

# Chapter II: Alternatives

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# Chapter II: Alternatives

## A. Introduction

This chapter outlines Alternatives that describe different approaches to the management of Bureau of Land Management (BLM) public lands and resources in the Bay planning area (Map 1.1). Each Alternative represents a complete and reasonable set of objectives, actions, and allocations that will guide future management of public land and resources in the planning area.

Four Alternatives are presented in this chapter. They are described in Section B. The Alternatives provide a range of choices for meeting BLM planning and program management requirements and resolving the planning issues identified through scoping. Alternatives were developed using an interdisciplinary team process that included BLM staff specialists and other interested agencies and entities. To begin the Alternative development process, goals and desired future conditions were identified by the planning team in consideration of public comment received through scoping and direction established by Bureau-wide initiatives and mandates. Each Alternative analyzed in the proposed Resource Management Plan (RMP) and Final Environmental Impact Statement (EIS) emphasizes a different combination of resource uses, allocations, and conservation measures to address issues and resolve conflicts among uses. Program goals are met in varying degrees across the Alternatives. Each Alternative is designed to guide future management and resolve land management issues identified during the early stages of the planning process. Implementation of decisions in any Alternative is subject to available funding.

The planning decisions identified for each Alternative generally apply to lands within the Bay planning area currently under BLM management, including unencumbered Federal public lands, State-selected lands, and Native-selected lands outside of the National Park and National Wildlife Refuge systems. Exceptions to the general applicability of the Alternatives described in this chapter are as follows:

- Management of the military withdrawals for the King Salmon Air Force Base would be the same under all Alternatives. These lands were withdrawn for military purposes by Public Land Order 6893. BLM retains jurisdiction of mineral and vegetative resources on the installations. However, the agency's authority is limited in scope. Under all Alternatives, BLM will continue to permit non-military activities consistent with the withdrawal orders and only with the concurrence of the military.
- Management of Agency withdrawals, other than Alaska Native Claims Settlement Act (ANCSA) 17(d)(1). These lands will remain withdrawn. They may be available for fluid mineral leasing, locatable or salable mineral entry as allowed under specific public land orders (PLO).
- Management of the Federal subsurface estate, within BLM's responsibility, in components of the National Wildlife Refuge System would be the same under all Alternatives. BLM is responsible for oil and gas leasing within refuges. The Alaska National Interest Lands Conservation Act (ANILCA)(1980) Section 206 withdrew new and expanded components of the National Park System from application of the mining laws. Provisions of ANILCA (Sections 304(b) and 1008) prohibit mineral leasing in refuges where the U.S. Fish and Wildlife Service (USFWS) determines that mineral leasing is incompatible with refuge purposes. The determination of compatibility is fulfilled through the development of refuge comprehensive conservation plans. The USFWS has determined that lands they manage in the Bay planning area are incompatible with oil and gas leasing.

Stipulations and Required Operating Procedures provide management guidance when making resource decisions in the planning area. They are developed through the RMP process and are based on knowledge of the resources in the planning area and current industry practices. Stipulations are specific

to oil and gas development and constitute significant restrictions on the conduct of operations under a lease. Required Operating Procedures are requirements, procedures, management practices, or design features that would be applied as applicable to permitted activities on BLM-managed lands. Required Operating Procedures have been developed to ensure that the Alaska Land Health Standards (BLM 2004) objectives are met. Required Operating Procedures and stipulations specific to this planning area are discussed in detail in Appendix A.

**Alaska Native Claims Settlement Act (ANCSA) 1971**

Native regional and village corporations selected large tracts of land administered by the Federal government. To date, a majority of these selections have been interim conveyed to the corporations.

**ANCSA 17(d)(1) Withdrawals**

Under the authority of ANCSA Section 17(d)(1), a series of public land orders were issued which withdrew and reserved lands for study and classification. These orders closed or segregated the lands to all forms of appropriation under the public land laws including mining and mineral leasing except for PLO 5180, which allowed location for metalliferous (locatable) minerals. The review of these withdrawals within the Bay planning area is addressed in this RMP/EIS. The revocation of the ANCSA 17(d)(1) withdrawals would remove the segregations and open the lands to mineral entry.

**Alaska Statehood Act 1959**

Under the provisions of the Statehood Act, the State selected large tracts of land administered by the Federal government. To date, a majority of these selections have been patented or tentatively approved and are under State management.

**Alaska National Interest Land Conservation Act (ANILCA) 1980**

ANILCA expanded Katmai National Monument to include Wilderness, National Park, and Preserve and established Lake Clark National Park and Preserve, Alaska Peninsula National Wildlife Refuge, and the Becharof National Wildlife Refuge.

## **B. General Description of Alternatives**

### ***1. Alternative A: No Action***

Alternative A, the no-action alternative, promotes the continuation of current management practices. Land and resource management would continue under the guidance of the existing Southwest Management Framework Plan (1981) for the Goodnews Block only. Direction contained in existing laws, regulations and policy statements would sometimes override provisions in the Southwest MFP. The current levels, methods and mix of multiple use management of BLM land in the planning area would continue. No lands would be open to mineral leasing and large tracts would remain closed to new Locatable Minerals activities due to retention of the Alaska Native Claims Settlement Act (ANCSA) 17(d)(1) withdrawals. No Special Designations would be proposed, such as Areas of Critical Environmental Concern (ACECs), Special Recreation Management Areas (SRMAs), or Wild and Scenic Rivers (WSRs) and lands would remain unclassified for off-highway vehicles (OHVs) and visual resource values. In general, proposed land use would be analyzed on a case-by-case basis. Leasable and locatable mineral activities would be guided by requirements in specific Plans of Operations on a project-specific basis.

## **2. Alternative B**

Alternative B highlights actions and management that would facilitate resource development. All ANCSA 17(d)(1) withdrawals would be revoked, opening all unencumbered BLM lands to leasable and locatable mineral activities. Selected lands whose selection is relinquished or rejected would also be open to mineral exploration and development. BLM-managed lands within the planning area would be designated as “open” to OHV use. No Special Recreation Management Areas (SRMA) would be identified. In all areas, the focus would be on management of permits. No Special Designations would be proposed and visual resources would be managed as Visual Resource Management (VRM) Class IV. Leasable and locatable mineral activities and other permitted activities would be guided by requirements in specific Plans of Operations on a project-specific basis.

## **3. Alternative C**

Alternative C emphasizes actions and management that protect and enhance renewable resources, archaeological, and paleontological values. Leasable and locatable mineral activities would be more constrained than in Alternatives B or D.

Areas of Critical Environmental Concern (ACEC) would be proposed, including the Bristol Bay ACEC (974,970 acres) and the Carter Spit ACEC (61,251 acres). ANCSA 17(d)(1) withdrawals would be retained for the Carter Spit ACEC; this area would remain closed to mineral activities. ANCSA 17(d)(1) withdrawals would be lifted from the Bristol Bay ACEC, opening this area to mineral activities subject to Stipulations and Required Operating Procedures. Both proposed ACECs would be closed to salable mineral activities.

ANCSA 17(d)(1) withdrawals would be maintained for proposed Wild and Scenic rivers as an interim to protect Wild and Scenic rivers until Congress has had an opportunity to act on the proposals. Three eligible river segments, portions of the Alagnak River, and portions of the Goodnews River mainstem and Goodnews River Middle Fork, would be found suitable for inclusion in the National WSR system.

All proposed WSR segments and ACECs would be managed as VRM Class III, and most of the remainder of the BLM-managed lands within the planning area would be managed as VRM Class IV. All BLM-managed lands within the planning area would be designated as “limited” to OHV use and a 2,000-lb gross vehicle weight restriction would be enforced. No SRMAs would be identified. In all areas, the focus would be on management of permits. Resources would be protected through Stipulations, Required Operating Procedures, and additional constraints as identified through project-specific NEPA analysis.

## **4. Alternative D: Preferred Alternative**

Alternative D provides a balance of protection, use, and enhancement of resources. ANCSA 17(d)(1) withdrawals would be revoked, and the majority of unencumbered lands and any selected lands whose selection is relinquished or rejected would be open to leasable and locatable mineral activities. ANCSA 17(d)(1) withdrawals would be revoked within a proposed Carter Spit ACEC (36,220 acres). Stipulations, Required Operating Procedures, and additional constraints as identified through project-specific NEPA analysis would be used to protect recognized resources within this area. The Carter Spit ACEC would be closed to salable mineral entry. No WSRs would be recommended. BLM-managed lands up to one-half mile from established winter trail or road systems would be managed as VRM Class III.

BLM lands in the full visible foreground up to one mile from the boundaries of Conservation System Units (CSU) would be managed as VRM Class III. The proposed Carter Spit ACEC would be managed as VRM Class III, and all other BLM-managed lands would be managed as VRM Class IV.

All BLM-managed lands within the planning area would be designated as “limited” to OHV use and a 2,000-lb gross vehicle weight restriction would be enforced. Stipulations, Required Operating Procedures, and additional constraints as identified through project-specific NEPA analysis would be used to protect resources on BLM-managed lands within the Bay planning area.

## **C. Alternatives Considered But Not Carried Forward**

The Bay RMP has considered a full range of Alternatives consistent with the goals of the plan. BLM has considered, but eliminated from detailed analysis, Alternatives that would address issues not within the scope of the plan. These issues, and the reasons for not further considering them, are provided here.

### ***1. Nomination of the Kvichak River as a Wild and Scenic River***

Among the issues listed but not addressed as an Alternative is the proposed nomination of the Kvichak River as a WSR. Recently a Recordable Disclaimer of Interest finding was issued by the Bureau of Land Management for the Kvichak River. This Disclaimer clarifies that the Federal government does not have a competing interest (with the State of Alaska) in the submerged lands. Because BLM does not have jurisdiction for the Kvichak River, the proposal was not carried forward.

### ***2. Nomination of Special Recreation Management Areas (SRMAs)***

The BLM Anchorage Field Office considered SRMA status for each block of unencumbered BLM land within the Bay planning area. However, the use patterns and types of recreation opportunities to justify SRMA status were not found.

### ***3. Designation of Subsistence Only Areas***

A request to designate portions of BLM-managed lands as subsistence use only areas was expressed through public concern for subsistence values within the planning area. FLPMA sec. 302(a) explains BLM’s mandate to manage public lands under the principles of multiple use and sustained yield. Currently, BLM has no authority to designate “Subsistence Use Only” areas.

### ***4. Additional Alternatives for Leasable Minerals***

Additional alternatives for mineral leasing were not considered, though all action alternatives (Alternatives B, C, D) propose to open over one million acres of unencumbered BLM lands. Current alternatives for leasable minerals include retaining ANSCA 17(d)(1) withdrawals in Alternative A, providing no acres open to leasable minerals, and revocation of all ANSCA 17(d)(1) withdrawals in Alternative B, opening all unencumbered BLM lands (1,103,138 acres) to mineral leasing. Additionally, Alternative C proposes to open approximately 40,000 fewer acres to mineral leasing than Alternative B. The Reasonably Foreseeable Development Scenario for leasable minerals predicts one gas field in the Koggiling Creek planning block only. Any additional alternatives considered would provide no greater benefit to the range of alternatives in this document because opening and closing the Koggiling Creek planning block is captured in Alternatives A and B. Chapter III, section C.3.a describes prospects for oil and gas exploration and development in the planning area. Though presently uncertain, the commercial demand for the oil and gas resources from the Federal domain within the planning area is expected to be low during the life of the plan.

## D. Detailed Descriptions of the Alternatives

This section provides a detailed description of proposed management, organized into four categories: Resources, Resource Uses, Special Designations, and Social and Economic Conditions. Goals are listed under each resource, resource use, or program. They 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: Air Quality, Soil, Vegetation, and Water Resources

#### a) Vegetation, Wetlands, and Riparian Habitat

##### (1) Goals

- BLM will maintain and protect vegetative land cover that provides for healthy fish and wildlife habitat on BLM-managed lands.
- Treatments to alter the vegetative composition of a site, such as prescribed burning, seeding, or planting will
  - be based on the potential of the site and will retain or promote infiltration, permeability, and soil moisture storage;
  - contribute to nutrient cycling and energy flow;
  - protect water quality and fish habitat;
  - help prevent the introduction and spread of invasive and noxious weeds;
  - contribute to the natural diversity of plant communities, plant community composition, and structure;
  - maintain proper functioning condition;
  - support the conservation of Special Status Species.
- BLM will take action to minimize the destruction, loss, or degradation of wetlands and riparian areas, and to preserve and enhance their natural and beneficial values.

##### (2) Management Common to All Alternatives

Wildland fire and fuels would be managed consistently with the BLM Land Use Plan Amendment for Wildland Fire and Fuels Management for Alaska (BLM 2004, 2005).

##### (3) Alternative A

This Alternative would continue existing management. The Southwest MFP (1981), applicable only to the Goodnews Block, provides little guidance related to vegetation other than that of the Walpole poppy. 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. BLM would continue to comply with applicable policy relative to management of riparian vegetation.

#### **(4) 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. 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.
- Assess impacts of OHV trails, especially in high-use areas where riparian and wetland resources or water quality are at risk.
- Lessees and all parties receiving BLM authorizations for activities impacting riparian and/or wetlands would be required to comply with protective measures listed in the Required Operating Procedures, Stipulations, Standard Lease Terms, and project-specific requirements.

##### **(b) Management Decisions**

- Vegetation treatments will be designed to achieve BLM Alaska Statewide Land Health Standards and desired conditions clearly described in activity plans or timber sales. Desired conditions will be based on the ecological capability of a given site and will be expressed as cover types or seral stages within cover types, based on management objectives.
- Vegetation treatments will be designed to prevent introduction or spread of noxious weeds.
- Prescribed burn plans will contain and implement weed prevention stipulations.
- Burn plans for large burns will prescribe conditions that result in a mosaic of burned or unburned areas within the burn unit. Smaller burns may not require a mosaic, dependent on objectives.
- Timber sales are not anticipated; however, should they occur, any ground disturbing equipment used in timber sales will be free of any material that could contain weed seeds.
- Timber sales will rely, to the extent possible, on natural regeneration through proper site preparation.
- Permitted livestock grazing is not expected to occur; however, should it occur, it will be conducted in a manner that meets AK Statewide Land Health Standards and maintains long-term vegetation productivity.
- One plant species in the planning area is currently on the BLM-AK Special Status Species (SSS) list—the Walpole poppy (*Papaver walpolei*). It no longer meets the criteria for SSS and is expected to be removed from the list. When populations of species on the SSS list are found, measures will be taken to prevent the need for listing under the Endangered Species Act.

##### **(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 Lease Stipulations, also listed in Appendix A.

## **b) Soil, Water and Air**

### **(1) Goals**

- **Resource Protection** – maintain, improve, and restore the health of watersheds. Ensure that watersheds are in, or are making significant progress toward, a properly functioning physical condition that includes stream banks, wetlands, and water quality. BLM will protect and enhance the quality of air resources associated with BLM-managed lands in the planning area as well as

consider, if practicable, minimizing the impacts of smoke to human health, communities, recreation and tourism from wildfire and prescribed burns. Smoke and its public health impacts are a parameter in fire suppression decisions. BLM will manage soils to promote healthy, sustainable, fully functioning ecosystems by maintaining the soils, which support a wide range of public values and uses.

- **Air and Water Quality** – meet or exceed local, State, and Federal requirements. 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.
- **Resource Uses** – support planning, use authorizations, compliance, and special designations.
- **Service to Communities** – support collaboration in shared watersheds.
- **Management Excellence** – promote program financial efficiency and improve data quality, security, and availability.

## **(2) Alternative A**

This Alternative would continue existing management. The Southwest MFP (1981), which applies only to the Goodnews Block in the Bay planning area, contains little guidance relative to management of soil, water, and air resources. The use of OHVs on interim managed encumbered lands is limited to 1,500 lbs curb weight as defined by the State’s “Generally Allowed Uses on State Land,” (Appendix H). This Alternative also recommends that BLM file for water rights under State law to secure water for needed BLM uses on an as-needed basis. To date, BLM has not filed for water rights in the planning area. Proposed permitted or authorized uses would be analyzed through the appropriate NEPA document. Based on this analysis, 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. BLM would continue to comply with applicable legislation, state and 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**

- Inventory and monitoring data should be collected according to a Quality Assurance Project Plan.” Development of a Quality Assurance Project Plan (QAPP) that meets the elements of the state and/or EPA requirements listed on the following web sites will help ensure the quality of collected data and that other resource agencies, as well as the public, can utilize that data.
  - ADEC Quality Assurance Project Plan elements:  
<http://www.dec.state.ak.us/water/wqsar/pdfs/qappelements.pdf>.
  - EPA Requirements for Quality Assurance Project Plans:  
<http://www.epa.gov/r10earth/offices/oea/epaqar5.pdf>
- Develop a water quality monitoring program implementing U.S. Geological Survey – National Water Quality Assessment (NAWQA) protocol to determine baseline water quality values in areas having critical aquatic habitats or potential for significant impacts due to permitted activities. Monitor for significant alterations to water quality value and water flow in accordance with State and Federal regulations.
- Collect data necessary for an Alaska in-stream water reservation on water bodies having critical aquatic habitats, within ACEC boundaries, or nominated for NLCS designation.
- Contract soil surveys in areas of high resource value or proposed development as needed.

### **(b) Management Decisions**

- In cooperation with the appropriate Federal, State, local or Native requirements, identify area-wide use restrictions, or other protective measures, to ensure compliance with the Clean Water Act, State water quality standards, and Federal wetlands and floodplain requirements.

- In order to comply with the Safe Drinking Water Act and protect the quality and quantity of drinking water, 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, when necessary, to secure water needed for BLM management purposes.
- BLM will stipulate that all direct or authorized emission-generating activities occurring on BLM-managed lands within the planning area comply with the Federal and State air quality laws and regulations. All permittees will be required to mitigate any activity that may result in air pollution.
- BLM will also implement interagency wildland fire smoke mitigation measures adopted by the Alaska Wildland Fire Coordinating Group and consider public health and safety in all fire management activities.
- BLM will provide for a wide variety of public land uses without compromising the long-term health of soil resources. BLM will require permittees to mitigate for all activities that may cause accelerated soil erosion, and to follow Stipulations and Required Operating Procedures.

### **(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. Leasable mineral activities would be subject to the Oil and Gas Leasing Stipulations also in Appendix A.

## **c) Floodplains**

### **(1) Goals**

- Reduce flood damage and loss of life and property.
- Minimize the impacts of floods on human safety, health and welfare.
- Sustain, restore and preserve the natural resources, ecosystems, and other functions of the floodplain, and the other beneficial values served by floodplains. Beneficial processes include maintaining the frequency and duration of floodplain/wetland inundation.

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

This Alternative would continue existing management. Proposed permitted or authorized uses would be analyzed through the appropriate NEPA document. Based on this analysis, BLM would develop mitigation to minimize impacts from proposed activities to floodplains. The resulting mitigation measures would be included in the permit that authorized the use. BLM would continue to comply with applicable legislation, Federal regulations, and policy pertaining to floodplains.

Floodplain management guidelines are defined within Executive Order 11988 (Floodplain Management). For administrative purposes, the 100-year floodplain serves as a basis for floodplain management on public land. If available, floodplain boundaries are based on the Flood Insurance Rate Maps prepared by the Federal Emergency Management Agency (FEMA). If FEMA maps are not available, floodplain boundaries will be based on the best available information. The following are steps to be taken in order to determine whether an activity will be allowed in the floodplain.

- Before taking any action, determine whether the proposed action will occur within a floodplain.
- Provide for public review.
- Identify and evaluate practicable Alternatives for locating in the floodplain.

- Identify the impacts of the proposed action.
- Minimize threats to life, property and to natural and beneficial floodplain values, and restore and preserve natural and beneficial floodplain values.
- Re-evaluate Alternatives including no action.
- Issue findings and a public explanation.
- Implement the action (or no action).

In addition, BLM may undertake projects as required to restore and preserve the natural and beneficial values served by floodplains. Stipulations and Required Operating Procedures apply to Alternatives B, C, and D.

## **d) Fish and Wildlife**

### **(1) Goals**

#### **(a) Fish**

- Work in conjunction with other programs and agencies to manage riparian areas.
- Achieve fish habitat stability and manage the aquatic habitat of various life stages of anadromous and resident fish.
- Provide for the continuing availability of fish habitat that contributes to the social, scientific, and economic aspects of the local communities and the nation.
- Determine and maintain or restore the fisheries potential of the aquatic habitat in BLM jurisdiction in the Bay planning area.

#### **(b) Wildlife**

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

### **(2) Alternative A**

This Alternative continues current management. The Southwest MFP (BLM 1981), which applies only to the Goodnews Block in this planning area, excepts “crucial habitat” from opening to various kinds of settlement entry and calls for preparing habitat management plans for wildlife and riparian habitat. Outside of crucial habitats, and outside of the Goodnews Block, 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. These 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**

##### **i. Fish**

- BLM Alaska has a Master Memorandum of Agreement with the State of Alaska for management of fish and wildlife (Appendix G).
- Inventory and monitor fish habitat in cooperation with ADF&G, other Federal agencies, private non-profit corporations and tribal agencies.

- Inventory habitat for Special Status fish species.
- In cooperation with ADF&G, monitor priority species population trends where issues exist or are pending and populations may be impacted.

#### **ii. Wildlife**

- Manage fish and wildlife in accordance with BLM Alaska's Master Memorandum of Agreement with the State of Alaska for management of fish and wildlife.
- In cooperation with ADF&G and other Federal agencies, BLM will monitor habitats and populations of important subsistence species to provide information necessary to develop subsistence regulations and bag limits on Federal lands, monitor priority migratory bird species, identify habitats of importance to special status species, and identify habitats for priority species.

### **(b) Essential Fish Habitat**

Section 305(b)(2) of the Magnuson-Stevens Fishery Conservation Act (MSA) requires all Federal agencies to consult with the Secretary of Commerce on all actions or proposed actions authorized, funded, or undertaken by the agency that may adversely affect Essential Fish Habitat (EFH). EFH is defined as those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity, and can include fresh and saltwater habitats. For Alaska, freshwater EFH includes all streams, lakes, ponds, wetlands, and other water bodies that have been historically accessible to salmon.

### **(c) Management Decisions**

#### **i. Fish**

- Additional site-specific objectives and habitat management actions for priority species will be made based on application requests of proposed activities.

#### **ii. Wildlife**

- In cooperation with ADF&G, ensure a natural abundance and diversity of wildlife habitat to assist ADF&G in ensuring sustained populations and a natural abundance of wildlife.
- BLM will work cooperatively with ADF&G, other Federal agencies, and adjacent land managers to implement the Mulchatna Caribou Herd Monitoring Plan, the Western Brown Bear Management Area planning group, the Unit 18 Goodnews/Arolik Moose Moratorium and Restoration Plan, the migratory bird MOU, and the Boreal Partners in Flight Conservation Plan.

### **iii. Essential Fish Habitat**

- Comply with provisions of the Magnuson-Stevens Fishery Conservation and Management Act to protect Essential Fish Habitat. If land use activities are likely to adversely affect EFH, consult with the Secretary of Commerce through NMFS to mitigate these effects. Adverse effect is defined in 50 CFR 600.910(a) as any impact that reduces the quality and/or quantity of EFH.

