	<p>Oil and gas development would likely result in long term temporary or permanent changes to the land and added facilities such as roads or activity sites. If these cause a relocation of subsistence resources such as caribou, local minority and low income populations would be pressed to travel to follow the resource. Mineral development would occur on a small scale and be very unlikely to cause any change in subsistence activity or effect environmental justice populations.</p>	<p>Impacts would be the same as Alternative A.</p>	<p>Impacts would be the same as Alternative B.</p>
<p style="text-align: center;">EFFECTS ON ENVIRONMENTAL JUSTICE</p> <p>Cumulative Effects: Alaska Iñupiat Natives, a recognized minority, are the predominant residents of northwest Alaska, the area potentially most affected by activities under Alternative B and D and other activities associated with cumulative projects on the North Slope and northwest Alaska. Environmental Justice effects on Alaska Natives could occur because of their reliance on subsistence foods, and potential effects that could impact subsistence resources and harvest practices. Potential cumulative effects from noise, disturbance, and oil spills on subsistence resources and harvest practices, and sociocultural patterns would focus on Iñupiat communities throughout the planning area. Cumulative socio-cultural impacts have occurred on the North Slope and the Iñupiat culture has undergone a noticeable change. The influx of money from wage employment has added benefits and raised the standard of living, but has also given rise to an array of social pathologies, including increased alcoholism. Expanded oil and gas development in North Slope or northwest Alaska, would expand the extent of disturbance effects on subsistence species and harvest patterns. While each individual project would likely be a small incremental increase, the cumulative effect would eventually become more and more repressive to the subsistence lifestyle. In addition to potentially diverting, deflecting, or disturbing subsistence species, oil and gas development could affect subsistence harvest by causing subsistence hunters to avoid certain areas. The North Slope still has vast undisturbed areas, yet the general subsistence hunting environment continues to change in response to increased development. Transportation facilities and activities would also contribute to cumulative effects to subsistence resources and, consequently, to the Native population. A new permanent road connection from Nuiqsut and the National Petroleum Reserve-Alaska would also facilitate petroleum development, and could provide an additional public travel route to northwest Alaska. Contamination and oil spills could affect the food chain in the area of development and subsistence harvest. If this were experienced, the effects would fall largely on indigenous people.</p>			

Alternative A	Alternative B	Alternative C	Alternative D
EFFECTS ON SUBSISTENCE			
<p>Impacts from authorized activities such as mining, leases, and permits, and OHV use may include temporary displacement of wildlife from harvest areas, access constraints, or increased competition for resources. These impacts would be minimal. Conflicts due to increasing recreational use levels would not be addressed. Wildlife used for subsistence purposes may be temporarily stressed or displaced. Direct impacts to subsistence use result from increased competition for resources by sport hunters and guides in heavily-used areas such as the Squirrel River, as well as other units in the planning area. Subsistence hunters may be reluctant to hunt in areas used either for development purposes or for intensive recreational activities. Subsistence users tend to shift away from their traditional harvest areas when too much activity from outside sources occurs.</p>	<p>Impacts to subsistence would occur on a larger area than under Alternative A as more lands would be open to mineral entry and leasing, OHV designations would be slightly less restrictive, and more land would be open to livestock grazing. Oil development would occur under this alternative. Activities associated with exploration may cause temporary displacement of wildlife from traditional harvest areas or limitations on access to traditional use areas. Potential effects of development activities include direct and indirect habitat loss, and changes in local distribution of subsistence species, potentially making them more difficult and expensive to locate and harvest. These effects would continue until animals were habituated to development and associated structures. Access by subsistence users could be hindered by pipelines or other infrastructure. Subsistence users may be reluctant to harvest animals that have become habituated to development, due to health and other concerns. Limits would be set on commercial recreational use in the Squirrel River, thus lowering the potential impacts to subsistence users.</p>	<p>Impacts to subsistence users would be similar to Alternative A for most authorized activities. Potential for impacts from grazing would be reduced as the area open to grazing would be the most limited under Alternative C. Limits would be set on recreational use in the Squirrel River and other areas, reducing impacts from recreation compared to Alternative A. OHV designations would be the most restrictive under this alternative, with OHVs limited to designated trails during the snow-free months. This would provide beneficial impacts to subsistence use, in that wildlife would not be displaced and wildlife habitat would not be degraded. OHV use off designated trails would be allowed for subsistence harvest by qualified subsistence users. Management of proposed ACECs would provide additional protection to wildlife habitats within these areas, reducing the potential for impacts to subsistence resources.</p>	<p>Impacts from grazing would be similar to Alternative A. Impacts from mineral development would be the same as Alternative B. Impacts in the Squirrel River would initially be similar to those discussed under Alternative A. However, limits on recreational use levels in the Squirrel River would be established through a RAMP to be developed within five years of plan approval, which may result in a decrease in impacts to subsistence. Impacts to subsistence from travel management and OHV management would be same as Alternative B; however, there would be less of an impact to subsistence in designated ACECs, RNAs, and SRMAs where OHV use may be further limited. Use off designated trails would be allowed for subsistence harvest by qualified subsistence users.</p>
<p>Cumulative Effects: Mineral development, privatization of land, and development of regional infrastructure would have cumulative impacts on subsistence. These activities have the potential to negatively affect wildlife resources, and thus subsistence. Development of regional infrastructure such as roads, may improve access for non-local hunters, increasing competition for subsistence resources. Improved access may concentrate hunting efforts, depleting subsistence resources and potentially altering harvest.</p>			