### **(d) Land Use Requirements**

- BLM will consult with USFWS and NMFS under Section 7 of the ESA for all discretionary actions that may affect listed species or designated critical habitat, or confer if actions are likely to jeopardize the continued existence of a proposed species or result in the destruction or adverse modification of proposed critical habitat.
- BLM will participate in the ESA Threatened and Endangered Species Recovery Plans as appropriate, and will take into consideration BLM Special Status sensitive species for all land use decisions.
- All permitted activities would operate under the Stipulations, Required Operating Procedures, and Standard Lease Terms provided in Appendix A. These procedures were developed through the

NEPA process and are based on current knowledge of resources in the planning area and current permitting procedures.

**(4) Alternative B**

This Alternative would be the same as that described in “Management Common to All Action Alternatives.” Stipulations and Required Operating Procedures would apply.

**(5) Alternative C**

This Alternative would be the same as Alternative B except seasonal restrictions or other constraints would be applied to leasable and locatable mineral activities in portions of the planning area comprising the Goodnews, Koggiling Creek, Yellow Creek, Kvichak, Iliamna West, Alagnak, and Klutuk Creek planning blocks. Two ACEC would be proposed. Stipulations, Required Operating Procedures, and project-specific requirements would apply.

**(6) Alternative D**

This Alternative would be the same as Alternative B except portions of the planning area comprising the Goodnews, Koggiling Creek, Yellow Creek, Kvichak, Iliamna West, Alagnak, and Klutuk Creek planning blocks would be open to leasable and locatable mineral activities subject to seasonal restrictions or other constraints. One ACEC would be proposed. Stipulations, Required Operating Procedures, and project-specific requirements would apply.

Tables 2.1 and 2.13 describe special provisions for fish and wildlife habitat management under each Alternative.

**Table 2.1. Fish and Wildlife Habitat – Summary of Alternatives**

|                      |   |
|----------------------|---|
| <b>Alternative A</b> | Proposed permitted or authorized uses analyzed through the NEPA process on a case-by-case basis. Mitigation measures developed to minimize impacts from proposed activities would be included in the permit that authorized use.  |
| <b>Alternative B</b> | Same as Alternative A. Stipulations, Required Operating Procedures, and project-specific requirements apply.  |
| <b>Alternative C</b> | <p>Two ACECs, Carter Spit ACEC (61,251 acres) and the Bristol Bay ACEC (989,202 acres), would be proposed for protection of fish and wildlife habitat. Inventory and monitoring of the ACECs would be a field office priority pursuant to available funding. ANSCA 17(d)(1) withdrawals would be retained for the Carter Spit ACEC and proposed Wild River segments of the Alagnak, mainstem Goodnews River, and Goodnews Middle Fork Rivers (12,210 acres) as an interim measure to provide an opportunity for Congressional action.</p> <p>Koggiling Creek, Yellow Creek, Kvichak, Iliamna West, Alagnak, Klutuk Creek, and portions of the Goodnews planning blocks would be open to leasable and locatable mineral activities subject to seasonal constraints.</p> <p>ROP FW-6a would establish a 300-ft. minimum setback on BLM-managed lands for segments of the East and South Fork Arolik River, Faro Creek, South Fork Goodnews River, and Klutuk Creek to protect riparian areas and soils adjacent to sensitive aquatic habitat.</p> |
| <b>Alternative D</b> | <p>One ACEC, Carter Spit ACEC (36,220 acres), would be proposed for protection of federally-listed migratory bird species.</p> <p>Koggiling Creek, Yellow Creek, Kvichak, Iliamna West, Alagnak, Klutuk Creek, and portions of the Goodnews Blocks would be open to leasable and locatable mineral activities subject to seasonal constraints.</p> <p>ROP FW-6a would establish a 300-ft. minimum setback on BLM-managed lands for segments of the East and South Fork Arolik River, Faro Creek, South Fork Goodnews River and Klutuk Creek to protect riparian areas and soils adjacent to sensitive aquatic habitat.</p>  |

**e) Special Status Species**

**(1) Goals**

- Identify and monitor the abundance of Special Status Species and their habitats.
- Manage habitats consistent with the conservation needs of Special Status Species and BLM sensitive species, and in a manner that will not contribute to the need to list any species under the Endangered Species Act (ESA).
- Manage plant and animal resources and wildlife habitat to ensure compliance with the ESA and to ensure progress towards recovery of listed species.
- Manage habitats consistent with the conservation needs provided in Recovery Plans for listed species.

**(2) Alternative A**

This Alternative would continue current management practices. The Southwest MFP (BLM 1981), applicable only to the Goodnews Block, does not contain any specific guidance for the general management of Special Status Species, which would be managed according to BLM policy, applicable laws, and Federal regulations. Land use proposals would be addressed on a case-by-case basis through

interagency cooperation and the NEPA process with project-specific requirements and mitigation on proposed actions. If actions authorized, funded, or carried out by BLM had the potential to affect any federally-listed species or designated critical habitat, consultation under Section 7 of the ESA would be initiated with the USFWS and NOAA Fisheries. 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**

- Identify botanically unexplored BLM lands within the planning area and prioritize for floristic inventory.
- Assess project proposals for potential impacts to Special Status Species plants and their habitats. Conduct pre-project inventories when SSS habitat is likely to occur in project area prior to ground disturbing activities.
- 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.
- Inventory Special Status Species habitat and populations on BLM-managed lands in accordance with the ESA.
- Cooperate with USFWS and other agencies to monitor habitats and populations of Threatened and Endangered Species (T&E).

#### **(b) Management Decisions**

- Plant and wildlife resources and habitat will be managed to ensure compliance with the ESA.
- T&E evaluations will occur on all actions proposed and mitigation or consultation carried out where listed species may occur.
- Additional site-specific actions needed to manage habitat for Special Status Species will be made through project specific NEPA process or as mitigation on proposed activities.
- An Area of Critical Environmental Concern (ACEC) is proposed for the Carter Spit/Goodnews Bay area to provide additional protection to federally-listed migratory bird species (Steller's eiders) in Alternatives C and D.

#### **(c) Land Use Requirements**

- Cooperate with USFWS in the development and implementation of recovery plans, management plans, and conservation strategies for T&E that occur on BLM lands.
- Wildlife resources will be managed to comply with the ESA to facilitate recovery of listed species and to prevent listing of additional species.
- Consult with USFWS or National Marine Fisheries Service under Section 7 of the ESA for all actions that may affect listed species or designated critical habitat or confer if actions are likely to jeopardize the continued existence of a proposed species or result in the destruction or adverse modification of proposed critical habitat.

## **f) Fire Management and Ecology**

### **(1) Goals**

- Protect human life and property.
- Provide appropriate management response on all wildland fires, with an emphasis on firefighter and public safety.
- Management of wildland fires and fuels will focus on maintaining intact and functioning key ecosystem components.
- Reduce adverse effects of fire management activities.
- Base fire and fuels management activities on land use and resource objectives.
- Continue interagency collaboration and cooperation.

### **(2) Alternative A**

Under Alternative A, current management which emphasizes firefighter and public safety as the highest priority in all activities related to fire management would continue. Historically, fire has not been a dominant ecological agent within the planning area. When fires do occur, they would be used to protect, maintain, and enhance natural resources and, as much as possible, function in a natural ecological role. The Southwest MFP (BLM 1981), applicable only to the Goodnews Block, requires that BLM preserve forest resources until the economics for harvest are more favorable; protect commercial grade timber stands; manage moose habitat emphasizing high value moose winter range and benefit moose browse by prescribed burning out of viewshed; identify and protect from fire caribou habitat with substantial lichen component; provide for a natural fire occurrence (mosaic) where other important resource values would not be harmed; protect and preserve cultural sites; include constraints in Burn Plans to protect climax-dependent species, swan and raptor habitat, recreation and view shed; and prohibit OHVs from areas after a burn to prevent erosion.

Current guidance for fire management is provided by the BLM Alaska Land Use Plan Amendment for Wildland Fire and Fuels Management (BLM 2005f). Under this Alternative, BLM would continue to cooperate and collaborate with other Federal, State, and Native land managers, to address issues and concerns related to wildland fire management in Alaska and to implement operational decisions. Fire management programs stress the protection of human life and site-specific values while recognizing fire as an ecological process and natural agent of change to ecosystems. This Alternative recognizes wildland fire as a viable management tool to support land use and resource management objectives. Vegetative communities would be monitored for cumulative effects of wildland fire and suppression activities as funding permits. Fuels management projects and prevention programs would be 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 and suppression actions.
- Monitor cultural resources for effects of wildland fire and suppression actions.

#### **(b) Management Decisions**

- Ensure wildland fire management option designations are compatible with land use and resource goals and objectives.

- Manage vegetation adjacent to populated areas to reduce risk of wildfires.
- Use wildland fire and fuel treatments as management tools to meet land use and resource objectives.
- Reduce risk and cost of uncontrolled wildland fire through wildland fire use, prescribed fire, manual or mechanical treatment.
- Reduce adverse effects of fire management activities.
- Continue interagency collaboration and cooperation.

**(4) Alternative B**

Alternative B would be the same as Alternative A. Required Operating Procedures would apply.

**(5) Alternative C**

Alternative C would be the same as Alternative A. Required Operating Procedures would apply. Wildland fire management strategies would support the management objectives of the Special Designations for the proposed Carter Spit ACEC and Bristol Bay ACEC, National Wild and Scenic River (WSR) segments and other land use and resource objectives identified under Alternative C.

**(6) Alternative D**

Alternative D would be the same as Alternative A. Required Operating Procedures would apply. Wildland fire management strategies would support the management objectives of the Carter Spit ACEC and other land use and resource objectives identified under Alternative D.

Table 2.2. Summarizes Fire Management and Ecology for the Alternatives.

**Table 2.2. Fire Management and Ecology – Summary of Alternatives**

|                      |  |
|----------------------|--|
| <b>Alternative A</b> | Firefighter and public safety is the highest priority. This Alternative would continue the management of wildland fire and fuels under the BLM Land Use Plan Amendment for Wildland Fire and Fuels Management (2004, 2005). Wildland fire use for resource benefit is permitted throughout the planning area and strategies are tiered to land use and resource management objectives. |
| <b>Alternative B</b> | Same as Alternative A. Required Operating Procedures would apply.  |
| <b>Alternative C</b> | Same as Alternative A. In addition, fire strategies would support the management objectives for Special Designations for the proposed Carter Spit ACEC and Bristol Bay ACEC and National Wild and Scenic River (WSR) segments.   |
| <b>Alternative D</b> | Same as Alternative A. Required Operating Procedures would apply. The fire management for the Carter Spit ACEC would be consistent with ACEC objectives.   |

**g) Cultural and Paleontological Resources**

**(1) Goals**

- Identify, protect, and preserve significant cultural resources.
- Manage cultural and paleontological resources for a variety of uses, including scientific use, conservation for future use, public education and interpretation, traditional use (in the case of Cultural Resources), and experimental use.

## **(2) Alternative A**

Under Alternative A, current management would continue. Currently, decisions regarding specific inventory, data recovery, monitoring and stabilization projects are made through the statewide program workshops and the cultural resource business plan. The Southwest MFP (BLM 1981), applicable only to the Goodnews Block of the Bay planning area, requires protecting significant Cultural Resources and developing a paleontological resource management program for the protection and research of paleontological resources.

Decisions about avoidance or other forms of mitigation of impacts to cultural and paleontological sites would be made based on weighing the relative value of the resources, the effects on development interests, and the interests and needs of the present and future public. Priorities for inventory would be assigned based on a combination of expected development activities and resource values. Non-destructive data recovery (e.g. mapping) would be done as necessary based on management needs and resource values. Limited destructive forms of data recovery (testing and excavation) and limited collection of artifacts and specimens would be allowed when other information is limited and/or the resource is threatened. Most sites would be designated as suitable for current research. Known and newly discovered sites would be assigned to multiple use categories. Suitable sites would be designated for educational/interpretive purposes in areas having general public access. Cultural sites would be designated for traditional use as they are identified.

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

### **(a) Inventory and Monitoring**

- Continue to conduct non-Section 106 related inventories as funds are available.
- Monitor cultural and paleontological resource sites in danger of alteration or destruction from natural or human-made causes, including wildland fires and the effects of fire suppression.
- Develop partnerships to achieve goals.

### **(b) Management Decisions**

- All cultural properties on BLM-managed lands in the Bay planning area would be managed for their scientific use (preserved until their research potential is realized).
- Identify area wide criteria or site-specific restrictions that apply to special cultural resource issues, including traditional cultural properties that may affect location, timing, or method of development or use of other resources in the planning area. Identify measures to proactively manage, protect, and use cultural and paleontological resources.

### **(c) Land Use Requirements**

All actions that may impact cultural resources will comply with the National Historic Preservation Act (NHPA) Sections 106 and 110, and with the Native American Graves Protection and Repatriation Act (NAGPRA), as well as laws governing the protection or consideration of cultural resources. When any Federal undertaking, including any action funded or authorized by the Federal Government with the potential to directly or indirectly affect any archaeological or historic site is planned, a consultation with the State Historic Preservation Officer (SHPO) under the 1997 National Cultural Programmatic Agreement and the 1998 State Protocol that stands in place of 36 CFR 800. If archaeological or historic sites are identified in the project area their significance will be evaluated to determine their eligibility for inclusion in the National Register of Historic Places. The State requests that the SHPO be notified if archaeological or historic sites are identified through this planning process. The State may request that recreational or commercial uses be precluded in order to protect archaeological and historic sites.

**(4) Alternative B**

Alternative B would be similar to Alternative A. Under Alternative B, decisions regarding avoidance of sites would be made after considering input from interested parties. When avoidance is not possible, given the overall benefits of the development, mitigate the impacts. Priority for non-Section 106 survey and inventory would be assigned to broad areas because of the likelihood of development impacts. Non-destructive data recovery would be conducted in areas where development is anticipated; destructive data recovery would be allowed in mitigation when avoidance is not feasible for the approved development project. Most sites would be designated as suitable for current research use. Allow other uses only to the extent that they do not restrict research use. Balance public use designations with other resource developments. Required Operating Procedures and Stipulations would apply.

**(5) Alternative C**

Alternative C would be similar to Alternative A. Under Alternative C, impacts to cultural and paleontological resources would be avoided except when it is physically impossible to do so. Priority for non-Section 106 survey and inventory would be assigned based on the value of the resource. Priority would be given to areas known to include important and/or numerous sites. Non-destructive data recovery would be conducted in areas of known or expected high resource values; destructive data recovery would be allowed to address important research topics when part of the site would be left intact for the future. Destructive data recovery would also be allowed in cases when there is danger of destruction of significant cultural resources by natural forces. Most sites would be reserved for conservation for future use unless threatened. Uses that would lead to destruction or major changes in sites would be avoided.

Under Alternative C, Stipulations and Required Operating Procedures would apply, and cultural and paleontological resource strategies and priorities specific to Special Designations would be developed for the proposed Carter Spit ACEC and Bristol Bay ACEC and the nominated Wild Rivers, the Alagnak River, Goodnews River mainstem, and Goodnews River Middle Fork.

**(6) Alternative D**

Alternative D would be similar to Alternative C. Under Alternative D, Stipulations and Required Operating Procedures would apply. An inventory of cultural and paleontological resources would be a field office priority for the proposed Carter Spit ACEC dependant upon available funding.

Table 2.3 provides the comparison of how these management actions proposed for cultural and paleontological resources are applied under each Alternative.

**Table 2.3. Cultural and Paleontological Resource Management – Summary of Alternatives**

|                      |   |
|----------------------|---|
| <b>Alternative A</b> | Identify, protect, and preserve significant cultural and paleontological resources; manage cultural and paleontological resources for a variety of scientific, conservation, public education, interpretation, traditional, and experimental use. |
| <b>Alternative B</b> | Same as Alternative A.  |
| <b>Alternative C</b> | Same as Alternative A. An inventory of cultural and paleontological resources would be a field office priority for the proposed Carter Spit and Bristol Bay ACECs dependant upon available funding.   |
| <b>Alternative D</b> | Same as Alternative A. An inventory of cultural and paleontological resources would be a field office priority for the proposed Carter Spit ACEC dependant upon available funding.  |

## h) Visual Resources

### (1) Goals

Protect the quality of scenic values of these lands.

#### What Do Visual Resources Management (VRM) Classes Mean for Future Management?

The objectives for the VRM classes are:

| Class | Objective  |
|-------|--|
| I     | Preserve the existing character of the landscape; change to the characteristic landscape should be very low and should not attract attention.  |
| II    | Preserve the existing character of the landscape; change to the characteristic landscape may be seen, but should be low and should not attract the attention of the casual observer.                             |
| III   | Partially retain the existing character of the landscape; change to the characteristic landscape should be moderate and may attract attention, but not dominate the view of the casual observer.                 |
| IV    | Provides for action that would make major modifications to the existing character of the landscape; change to the characteristic landscape can be high, dominate the view, and be the major focus of the viewer. |

### (2) Alternative A

Alternative A would continue current management. The Southwest MFP (BLM 1981), applicable only to the Goodnews Block, contains guidance for the general management of Visual Resources. It requires that all proposed management activities be evaluated using the visual resource management contrast rating system. In that way, areas that have not been classified for visual resources can be evaluated. The following guidance is provided:

The MFP VR-1 Objective states “Allow only very limited visual change in areas designated “Wild” portions of Wild and Scenic Rivers.” These areas are to be designated VRM Class I which provides for primarily natural ecological changes in visual resources, but does not preclude limited management activities.

The MFP VR-2 Objective is to “Maintain the visual quality of the planning area.” The planning area is virtually undisturbed by human activities. Any major development would be highly visible from aircraft. Development should be designed for minimum impact to visual resources and to reduce unnecessary surface disturbance.”

The MFP multiple use recommendation calls for evaluating all proposed management activities using the visual resource management contrast rating system and encourages activities that are compatible or designed to be compatible with the character of the natural landscape.

Current management practices require that a specialist analyze the visual resource impacts of proposed actions on a case-by-case basis. BLM’s policy is to minimize impacts to visual resources and place stipulations on permits to accomplish this goal. To date, most VRM actions in the planning area have been applied to communication tower permits and have addressed mitigation issues related to structure heights and color schemes.

Under Alternative A, no VRM classes would be established on BLM-managed lands within the Bay planning area. The visual resources of an area would be identified and assigned inventory classes using the BLM visual resource inventory process (Manual 8400). The principles of the visual contrast rating system (Manual 8431) would be used to identify mitigation measures and to develop stipulations to meet the objectives of the assigned inventory class.

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

#### **(a) Inventory and Monitoring**

All BLM unencumbered, State-selected, and Native-selected lands within the Bay planning area would be inventoried for scenic qualities, sensitivity level analysis, and distance zone classification utilizing the visual resource inventory system as described in BLM Manual 8410 – Visual Resource Inventory. VRM Management Classes would be assigned based upon this analysis.

#### **(b) Management Decisions**

- Visual resources within the planning area would be managed at the assigned VRM Inventory Classification unless or until VRM Management Classes are established in the final RMP/EIS.
- All proposed actions within the planning area would be analyzed individually for impacts on visual resources utilizing the Visual Resource Contrast Rating System as described in BLM Manual 8431 – Visual Resource Contrast Rating. This analysis would determine if the potential visual impacts from proposed surface-disturbing activities or developments would meet VRM Inventory Class management objectives assigned for the area, or whether design adjustments would be required.
- All actions would be mitigated to reduce impacts on visual resources utilizing design techniques including proper siting and location, reducing unnecessary disturbance, and the repetition of the basic elements of form, line, color, and texture found in the existing visual landscape. Design strategies and appropriate stipulations will be employed to ensure that surface-disturbing activities are in harmony with their surroundings and VRM management classes.
- Consult with neighboring Federal, State, and Native corporation land managing agencies to coordinate compatible VRM management along common boundaries.

### **(4) Alternative B**

Under Alternative B, all lands in the Bay planning area would be managed as VRM Class IV (Maps 2.1 and 2.4). The principles of the visual resource contrast rating system (Manual 8431) would be used to identify mitigation measures and to develop stipulations to meet the objectives of VRM Class IV. Development would be allowed with mitigation. Stipulations and Required Operating Procedures would be applicable (Appendix A).

VRM Classification percentages are approximately 0% (III) and 100% (IV).

### **(5) Alternative C**

Under Alternative C, BLM lands in the full visible foreground based on GIS analysis up to five miles from established winter trail/road systems would be managed as VRM Class III, including Goodnews to Quinhagak coastal and Arolik River routes; Goodnews Bay to Dillingham route; Dillingham to Aleknagik; Dillingham to Koliganek; Ekwok to Naknek; New Stuyahok to Levelock; and Naknek to King Salmon. BLM lands in the full visible foreground up to five miles from main river travel routes would be managed as VRM Class III, including portions of the North Fork Goodnews River; Middle Fork Goodnews River; South Fork Goodnews River; and East Fork Arolik River, Nushagak River; Kvichak River; Lower Mulchatna River; and Alagnak Wild River.

BLM lands in the full visible foreground up to five miles from the boundaries of Togiak NWR, Becharof NWR, Katmai NPP, and Lake Clark NPP would be managed as VRM Class III.

The proposed Carter Spit and Bristol Bay ACECs would be managed as VRM Class III. The proposed National WSRs, a portion of the Alagnak River, Goodnews River mainstem and Middle Fork Goodnews River would be managed as VRM Class III.

All other BLM lands would be managed as VRM Class IV. (Maps 2.2 and 2.5)

VRM Classification percentages are approximately 50% (III) and 50% (IV).

Stipulations and Required Operating Procedures, located in Appendix A, would apply.

#### **(6) Alternative D**

Under Alternative D, BLM lands in the full visible foreground based on GIS analysis up to one-half mile from established winter trail/road systems would be managed as VRM Class III, including Goodnews to Quinhagak coastal and Arolik River routes; Goodnews Bay to Dillingham route; Dillingham to Aleknagik; Dillingham to Koliganek; Ekwok to Naknek; New Stuyahok to Levelock; and Naknek to King Salmon.

BLM lands in the full visible foreground up to one-half mile from main river travel routes would be managed as VRM Class III, including portions of the North Fork Goodnews River; Middle Fork Goodnews River; South Fork Goodnews River; and East Fork Arolik River; Nushagak River; Kvichak River; Lower Mulchatna River; and Alagnak Wild River.

BLM lands in the full visible foreground up to one mile from the boundaries of Togiak NWR, Becharof NWR, Katmai NPP, and Lake Clark NPP would be managed as VRM Class III. The proposed Carter Spit ACEC would be managed as VRM Class III.

All other BLM lands would be managed as VRM Class IV (Maps 2.3 and 2.6).

VRM Classification percentages are approximately 10% (III) and 90% (IV).

Stipulations and Required Operating Procedures, located in Appendix A, would apply.

Tables 2.4 and 2.13 provide the comparison of how these management actions proposed for visual resource management are applied under each Alternative.

**Table 2.4. Visual Resource Management - Summary of Alternatives**

|                      | <b>Classification of BLM-managed Unencumbered Lands for Visual Resource Management</b>   | <b>VRM Classification in Special Designations</b>   |
|----------------------|--|---|
| <b>Alternative A</b> | No VRM classes would be established on BLM-managed lands within the Bay planning area.   | No Special Designations would be recommended.   |
| <b>Alternative B</b> | All lands in the Bay planning area would be managed as VRM Class IV (Maps 2.1 and 2.4).  | No Special Designations would be recommended.   |
| <b>Alternative C</b> | <p>BLM lands in the full visible foreground based on GIS analysis up to 5 miles from established winter trail/road systems would be managed as VRM Class III including (Maps 2.2 – 2.5):</p> <p>Goodnews Bay region</p> <ul style="list-style-type: none"> <li>• Goodnews to Quinhagak coastal and Arolik River routes</li> <li>• Goodnews Bay to Dillingham</li> </ul> <p>Bristol Bay region</p> <ul style="list-style-type: none"> <li>• Dillingham to Aleknagik</li> <li>• Dillingham to Koliganek</li> <li>• Ekwok to Naknek</li> <li>• New Stuyahok to Levelock</li> <li>• Naknek to King Salmon</li> </ul> <p>BLM lands in the full visible foreground up to five miles from main river travel routes would be managed as VRM Class III including:</p> <p>Goodnews Bay region</p> <ul style="list-style-type: none"> <li>• North Fork Goodnews River</li> <li>• Middle Fork Goodnews River</li> <li>• South Fork Goodnews River</li> <li>• East Fork Arolik River</li> </ul> <p>Bristol Bay rivers</p> <ul style="list-style-type: none"> <li>• Nushagak River</li> <li>• Kvichak River</li> <li>• Lower Mulchatna River</li> <li>• Alagnak Wild River</li> </ul> <p>BLM lands in the full visible foreground up to five miles from the boundaries of Togiak NWR, Becharof NWR, Katmai NPP, and Lake Clark NPP would be managed as VRM Class III.</p> <p>All other BLM lands would be managed as VRM Class IV.</p> | <p>Proposed Carter Spit and Bristol Bay ACECs would be managed as VRM Class III.</p> <p>Proposed National WSR Alagnak River (Wild, Recreational) would be managed as VRM Class III.</p> <p>Proposed National WSR Goodnews River mainstem and Middle Fork Goodnews River (Wild) would be managed as VRM Class III.</p> |

|                      | <b>Classification of BLM-managed Unencumbered Lands for Visual Resource Management</b>   | <b>VRM Classification in Special Designations</b>                   |
|----------------------|--|---|
| <b>Alternative D</b> | <p>BLM lands in the visible foreground up to one-half mile from established winter trail/road systems would be managed as VRM Class III including (Maps 2.3 and 2.6):</p> <p>Goodnews Bay region</p> <ul style="list-style-type: none"> <li>• Goodnews to Quinhagak coastal and Arolik River routes</li> <li>• Goodnews Bay to Dillingham</li> </ul> <p>Bristol Bay region</p> <ul style="list-style-type: none"> <li>• Dillingham to Aleknagik</li> <li>• Dillingham to Koliganek</li> <li>• Ekwok to Naknek</li> <li>• New Stuyahok to Levelock</li> <li>• Naknek to King Salmon</li> </ul> <p>BLM lands in the visible foreground up to one-half mile from main river travel routes would be managed as VRM Class III including:</p> <p>Goodnews Bay region</p> <ul style="list-style-type: none"> <li>• North Fork Goodnews River</li> <li>• Middle Fork Goodnews River</li> <li>• South Fork Goodnews River</li> <li>• East Fork Arolik River</li> </ul> <p>Bristol Bay rivers</p> <ul style="list-style-type: none"> <li>• Nushagak River</li> <li>• Kvichak River</li> <li>• Lower Mulchatna River</li> <li>• Alagnak Wild River</li> </ul> <p>Manage BLM lands in the visible foreground up to one mile from the boundaries of Togiak NWR, Becharof NWR, Katmai NPP, and Lake Clark NPP as VRM Class III.</p> <p>All other BLM lands would be managed as VRM Class IV.</p> | <p>Proposed Carter Spit ACEC would be managed as VRM Class III.</p> |

## 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 opportunities for personal and commercial use of timber and other vegetative resources. Requests for commercial timber or vegetative resources are not anticipated.

**(2) Alternative A**

Alternative A would continue current management. Under this Alternative, 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. The Southwest MFP (1981), which applies only to the Goodnews Block within the Bay planning area, provides for the use of forestry products in the Goodnews Block with priority areas opened for settlement entry. No potential commercial harvest areas have been identified for BLM-managed lands in the planning area. No commercial timber harvesting is anticipated within the life of this plan, due to the lack of commercial grade timber on BLM lands in the Bay planning area.

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

**(a) Inventory and Monitoring**

Should any exist, BLM will identify potential commercial harvest areas and high interest personal use areas. If any of these areas are identified within the proposed ACECs, management will be consistent with the objectives of the proposed ACEC.

**(b) Management Decisions**

- All forestry management practices would be conducted consistent with guidelines described in the stipulations and Required Operating Procedures (Appendix A).
- The natural range of variation in plant composition and structure and the high value of natural resources will be sustained.
- 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.

**(4) Alternative B**

Under Alternative B, forested lands would be managed for a variety of sustainable public uses, including firewood, house logs, and other forest products for subsistence, personal and commercial use. The feasibility of fuel reductions, prescribed fire, or salvage logging in localized areas of insect and disease killed trees would be assessed. Requests for forest products would be considered on a case-by-case basis as applications are received. Required Operating Procedures, Stipulations, and additional requirements identified through project-specific NEPA analysis would apply.

**(5) Alternative C**

Under Alternative C, forested lands would be managed as in Alternative B. In addition, further restrictions on harvest of forest products would apply in the Carter Spit ACEC and the Bristol Bay ACEC and rivers found eligible/suitable for inclusion to the National Wild and Scenic River (WSR) system, including but not limited to seasonal restrictions. These restrictions will be determined through project specific NEPA analysis.

**(6) Alternative D**

Under Alternative D, forested lands would be managed as in Alternative B. In addition, further restrictions on harvest of forest products would apply in the Carter Spit ACEC, including but not limited to seasonal restrictions. Additional restrictions may be determined through project-specific NEPA analysis.

## **b) Livestock and Reindeer Grazing**

### **(1) Goals**

- Avoid conflicts between livestock grazing uses, fisheries and wildlife habitat, and subsistence uses.
- Determine range suitability for livestock, and the potential allocation of forage for livestock in the planning area ecosystems.
- Maintain habitat needed to support healthy populations of wildlife to meet population viability and human use demands, as required by FLPMA and the Land Health Standards.

### **(2) Management Common to All Alternatives**

The Southwest MFP (1981), which is applicable only to the Goodnews planning block in the Bay planning area, allows seasonal grazing for domestic livestock and reindeer on a local level where public demand warrants and where compatible with other resources. Livestock grazing would be managed on a case-by-case basis as permit applications are received. Incidental grazing by pack animals associated with special recreation use permits would be considered on a case-by-case basis. Conflicts with wildlife and subsistence, compatibility, and suitability would be taken into consideration.

#### **(a) Inventory and Monitoring**

- Currently there is no livestock or reindeer grazing permitted on BLM-managed lands in the Bay planning area, nor has there been interest expressed. In the future, should there be an interest, BLM would consider cooperative monitoring with adjacent landowners and agencies to assess range conditions and use and to provide the necessary information to manage all aspects of grazing activities. BLM could also work with NRCS and others to assess seasons of use, grazing systems, suitability and compatibility.
- BLM would inventory habitat to ensure priority for wildlife species, and that conflicts or threats are adequately addressed.

#### **(b) Management Decisions**

- Avoid conflicts between grazing, habitat requirements of fish and wildlife, and other human uses.
- Develop allotment management plans for proposed grazing that includes grazing systems and fire management and allows for maintaining long-term native vegetative communities, composition, diversity, distribution and productivity.
- 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 and the Alaska Statewide Land Health Standards.
- Special recreation permits and casual use of grazing animals require evaluation for suitability and compatibility before authorizing use.
- Grazing permits would be subject to Required Operating Procedures and project-specific requirements, to maintain habitat needed to support healthy populations.

**Table 2.5. Livestock and Reindeer Grazing – Summary of Alternatives**

| Resource                                   | Management Common to All Alternatives  |
|--|--|
| Livestock and Reindeer Grazing             | Livestock grazing would be considered and administered on a case-by-case basis as permits are received. The type of livestock or reindeer use authorized will likely be limited to reindeer grazing and incidental grazing by pack animals associated with special recreation use permits. |
| Grazing Management in Special Designations | Livestock grazing would be considered and administered on a case-by-case basis as permits are received. The type of livestock or reindeer use authorized will likely be limited to reindeer grazing and incidental grazing by pack animals associated with special recreation use permits. |

**c) Minerals**

Lands currently under selection by the State and Native Corporations are segregated from locatable mineral entry and leasing to avoid potential encumbrances on selected lands prior to conveyance<sup>1</sup>. These lands comprise approximately 759,656 acres of the 1,927,083 acres currently managed by 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 selected lands are retained long-term in Federal ownership. In addition, 3,482 acres of Agency withdrawals exist within the Bay planning area. Of this, 3,318 acres are closed to leasables activities and 3,395 is closed to locatable activities.

**c.1. Fluid Leasable Minerals (Oil and Gas)**

**(1) Goals**

Public lands and Federal mineral estate will be made available for orderly and efficient exploration (including geophysical exploration), development and production of fluid leasable minerals, including oil, natural gas, tar sands, coal bed methane and geothermal steam, unless a withdrawal or other administrative action is justified in the national interest.

**(2) Alternative A**

Under Alternative A, current management would continue. Approximately 1,927,083 acres of BLM-managed lands would be closed to leasing. No withdrawal review would occur and all ANCSA 17(d)(1) withdrawals would remain in place, pending future legislation or unrelated management direction. However, where Federal oil and gas resources are being drained from lands otherwise unavailable for leasing, there is implied authority for BLM to lease such lands. (Maps 2.7 and 2.8)

The Southwest MFP (BLM 1981), which addresses only the Goodnews planning block of the planning area, called for opening all BLM-managed public lands to oil and gas leasing under Section 1008 of ANILCA (PL 96-487 Title 10 §1008). This action was not carried forward after publication of the MFP.

<sup>1</sup> State-selected lands: 43 CFR 2627.4(b); Native-selected lands: ANCSA, section 11

### What is Drainage?

Drainage of oil or gas occurs whenever an oil or gas well on property adjacent to BLM-managed subsurface estate produces from a reservoir or reservoirs that extend onto both properties. In such a case, Federal resources are being drained through a well on lands owned or administered by others, and BLM would lease the Federal subsurface estate or, at a minimum, pursue an agreement for payment of royalties on the government's share of the oil and gas produced.

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

- Lands currently under selection by the State and Native corporations are segregated from mineral leasing to avoid potential encumbrances on selected lands prior to conveyance.
- Areas for potential leasing would be identified consistent with the goals, standards, and objectives for natural resources within the planning area. Areas where oil and gas development could coexist with other resource uses would be open to leasing under Standard Lease Terms or with added stipulations.
- Oil and Gas Stipulations and Required Operating Procedures described in Appendix A apply to all BLM-managed lands in the Bay planning area open to oil and gas leasing. Stipulations notify the leaseholder that development activities may be limited, prohibited, or implemented with mitigation measures to protect specific resources. The stipulations would condition the leaseholder's development activities and provide BLM the authority to require other mitigation or to deny some proposed exploration and development methods.
- Additional constraint might also be required based on project-specific NEPA analysis. Additional information can be provided to the lessee in the form of a lease notice. This notice does not place restrictions on lease operations, but does provide information about applicable laws and regulations, and the requirements for additional information to be supplied by the lessee.
- The BLM land use planning process determines availability of Federal lands for oil and gas leasing where BLM is the surface management agency. For Federal oil and gas where the surface is managed by another Federal agency, BLM will consult with that agency before issuing leases.
- All areas open to mineral leasing would be open to geophysical exploration, except those lands containing No Surface Occupancy (NSO) restrictions, which would only be available for geophysical exploration in winter conditions, subject to Stipulations and through Casual Use as described in 43 CFR 3150.05(b) during non-winter conditions. On a case-by-case basis geophysical exploration may be allowed in areas closed to oil and gas leasing based on the nature and level of impacts from the exploration, and consistency with other applicable policy. Oil and gas geophysical exploration activity on public lands in Alaska, the surface of which is administered by BLM, is governed by regulations found at 43 CFR Subparts 3150, 3152, and 3154. A Federal oil and gas lease is not required to conduct geophysical exploration. BLM will review Notices of Intent to Conduct Geophysical Exploration (NOI) in the planning area and develop appropriate mitigation measures so as not to create unnecessary or undue degradation. A site-specific environmental analysis will be prepared for each NOI filed. The oil and gas lease stipulations developed in this document serve as the starting point for developing required mitigation measures for each NOI.
- 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. There are no Known Geothermal Resource Areas (KGRAs) on BLM-managed lands within the planning area. A site-specific environmental analysis would be prepared should interest be expressed in exploring for or developing geothermal resources in the planning area. This analysis would address the application of stipulations and develop additional mitigating measures over and above the lease stipulations. Stipulations developed in this document for oil and gas leases would be applied to any geothermal lease issued if appropriate.

- Coal bed natural gas (CBNG) development is authorized by the same process as oil and gas.
- Public lands available for oil and gas leasing would be offered first by competitive bid at an oral auction. Stipulations, terms, and conditions would be applied at the time of leasing. Leasing of available lands under jurisdiction of another Federal agency would only occur following consultation, and consent if necessary, from the surface managing agency. Notices of Intent to conduct geophysical exploration would be reviewed and mitigation measures developed to prevent unnecessary or undue degradation.
- Where oil or 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 BLM to lease such lands (43 CFR 3100.0-3(d)). Leasing of such lands would only occur following consultation, and consent if necessary, from the surface managing agency.
- The terms of existing oil and gas leases cannot be changed by the decisions in this document. However, when the lease expires, the area will be managed for oil and gas according to the decisions made in this RMP/EIS.

### No Surface Occupancy

No Surface Occupancy (NSO) is a limitation of oil and gas leasing. It denotes an area that is open for mineral leasing, but that analysis has found that in order to protect other resources, no surface development or occupancy are allowed on the specified lands. Resource extraction can occur by using directional drilling techniques from another location.

As described in BLM Manual 1624, Federal oil and gas resources (including CBNG) fall into one of the following categories relative to restrictiveness:

- **Areas open to leasing, subject to the terms and conditions of the standard lease form.** These are areas where it has been determined through the planning process that the standard terms and conditions of the lease form combined with applied ROPs and Stipulations (Appendix A) are sufficient to protect other land use or resource values.
- **Areas open to leasing, subject to additional constraints such as seasonal restrictions.** These are areas where it has been determined through the planning process that moderately restrictive lease Stipulations may be required to mitigate impacts to other land use or resource values. This category of leases frequently involves timing limitations such as restricting construction activities in important designated big game habitats, or controlled surface use Stipulations such as creating a buffer zone around a key resource.
- **Areas open to leasing, subject to NSO Stipulations.** These are areas where it has been determined through the planning process that highly restrictive lease stipulations are required to mitigate impacts to other land use and resource values. This category of leases may prohibit the construction of well production and support facilities. These areas are subject to directional drilling, if technologically and economically feasible.
- **Areas closed to leasing.** These are areas where it has been determined through the planning process that other land use or resource values cannot be adequately protected with even the most restrictive lease stipulations. Appropriate protection can be ensured only by closing the lands to leasing.

#### **(4) Alternative B**

Under Alternative B, all existing ANCSA 17(d)(1) withdrawals would be revoked to allow increased opportunities for leasable minerals activities.

Approximately 1,103,138 acres of unencumbered BLM lands and any State-selected or Native-selected lands whose selections are relinquished or revoked would be open to fluid mineral leasing subject to

standard lease terms. There would be no restriction under this Alternative for seasonal closures or for NSO (Maps 2.9 and 2.10). Additionally, oil and gas Stipulations #6, #7, and #9 and ROPs FW-3b, FW-3d, and FW-6a in Appendix A would not be applicable under this Alternative. Agency withdrawals would close approximately 3,318 acres to leasing.

### **(5) Alternative C**

Under Alternative C, lands available for leasable mineral activities would be reduced and subject to more constraints compared to Alternatives B or D. Approximately 1,063,129 acres of unencumbered BLM lands and any State- or Native-selected lands whose selections are relinquished or revoked would be open to fluid mineral leasing subject to constraints.

Unencumbered BLM lands within the Bristol Bay ACEC would be open to leasable mineral activities with seasonal restrictions. To protect caribou calving, and insect relief areas, leasable mineral activities will be required to adhere to Stipulations #6 and #7, and ROPs FW-3b and FW-3d.

ANCSA 17(d)(1) withdrawals would be retained for all eligible/suitable Wild River Segments (12,210 acres), including portions of the Alagnak, Goodnews mainstem and Goodnews Middle Fork rivers, until Congressional action is completed. ANCSA 17(d)(1) withdrawals would be retained within the proposed Carter Spit ACEC (61,251 acres), closing this area to leasable mineral activities.

Total Acreage subject to no surface occupancy (NSO) is 1,834 acres. Areas subject to NSO include a 300-ft. buffer on either side of the East and South Forks of the Arolik River, Faro Creek, South Fork Goodnews River, and Klutuk Creek to protect riparian areas and soils adjacent to sensitive habitat for salmon and freshwater fish (Stipulation 9, Appendix A; Maps 2.11 and 2.12).

### **(6) Alternative D**

Under Alternative D, all existing ANCSA 17(d)(1) withdrawals would be revoked to allow for increased opportunities for exploration, development and production of fluid leasable minerals. No eligible WSR segments would be found suitable and thus no WSR designations would be proposed for the Alagnak, Goodnews mainstem and Goodnews Middle Fork rivers.

Approximately 1,101,304 acres of unencumbered BLM lands and any State-selected or Native-selected lands whose selections are relinquished or revoked would be open to fluid mineral leasing subject to standard lease terms.

ANCSA 17(d)(1) withdrawals would be revoked within the proposed 36,220 acre Carter Spit ACEC. ROPs SS-1a, 1b, and SS-2a would apply to protect habitat for federally-listed migratory bird species (Appendix A).

Total Acreage subject to no surface occupancy (NSO) is 1,834 acres. Areas subject to NSO include a 300-ft. buffer on either side of the East and South Forks of the Arolik River, Faro Creek, South Fork Goodnews River, and Klutuk Creek to protect riparian areas and soils adjacent to sensitive habitat for salmon and freshwater fish. (Stipulation 9, Appendix A; Maps 2.13 and 2.14)

Existing Agency withdrawals of approximately 3,318 unencumbered acres would remain withdrawn from fluid mineral leasing.

To protect caribou calving and insect relief areas, oil and gas exploration and development activities will be required to adhere to Stipulations #6 and #7, and ROPs FW-3b, and FW-3d.

There are no oil and gas leasing closures proposed with the exception of existing Agency withdrawals.

Tables 2.6 and 2.13 provide a comparison of fluid leasable minerals applied under each Alternative.

**Table 2.6. Fluid Leasable Minerals - Summary of Alternatives**

| Management Action  | Alternative A (Current management)                                       | Alternative B  | Alternative C  | Alternative D (Preferred Alternative)   |
|--|--|--|--|---|
| <b>Areas Open to Fluid Mineral Leasing Subject to Standard Lease Terms</b> | No BLM-managed lands would be open for fluid mineral leasing.            | 1,103,138 acres unencumbered BLM lands, and any State- or Native-selected lands relinquished from current selection. | 1,063,129 acres of unencumbered BLM lands and any State- or Native-selected lands relinquished from current selection.   | 1,101,304 acres BLM-managed lands, and any State- or Native-selected lands relinquished from current selection. |
| <b>Areas Closed to Fluid Mineral Leasing</b>                               | All BLM lands would be closed to fluid mineral leasing (1,927,083 acres) | Existing Agency withdrawals, of approximately 3,318 acres would remain withdrawn from fluid mineral leasing.         | <p>Approximately 76,779 acres of unencumbered BLM lands:</p> <p>Existing Agency withdrawals, of approximately 3,318 acres would remain withdrawn from fluid mineral leasing.</p> <p>Proposed Wild River segments of the Alagnak, Goodnews and Goodnews Middle Fork Rivers (12,210 acres). ANCSA 17 (d)(1) withdrawals would be retained for these river segments as an interim measure to provide an opportunity for Congressional action.</p> <p>ANCSA 17 (d)(1) withdrawals would be retained for Carter Spit ACEC (61,251 acres).</p> | Existing Agency withdrawals, of approximately 3,318 acres would remain withdrawn from fluid mineral leasing.    |

| Management Action  | Alternative A (Current management)   | Alternative B   | Alternative C   | Alternative D (Preferred Alternative)   |
|--|--|---|---|---|
| <b>Areas Open to Fluid Mineral Leasing Subject to Seasonal Constraint</b>  | No Federal leases would occur on BLM-managed lands within the Bay planning area. | No acres are subject to seasonal constraints.<br><br>Stipulations #6 and #7 and ROPs FW-3b, and FW-3d (Appendix A) do not apply under this Alternative. | Bristol Bay ACEC (973,862 acres)<br><br>To protect caribou habitat, Stipulations #6 and #7 and ROPs FW-3b, and FW-3d (Appendix A) would apply under this Alternative.   | Carter Spit ACEC (36,220 acres) ROPs SS-1a, 1b, and SS-2a would apply to protect habitat for federally-listed migratory bird species. (Appendix A)<br><br>To protect caribou habitat, Stipulations #6 and #7 and ROPs FW-3b, and FW-3d (Appendix A) would apply under this Alternative.   |
| <b>Areas Open to Fluid Mineral Leasing Subject to No Surface Occupancy</b> | No Federal leases would occur on BLM-managed lands within the planning area.     | 0 acres.<br><br>Stipulation #9 and ROP FW-6a (Appendix A) do not apply under this Alternative.  | 1,834 acres.<br><br>Stipulation #9 and ROP FW-6a (Appendix A) would apply under this alternative. 300-ft. NSO buffer on either side of the East and South Forks of the Arolik River, Faro Creek, South Fork Goodnews River, and Klutuk Creek. This setback would protect riparian areas and soils adjacent to sensitive habitat for salmon and freshwater fish. | 1,834 acres.<br><br>Stipulation #9 and ROP FW-6a (Appendix A) would apply under this alternative. 300-ft. NSO buffer on either side of the East and South Forks of the Arolik River, Faro Creek, South Fork Goodnews River, and Klutuk Creek. This setback would protect riparian areas and soils adjacent to sensitive habitat for salmon and freshwater fish. |

## **c.2. Solid Leasable Minerals**

Currently there are no known coal resources on BLM-managed lands in the Bay planning area. The Governor of any state with an approved regulatory program may request that the Secretary of the Department of the Interior enter into a cooperative agreement to grant the State the authority to implement the Surface Mining Control and Reclamation Act of 1977 on Federal lands. At present, Alaska has no such agreement in place. However, 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).

### **(1) Goals**

- Public lands and the Federal mineral estate will be made available for orderly and efficient exploration, development and production of solid leasable mineral resources (including coal and oil shale, and non-energy leasable minerals (including potassium, sodium, phosphate and gilsonite), unless continued withdrawal from mineral entry 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**

Under Alternative A, current management would continue. No BLM-managed lands would be identified as open for solid leasable mineral leasing in the Bay planning area. The Southwest MFP (BLM 1981), which addresses only the Goodnews planning block of the planning area, called for providing opportunities for leasing or permitting of coal reserves on all BLM-managed public lands. This action was not carried forward after publication of the MFP.

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

The following management direction applies to all BLM-managed lands within the Bay planning area.

#### **(a) Land Use Plan Decisions**

- Leasing and exploration licensing are subject to BLM standard lease terms and BLM Alaska's Oil and Gas Stipulations and Required Operating Procedures, located in Appendix A.
- Coal and oil shale exploration and leasing will 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 and other Federal resource and environmental laws, coal regulations and coal planning criteria.
- Identify BLM-managed public lands acceptable for further consideration for coal leasing and the methods under which such development may take place, consistent with unsuitability assessment procedures outlined in 43 CFR 3461, including:
  - areas unacceptable for further consideration for coal leasing and development by all mining methods
  - areas acceptable for further consideration for coal leasing and development by only certain stipulated mining methods
- All unencumbered BLM-managed lands within the Bay planning area subject to coal leasing under Part 43 CFR 3400.2 are open to coal exploration and study through the issuance of an exploration license. To date, no areas within the Bay RMP have been identified as having economic coal reserves. Therefore, the coal screening process (as identified by 43 CFR 3420.1-4) has not been conducted for this plan. 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 further consideration for leasing under 43 CFR 3420.1-4(e). The Bay RMP/EIS would be amended as necessary.

- Should coal operations be developed on Federal lands, an agreement would likely be developed between the State of Alaska and the Office of Surface Mining defining the regulatory role of the State in these mining operations (30 CFR 745).
- The Mineral Leasing Act authorizes the leasing of Federal lands for the development of oil shale. However, there are currently no regulations governing the leasing of oil shale. Oil shale will be leased on a case-by-case basis and issued under the authority of 30 U.S.C. Chapter 3A, Subchapter V, Section 241.
- Solid leasable minerals include chlorides, sulfates, carbonates, borates, silicates or nitrates of potassium or sodium and related products; sulphur, phosphate and related minerals; oil shale, coal and gilsonite (including all vein-type solid hydrocarbons). The likelihood of commercially valuable deposits of these minerals occurring on BLM-managed lands in the planning area is not presently known. If solid leasable mineral deposits (excluding oil shale and coal) were discovered, subsequent leasing, exploration, and development would be analyzed on a case-by-case basis and would be subject to regulations under 43 CFR 3500 (Leasing of Solid Minerals other than Coal and Oil Shale). Non-energy leasable mineral exploration and leasing will comply with the Mineral Leasing act of 1920, as amended, the Mineral Leasing Act for Acquired Land of 1947, as amended, Federal resource laws, the Reorganization Plan No. 3 of 1946, non energy leasable minerals regulations and planning criteria.
- Lands under selection by the State and Native Corporations are segregated from mineral leasing. The categories and constraints identified in this section only apply on lands retained in long-term Federal ownership.
- Leasable mineral 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.

Stipulations, Required Operating Procedures, and project-specific requirements would apply.

### ***c.3. Locatable Minerals and Salable Minerals***

#### ***(1) Goals***

Maintain or enhance opportunities for mineral exploration and development while preventing undue and unnecessary degradation of other resource values from the development of locatable and salable mineral resources. Tables 2.7 and 2.13 provide a comparison of the locatable and salable mineral management actions proposed under each Alternative.

#### ***(2) Alternative A***

Under Alternative A, current management would continue. All ANCSA 17(d)(1) withdrawals would remain in place, pending future legislation or unrelated management direction. Approximately 138,627 acres would be available for locatable mineral entry. Other Agency withdrawals of approximately 3,968 acres would remain closed to locatable and salable mineral entry per specific PLO. Approved Plans of Operations would contain stipulations based on site-specific resource concerns (Maps 2.15 – 2.18).

The Southwest MFP (BLM 1981), which addresses only the Goodnews planning block of the Bay planning area, required reviewing areas presently closed to the various mining laws and the Mineral Leasing Act of 1920 for potential opening under those laws. However, this action was never implemented.

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

**(a) Inventory and Monitoring**

- In open areas identify area-wide terms, conditions, or other special considerations needed to protect resource values.

**(b) Management Decisions**

- Mining of locatable minerals and salable material, including existing mineral claims, would be subject to the surface management regulations found in 43 CFR 3809. Surface occupancy under the mining laws will be limited to uses incident to the mining operation. Bonding will be required in accordance with BLM policy. Specific measures that would be utilized to minimize surface impacts and to facilitate rehabilitation and revegetation of mined areas can be found in the Required Operating Procedures in Appendix A.
- All operations must file a Plan of Operations with BLM. The Plan of Operations must be approved prior to commencement of on-the-ground activities. Areas withdrawn from mineral location in which valid existing rights are being exercised require the filing of a Plan of Operations.
- Lands under selection by the State and Native corporations are segregated from locatable mineral and salable material entry. For State- and Native-selected lands, revocation or modification of ANCSA (d)(1) withdrawals as indicated below only apply if lands are retained in long-term Federal ownership.

**(c) Land Use Requirements**

Mining of locatable minerals and salable material will be subject to the surface management regulations found in 43 CFR 3809.

**(4) Alternative B**

Under Alternative B, ANCSA 17(d)(1) withdrawals would be revoked and approximately 1,102,489 acres of unencumbered BLM lands and any selected lands (820,627 acres) of which selection is revoked or relinquished would be available for locatable entry. Within the Bay planning area, approximately 3,968 acres would remain withdrawn from mineral entry due to Agency withdrawals other than ANCSA 17(d)(1). Exploration and development would be guided by Required Operating Procedures (Appendix A), and project-specific requirements. ROPs FW-3b, FW-3d, and FW-6a would not apply under this alternative (Maps 2.19 - 2.22).

**(5) Alternative C**

Under Alternative C, ANCSA 17(d)(1) withdrawals would be revoked except for one ACEC (Carter Spit ACEC, 61,251 acres) and proposed inclusions in the National WSR system (Alagnak River, Goodnews River mainstem, and Goodnews River Middle Fork, totaling 12,210 acres). Approximately 1,064,313 acres of unencumbered BLM lands and any selected lands (785,341 acres) of which selection is revoked or relinquished would be available for locatable entry and the sale of mineral materials with the following exceptions: Within the Bay planning area, approximately 3,968 acres of Agency withdraws will remain closed to mineral entry. Bristol Bay ACEC would be open to locatable mineral activities and closed to the sale of mineral materials (979,970 acres). Exploration and development would be guided by Required Operating Procedures and project-specific requirements (Appendix A). ROP FW-6a would apply under this alternative to protect riparian and aquatic habitat (Maps 2.23 - 2.26).

**(6) Alternative D**

Under Alternative D, ANCSA 17(d)(1) withdrawals would be revoked. Approximately 1,102,489 acres of unencumbered BLM lands and any selected lands (817,464 acres) of which selection is revoked or relinquished would be available for locatable entry. Within the Bay planning area, approximately 3,968 acres of Agency withdraws will remain closed to mineral entry. Carter Spit ACEC would be closed to salable mineral development (36,220 acres). Exploration and development would be guided by Required Operating Procedures (Appendix A), and project-specific requirements. ROP FW-3b, FW-3d, and FW-6a would apply under this alternative (Appendix A). (Maps 2.27 – 2.30)

Tables 2.7 and 2.13 provide the comparison of management actions proposed for locatable minerals under each Alternative.

**Table 2.7. Locatable Minerals and Salable Minerals - Comparison of Alternatives**

| Management Action                | Alternative A (Current Management)   | Alternative B  | Alternative C  | Alternative D (Preferred Alternative)  |
|----------------------------------|--|--|--|--|
| <p><b>Locatable Minerals</b></p> | <p>138,627 acres of BLM lands would be identified as open for locatable mineral entry.</p> <p>Within the Bay planning area, approximately 3,968 acres would remain withdrawn from mineral entry due to Agency withdrawals.</p> | <p>ANCSA 17(d)(1) withdrawals would be revoked.</p> <p>Approximately 1,102,489 acres of unencumbered lands would be available for locatable mineral entry.</p> <p>820,627 acres of selected lands would be made available if the selection is revoked or relinquished.</p> <p>Within the Bay planning area, approximately 3,968 acres would remain withdrawn from mineral entry due to Agency withdrawals.</p> <p>ROPs FW-3b, FW-3d, and</p> | <p>1,064,313 acres of BLM unencumbered lands would be open to locatable mineral activities.</p> <p>The following lands would be closed to locatable mineral entry:</p> <p>Proposed wild river segments of the Alagnak, Goodnews mainstem, and Goodnews Middle Fork (12,210 acres). ANCSA 17(d)(1) withdrawals for these river segments would be retained as an interim measure to provide an opportunity for Congressional action.</p> <p>ANCSA 17(d)(1) withdrawals would be retained within the proposed Carter Spit ACEC (61,251 acres).</p> <p>ROP FW-3b, FW-3d, would apply under this alternative.</p> <p>ROP FW-6a, which</p> | <p>Same as Alternative B, except 1,102,489 acres of unencumbered BLM land would be available for locatable mineral activities.</p> <p>Proposed Carter Spit ACEC (36,220 acres) would be open to locatable mineral activities. ROPs SS-1a, 1b, and SS-2a would apply to protect habitat for federally-listed migratory bird species.</p> <p>Approximately 3,968 acres would remain withdrawn from mineral entry due to Agency withdrawals.</p> <p>ROP FW-3b, FW-3d, would apply under this alternative.</p> <p>ROP FW-6a, which establishes additional protective measures within 300 feet on either side of the East and South Forks of the Arolik River, Faro Creek, South Fork</p> |

| Management Action         | Alternative A (Current Management)   | Alternative B   | Alternative C  | Alternative D (Preferred Alternative)  |
|---------------------------|--|---|--|--|
|                           |  | <p>FW-6a would not apply under this alternative.</p>  | <p>establishes additional protective measures within 300 feet on either side of the East and South Forks of the Arolik River, Faro Creek, South Fork Goodnews River, and Klutuk Creek. This setback would protect riparian areas and soils adjacent to sensitive habitat for salmon and freshwater fish.</p> <p>Within the Bay planning area, approximately 3,968 acres would remain withdrawn from mineral entry due to Agency withdrawals.</p> | <p>Goodnews River, and Klutuk Creek. This setback would protect riparian areas and soils adjacent to sensitive habitat for salmon and freshwater fish.</p>   |
| <b>Locatable Minerals</b> | <p>Approved Plans of Operations would contain restrictions based on site-specific resource concerns.</p>   | <p>Same as Alternative A, with the addition that an approved Plan of Operations will contain guidelines as listed in the Required Operating Procedures in Appendix A.</p>   |  |  |
| <b>Salable Minerals</b>   | <p>Approximately 1,163,594 acres of unencumbered lands would be available for sale of mineral materials.</p> <p>Selected lands would be made available if the selection were revoked or relinquished.</p> <p>Within the Bay planning area, approximately 3,968 acres of unencumbered lands would remain withdrawn from mineral entry due to Agency</p> | <p>Approximately 1,102,484 acres of unencumbered lands would be available for sale of mineral materials.</p> <p>Selected lands would be made available if the selection were revoked or relinquished.</p> <p>Within the Bay planning area, approximately 3,968 acres of unencumbered lands would remain withdrawn from mineral entry due to</p> | <p>115,163 acres of unencumbered BLM lands would be available for salable mineral activities.</p> <p>Same as Alternative A, except the following lands would be closed to sale:</p> <ul style="list-style-type: none"> <li>• Proposed Carter Spit ACEC (61,251 acres)</li> <li>• Proposed Bristol Bay ACEC (974,970 acres)</li> <li>• Proposed Wild river segments of the Alagnak,</li> </ul>  | <p>1,100,654 acres of unencumbered BLM lands would be available for salable mineral activities.</p> <p>The following lands would be closed to sale:</p> <ul style="list-style-type: none"> <li>• Proposed Carter Spit ACEC (36,220 acres)</li> </ul> <p>Approximately 3,968 acres would remain withdrawn from mineral entry due to Agency withdrawals.</p> <p>ROPs FW-3b, FW-3d, and FW-6a would</p> |

| Management Action | Alternative A (Current Management)   | Alternative B   | Alternative C   | Alternative D (Preferred Alternative)             |
|-------------------|--|---|---|---|
|                   | <p>withdrawals.</p> <p>Approved Plans of Operations would contain stipulations based on site-specific resource concerns.</p> | <p>Agency withdrawals.</p> <p>Same as Alternative A, with the addition that approved Plans of Operations would contain guidelines as listed in the Required Operating Procedures in Appendix A.</p> <p>ROPs FW-3b, FW-3d, and FW-6a would not apply under this alternative.</p> | <p>Goodnews mainstem, and Goodnews Middle Fork (12,210 acres).</p> <p>Approximately 3,968 acres would remain withdrawn from mineral entry due to Agency withdrawals.</p> <p>ROPs FW-3b, FW-3d, and FW-6a would apply under this alternative. (Appendix A)</p> | <p>apply under this alternative. (Appendix A)</p> |

## d) Recreation Management

### (1) Goals

- Manage recreation to maintain a diversity of recreational opportunities.
- Improve access to appropriate recreational opportunities.
- Ensure a quality experience and enjoyment of natural resources
- Provide for fair value in recreation on BLM-managed lands

### (2) Management Common to All Action Alternatives

#### Permit Availability

- Issuing an SRP is a discretionary action.
- Factors considered before approval of a Special Recreation Permit (SRP) include existing recreation conflicts, diversity of services provided to the public, number of similar services already offered, and whether the public land area available is sufficient to accommodate the proposed use.
- SRPs may be issued until the affected area's desired use level is reached. The desired use level is determined in resource management plans (RMPs), recreation area management plans (RAMPs), or in their absence, through analysis of resources and visitor use for each area using the Recreation Opportunity Spectrum (ROS) limits of acceptable change (LAC) or other valid methods.
- Each SRP application is analyzed for impacts to subsistence in accordance with ANILCA 810 through application specific NEPA processes.

**(3) Alternative A**

Under Alternative A, all unencumbered BLM-managed lands in the Bay planning area (1,163,604 acres) and selected lands (759,656 acres) until they are conveyed, would be managed as “Semi-Primitive Motorized” under the Recreation Opportunity Spectrum (Table 2.8).

**Table 2.8. Current ROS Class Acreages and Descriptions for BLM-Managed Lands in the Bay Planning Area**

| Class<br>(acres/% of planning<br>area)                             | Description  |
|--|--|
| <b>Primitive<br/>0 Acres (0%)</b>                                  | Area is characterized by an essentially unmodified natural environment of fairly large size. Concentration of users is low and no conflicts with users are evident. Sights and sounds of road systems are nonexistent and area is remote. Human-built structures are few and far between, or are inconspicuous. Vegetation and soils remain in a natural state.  |
| <b>Semi-Primitive<br/>Non-Motorized<br/>0 Acres (0%)</b>           | Area is characterized by a predominantly unmodified natural environment of moderate to large size. Concentration of users is low, but there is often evidence of other area users. Area is generally free of motorized trails and roads. Sights and sounds of transportation systems (mainly air) are encountered. Local traditional subsistence use is evident but impacts are fairly minimal. Vegetation and soils are predominantly natural but some impacts exist.   |
| <b>Semi-Primitive<br/>Motorized<br/>2,503,822 Acres<br/>(100%)</b> | Area is characterized by a predominantly unmodified natural environment of moderate to large size. Concentration of users is low, but there is often evidence of other users. Area is accessible to specialized OHVs but is generally not accessible to most four-wheel drive vehicles. Sights and sounds of the road system may or may not be dominant. Some portions of the area may be distant from road systems, but all portions are near motorized trails. Vegetation and soils are predominantly natural but localized areas of disturbance may exist. Local traditional subsistence use is evident but environmental impacts are minimal.  |
| <b>Roaded Natural<br/>0 Acres (0%)</b>                             | Area is characterized by a generally natural environment with moderate evidence of sights and sounds of humans. Resource modification and utilization practices are evident, but harmonize with the environment. Concentration of users is low to moderate, and rustic facilities may exist for user convenience and safety. The area is accessible to conventional motorized vehicles and roads are maintained on a regular basis. Sights and sounds of the road system are evident and traffic levels may be highly variable. Areas of localized vegetation and soil impacts exist. User concentrations are low to moderate but may be high in popular recreational sites such as waysides, trailheads, and water access points. |
| <b>Rural<br/>0 Acres (0%)</b>                                      | Area is characterized by a substantially modified natural environment. Resource modification and utilization practices are obvious. Sights and sounds of humans are readily evident and concentration of users is moderate to high. Some facilities may be designed for use by a large number of people. Areas typically are readily accessible to conventional motorized vehicles and are in areas where other camp structures are fairly common. Traffic levels are fairly constant. Areas of modified soil and vegetation exist.  |
| <b>Urban<br/>0 Acres (0%)</b>                                      | Area is characterized by a highly modified environment, although the background may have natural elements. Vegetation is often exotic and manicured. Soils may be protected by surfacing. Sights and sounds of humans predominate. Large numbers of users should be expected. Modern facilities may exist for the convenience and comfort of large numbers of people.  |

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

- Opportunities for commercial recreation will be provided consistent with area objectives for recreation management.
- The entire planning area would be designated as an Extensive Recreation Management Area. Management for dispersed recreation use and no facilities would be developed. No significant amounts of recreational staffing would be expended for the area.
- Camping associated with commercial activities would be prohibited without written authorization from BLM. Short-term commercial camping would be limited to 14 days within a 28-day period. After a camp has been occupied for 14 days, the camp must be moved at least 2 miles to start a new 14-day period. Short-term camping associated with non-commercial activities would be allowed for less than 14 days in one location.

**(5) Alternative B**

Under Alternatives B, the entire recreation area setting, including all unencumbered BLM-managed lands (1,163,604 acres) and selected lands (759,656 acres) until they are conveyed, would be managed as Roaded Natural (Table 2.8).

Table 2.8 and Table 2.13 provide a comparison of the recreation management actions proposed under each Alternative.

**(6) Alternative C**

Same as Alternative A, the entire recreation area setting, including all unencumbered BLM-managed lands (1,163,948 acres) and selected lands (759,656 acres) until they are conveyed, would be managed as Semi-Primitive Motorized.

**(7) Alternative D**

Same as Alternative A, the entire recreation area setting, including all unencumbered BLM-managed lands (1,163,948 acres) and selected lands (759,656 acres) until they are conveyed, would be managed as Semi-Primitive Motorized.

**e) Travel Management – Off-Highway Vehicles**

**(1) Goals**

- Manage access to BLM-managed lands and water.
- Ensure protection of natural and cultural resources from OHV impacts.
- Improve access to appropriate recreation opportunities on BLM-managed lands and water.
- Incorporate BLM's national strategy for motorized off-highway vehicle use.
- Provide OHV access consistent with the provisions of ANILCA
- Manage OHV access for resource development by applying Required Operating Procedures and Stipulations.

**(2) Alternative A**

Under Alternative A, there would be no OHV designations within the Bay planning area.

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

**(a) Inventory and Monitoring**

Inventory trails in order to identify all existing trails and assess trail density and resource impacts. Inventory and assessment information would also be used to prioritize trail maintenance needs.

**Gross Vehicle Weight Rating (GVWR) vs. Curb Weight Rating**

**GVWR:** the maximum allowable total weight of a vehicle that is loaded, including the weight of the vehicle itself plus fuel, driver, passengers, and cargo. Common 2,000-lb GVWR vehicles found operating on trails within the Bay planning area include: three, four, and six wheel all-terrain vehicles (ATVs); and amphibious six-to-eight wheel drive Argos. This method is more practicable to administer and enforce because vehicle weight capacities are normally found on a plate affixed to a vehicle, or is easily obtained from the manufacturer.

**Curb Weight Rating:** the weight of a vehicle, full fuel tank, and all fluids topped off but does not include passengers or cargo. This method is much more difficult to determine and enforce without specialized equipment.

The State’s 1,500-lb curb weight limit and the 2,000-lb GVWR limitation provide comparable protection to resources within the Bay planning area.

**(b) Management Decisions**

- Consider all access to public lands, including recreational, traditional, commercial, industrial, public roads and airstrips.
- Vehicle weight limits for OHV activities in “limited” designation areas would be to 2,000 pounds gross vehicle weight rating (GVWR includes the weight of the vehicle itself plus fuel, driver, passenger, and load) on all BLM-managed lands. Upon conveyance, designation of lands would be at the discretion of the new land manager.
- Any activity-level plan or integrated activity plan (IAP) such as for an ACEC, would include a trails inventory in the activity planning area and describe specific resource concerns or conflicts, and could describe specific designated trails and trail conditions or limitations of use (seasonal, vehicle class). Such a planning process would include public, State, and Native coordination. These plans would identify and prioritize specific maintenance needs and opportunities for trail development or loops. Unencumbered BLM lands would be first priority for implementation-level planning.
- OHVs will use existing trails whenever possible (i.e. subsistence hunting need for game retrieval), consistent with the State’s Conditions on Generally Allowed Uses (11 AAC 96.025) (Appendix H). OHV use will be conducted in a manner that minimizes disturbance of vegetation, disturbance of soil stability, or impacts to drainage systems; changing the character of, polluting, or introducing silt and sediment into streams, lakes, ponds, seeps, or marshes; and disturbance of fish and wildlife. Snowmachines will be allowed open cross-country travel when adequate snow cover is present – that is, adequate to avoid crushing vegetation or removing ground cover.
- All proposals for OHV management under consideration would be consistent with Section 811 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.

**What is Meant by “Open,” “Limited,” and “Closed” OHV Designations?**

To comply with BLM regulation 43 CFR 8342.1, all BLM lands must be designated in one of the following three categories:

- “Open” – OHVs may travel anywhere; cross-country travel is permitted.
- “Limited” – OHVs are restricted to certain areas or specific trails, with restrictions that can include vehicle weight, type of vehicle, seasonal limitations, or travel restricted to designated trails.
- “Closed” – no OHV activity is allowed.

**(4) Alternative B**

Under Alternative B, all lands within the Bay planning area would be designated as “open” to OHV use.

**(5) Alternative C**

Under Alternative C, all lands would be designated as “limited” to OHV use, allowing for limitations on OHV activities to protect habitat, soil and vegetation, water quality, cultural resources, and recreation experiences. Additional limitations within the proposed Carter Spit ACEC and Bristol Bay ACEC would be defined through the development of activity plans to meet the objectives of the proposed Special Designations.

**(6) Alternative D**

All lands would be designated as “limited” to OHV use, allowing for limitations on OHV activities to protect habitat, soil and vegetation, water quality, cultural resources, and recreational experiences. Additional limitations within the proposed Carter Spit ACEC would be defined through the development of activity plans to meet the objectives of the proposed Special Management Area.

Tables 2.9 and 2.13 compare the OHV management actions proposed under each Alternative.

**Table 2.9. Comparison of Alternatives – Recreation Management. Off-Highway Vehicles and Recreation Opportunity Spectrum**

| Management Actions  | Alternative A – Current Management   | Alternative B  | Alternative C  | Alternative D – Preferred Alternative  |
|---|--|--|--|--|
| <b>Travel Management on BLM-Managed Unencumbered Lands</b>                                    |  |  |  |  |
| <p><b>Designation of BLM-managed unencumbered lands for Off-Highway-Vehicle (OHV) Use</b></p> | <p>There would be no OHV designations on BLM-managed lands within the planning area.</p>                     | <p>All unencumbered BLM-managed lands within the planning area would be designated as “open” for OHV use.</p> <p>Required Operating Procedures and Stipulations apply to authorized or permitted activities.</p> | <p>All unencumbered BLM-managed lands would be designated as “limited” for OHV use.</p> <p>Vehicle weight limits for OHVs would be 2,000 pounds gross vehicle weight rating (GVWR, includes load capacity). Allowing OHV travel on designated roads and trails vs. existing roads and trails would be addressed through the development of an activity plan if any significant resource impacts are observed.</p> <p>Limitations within the proposed Bristol Bay and Carter Spit ACECs would be defined through the development of activity plans to meet the objectives of the proposed Special Management Area.</p> <p>Required Operating Procedures and Stipulations apply to authorized or permitted activities.</p> | <p>All unencumbered BLM-managed lands would be designated as “limited” to OHV use.</p> <p>Vehicle weight limits for OHVs would be 2,000 pounds gross vehicle weight rating (GVWR, includes load capacity). Allowing OHV travel on existing roads and trails vs. designated roads and trails. The need for designated routes would be addressed through the development of an activity plan if any significant resource impacts are observed.</p> <p>Limitations within the proposed Carter Spit ACEC would be defined through the development of a comprehensive trails and travel management plan within 5 years of signing the ROD.</p> <p>Required Operating Procedures and Stipulations apply to authorized or permitted activities.</p> |
|   | <p>No route restrictions; cross-country travel allowed everywhere on BLM lands within the planning area.</p> | <p>Same as Alternative A.</p>  | <p>The “limited” designation is similar to the State’s “Generally Allowed Uses on State Land,” which requires OHVs to stay on existing trails whenever possible (Appendix H).</p>  | <p>Same as Alternative C.</p>  |

| Management Actions   | Alternative A – Current Management   | Alternative B   | Alternative C  | Alternative D – Preferred Alternative   |
|--|--|---|--|---|
| <p><b>Designation of interim BLM-managed encumbered lands for Off-Highway-Vehicle (OHV) Use</b></p>  | <p>There would be no OHV designations on BLM-managed lands within the planning area.</p> | <p>All interim BLM-managed encumbered lands within the planning area would be designated as “open” for OHV use.</p> <p>Required Operating Procedures apply to authorized or permitted activities.</p> | <p>All interim BLM-managed encumbered lands would be designated as “limited” for OHV use.</p> <p>The “limited” designation is similar to the State’s “Generally Allowed Uses on State Land,” which requires OHVs to stay on existing trails whenever possible (Appendix H).</p> <p>Vehicle weight limits for OHVs would be 2,000 pounds gross vehicle weight rating (GVWR, includes load capacity). Allowing OHV travel on designated roads and trails vs. existing roads and trails. Designated routes would be addressed through the development of an activity plan if any significant resource impacts are observed.</p> <p>Required Operating Procedures apply to authorized or permitted activities.</p> | <p>All interim BLM-managed encumbered lands would be designated as “limited” to OHV use.</p> <p>The “limited” designation is similar to the State’s “Generally Allowed Uses on State Land,” which requires OHVs to stay on existing trails whenever possible (as described in Appendix H).</p> <p>Vehicle weight limits for OHVs would be 2,000 pounds gross vehicle weight rating (GVWR, includes load capacity). Allowing OHV travel on existing roads and trails vs. designated roads and trails. The need for designated routes would be addressed through the development of an activity plan if any significant resource impacts are observed.</p> <p>Required Operating Procedures and Stipulations apply to authorized or permitted activities.</p> |
| <p><b>Recreation Opportunity Spectrum for BLM-Managed Unencumbered Lands</b></p>                     |  |   |  |   |
| <p><b>Designation of BLM-managed unencumbered lands for Recreation Experience Opportunities.</b></p> | <p>Manage as “Semi-Primitive Motorized” under the Recreation Opportunity Spectrum.</p>   | <p>Manage the entire recreation area setting as “Roaded Natural.”</p>   | <p>Same as Alternative A.</p>  | <p>Same as Alternative A.</p>   |

## f) Renewable Energy

### (1) Goals

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

### (2) Alternative A

Currently there are no permits issued for renewable energy facilities. No areas have been classified for hydropower on BLM-managed lands in the Bay planning area. 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

Potential exists for the development of a variety of sources of renewable energy on BLM-managed lands in the Bay planning area, including solar, wind, and biomass renewable energy facilities. No authorizations for these purposes have been issued on BLM-managed lands within the planning area to date, nor has any interest been expressed. BLM would consider applications for permit or lease to conduct such developments on a case-by-case basis, subject to the constraints developed through project-specific NEPA analysis.

#### (b) Land Use Requirements

Permits for development of renewable energy would include Required Operating Procedures, Stipulations and project-specific requirements that minimize impacts to resources. Required Operating Procedures and Stipulations can be found in Appendix A.

## g) Lands and Realty Actions

### (1) Goals

- Meet public needs for use authorizations while minimizing adverse impacts to other resource values.
- Adjust land ownership to consolidate public land holdings, acquire lands with high public resource values, and meet public and community needs.
- Assist with Alaska goal of completing the Alaska Lands Transfer program by established timeframes.
- Satisfy State and local government land use needs as well as public and/or private demonstrated needs as they arise.
- Identify disposal areas based on specific disposal criteria and other evaluation factors identified in this plan.
- Revoke BLM-held withdrawals deemed inappropriate and restore them to the public domain.
- Revoke withdrawals for other agencies at their request, provided that the lands are suitable to be restored to the public domain.

### (2) Alternative A

Under Alternative A, the Lands and Realty program would continue in its current role of supporting other BLM programs, authorizing the use of public lands, and supporting the BLM Alaska State Office in conveyances. No specific lands would be identified for disposal, exchange, or acquisition. Authorizations such as FLPMA leases, permits, and rights-of-way would continue to be dealt with on a case-by-case basis, as would unauthorized uses, such as trespass cabins. Withdrawal review would not occur for

ANCSA 17(d)(1) withdrawals or other smaller administrative withdrawals. Some uses would continue to be constrained by such withdrawals.

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

#### **(a) Land Tenure Adjustments**

Land tenure adjustments could consist of a sale or an exchange. BLM may identify disposal areas by parcel or by specific areas that would be subject to disposal based on the application of the specific disposal criteria (FLPMA, Section 203 or 206) and other evaluation factors (e.g. resource values and concerns, accessibility, public investment, encumbrances, and community needs) identified in this plan. A goal of future adjustments would be to exchange identified isolated parcels of land for those which would help BLM to consolidate its unencumbered lands.

Lands withdrawn under the public land laws or segregated by State or Native selection would not be offered for disposal until such time as the State and Native corporations reach full entitlement.

#### **(b) Entitlement and Settlement**

The BLM Anchorage Field Office will assist in the conveyance of lands pursuant to legislative mandates. These mandates include the Alaska Statehood Act (1958), ANCSA (1971), and the Native Allotment Act (1906).

#### **(c) Sales**

Public lands meeting one or more stated criteria could be disposed of through FLPMA Section 203 (43 CFR 2710). No specific parcels available for sale are identified in this RMP.

#### **What is the R&PP Act?**

The Recreation and Public Purposes (R&PP) Act (43 CFR 2740, as Amended, 2001) authorizes the sale or lease of public lands for recreational or public purposes to State and local governments and to qualified nonprofit organizations. Examples of typical uses under the Act are historic monument sites, campgrounds, schools, fire houses, law enforcement facilities, municipal facilities, landfills, hospitals, parks and fairgrounds. Lands patented under this Act contain a reversionary clause in the patent, requiring continued use for the intended purpose.

#### **(d) Recreation and Public Purposes (R&PP) Act Sales**

Lands identified for disposal under this authority that are selected by either the State or Native corporations would have to be fully adjudicated before BLM would entertain a sale. In order to be analyzed for disposal under the R&PP Act (43 CFR 2740, as amended, 2001), the following conditions must exist:

- Lands must be readily accessible to a qualified applicant.
- The qualified applicant must have a defined purpose for the land and secure funding to develop it.
- R&PP sales would not be implemented on lands withdrawn for another agency without that agency's approval.
- Lands within proposed Special Designations (i.e. SRMA or ACEC) would not be considered available under R&PP, nor would lands acquired by the Federal government for inclusion in the proposed special designation.

- In most instances, BLM would first lease lands under this Act and then sell the lands only after the project is constructed in compliance with an approved development and management plan. An important exception to this would be tracts proposed for projects that may include the disposal, placement, or release of hazardous materials (i.e., sanitary landfills), which would always be sold and go directly to patent; they would not be leased (BLM Handbook H-2740-1, VI, B).
- Application for tracts where hazardous materials would be disposed, placed or released would only be conveyed with a clause that would prohibit reversion to the Federal government.
- Existing leases where the purpose of the lease is to dispose, place or release hazardous materials must be converted to patents containing a clause prohibiting reversion to the Federal government.

No lands in the Bay planning area have been identified for disposal under this authority.

**(e) Recreation and Public Purposes Act Leases**

A lease allows the lessee to conduct authorized activities on BLM lands, for a less than fair market value rent; however, the land remains in Federal ownership. Should the land be patented (authorized for sale), the land would be removed from Federal ownership via a patent with a reversionary clause.

R&PP leases would not be issued for projects that may include the disposal, placement, or release of hazardous materials (i.e., sanitary landfills). In the case of an existing lease where the purpose of the lease is to dispose, place or release hazardous materials, the land must be converted to patent without a reversionary clause, thereby preventing the land from returning to Federal ownership.

**(f) Airport and Airway Improvement Act of September 3, 1982**

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

**(g) Exchanges**

BLM would seek to put in place mutually beneficial public interest land exchanges, which are authorized in Alaska by FLPMA, ANCSA, and ANILCA. Where feasible, BLM will consider land exchanges to resolve issues of split estate ownership of surface and subsurface interests. When considering public interest, full consideration must be given to efficient management of public lands and to secure important objectives including protection of fish and wildlife, cultural resources, and aesthetic values; enhancement of recreational opportunities; consolidation of mineral holdings for more efficient management; expansion of communities; promotion of multiple use values, and fulfillment of public needs. Exchanges would not be pursued until State and Native entitlements are fulfilled. Parcels of land in the Iliamna East block, Iliamna West block and two sections east of Aleknagik have been identified in this RMP/EIS for potential exchange.

**(h) Withdrawals**

Chapter III discusses the numbers and types of withdrawals on BLM lands in the Bay planning area and their purposes. Under all Alternatives, BLM would maintain Agency withdrawals (other than ANCSA 17(d)(1) withdrawals) until the agency for which the land was withdrawn, requested revocation of the withdrawal. Under Alternatives B, C, and D, BLM would revoke ANCSA 17 (d)(1) withdrawals, except that in Alternative C, ANCSA 17(d)(1)s would be retained in the proposed Carter Spit ACEC and three nominated WSRs until Congress had opportunity to act on the nominations.

### (i) Acquisitions

The BLM Anchorage Field Office (AFO) does not anticipate acquiring lands within the Bay planning area during the life of this plan except perhaps through exchange or donations.

### (j) Land Use Authorization and Right-of-Way administration on Selected Lands

A land use authorization is an authorization issued by BLM to use public lands in accordance with section 302 of FLPMA. The two most commonly issued authorizations in the planning area are leases and permits.

A right-of-way is an authorization issued by BLM to use BLM public lands in accordance with Title V of FLPMA or Section 28 of the Mineral Leasing Act.

The State of Alaska and ANCSA Native Corporations have selected BLM-managed lands in the Bay planning area for conveyance. State and Native selections affect BLM's processing of land use authorizations and rights-of-way.

#### Selected and Unencumbered Lands

The term "selected lands" refers to selections on those BLM lands made in Alaska pursuant to the Alaska Statehood Act (1958) and ANCSA (1971). A selection serves to withdraw the lands from all forms of appropriation under the public land laws. Selected lands continue to be managed by BLM, but depending on the selecting entity, BLM is required to obtain concurrence or to seek and consider comments on any authorization to use the lands. The term "unencumbered lands" refers to lands that are managed by BLM without these constraints. To note, the unencumbered lands withdrawn under PLO 5181 unencumbered lands may contain a top filing by the State of Alaska (see Chapter III for topfiling discussion).

- **Native-selected lands.** Prior to issuing a use authorization the views of the Native corporation shall be obtained and considered. Monies received for any use authorization on Native-selected lands would go into an escrow account to be disbursed to the Native corporation upon conveyance.
- **State-selected lands.** In accordance with 906(k) of ANILCA, BLM must receive a letter of concurrence from the State of Alaska prior to issuance of any use authorization. BLM may then incorporate State terms and conditions in the use authorization if they comply with Federal laws and regulations. Money received for any use authorization on State-selected lands would go into an escrow account to be disbursed to the State upon conveyance. If the State objects to the use authorization, BLM would not issue it. If the proposal is for an authorization on land that has been top filed by the State, pursuant to 906(e) of ANILCA, a letter of concurrence is not required because the top filing is not yet a valid right, but a future interest in the land.

#### 1. FLPMA Leases

FLPMA Leases are used to authorize the use of public lands involving substantial construction, development, or land improvement 43 CFR 2920.1-1(a). Stipulations and Required Operating Procedures would apply, and NEPA compliance is necessary for FLPMA Leases.

All FLPMA leases would be at market value rental, or determined according to a rental schedule. Cabins or permanent structures used for private recreation cannot be authorized under this authority. Proposals for leases for commercial use cabins, special use cabins, or subsistence use cabins would be considered on a case-by-case basis. Currently there are no commercial use cabins special use cabins or subsistence use cabins located on BLM lands in the Bay planning area. 43 CFR 2920.1-1 clarifies when a lease, permit, or easement is required.

## 2. FLPMA Permits

FLPMA permits are short-term revocable authorizations to use public lands for a specific purpose (43 CFR 2920.1-1(b)). Permits are also issued at market value rental, or determined according to a rental schedule. According to 43 CFR 2920.2-2, they may be granted for a land use if BLM determines that the use is in conformance with the agency plans, policies, and programs, local regulations, and other requirements, and will not cause appreciable damage or disturbance to the public lands, their resources, or improvements.

In general:

- Cabins or permanent structure permits would not be issued for private recreation purposes.
- Commercial use cabins, special use cabins, or subsistence use cabins may be authorized with short-term (maximum three year) permits renewable at the discretion of BLM. Once the permittee demonstrated conformance to policies and regulations, the Authorized Officer could reissue the authorization as a lease or renew as a permit. (Trapping shelters would be authorized by short-term (three years maximum) FLPMA 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).
- Shelters, tent platforms, and other temporary facilities and equipment used for hunting and fishing are allowed on BLM lands under Section 1316 of ANILCA.

## 3. FLPMA Easements

A FLPMA easement is an authorization for a non-possessory, non-exclusive interest in lands that specifies the rights of the holder and the obligation of BLM to use and manage the land in a manner consistent with the terms of the easement. Each proposal for an easement would be considered on a case-by-case basis and, pursuant to 43 CFR 2920.7, would contain terms and conditions protecting the environment and public health and safety.

## 4. Rights-of-Way

A Right-of-Way is public land authorized to be used or occupied pursuant to a Right-of-Way grant. These grants are non-exclusive and authorize the holder to construct, operate, and maintain a project for a specified use for a specified amount of time. Rental fees for Rights-of-Way are at market value rental, or determined according to a rental schedule. BLM may exempt, waive or reduce rent for a grant under certain circumstances except that there are no reductions or waivers for Mineral Leasing Act authorizations. Construction within new Rights-of-Way would consider valid existing rights and uses.

Rights-of-Way for oil or gas pipelines and their related facilities are issued under the authority of Section 28 of the Mineral Leasing Act (1920). In accordance with 43 CFR 2880, BLM shall place stipulations on these Rights-of-Way requiring:

- Restoration, revegetation, and curtailment of erosion.
- Compliance with air and water quality standards.
- Control or prevention of damage to the environment, to public or private property, and hazards to public health and safety.
- Protection of the subsistence interests of those living along the Right-of-Way.

Stipulations and Required Operating Procedures (Appendix A), and project-specific requirements would apply.

Title V of FLPMA authorizes the issuance of Rights-of-Way for other uses, such as transportation systems (roads and trails), water pipelines and reservoirs, systems for generation and transmission of electric energy (hydro power and wind energy), and various types of communication sites. According to 43 CFR 2800 and ANILCA, BLM may grant such Rights-of-Way provided that:

- The natural resources located on public lands administered by a government agency, where the public lands are adjacent to private or other lands, are protected.
- Undue or unnecessary environmental damage to the lands and resources is prevented.
- The utilization of Rights-of-Way in common with respect to engineering and technological compatibility, national security and land use plans compatibility are promoted.
- Coordination, to the fullest extent possible, takes place with the State, local governments, interested individuals and appropriate non-governmental entities.
- Transportation corridors and communication sites will be considered on a case-by-case basis.

**(k) Unauthorized Use**

Possible management actions with respect to unauthorized cabins (trespass) include removal of the structure, authorization by lease or permit for legitimate uses if they are consistent with identified area objectives, or relinquishment to the U.S. Government for management purposes. If unauthorized cabins become the property of the U.S. Government they can be managed as administrative sites, as emergency shelters, or as public use cabins. Criteria for prioritizing which unauthorized cases would receive the highest consideration are:

- Situations involving new unauthorized construction, public safety, or public complaints
- Areas identified for long-term Federal management
- Selected lands on which resources are being removed without authorization or where resource damage is occurring or the presence of a trespass cabin is holding up a conveyance
- Other selected lands

**(l) 17(b) Easements**

Section 17(b) of ANCSA provided for the reservation of easements across Village and Regional Native corporation lands to provide public access to publicly owned lands or major waterways for the purpose of facilitating transportation; however easements are also reserved for utility, utility purposes, air, light and visibility easements or easements to guarantee international treaty obligations. BLM is responsible for identifying and reserving these easements during the conveyance process in accordance with 43 CFR § 2650.4-7. The management of these easements lies with BLM or, under a Memorandum of Understanding, the appropriate Federal land manager. BLM does not have a similar agreement for transferring easement management to the State of Alaska. Consequently, BLM retains management responsibilities for easements reserved to access State lands.

BLM would continue to administer ANCSA Section 17(b) easements that have been reserved in patents or interim conveyances to ANCSA corporations as staffing and budgets allow. ANCSA 17(b) easement management will be transferred to the NPS or the USFWS for those easements that access lands administered by these agencies or are wholly within the boundaries of the park, preserve, Wild and Scenic River corridor, or refuge. On BLM-managed lands, BLM will continue to locate, mark and sign, GPS survey, map, and monitor ANCSA 17(b) easement locations as staffing and budgets allow. BLM reserves easements to ensure access to Federal, State, and municipal corporation lands as ANCSA conveyances occur. BLM would continue to identify, sign, map, monitor use, and realign ANCSA 17(b) easements, with priority based on:

- Easements with safety hazards.
- Easements accessing lands that are permanently managed by BLM or are important to BLM programs.
- Easements receiving high use.
- Easements required to implement an activity or implementation plan.
- Easements where landowners have made a request to work cooperatively on marking projects.
- Easements where environmental damage is occurring.

**(m) Conservation Easements**

BLM would continue to manage conservation easements for the specific purpose for which they were acquired. Currently there are no conservation easements on BLM-managed lands in the Bay planning area.

**(4) Alternative B**

Under Alternative B five isolated parcels in the planning area would be identified for exchange in order to consolidate BLM long-term holdings. Existing ANCSA 17(d)(1) withdrawals would be revoked. Avoidance or exclusion areas would be identified on a case-by-case basis. Required Operating Procedures and stipulations would apply to permitted activities.

**(5) Alternative C**

Under Alternative C, no lands would be identified for disposal or land exchange. Existing ANCSA 17(d)(1) withdrawals would be revoked, except that those on proposed wild river segments of the Alagnak River, Goodnews River mainstem, and Goodnews River Middle Fork would be retained until Congressional action is completed. The Carter Spit ACEC and the Bristol Bay ACEC would be identified as avoidance areas for Land Use Authorizations. Required Operating Procedures and stipulations would apply to permitted activities.

**(6) Alternative D**

Under Alternative D, as in Alternative B, five isolated parcels in the planning area would be identified for exchange. Existing ANCSA 17(d)(1) withdrawals would be revoked. The Carter Spit ACEC would be identified as an avoidance area for Land Use Authorizations (avoidance areas are defined as areas to be avoided but may be available for location of rights-of-way with special stipulations). Required Operating Procedures and stipulations would apply to permitted activities.

Tables 2.10 and 2.13 provide the comparison of Alternatives for Lands and Realty.

**Table 2.10. Comparison of Alternatives – Lands and Realty**

| <b>Management Actions</b> | <b>Alternative A – Current Management</b>   | <b>Alternative B</b>  | <b>Alternative C</b>   | <b>Alternative D – Preferred Alternative</b> |
|---------------------------|---|---|--|--|
| <b>Withdrawals</b>        | ANCSA 17(d)(1) withdrawals would be retained.<br><br>Withdrawals other than ANCSA 17(d)(1) would be retained (3,970 acres). | ANCSA 17(d)(1) withdrawals would be revoked.<br><br>Agency Withdrawals (other than ANCSA 17(d)(1)) would be retained (3,970 acres). | Same as Alternative B. ANCSA 17(d)(1) withdrawals would be retained on proposed Wild River segments of the Alagnak, Goodnews mainstem, and Goodnews Middle Fork would be retained (12,210 acres) until Congress has opportunity to act on the nominations.<br><br>ANCSA 17(d)(1) withdrawals would be retained on the proposed Carter Spit ACEC (61,251 acres) | Same as Alternative B.                       |

| Management Actions                                      | Alternative A – Current Management   | Alternative B   | Alternative C   | Alternative D – Preferred Alternative   |
|---|--|---|---|---|
| <p><b>Land Use Authorizations and Rights-of-Way</b></p> | <p>Land Use Authorizations: Right-of-Way avoidance areas, or exclusion areas, would be identified on a case-by-case basis.</p> | <p>Same as Alternative A.</p>   | <p>Same as Alternative A.<br/><br/>The proposed Carter Spit ACEC (61,251 acres) and the proposed Bristol Bay ACEC (974,970 acres) would be identified as avoidance areas for Land Use Authorizations.</p> | <p>Same as Alternative A.<br/><br/>The proposed Carter Spit ACEC would be identified as an avoidance area for Land Use Authorizations (36,220 acres).</p> |
| <p><b>Disposal or Land Exchange</b></p>                 | <p>No lands identified for disposal (sale) or land exchange.</p>   | <p>Parcels identified for land exchange:</p> <p>Chekok Creek, T2 and 3S, R30W. (5,749 acres).</p> <p>Chulitna River, T1N, R32W Sec. 21, 22, 23, 28, 31, 32 (3,840 acres).</p> <p>Katmai Boundary T11S R35W Sec. 1. (323 acres).</p> <p>T11S R37W Sec. 2, 3, 4, 9, 10; Sec. 16, 21 portions. (3,533 acres).</p> <p>T11S R44W Sec. 5, 6, 7, 8, 17, 18, 19. (4,415 acres)</p> <p>Aleknagik Vicinity, T10S R53W Sec. 7, 18, if not conveyed out of Federal ownership (1228 acres).</p> <p>T9S R72W Sec. 18. BLM land that is not State-selected but</p> | <p>Same as Alternative A.</p>   | <p>Same as Alternative B.</p>   |

| Management Actions | Alternative A – Current Management | Alternative B   | Alternative C | Alternative D – Preferred Alternative |
|--------------------|------------------------------------|---|---------------|---------------------------------------|
|                    |                                    | <p>may be Top Filed; however, it is not a priority (605 acres).</p> <p>Parcels identified for land exchange or disposal (sale):</p> <p>Aleknagik Vicinity, T10S R55W Sec. 32, U.S. Survey 12403, lots 1 and 2, (5 acres)</p> <p>Clarks Point Vicinity, T14S R55W Sec. 8, (46 acres)</p> <p>Clarks Point Vicinity, T15S R55W Sec. 6,7,18, (25 acres)</p> |               |                                       |

### 3. Special Designations

A detailed description of the criteria and processes for determining special designations can be found in Appendix B of this document.

#### a) Areas of Critical Environmental Concern

##### (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 and wildlife resources or other natural systems or processes through designation of ACECs.

##### (2) Alternative A

Alternative A is a continuation of current management practices. Currently there are no Special Designations placed upon BLM-managed lands in the Bay planning area. Under this Alternative, there would be no designated ACECs.

##### (3) Alternative B

Same as Alternative A.

#### **(4) Alternative C**

Under Alternative C, 1,036,221 acres would be designated as ACECs in two separate areas (Maps 2.31 and 2.32). The proposed ACECs will not encumber any State-selected or Native-selected lands.

Designation of an ACEC 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 management prescription would not attach to conveyed lands. Following adjudication of all selections, the boundaries of Special Designations may be adjusted.

- Additional site-specific monitoring needed to manage ACECs would be a field office priority but based on project proposals and available funding.
- A mining Plan of Operations would be required on any mining activity within an ACEC. Required Operating Procedures and project-specific requirements would be in effect.
- A Comprehensive Trails and Travel Management Plan will be performed within five years after signing of the ROD.
- OHVs would be limited to designated trails.
- The area would be open to leasable mineral entry subject to Required Operating Procedures, Stipulations, seasonal closures, and additional provisions determined through project specific NEPA processes.
- Opening the area to locatable mineral entry but closing it to salable mineral development, subject to Required Operating Procedures and project-specific requirements as determined through project specific NEPA analysis.
- Designating the area as a Right-of-Way avoidance area (Right-of-Way can be available but with special stipulations).
- Livestock grazing would be managed on a case-by-case basis as permits are received.
- Inventories and assessments of biological and habitat resources will be a field office priority determined by available funding and proposed project specific data needs.
- Paleontological resource strategies and priorities specific to the Special Designations would be developed for the proposed ACEC.
- ACEC will be managed as VRM Class III.

##### **(a) Carter Spit ACEC**

The Carter Spit and adjacent spits and wetlands would be designated as an ACEC to include 61,251 acres. ANSCA 17(d)(1) withdrawals would be retained. Should lands adjacent to the ACEC be relinquished from selection, they may be added to the ACEC. This would be performed through a plan amendment at a later date.

##### **(b) Bristol Bay ACEC**

The Bristol Bay blocks of BLM land would be designated as an ACEC to include 974,970 acres, all of which are BLM lands unencumbered by a valid selection currently in place. Should lands adjacent to the ACEC be relinquished from selection, they may be added to the ACEC. This would be performed through a plan amendment at a later date.

#### **(5) Alternative D**

Under this Alternative, 36,220 acres would be designated as an ACEC in one area (Map 2.33).

##### **(a) Carter Spit ACEC**

The Carter Spit and adjacent spits and wetlands would be designated as an ACEC to include 36,220 acres. ANSCA 17(d)(1) withdrawals would be revoked. Should lands adjacent to the ACEC be

relinquished from selection, they may be added to the ACEC. This would be performed through a plan amendment at a later date.

In addition to Required Operating Procedures and Stipulations (Appendix A), measures identified within the ACEC to protect scenic, wildlife, fisheries, botanical, and cultural values would include:

- OHVs would be limited to designated trails.
- The area would be open to leasable mineral entry subject to Required Operating Procedures, Stipulations, seasonal closures, and additional provisions determined through project-specific NEPA analysis.
- The area would be opened to locatable mineral entry but closed to salable mineral development, subject to Required Operating Procedures and project-specific requirements as determined through project specific NEPA analysis.
- The area would be designated as a Right-of-Way avoidance area (Rights-of-Way can be available but with special stipulations).
- Livestock grazing would be managed on a case-by-case basis as permits are received.
- Inventories and assessments of biological and habitat resources will be a field office priority determined by available funding and proposed project specific data needs.
- Paleontological resource strategies and priorities specific to the Special Designations would be developed for the proposed Carter Spit ACEC.
- Carter Spit ACEC will be managed as VRM Class III.
- ROP, SS-1a, SS-1b and SS-2a (Appendix A), would be applied to protect federally-listed migratory bird species.

The preceding information is summarized in Table 2.11 and Table 2.13.

## b) Wild and Scenic Rivers

### (1) Goals

- Identify and recommend for designation any rivers in the planning area that are suitable for designation as components of the National WSR System.
- Identify and develop protection strategies for outstanding river-related values in the planning area.
- Protect water quality.

#### **What is the Role of the RMP Process in the Wild and Scenic River Designation Process?**

BLM identifies rivers in the planning area that are *eligible* and *suitable* for inclusion in the National WSR System.

*Eligibility* is based on the physical attributes of a river. *Eligible* rivers are free-flowing and possess one or more “outstandingly remarkable values” such as exemplary scenery, recreation opportunities, or characteristics that are unusual enough to attract visitors to the region, geologic features that are rare or unique to the region, and regionally or nationally important fish or wildlife.

*Suitability* is a management determination of the appropriateness of adding eligible rivers to the National WSR System. BLM assesses a number of factors, including the manageability of adding the river to the system (cost, legal jurisdiction), support for designation, and the compatibility of designation with other overall management of the area.

If BLM determines that a river is eligible and suitable as part of the National WSR System, it will recommend its designation in the Record of Decision (ROD) for the RMP. The Secretary of the Interior can choose to forward or change the recommendation, and Congress and the President must ultimately decide whether to make the river part of the system.

**(2) Alternative A**

Current management practices will continue under this Alternative. No rivers, river segments, lakes, or streams would be evaluated for eligibility or suitability for inclusion in the National WSR System.

**(3) Alternative B**

Under Alternative B, no rivers found eligible would be recommended as suitable for designation under the Wild and Scenic Rivers Act.

**(4) Alternative C**

Under Alternative C, three river segments, a portion of the Alagnak River, a portion of the Goodnews River mainstem, and a portion of the Goodnews River Middle Fork would be found eligible and suitable for recommendation to Congress for designation as Wild Rivers in the National WSR System (Map 2.34 and 2.35). ANCSA 17(d)(1) withdrawals would be retained at these locations until Congress had an opportunity to act on the recommendation, precluding oil, gas, and solid mineral exploration or development.

**(5) Alternative D**

Alternative D would be the same as Alternative B.

The rationale for not carrying the eligible and suitable rivers identified in Alternative C forward to Alternative D is due to the complexity of managing three river segments located where there is a patchwork of land ownership, where the proposed water bodies are short segments of larger rivers, and (based on formal scoping) where there is a demonstrated lack of support by residents using the rivers.

Recommendations for Wild and Scenic River (WSR) designation under each Alternative are summarized in Tables 2.11 and 2.13.

**Table 2.11. Comparison of Alternatives – Special Management Areas.**

| Management Actions                 | Alternative A (Current Management)                    | Alternative B  | Alternative C  | Alternative D (Preferred Alternative) |
|------------------------------------|---|--|--|---------------------------------------|
| <b>Recreation Management Areas</b> | No recreation management areas would be established.  | All BLM lands in the Bay planning area would be managed as an Extensive Recreation Management Area.  | Same as Alternative B.   | Same As Alternative B.                |
| <b>Wild and Scenic Rivers</b>      | No National System designations would be recommended. | The following eligible river segments would not be found suitable for inclusion to the National WSR System:<br><b>Bristol Bay Region</b><br>Alagnak River, | The following eligible river segments would be found suitable for inclusion to the National WSR System<br><b>Bristol Bay Region</b><br>Alagnak River, portion (Wild, Recreational)(662 acres)<br><b>Goodnews Bay</b> | Same as Alternative B.                |

| Management Actions                            | Alternative A (Current Management)   | Alternative B  | Alternative C  | Alternative D (Preferred Alternative)  |
|---|--|--|--|--|
|   |  | portion (Wild, Recreational)(662 acres)<br><b>Goodnews Bay Region</b> (Map 2.35):<br>Goodnews River, mainstem (Wild)(7,737 acres)<br>Goodnews River, middle fork, portion (Wild)(7,926 acres). | <b>Region</b> (Map 2.35):<br>Goodnews River, mainstem (Wild)(7,737 acres)<br>Goodnews River, middle fork, portion (Wild)(7,926 acres).<br><br>ANCSA 17 (d)(1) withdrawals for these river segments would be retained as an interim measure to provide an opportunity for Congressional action. |  |
| <b>Area of Critical Environmental Concern</b> | No Areas of Critical Environmental Concern would be recommended.   | Same as Alternative A.   | The following areas of unencumbered BLM land would be proposed as Areas of Critical Environmental Concern <ul style="list-style-type: none"> <li>Bristol Bay ACEC (974,970 acres)</li> <li>Carter Spit ACEC, retain ANCSA 1 (d)(1) withdrawals (61,251 acres)</li> </ul>                       | The following area of unencumbered BLM land would be proposed as an Area of Critical Environmental Concern. <ul style="list-style-type: none"> <li>Carter Spit ACEC (36,220 acres).</li> </ul> |
| <b>Wildlife and Wildlife Habitat</b>          | BLM would manage wildlife habitat and address concerns on a case-by-case basis during review of permits. |  | Same as Alternative A. Inventory and monitoring efforts of wildlife and wildlife habitat will be a field office priority but determined by available funding.  |  |

## 4. Social and Economic

### a) Public Safety: Abandoned Mine Lands and Hazardous Materials

#### (1) 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 hazardous materials standards and meet all Federal and State mandates, laws, Executive Orders, regulations and policies.
- 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.

## **(2) Alternative A**

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 Southwest MFP does not provide any guidance on hazardous materials management or abandoned mine lands.

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

#### **(a) Management Decisions**

- Impacts caused by past hazardous materials management on BLM lands will be mitigated subject to the availability of funds.
- BLM will prevent creation of new hazardous material sites through implementation of best management practices for all land use permits, leases, ROW, and mining claims and will include pollution prevention measures in all permits, leases, and grants of ROW.

#### **(b) Land Use Requirements**

BLM will coordinate and consult with appropriate regulatory agencies for all cleanup plans, and will notify and coordinate hazardous materials activities with specific Native Corporations on Native-selected lands.

## **b) Subsistence**

### **(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 subsistence opportunities, resources, and the socio/economic environment.
- Maintain sufficient quality and quantity of habitat to support healthy populations of important subsistence species of fish and wildlife.
- BLM will effectively manage subsistence harvests through regulations established by the Federal Subsistence Board, and in cooperation with ADF&G, other Federal agencies, the Subsistence Regional Advisory Councils, and the subsistence users.
- 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 due to permitted activities.
- Avoid user conflicts over multiple use resources. Involve subsistence users in issue identification and conflict resolution.

### **(2) Alternative A**

Under this Alternative, BLM would continue to manage subsistence in accordance with sec. 802 of ANILCA. Before 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 Southwest MFP (1981), applicable to the Goodnews planning block only, does not provide any specific direction on subsistence management. However, the decisions 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.

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

The opportunity for subsistence uses by rural residents on Federal public lands in Alaska is assured by law [sec. 802(1) of ANILCA]. Decisions made within this RMP will not affect BLM's role in administration of subsistence on Federal public lands. Under all Alternatives, BLM will continue to carry out or participate in the following administrative functions:

- **Involve Subsistence Users in Issues Identification.** Ten Subsistence Regional Advisory Councils (SRACs) were established in Section 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. The Bay planning area encompasses parts of the Bristol Bay and Yukon Kuskokwim Delta Federal Subsistence Regions. BLM field staff members as well as those of other agencies meet twice each year with both Subsistence Regional Advisory Councils to identify emerging issues in conservation, allocation, and appropriate regulation of subsistence harvests.
- **Manage Land/Habitat; Assess Impacts to Subsistence.** ANILCA Section 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.
- **In a Multi-agency Setting, Monitor Resource Populations Used 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.
- BLM will work cooperatively with ADF&G and other Federal agencies to implement the Mulchatna Caribou Herd Monitoring Plan, the Western Brown Bear Management Area planning group, the Unit 18 Goodnews/Arolik Moose Moratorium and Restoration Plan, the migratory bird MOU, Boreal Partners in Flight Conservation Plan, and other cooperative management efforts of which BLM is a part.
- **In a Multi-agency Setting, Manage Subsistence Harvests through regulations established by the Federal Subsistence Board.** With heavy reliance on SRAC input and interagency coordination, the development of subsistence regulations is a multi-step process.

### **(4) Land Use Requirements**

- BLM will consult with USFWS and NMFS under Section 7 of the ESA for all actions that may affect listed species or designated critical habitat, or confer if actions are likely to jeopardize the continued existence of a proposed species or result in the destruction or adverse modification of proposed critical habitat.
- All permitted activities would operate under the Stipulations, Required Operating Procedures, and Standard Lease Terms provided 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 listed in Appendix A.

## E. Comparison of Alternatives

Table 2.12. Alternative Summary Table

|                                  | Alternative A - Current Management   | Alternative B  | Alternative C  | Alternative D - Preferred  |
|----------------------------------|--|--|--|--|
| <b>Fish and Wildlife Habitat</b> | Proposed permitted or authorized uses analyzed through the NEPA process on a case-by-case basis. Mitigation measures developed to minimize impacts from proposed activities would be included in the permit that authorized use. | Same as Alternative A. Stipulations, Required Operating Procedures, and project-specific requirements would apply. | <p>Same as Alternative B. Stipulations, Required Operating Procedures, and project-specific requirements would apply.</p> <p>For Fluid Leasable Minerals, Goodnews, Koggiling Creek, Yellow Creek, Kvichak, Iliamna West, Alagnak, and Klutuk Creek planning blocks would be open to leasing subject to seasonal restrictions or other constraints.</p> <p>A 300-ft. minimum setback on unencumbered BLM lands on segments of the East and South Fork Arolik River, Faro Creek, and South Fork Goodnews River and Klutuk Creek would be required (ROP FW-6a).</p> <p>This setback would protect riparian areas and soils adjacent to sensitive habitat for salmon and freshwater fish.</p> | <p>Same as Alternative B. Stipulations, Required Operating Procedures, and project-specific requirements would apply.</p> <p>For Fluid Leasable Minerals, Goodnews, Koggiling Creek, Yellow Creek, Kvichak, Iliamna West, Alagnak, and Klutuk Creek planning blocks would be open to leasing subject to seasonal restrictions or other constraints.</p> <p>A 300-ft. minimum setback on BLM unencumbered lands on segments of the East and South Fork Arolik River, Faro Creek, and South Fork Goodnews River and Klutuk Creek would be required (ROP FW-6a).</p> <p>This setback would protect riparian areas and soils adjacent to sensitive habitat for salmon and freshwater fish.</p> |

|   |                            | Alternative A - Current Management   | Alternative B  | Alternative C   | Alternative D - Preferred  |
|---|----------------------------|--|--|---|--|
| <b>Fire Management and Ecology</b>                      |                            | This Alternative allows wildland fire use and fuels treatments to meet land use and resource management objectives, reduce the risk and costs of wildland fires and supports interagency collaboration.  | Same as Alternative A. Required Operating Procedures would apply.        | Same as Alternative A. Required Operating Procedures would apply. Fire strategies would be designated that support the management objectives for Carter Spit and Bristol Bay ACECs and wild and scenic river corridors.   | Same as Alternative A. Required Operating Procedures would apply. Fire management for the Carter Spit ACEC would support the management objectives.  |
| <b>Cultural and Paleontological Resource Management</b> |                            | This Alternative would identify, protect, and preserve significant cultural and paleontological resources; and manage cultural and paleontological resources for a variety of scientific, conservation, public education, interpretation, traditional, and experimental use. | Same as Alternative A.   | Same as Alternative A. An inventory of cultural and paleontological resources would be a field office priority for the proposed Carter Spit and Bristol Bay ACECs pursuant to available funding.  | Same as Alternative A. An inventory of cultural and paleontological resources would be a field office priority for the proposed Carter Spit ACEC pursuant to available funding.  |
| <b>Visual Resource Management</b>                       | <b>VRM Classifications</b> | No VRM Classes would be established within the Bay planning area.  | All lands within the Bay planning area would be managed as VRM Class IV. | BLM lands in the full visible foreground based on GIS analysis up to 5 miles from established winter trail/road systems would be managed as VRM Class III including:<br><br>Goodnews planning block: <ul style="list-style-type: none"> <li>• Goodnews to Quinhagak coastal and Arolik River routes</li> <li>• Goodnews Bay to Dillingham</li> </ul> Nushagak/Kvichak/Alagnak Drainages | BLM lands in the full visible foreground based on GIS analysis up to 1/2 mile from established winter trail/road systems would be managed as VRM Class III including:<br><br>Goodnews planning block: <ul style="list-style-type: none"> <li>• Goodnews to Quinhagak coastal and Arolik River routes</li> <li>• Goodnews Bay to Dillingham</li> </ul> Nushagak/Kvichak/Alagnak Drainages |

|  |  | Alternative A - Current Management | Alternative B | Alternative C  | Alternative D - Preferred   |
|--|--|------------------------------------|---------------|--|---|
|  |  |                                    |               | <ul style="list-style-type: none"> <li>• Dillingham to Aleknagik</li> <li>• Dillingham to Koliganek</li> <li>• Ekwok to Naknek</li> <li>• New Stuyahok to Levelock</li> <li>• Naknek to King Salmon</li> </ul> <p>BLM lands in the full visible foreground up to 5 miles from main river travel routes would be managed as VRM Class III including the navigable portions of:</p> <p>Goodnews planning block:</p> <ul style="list-style-type: none"> <li>• North Fork Goodnews River</li> <li>• Middle Fork Goodnews River</li> <li>• South Fork Goodnews River</li> <li>• East Fork Arolik River</li> </ul> <p>Nushagak/Kvichak/Alagnak Drainage</p> <ul style="list-style-type: none"> <li>• Nushagak River</li> <li>• Kvichak River</li> <li>• Lower Mulchatna River</li> <li>• Alagnak Wild River</li> </ul> <p>BLM lands in the full visible foreground up to five miles from the boundaries of Togiak NWR, Becharof NWR, Katmai NPP, and Lake Clark NPP would be managed as VRM Class III. All other BLM lands would be managed as VRM Class IV.</p> | <ul style="list-style-type: none"> <li>• Dillingham to Aleknagik</li> <li>• Dillingham to Koliganek</li> <li>• Ekwok to Naknek</li> <li>• New Stuyahok to Levelock</li> <li>• Naknek to King Salmon</li> </ul> <p>BLM lands in the full visible foreground up to 1/2 mile from main river travel routes would be managed as VRM Class III including the navigable portions of:</p> <p>Goodnews planning block:</p> <ul style="list-style-type: none"> <li>• North Fork Goodnews River</li> <li>• Middle Fork Goodnews River</li> <li>• South Fork Goodnews River</li> <li>• East Fork Arolik River</li> </ul> <p>Nushagak/Kvichak/Alagnak Drainage</p> <ul style="list-style-type: none"> <li>• Nushagak River</li> <li>• Kvichak River</li> <li>• Lower Mulchatna River</li> <li>• Alagnak Wild River</li> </ul> <p>BLM lands in the full visible foreground up to one mile from the boundaries of Togiak NWR, Becharof NWR, Katmai NPP, and Lake Clark NPP would be managed as VRM Class III. All other BLM lands would be managed as VRM Class IV.</p> |

|                                       |  | Alternative A - Current Management  | Alternative B   | Alternative C   | Alternative D - Preferred  |
|---------------------------------------|--|---|---|---|--|
|                                       | <b>VRM Classifications in Special Mgmt Areas</b>                           |   | Proposed Carter Spit and Bristol Bay ACECs would be managed as VRM Class III  | Proposed Carter Spit and Bristol Bay ACECs would be managed as VRM Class III.<br><br>Proposed National WSR Alagnak River and Kvichak River (Wild, Recreational) would be managed as VRM Class III.<br><br>Proposed National WSR Goodnews River and Middle Fork Goodnews River (Wild) would be managed as VRM Class III. | Proposed Carter Spit ACEC would be managed as VRM Class III.   |
| <b>Livestock and Reindeer Grazing</b> |  | Alternative A would continue current management. Livestock grazing would be managed on a case-by-case basis as permits were received. Livestock permitted would be limited to reindeer.                     | Same as Alternative A. Permits subject to Required Operating Procedures.  | Same as Alternative B.  | Same as Alternative B.   |
| <b>Fluid Leasable Minerals</b>        | <b>Areas Open to Fluid Mineral Leasing Subject to Standard Lease Terms</b> | No BLM-managed lands would be open for fluid mineral leasing.   | 1,103,138 acres unencumbered BLM lands, and possibly 820,627 acres of State- or Native-selected lands if relinquished from current selection. | 1,063,129 acres of unencumbered BLM lands, and possibly 785,341 acres of State- or Native-selected lands if relinquished from current selection.  | 1,101,304 acres BLM-managed lands, and possibly 817,464 acres of State- or Native-selected lands if relinquished from current selection. |
| <b>Fluid Leasable Minerals</b>        |  | Notwithstanding the provisions listed within this management action, BLM may lease lands in cases where oil and gas is being drained from the Federal subsurface estate by wells drilled on adjacent lands. |   |   |  |

|   | Alternative A - Current Management  | Alternative B  | Alternative C  | Alternative D - Preferred   |
|---|---|--|--|---|
|   | Oil and Gas Stipulations and Required Operating Procedures described in Appendix A apply to all BLM-managed lands in the Bay planning area open to oil and gas leasing. |  |  |   |
| <p style="text-align: center;"><b>Areas Closed to Fluid Mineral Leasing</b></p> | <p>All BLM lands would be closed to fluid mineral leasing.</p>  | <p>Existing Agency withdrawals of approximately 3,318 acres would remain withdrawn from fluid mineral leasing.</p> | <p>Approximately 76,779 acres of unencumbered BLM lands.</p> <p>Existing Agency withdrawals of approximately 3,318 acres would remain withdrawn from fluid mineral leasing.</p> <p>Proposed Wild River segments of the Alagnak, Goodnews and Goodnews Middle Fork rivers (12,210 acres). ANCSA 17(d)(1) withdrawals would be retained for these river segments as an interim measure to provide an opportunity for Congressional action.</p> <p>ANCSA 17 (d)(1) withdrawals would be retained for Carter Spit ACEC (61,251 acres).</p> | <p>Existing Agency withdrawals (3,318 acres) would remain withdrawn from fluid mineral leasing.</p> |

|                         |   | Alternative A - Current Management   | Alternative B   | Alternative C   | Alternative D - Preferred   |
|-------------------------|---|--|---|---|---|
| Fluid Leasable Minerals | Areas Open to Fluid Mineral Leasing Subject to Seasonal Constraints | No Federal leases would occur on BLM-managed lands within the Bay planning area. | No acres are subject to seasonal or other minor constraints.<br><br>Stipulations #6, #7 and #9 and ROPs FW-3b and FW-3d (Appendix A) do not apply under this Alternative. | Bristol Bay ACEC (973,862 acres)<br><br>To protect caribou habitat, Stipulations #6 and #7 and ROPs FW-3b, and FW-3d (Appendix A) would apply under this Alternative.   | Carter Spit ACEC (36,220 acres) ROPs SS-1a, 1b, and SS-2a would apply to protect habitat for federally-listed migratory bird species. (Appendix A).<br><br>To protect caribou habitat, Stipulations #6 and #7 and ROPs FW-3b, and FW-3d (Appendix A) would apply under this Alternative.  |
|                         | Areas Open to Fluid Mineral Leasing Subject to No Surface Occupancy | No Federal leases would occur on BLM-managed lands within the planning area.     | 0 acres.<br><br>Stipulations #6 and #7 and ROPs FW-3b, and FW-3d (Appendix A) do not apply under this Alternative   | 1,834 acres.<br><br>Stipulation #9 (Appendix A) would apply under this alternative. 300-ft. NSO buffer on either side of the East and South Forks of the Arolik River, Faro Creek, South Fork Goodnews River, and Klutuk Creek. This setback would protect riparian areas and soils adjacent to sensitive habitat for salmon and freshwater fish. | 1,834 acres.<br><br>Stipulation #9 (Appendix A) would apply under this alternative. 300-ft. NSO buffer on either side of the East and South Forks of the Arolik River, Faro Creek, South Fork Goodnews River, and Klutuk Creek. This setback would protect riparian areas and soils adjacent to sensitive habitat for salmon and freshwater fish. |

|                                  | Alternative A - Current Management   | Alternative B  | Alternative C  | Alternative D - Preferred   |
|----------------------------------|--|--|--|---|
| <p><b>Locatable Minerals</b></p> | <p>138,627 acres of BLM lands would be identified as open for locatable mineral entry.</p> <p>Within the Bay planning area, approximately 3,968 acres would remain withdrawn from mineral entry due to Agency withdrawals.</p> | <p>ANCSA 17(d)(1) withdrawals would be revoked.</p> <p>Approximately 1,102,489 acres of unencumbered lands would be available for locatable mineral entry.</p> <p>Within the Bay planning area, approximately 3,968 acres would remain withdrawn from mineral entry due to Agency withdrawals.</p> | <p>1,064,313 acres of BLM unencumbered lands would be open to locatable mineral activities.</p> <p>The following lands would be closed to locatable mineral entry:<br/>                     ANCSA 17(d)(1) withdrawals for these river segments would be retained on proposed wild river segments, Alagnak, Goodnews mainstem, and Goodnews Middle Fork (12,210 acres), as an interim measure to provide an opportunity for Congressional action.<br/>                     ANCSA 17(d)(1) withdrawals would be retained within the proposed Carter Spit ACEC (61,251 acres).<br/>                     ROP FW-6a, which establishes additional protective measures within 300-feet on either side of the East and South Forks of the Arolik River, Faro Creek, South Fork Goodnews River, and Klutuk Creek. This setback would protect riparian areas and soils adjacent to sensitive habitat for salmon and freshwater fish.</p> <p>Within the Bay planning area, approximately 3,968 acres would remain withdrawn from mineral entry due to Agency withdrawals.</p> | <p>Same as Alternative B, except 1,102,313 acres of unencumbered BLM land would be available for locatable mineral activities.</p> <p>Proposed Carter Spit ACEC (36,220 acres) would be open to locatable mineral activities. ROPs SS-1a, 1b, and SS-2a would apply to protect habitat for federally-listed migratory bird species.</p> <p>Approximately 3,968 acres would remain withdrawn from mineral entry due to Agency withdrawals.</p> <p>ROP FW-6a, which establishes additional protective measures within 300-feet on either side of the East and South Forks of the Arolik River, Faro Creek, South Fork Goodnews River, and Klutuk Creek. This setback would protect riparian areas and soils adjacent to sensitive habitat for salmon and freshwater fish.</p> |

|                         | Alternative A - Current Management   | Alternative B  | Alternative C  | Alternative D - Preferred  |
|-------------------------|--|--|--|--|
|                         | Approved Plans of Operation would contain stipulations based on site-specific resource concerns.   | Same as Alternative A, with the addition that an approved Plan of Operations will contain guidelines as listed in the Required Operating Procedures in Appendix A.   |  |  |
| <b>Salable Minerals</b> | <p>Approximately 1,163,594 acres of unencumbered lands would be available for sale of mineral materials.</p> <p>Selected lands would be made available if the selection were revoked or relinquished.</p> <p>Within the Bay planning area, approximately 3,968 acres would remain withdrawn from mineral entry due to Agency withdrawals</p> | <p>Approximately 1,102,484 acres of unencumbered lands would be available for sale of mineral materials.</p> <p>Selected lands would be made available if the selection were revoked or relinquished.</p> <p>Within the Bay planning area, approximately 3,968 acres would remain withdrawn from mineral entry due to Agency withdrawals</p> | <p>115,163 acres of unencumbered BLM lands would be available for salable mineral activities.</p> <p>Same as Alternative A, except the following lands would be closed to sale:</p> <ul style="list-style-type: none"> <li>Proposed Carter Spit ACEC (61,251 acres)</li> <li>Proposed Bristol Bay ACEC (974,970 acres)</li> <li>Proposed Wild river segments of the Alagnak, Goodnews mainstem, and Goodnews Middle Fork (12,210 acres).</li> </ul> <p>Approximately 3,968 acres would remain withdrawn from mineral entry due to Agency withdrawals.</p> <p>ROP FW-6a would apply under this Alternative. (Appendix A).</p> | <p>1,100,654 acres of BLM unencumbered lands would be available for salable mineral activities.</p> <p>The following lands would be closed to sale:</p> <ul style="list-style-type: none"> <li>Proposed Carter Spit ACEC (36,220 acres)</li> </ul> <p>Approximately 3,968 acres would remain withdrawn from mineral entry due to Agency withdrawals.</p> <p>ROP FW-6a would apply under this Alternative. (Appendix A)</p> |

|  |  | Alternative A - Current Management   | Alternative B   | Alternative C   | Alternative D - Preferred  |
|--|--|--|---|---|--|
|  |  | Approved Plans of Operation would contain stipulations based on site-specific resource concerns. | Same as Alternative A, with the addition that approved Plans of Operations would contain guidelines as listed in the Required Operating Procedures in Appendix A. |   |  |
| <b>OHV Designation BLM-Managed Lands</b> |  | There would be no OHV designations on BLM-managed lands within the planning area.                | All unencumbered BLM-managed lands within the planning area would be designated as "open" for OHV use.  | <p>All unencumbered BLM-managed lands would be designated as "limited" for OHV use.</p> <p>All interim BLM-managed encumbered lands would be designated as "limited" for OHV use.</p> <p>The "limited" designation is the similar to the "Generally Allowed Uses on State Land," which among other things, requires OHVs to stay on existing trails whenever possible (Appendix H).</p> | <p>All unencumbered BLM-managed lands would be designated as "limited" to OHV use.</p> <p>All interim BLM-managed encumbered lands would be designated as "limited" for OHV use.</p> <p>The "limited" designation is similar to the "Generally Allowed Uses on State Land," which among other things requires OHVs to stay on existing trails whenever possible (as described in Appendix H).</p> <p>Limitations within the proposed Carter Spit ACEC would be defined through the development of activity plans to meet the objectives of the proposed Special Management Area.</p> |

|   |                                  | Alternative A - Current Management  | Alternative B  | Alternative C   | Alternative D - Preferred |
|---|----------------------------------|---|--|---|---------------------------|
|   |                                  | No route restrictions; cross-country travel allowed everywhere on BLM lands within the planning area. | Same as Alternative A.   | OHV use would be limited to existing roads and trails. This limitation is the same as the <i>Generally Allowed Uses on State Land</i> , which requires OHVs to stay on existing trails whenever possible. | Same as Alternative C.    |
| <b>ROS Classification for BLM-Managed Lands</b> |                                  | Manage as “Semi-Primitive Motorized” under the Recreation Opportunity Spectrum.                       | Manage the entire recreation area setting as Roaded Natural.   | Same as Alternative A   | Same as Alternative A.    |
| <b>Lands and Realty</b>                         | <b>Disposal or Land Exchange</b> | No lands would be identified for disposal (sale) or land exchange.                                    | <p>Parcels would be identified for land exchange:</p> <p>Chekok Creek, T2 and 3S, R30W. (5,749 acres).</p> <p>Chulitna River, T1N, R32W Sec. 21, 22, 23, 28, 31, 32 (3,840 acres).</p> <p>Katmai Boundary T11S R35W Sec. 1. (323 acres).</p> <p>T11S R37W Sec. 2, 3, 4, 9, 10; Sec. 16, 21 portions. (3,533 acres).</p> <p>T11S R44W Sec. 5, 6, 7, 8, 17, 18, 19. (4,415 acres)</p> <p>Aleknagik Vicinity, T10S R53W Sec. 7, 18, if not conveyed out of Federal ownership (1,228 acres).</p> | Same as Alternative A.  | Same as Alternative B.    |

|  |                    | Alternative A - Current Management   | Alternative B  | Alternative C  | Alternative D - Preferred     |
|--|--------------------|--|--|--|-------------------------------|
|  |                    |  | <p>T9S R72W Sec. 18. BLM land that is not State-selected but may be Top Filed; however, it is not a priority (605 acres).</p> <p>Parcels identified for land exchange or disposal (sale):</p> <p>Aleknagik Vicinity, T10S R55W Sec. 32, U.S. Survey 12403, lots 1 and 2, (5 acres)</p> |  |                               |
|  | <b>Withdrawals</b> | <p>ANCSA 17(d)(1) withdrawals would be retained.</p> <p>Withdrawals other than ANCSA 17(d)(1) would be retained (3,970 acres).</p> | <p>ANCSA 17(d)(1) withdrawals would be revoked.</p> <p>Agency Withdrawals (other than ANCSA 17(d)(1)) would be retained (3,970 acres).</p>   | <p>Same as Alternative B, except:</p> <p>Existing ANCSA 17(d)(1) withdrawals on proposed wild river segments of the Alagnak, Goodnews mainstem, and Goodnews Middle Fork would be retained until Congressional action is completed (12,210 acres).</p> <p>Withdrawals other than ANCSA 17(d)(1) would be retained (3,970 acres).</p> | <p>Same as Alternative B.</p> |

|  |  | Alternative A - Current Management  | Alternative B  | Alternative C  | Alternative D - Preferred  |
|--|--|---|--|--|--|
|  | <b>Land Use Authorizations and Rights-of-Way</b> | Land Use Authorizations: Right-of-Way avoidance areas, or exclusion areas, would be identified on a case-by-case basis. | Same as Alternative A.   | Same as Alternative A.<br><br>The proposed Carter Spit ACEC (61,251 acres) and the proposed Bristol Bay ACEC (974,970 acres) would be identified as avoidance areas for Land Use Authorizations. | Same as Alternative A.<br><br>The proposed Carter Spit ACEC would be identified as an avoidance area for Land Use Authorizations (36,220 acres). |
|  | <b>Recreation Management Areas</b>               | No Recreation Management Areas would be established.  | All BLM lands in the Bay planning area would be managed as an Extensive Recreation Management Area (Appendix C). | Same as Alternative B  | Same as Alternative B  |

|                                      |  | Alternative A - Current Management  | Alternative B  | Alternative C  | Alternative D - Preferred   |
|--------------------------------------|--|---|--|--|---|
| Special Management Area Designations | Wild and Scenic Rivers                 | No National System designations would be recommended.   | The following eligible river segments would not be found suitable for inclusion to the National WSR System:<br><b>Bristol Bay Region</b><br>Alagnak River, portion (Wild, Recreational)(662 acres)<br><b>Goodnews Bay Region</b><br>(Map 2.35):<br>Goodnews River, mainstem (Wild)(7,737 acres)<br>Goodnews River, middle fork, portion (Wild)(7,926 acres). | The following eligible river segments would be found suitable for inclusion to the National WSR System<br><b>Bristol Bay Region</b><br>Alagnak River, portion (Wild, Recreational)(662 acres)<br><b>Goodnews Bay Region</b><br>(Map 2.35):<br>Goodnews River, mainstem (Wild)(7,737 acres)<br>Goodnews River, middle fork, portion (Wild)(7,926 acres).<br><br>ANSCA 1 (d)(1) withdrawals for these river segments would be retained as an interim measure to provide an opportunity for Congressional action. | Same as Alternative B   |
|                                      | Area of Critical Environmental Concern | No Areas of Critical Environmental Concern would be recommended.  | The following areas of unencumbered BLM land* would be proposed as Areas of Critical Environmental Concern:  | The following areas of unencumbered BLM land* would be proposed as Areas of Critical Environmental Concern:<br><ul style="list-style-type: none"> <li>• Carter Spit ACEC (61,251 acres)</li> <li>• Bristol Bay ACEC (974,970 acres)</li> </ul>   | The following area of unencumbered BLM land* would be proposed as an Area of Critical Environmental Concern:<br><ul style="list-style-type: none"> <li>• Carter Spit ACEC (36,220 acres)</li> </ul> |
|                                      |  | *Should the contiguous block of selected land adjacent to the proposed ACECs be returned to BLM administration, a portion of it may be included in the ACECs. |  |  |   |

**Table 2.13. Summary and Comparison of Effects on Resources by Alternative**

| Alternative A   | Alternative B   | Alternative C  | Alternative D  |
|---|---|--|--|
| <b>Effects to Air Quality</b>   |   |  |  |
| <p>Much of the Bay planning area is designated as unclassifiable, with regard to air resources (USEPA 2004a). Impacts to air quality would be low and air quality should remain good throughout the planning area. Leasable mineral exploration and development would not occur; some locatable mineral exploration and development would be possible. Smoke from wildland fire would have short-term effects on air quality and visibility. This alternative predicts actual mining disturbance of 23 acres on BLM-managed lands. This limited amount of mining may have localized impacts on air quality due to dust and airborne deposition of heavy metals.</p>   | <p>Alternative B may result in a greater magnitude of impacts due to potential locatable mineral development or OHV activity. This alternative predicts that natural gas development could occur in the Kogginging Creek planning block, potentially leading to air quality impacts from the emissions of hydrocarbons and windborne particulates. Flaring, a flow test, would contribute gaseous byproducts of combustion briefly during the test. Impacts from OHV activity will be localized and would be expected to dissipate quickly. This alternative predicts actual mining disturbance of 115 acres on BLM-managed lands. This amount of mining may have localized impacts on air quality due to dust and airborne deposition of heavy metals. Smoke from wildland fire would have short-term effects on air quality and visibility.</p> | <p>Impacts to air quality would be low and air quality should remain in attainment throughout the planning area. Both locatable mineral development and natural gas development could occur and impacts from these activities would be the same, including wind-blown particulates, smoke and exhaust. Flaring, a flow test used in natural gas development, would contribute gaseous byproducts of combustion briefly during the test. Smoke from wildland fire would have short-term effects on air quality and visibility. There might be an increase in OHV activity; effects would be localized and temporary. This alternative predicts actual mining disturbance on 43 acres on BLM-managed lands. This limited amount of mining may have localized impacts on air quality due to dust and airborne deposition of heavy metals.</p> | <p>The level of impact would be similar to Alternative B. Impacts to air quality would be low and air quality should remain in attainment throughout the planning area. Both locatable mineral development and natural gas development could occur, and impacts from these activities would be the same, including wind-blown particulates, smoke and exhaust. Flaring, a flow test used in natural gas development, would contribute gaseous byproducts of combustion briefly during the test. Smoke from wildland fire would have short-term effects on air quality and visibility. There might be an increase in OHV activity associated with resource development; effects would be localized and temporary.</p> |
| <p><b>Cumulative Effects:</b> Cumulative air quality impacts may result from the emissions of hydrocarbons or gaseous byproducts of combustion, which may add to the region's atmosphere increased concentrations of specific pollutants, or may contribute to chemical reactions that form ozone, which may degrade air quality. However, only one small natural gas project is proposed for BLM lands in the planning area over the life of the plan. Ambient air quality in western Alaska is relatively pristine, and it is expected that it will remain so for the foreseeable future. Projects for development of locatable minerals on BLM lands are expected to be small; however, other large mining projects are proposed in the area, and cumulatively could contribute to increased wind-borne particulates including heavy metals and other hazardous materials. Development of infrastructure, including regional roads and access would have impacts throughout the area of activity, including increased airborne particulates, especially during construction.</p> |   |  |  |
| <b>Effects to Water Resources</b>   |   |  |  |
| <p>Impacts to water resources would remain low. No leasable mineral</p>   | <p>Impacts to water resources would remain low, but would be higher</p>   | <p>Impacts to water resources would remain low, but might be slightly</p>  | <p>Impacts to water resources would remain low, but might be higher than</p>   |

| Alternative A  | Alternative B  | Alternative C  | Alternative D  |
|--|--|--|--|
| <p>exploration or development would occur. Approximately 5% of BLM-managed lands would be open to locatable mineral development. The most likely mineral development to occur would be placer mining, but it is only predicted to occur on 23 acres of BLM-managed lands under this alternative. Disturbance to soil could result in soil erosion, sedimentation and turbidity of water bodies. Other effects could include ponding, diversion or blockage of stream flow, water contamination by human waste or a variety of toxic chemicals, and alteration of natural lake chemistry. OHV use for stream crossings may cause streambank erosion, sedimentation and turbidity.</p>   | <p>than in Alternative A. Leasable mineral exploration would most likely occur in the Koggiling Creek planning block. Water resources would be drawn from nearby streams or lakes for the operation. Except for withdrawals other than 17(d)(1), unencumbered BLM lands are open for locatable mineral exploration and development. The most likely mineral development to occur would be placer mining in the Goodnews planning block, with a total predicted disturbance of 115 acres on BLM-managed lands. Disturbance to soil could result in soil erosion, sedimentation and turbidity of water bodies. Other effects could include ponding, diversion or blockage of stream flow, water contamination by human waste or a variety of toxic chemicals, and alteration of natural lake chemistry. OHV use for stream crossings may cause streambank erosion, sedimentation and turbidity. Because the area would be classified as “open” for OHVs, these effects would occur at approximately the same level as under Alternative A.</p> | <p>higher than in Alternative A. Leasable mineral exploration would most likely occur in the Koggiling Creek planning block. Water resources would be drawn from nearby streams or lakes for the operation. Except for withdrawals other than 17(d)(1) and those in the Carter Spit ACEC, unencumbered BLM lands are open for locatable mineral exploration and development. The most likely mineral development to occur would be placer mining in the Goodnews planning block, predicted at 43 acres of actual disturbance. Disturbance to soil could result in soil erosion, sedimentation and turbidity of water bodies. Other effects could include ponding, diversion or blockage of stream flow, water contamination by human waste or a variety of toxic chemicals, and alteration of natural lake chemistry. OHV use for stream crossings may cause streambank erosion, sedimentation and turbidity. However, there would be fewer of these effects from OHVs under this alternative because of a limited designation, designated routes in some areas, and a 2,000-lb. weight limit.</p> | <p>in Alternatives A or C. Leasable mineral exploration would most likely occur in the Koggiling Creek planning block. Water resources would be drawn from nearby streams or lakes for the operation. Except for withdrawals other than 17(d)(1), unencumbered BLM lands are open for locatable mineral exploration and development. The most likely mineral development to occur would be placer mining in the Goodnews Planning block with estimated actual disturbance of 115 acres. Disturbance to soil could result in soil erosion, sedimentation and turbidity of water bodies. Other effects could include ponding, diversion or blockage of stream flow, water contamination by human waste or a variety of toxic chemicals, and alteration of natural lake chemistry. OHV use for stream crossings may cause streambank erosion, sedimentation and turbidity. However, there would be fewer of these effects from OHVs under this alternative because of a limited designation, designated routes in some areas, and a 2,000-lb. weight limit.</p> |
| <p><b>Cumulative Effects:</b> Past and present actions affecting fresh water resources within and adjacent to the Bay planning area have included climate change, mining activities, transportation projects and transportation-related accidents, military activities, industrial and domestic activities and related disposal of hazardous materials, and construction of facilities. Cumulative effects from locatable mineral exploration and development can include substantial decrease in water supplies in local aquifers, alteration of drainage patterns, and degradation of water quality. Cumulative effects from oil and gas exploration and development could include those effects already listed and disturbance of stream banks or lake shorelines, temporary blockage of natural channels and disruption of drainage patterns, increased sedimentation and turbidity, the removal of water from lakes or streams for ice roads and pads, and removal of gravel from riverine pools and lakes.</p> |  |  |  |

| Alternative A   | Alternative B   | Alternative C   | Alternative D   |
|---|---|---|---|
| <b>Effects to Soils</b>   |   |   |   |
| <p>Impacts to soils would be low. Leasable mineral exploration and development would not occur; some locatable mineral exploration and development would be possible, but predicted at only 23 acres under this alternative. Locatable mineral exploration and development would have localized effects including loss of vegetative cover, erosion, rutting, ponding, mechanical removal of soil, and compaction of soils from vehicles and heavy equipment. Impacts from OHV activity would be localized but would include a proliferation of trails that could result in scarring of the terrain, soil compaction, erosion, and rutting.</p>   | <p>Alternative B may result in a greater magnitude of impacts than Alternative A due to potential leasable mineral (natural gas) exploration in the Koggiling Creek planning block, and potential locatable mineral exploration and development. Actual mining under this alternative is predicted at 115 acres of disturbance. Impacts to soils would be localized, and would include loss of vegetative cover, removal of topsoil, melting of permafrost, erosion, rutting, and ponding. Impacts from OHV activity would be localized but could include a proliferation of trails that could result in scarring of the terrain, soil compaction, erosion, and rutting. The extent of OHV impacts would be similar to Alternative A.</p> | <p>Alternative C may result in a greater magnitude of impacts than Alternative A due to potential leasable mineral (natural gas) exploration in the Koggiling Creek planning block, and potential locatable mineral exploration and development. Actual mining is predicted to occur on 43 acres under this alternative. Impacts to soils would be localized, and would include loss of vegetative cover, removal of topsoil, melting of permafrost, erosion, rutting, and ponding. Impacts from OHV activity would be localized, a weight limit imposed, and traffic would be restricted to existing trails, meaning fewer impacts to soils than in Alternatives A or B. Impacts from OHV use could include soil compaction, erosion, and rutting.</p> | <p>Alternative D may result in a greater magnitude of impacts than Alternatives A and C due to potential leasable mineral (natural gas) exploration in the Koggiling Creek planning block, and potential locatable mineral exploration and development. Actual mining is predicted to occur on 115 acres of BLM-managed lands. Impacts to soils would be localized, and would include loss of vegetative cover, removal of topsoil, melting of permafrost, erosion, rutting, and ponding. Impacts from OHV activity would be localized, a weight limit imposed, and traffic would be restricted to existing trails, meaning fewer impacts on soils than in Alternatives A or B. Impacts from OHV use could include soil compaction, erosion, and rutting.</p> |
| <p><b>Cumulative Effects:</b> Based on the Reasonably Foreseeable Development Scenario for Locatable and Salable Minerals (BLM, 2006), 7,881 acres of total surface disturbance on non-BLM lands could occur from mining. These numbers, combined with the highest projected numbers of surface disturbance on BLM lands (115 acres under alternatives B and D) from mining disturbance, total 7,996 acres of projected reasonably foreseeable surface disturbance for all lands within the planning area. This represents a significant impact to soils directly disturbed by mining operations. However, the cumulative projected disturbed acreage of 7,996 represents only .03 percent of the total acres in the planning area. Reclamation on both State and BLM lands prescribed in Plans of Operations would help to restore soils and vegetation to pre-mining productivity. Cumulative impacts to soils from OHV use associated with mineral exploration on State or Native land in the planning area is expected to increase, common to all alternatives.</p> |   |   |   |
| <b>Effects to Vegetation</b>  |   |   |   |
| <p>Mineral development under this alternative on BLM-managed lands is predicted at 23 acres of actual disturbance. This development may negatively impact vegetation by</p>   | <p>Effect would occur over a larger area than Alternative A as the level of mineral exploration and development would have the opportunity to increase. Both</p>  | <p>Effects would occur over a smaller area than predicted for Alternatives B or D because of constraints associated with ACECs. Both leasable and locatable mineral</p>   | <p>For mineral development and exploration, effects would be similar to Alternative B. All BLM lands would be classified as limited to OHVs, with OHVs staying on</p>   |

| Alternative A   | Alternative B  | Alternative C  | Alternative D   |
|---|--|--|---|
| <p>removing the vegetative mat, re-routing water 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. Under this alternative, OHV use would remain unregulated on BLM lands and some trail proliferation may occur.</p>  | <p>leasable and locatable mineral exploration and development would be expected in the Koggiling Creek planning block and the Goodnews planning block during the life of this plan. Potential effects of oil development include compression of the vegetation mat, broken shrubs and crushed tussocks from seismic activity; mortality of plants due to oil, gasoline, or diesel spills; compression of the tundra mat and localized die-off of plants under access roads and pads; and destruction of vegetation at the location of facility development. Under all action alternatives, these effects would be limited to approximately 50 acres, including all associated gravel roads. OHV designations would not be restrictive, allowing for free movement of OHVs and magnitude of effects similar to Alternative A.</p> | <p>exploration and development would be expected to be localized to the Koggiling Creek planning block and the Goodnews planning block during the life of this plan. Actual mining disturbance is predicted at 43 acres on BLM-managed lands. Potential effects of oil development include compression of the vegetation mat, broken shrubs and crushed tussocks from seismic activity; mortality of plants due to oil, gasoline, or diesel spills; compression of the tundra mat and localized die-off of plants under access roads and pads; and destruction of vegetation at the location of facility development. All BLM lands would be classified as limited to OHVs, with OHVs staying on existing or designated trails. Additionally, there would be a 2,000 lb. weight limit on OHVs. This would decrease impacts to vegetation from OHVs compared to Alternatives A and B.</p> | <p>existing or designated trails. Additionally, there would be a 2,000 lb. weight limit on OHVs. This would decrease impacts to vegetation from OHVs compared to Alternatives A and B.</p>  |
| <p><b>Cumulative Effects:</b> 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. Blowing dust and contaminants from projects on non-BLM-managed lands that are deposited on vegetation could have negative effects to the vegetation and to the animals and subsistence users dependent upon it. Dispersed recreation effects, OHV travel, remote landing sites for bush aircraft, and campsites could have minor adverse and cumulative impacts to riparian and tundra vegetation on BLM-managed lands. 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> |  |  |   |
| <p><b>Effects to Fish</b></p>   |  |  |   |
| <p>Permitted activities, including exploration and development of locatable minerals, road construction, and use of OHV trails and stream crossings would impact fish and aquatic habitat. Currently BLM lands in the planning area are</p>   | <p>Under Alternative B, most BLM unencumbered lands would be available for leasable mineral exploration and development and locatable mineral exploration and development. Potential impacts would be greater than those under</p>   | <p>Under Alternative C, fewer BLM unencumbered lands would be available for leasable mineral exploration and development because of retention of ANCSA 17(d)(1) withdrawals within the Carter Spit ACEC and within river</p>   | <p>Under Alternative D, all BLM unencumbered lands would be available for leasable mineral exploration and development and locatable mineral exploration and development unless they were withdrawn under other than 17(d)(1)</p> |

| Alternative A  | Alternative B   | Alternative C  | Alternative D  |
|--|---|--|--|
| <p>closed to leasable mineral exploration and development and all but 6% of BLM lands are closed to locatable minerals. This alternative anticipates 23 acres of disturbance from mining activities on existing mining claims. There is no restriction on OHV travel or weight limits, and it is from OHV activity that the most serious impacts would come. Negative effects to fisheries from OHV crossings could occur from increased sedimentation as well as physical breakdown of streambanks, thus negatively affecting fish habitat.</p>   | <p>Alternatives A, C, or D and would include gas exploration activities in Koggiling Creek planning block, placer mining activities in Goodnews planning block (115 acres disturbance predicted), potential infrastructure development, and OHV travel. This alternative would designate the area as “open” for OHVs, and associated impacts would be similar to Alternative A.</p>   | <p>corridors considered suitable for inclusion as Wild and Scenic. Potential impacts would be greater than those under Alternative A, and would include gas exploration activities in Koggiling Creek planning block, placer mining activities in Goodnews planning block (43 acres of disturbance predicted), potential infrastructure development, and OHV travel. A beneficial effect would be the imposition of a “limited” OHV designation and a 2,000-lb OHV weight limit. OHVs would be limited to existing or designated trails, which would minimize proliferation of unmanaged stream and river crossings.</p> | <p>withdrawals. This alternative anticipates similar levels of mineral development as Alternative B (one gas field in the Koggiling Creek planning block and 115 acres of actual mining surface disturbance). However, application of ROPs (300 foot buffers on specific streams) would minimize impacts to fisheries on these streams. This ROP would not apply under Alternative B. Potential impacts would be greater than those under Alternatives A and C, but less than B. A beneficial effect would be the imposition of a “limited” OHV designation and a 2,000-lb OHV weight limit.</p> |
| <p><b>Cumulative Effects:</b> Any changes of current water and land use practices, by private, State, and other Federal agencies in the planning area, would affect fish habitat within the planning area, including on BLM-managed lands. Currently a number of locatable mineral projects are proposed for State lands at the headwaters of the Kvichak and Nushagak rivers. BLM-managed lands lie downstream of those projects in the two watersheds in question, and sediment and water quality issues that influence the quality of fish habitat downstream from the source could be a concern. Should OHV use increase it could also be a concern for the same reason. Coordinating with regional planning actions and conducting interagency watershed planning efforts could help protect important fisheries values in the Bristol Bay and Goodnews Bay watersheds.</p> |   |  |  |
| <p><b>Wildlife</b></p>   |   |  |  |
| <p>Low levels of mineral exploration and development, 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 is anticipated after revocation of ANCSA 17(d)(1) withdrawals. This alternative anticipates the development of one gas field in the Koggiling Creek planning block and 115 acres of surface disturbance from mining. This would increase the level of impacts to wildlife and their habitat in localized areas. Specific stipulations providing timing restrictions for caribou habitat protection would not apply under</p> | <p>Leasable mineral exploration and development in the Koggiling Creek planning block would increase impacts to wildlife and habitat in localized areas. However, application of specific stipulations restricting oil and gas activities during caribou calving or in areas of heavy caribou concentration would minimize impacts. Locatable mineral exploration and development would be more limited than in Alternative B because of designation of two ACECs. This</p>  | <p>This alternative anticipates similar levels of mineral development as Alternative B (one gas field in the Koggiling Creek planning block and 115 acres surface disturbance from mining). Impacts to caribou would be decreased by the application of timing stipulations under this alternative to protect caribou. Impacts from OHV use would be less due to a “limited” designation for access and a 2,000 pound GWVR weight limit. The Carter Spit ACEC would be designated to</p>   |

| Alternative A  | Alternative B   | Alternative C  | Alternative D  |
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|  | <p>this alternative. Impacts from OHV use would be similar to Alternative A.</p>  | <p>alternative anticipates surface disturbance of 43 acres from mining. Impacts in these localized areas would include loss of habitat and animal displacement. Impacts from OHV use would be less due to a "limited" designation for access and a 2,000-lb GWVR weight limit. The two ACECs would be designated to provide additional management emphasis in important wildlife habitats.</p>   | <p>provide additional management emphasis in important wildlife habitats.</p>  |
| <p><b>Cumulative Effects:</b> The possibility of solid mineral exploration and development in the planning area on non-BLM lands would have cumulative impacts on wildlife and wildlife habitat. 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; and 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 additional roads would also affect caribou movements and 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. Impacts would include habitat fragmentation, increased access into wildlife habitats, increased disturbance, increased potential for mortality from road kills, and possible alteration of behavior or movement patterns of wildlife.</p> |   |  |  |
| <p><b>Effects to Cultural Resources</b></p>  |   |  |  |
| <p>Few impacts to cultural resources would be anticipated from authorized activities due to the remoteness of most BLM-managed lands and the nature of most permitted activities. Currently the primary permitted activity in the planning area is Special Recreation Permits for big game guides, with little potential for impacts. Significant conflicts with cultural resources have not occurred. OHVs would be the greatest potential source of impact from authorized uses.</p>   | <p>There could be an increase in potential for impacts under Alternative B. Exploration for leasable minerals and development of locatable minerals in the form of placer mining would result in substantial surface disturbance in limited areas of Koggiling Creek planning block and Goodnews planning block. Exploration for leasable minerals involves little potential for impacts. BLM would require inventory and appropriate mitigation in advance of ground-disturbing activities. The greatest impact from authorized activities exists in the "open" designation for OHVs on BLM lands and the potential for unmanaged proliferation of OHV trails.</p> | <p>This alternative anticipates the development of one gas field in the Koggiling Creek planning block and the disturbance of 43 acres from mining activity. BLM would require inventory and appropriate mitigation in advance of ground-disturbing activity. A "limited" designation for OHVs under this Alternative would also provide beneficial impacts for cultural resources since OHV will be confined to existing trails. Beneficial effects to cultural resources would be expected with the proposed Carter Spit ACEC, the proposed Bristol Bay ACEC, and the proposed Wild and Scenic Rivers.</p> | <p>This alternative anticipates similar levels of mineral development as described in Alternative B. BLM would require inventory and appropriate mitigation in advance of ground disturbing activities. A "limited" designation for OHVs under this Alternative would also provide beneficial impacts for cultural resources since OHV will be confined to existing trails. Beneficial effects to cultural resources would be expected with the proposed Carter Spit ACEC.</p> |

| Alternative A   | Alternative B   | Alternative C   | Alternative D  |
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| <p><b>Cumulative Effects:</b> 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 Alaska Natives.</p>  |   |   |  |
| <p align="center"><b>Effects to Paleontological Resources</b></p>   |   |   |  |
| <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. This alternative anticipates a lower level of authorized activities than any other alternative. Geologic formations with exposures containing vertebrate and non-vertebrate fossils could 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>This alternative anticipates development associated with leasable and locatable minerals in the Goodnews planning block and the Koggiling Creek planning block. This development could have adverse impacts on paleontological resources through surface disturbing activities. Impacts to paleontological resources from uses other than mineral development would be negligible.</p> | <p>This alternative anticipates a similar level of leasable mineral development as alternative B (development of one gas field in the Koggiling Creek planning block. Where paleontological resources are not known, activities associated with gas field development, such as construction of roads or wellpads, could unearth or disturb paleontological resources. Limited locatable mineral development is expected under this alternative (43 acres of disturbance anticipated) so impacts would be minimal.</p> | <p>Impacts to paleontological resources would be the same as Alternative B.</p>  |
| <p><b>Cumulative Impacts:</b> 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 align="center"><b>Effects to Visual Resources</b></p>  |   |   |  |
| <p>Visual resources would be managed on a project-by-project basis as no visual management classes would be established. Surface altering activities and events such as fire, mineral development and OHV use, and authorizations that result in facility or infrastructure construction such as powerlines or roads can alter or negatively impact visual</p>  | <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 development. Impacts from activities associated with exploration for gas would primarily be</p>   | <p>Alternative C anticipates less mineral development than alternatives B or D. ANCSA 17(d)(1) withdrawals would be maintained in the Carter Spit ACEC and in river corridors deemed suitable for inclusion as Wild and Scenic. This would prohibit mineral entry or leasing in these areas. Mineral development and</p>  | <p>Alternative D is similar to Alternative B, except that OHVs would be restricted to travel on existing roads and trails vs. designated roads and trails. The need for designated routes would be addressed through the development of an activity plan if any significant resource impacts are observed. Additionally,</p> |

| Alternative A  | Alternative B  | Alternative C  | Alternative D  |
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| resources. Few impacts are anticipated from authorized activities due to the remoteness of these BLM-managed lands and the nature of most permitted activities.  | associated with the construction of support facilities.  | associated infrastructure can impact visual resources through surface alteration and the addition of linear features such as roads, pipelines, or powerlines. OHVs would be restricted to existing trails.   | alternative D adopts a Class III visual resource management class within the Carter Spit ACEC and within the viewsheds of Conservation System Units in the area.   |
| <b>Cumulative Effects:</b> Continued development of OHV trails, roads, infrastructure, 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. |  |  |  |
| <b>Effects to Leasable Minerals</b>  |  |  |  |
| No BLM-managed lands would be open for fluid mineral leasing due to the retention of ANCSA 17(d)(1) withdrawals. Under this Alternative no oil and gas exploration and development would occur, rendering these resources unavailable during the life of this plan or as long as selected lands are BLM-managed.   | Alternative B provides the greatest opportunity for leasable mineral development. Approximately 1,103,138 acres (99%), 820,627 acres of which are State-selected or Native-selected, would be available for mineral leasing subject to Standard Lease Terms. Approximately 3,318 unencumbered acres, withdrawn under withdrawals other than ANCSA 17(d)(1), would remain withdrawn from fluid mineral leasing. | Under Alternative C, approximately 1,063,129 acres (57%) of which 785,341 of which are State-selected or Native-selected, would be available for mineral leasing subject to Standard Lease Terms, Required Operating Procedures, and Stipulations. Areas closed would be the proposed Wild River segments of the Alagnak, Goodnews and Goodnews Middle Fork rivers (12,210 acres), where existing ANCSA 17(d)(1) withdrawals would be retained. 973,862 acres (42%), none of which are State-selected or Native-selected, would be open to mineral leasing subject to seasonal or other minor constraints. These constraints would limit exploration and development during specific time periods and increase recovery costs. 1,834 acres (>1%) of BLM unencumbered lands on the Arolik River, Faro Creek, and South Fork Goodnews River would be subject to NSO. These areas are low potential for oil and gas, and low potential for leasable mineral | Under Alternative D, approximately 1,101,304 acres (58%), of which 817,464 acres are State-selected or Native-selected, would be available for mineral leasing subject to Standard Lease Terms, Required Operating Procedures, and Stipulations. Existing Agency withdrawals or approximately 3,318 unencumbered acres, would remain withdrawn from fluid mineral leasing. 36,220 acres (42%). 1,834 acres (>1%) of unencumbered BLM lands on the Arolik River, Faro Creek, and South Fork Goodnews River would be subject to NSO. These areas are low potential for oil and gas, and low potential for leasable mineral development. Closing these areas to leasing would preclude oil and gas development and render these resources unrecoverable during the life of this plan. |

| Alternative A  | Alternative B   | Alternative C   | Alternative D   |
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|  |   | development. Closing these areas to leasing would preclude oil and gas development and render these resources unrecoverable during the life of this plan.   |   |
| <p><b>Cumulative Effects:</b> Cumulative impacts to leasable mineral development would include retention of withdrawals, imposition of minor or major constraints, and requirements of Required Operating Procedures and Stipulations. 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 in the beginning stages of economic development could become non-profitable by imposing restrictive guidelines, resulting in the displacement of mineral activities to adjacent landowners.</p>  |   |   |   |
| <p><b>Effects to Locatable Minerals</b></p>  |   |   |   |
| <p>ANCSA 17(d)(1) withdrawals and Agency withdrawals) would remain in place. 138,627 acres would be identified as open for locatable mineral entry. 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>This Alternative would have the fewest impacts to locatable mineral development. ANCSA 17(d)(1) withdrawals would be revoked. Approximately 1,102,489 acres of unencumbered lands would be open to locatable mineral entry. 3,968 acres of Agency withdrawals would remain withdrawn from mineral entry. Administration of Notices and Plans of Operations, compliance, and mine reclamation would continue.</p> | <p>Under this Alternative, 1,064,313 acres would be available for locatable mineral entry. ANCSA 17(d)(1) withdrawals would be retained for the nominated Wild and Scenic River segments, to provide opportunity for Congressional action, and the proposed Carter Spit ACEC, closing this area to mineral entry. Approximately 3,968 acres of Agency withdraws will remain closed to mineral entry. Bristol Bay ACEC would be open to locatable mineral activities and closed to the sale of mineral materials The BLM would continue to regulate surface disturbing activities on valid Federal claims through Notices and Plans of Operations, and Required Operating Procedures would be implemented.</p> | <p>Alternative D is the same as Alternative B. Under this Alternative, 3,968 acres would remain closed to locatable mineral entry due to withdrawals other than ANCSA 17(d)(1). However, the proposed Carter Spit ACEC (36,220 acres) would be subject to more stringent Required Operating Procedures. Administration of Notices and Plans of Operations, compliance, and mine reclamation would continue. Required Operating Procedures would be implemented.</p> |
| <p><b>Cumulative Effects:</b> 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 BLM has no control. These factors result in additional costs 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, Alternatives A and C would be the most restrictive to mineral development and could result in the most cumulative impacts.</p> |   |   |   |

| Alternative A  | Alternative B  | Alternative C  | Alternative D   |
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| <b>Effects to Mineral Materials</b>  |  |  |   |
| Development of mineral materials sites would not be constrained except as restricted by the interim management guidelines for selected lands. No unencumbered Federal lands would be closed to mineral material sales and permits. | Impacts would be the same as Alternative A except the ROPS would apply to mineral material sales.  | Development of mineral materials sites on BLM-managed lands would be severely constrained under Alternative C. Unencumbered BLM lands in the Bristol Bay ACEC and Carter Spit ACEC would be closed to mineral materials development (1,052,398 acres).   | Under this alternative, the Carter Spit ACEC would be closed to mineral materials development. (36,220 acres).  |
| <b>Cumulative Effects:</b> Under Alternative C the closure of two ACECs to sale/permit of mineral materials would essentially close BLM-managed land in the planning area to mineral materials development and production.         |  |  |   |
| <b>Effects to Recreation Management</b>  |  |  |   |
| No SRMAs would be designated under Alternative A. BLM land in the planning area would be managed to retain existing ROS classes of Primitive, Semi-primitive, and semi-primitive motorized.  | No SRMAs would be designated. The entire area would be managed to allow for a Roded Natural ROS class. This would allow a higher level of resource development and increased recreation visitation.  | The entire area would be managed to allow for a semi-primitive motorized ROS class. This would allow for a continued diversity of the existing ROS classes of primitive, semi-primitive, and semi-primitive motorized. Determination of suitability of segments of three river corridors for inclusion as Wild and Scenic could increase visitation to those rivers, with an associated increase in impacts. | The entire area would be managed to allow for a semi-primitive motorized ROS class. This would allow for a continued diversity of the existing ROS classes of primitive, semi-primitive, and semi-primitive motorized.  |
| <b>Cumulative Effects:</b> The planning area currently provides diverse recreation opportunities which are expected to continue over the life of the plan regardless of the Alternative selected.                                  |  |  |   |
| <b>Effects to Travel Management/OHV</b>  |  |  |   |
| There are no OHV designations in the planning area.  | The planning area would be designated as "open" to OHV use. More lands would be open to mineral entry under this Alternative, potentially creating improved access. Given the low level of mineral development anticipated, effects would be minor. However, unmanaged proliferation of OHV trails with associated resource impacts could continue to occur. | The planning area would be designated as "Limited" for OHV use. There would be a 2,000-lb GVWR weight limit. Proposed restrictions would impact users by limiting OHV use where no limits have been in place before. In designated ACECs further limitations may be placed upon OHV use. Effects of this Alternative on OHV users are expected to be minimal, since users access BLM-                        | The planning area would be designated as "Limited" for OHV use. There would be a 2,000-lb GVWR weight limit. Proposed restrictions would impact users by limiting OHV use where no limits have been in place before. In designated ACECs further limitations may be placed upon OHV use. Effects of this Alternative on OHV users are expected to be minimal, since |

| Alternative A   | Alternative B  | Alternative C   | Alternative D  |
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|   |  | managed lands primarily by boat and aircraft.   | users access BLM-managed lands primarily by boat and aircraft.   |
| <p><b>Cumulative Effects:</b> BLM-managed lands are somewhat remote from the villages and hubs in the planning area. Most users access BLM lands by boat or by aircraft. Decisions made in this plan would not be expected to have major impacts on OHV users. Travel management occurring on non-BLM lands (such as road or trail construction associated with mineral development) is more likely to have an impact on access.</p>  |  |   |  |
| <p><b>Effects to Lands and Realty</b></p>   |  |   |  |
| <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.</p>   | <p>Impacts in Alternative B would be similar to those in Alternative A. In addition, a 2,000 pound GVWR weight restriction would be implemented for OHVs. Requirements to meet VRM management classes could increase project cost, although VRM classes are the least restrictive under this Alternative. More lands would be available for mineral development due to revocation of ANCSA 17(d)(1) withdrawals, potentially resulting in a greater demand for land use authorizations such as ROWs. 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.</p> | <p>Impacts in Alternative C would be similar to those in Alternative B. Additional, the proposed Carter Spit ACEC and the proposed Bristol Bay ACEC would be identified as avoidance areas for Land Use Authorizations. Under this Alternative, five parcels would be proposed for land exchange. They would need to be inventoried for the presence of hazardous materials. The presence of contaminants could lead to modification or abandonment of a land action, or to remediation in the form of cleanup and removal of the contaminants. ROPS and Stips would restrict land uses in certain areas.</p> | <p>Impacts in Alternative D would be similar to those in Alternative B. Additional restrictions would include no Land Use Authorizations in the proposed Carter Spit ACEC. Under this Alternative, five parcels would be proposed for land exchange. They would need to be inventoried for the presence of hazardous materials. The presence of contaminants could lead to modification or abandonment of a land action, or to remediation in the form of cleanup and removal of the contaminants. ROPS and Stips would restrict land uses in certain areas.</p> |
| <p><b>Cumulative Effects:</b> Effects from any exchange proposal in any Alternative for BLM-managed lands in the planning area 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> |  |   |  |
| <p><b>Effects to Areas of Critical Environmental Concern</b></p>  |  |   |  |
| <p>No ACECs exist in the planning area</p>  | <p>No ACECs would be proposed</p>  | <p>Two 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.</p>  | <p>One ACEC 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.</p>  |

| Alternative A  | Alternative B  | Alternative C   | Alternative D                 |
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| <p><b>Cumulative Effects:</b> Cumulative impacts could have a wide range of effects on the different resources that are intended to benefit from the various ACECs 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>  |  |   |                               |
| <p><b>Effects to Social and Economic Conditions</b></p>  |  |   |                               |
| <p>Income generated by BLM expenditures and permitted activities would have minimal effects on the regional economy.</p>   | <p>Natural gas exploration in the Koggiling Creek planning block is projected to take place within the life of the plan; should it go forward, economic effects of a gas field will more likely impact the Dillingham area, and will be less likely to impact the remainder of the planning area. Up to three placer mining operations could be developed in the Goodnews planning block. A small number of workers could be employed. At this level, mineral development would be unlikely to have a negative impact on the existing subsistence economy, the commercial fishing industry, and the sports hunting and fishing guiding industries.</p> | <p>For leasable minerals, the effect on the regional economy from leaseable mineral development is expected to be the same as Alternative B. For locatable minerals, this alternative anticipates mining activity mostly limited to existing claims. Thus, economic effects would not be significant. There may be some economic opportunity generated from increased outfitter/guide activity in association with the river corridors suitable for inclusion as Wild and Scenic.</p> | <p>Same as Alternative B.</p> |
| <p><b>Cumulative Effects:</b> Under Alternatives B, C, and D, natural gas exploration and locatable mineral exploration and development on BLM-unencumbered lands in the planning area might generate a small amount of income for the region; however, such developments taken cumulatively with other developments on State and Native-owned lands could have a negative impact on the existing subsistence economy, the commercial fishing industry, and the sports hunting and fishing guiding industries.</p> |  |   |                               |
| <p><b>Effects to Environmental Justice</b></p>   |  |   |                               |
| <p>The Altuiq, Athabaskan, and Central Yup'ik Native people predominate in 25 villages in the Bay planning area. Under Alternative A, BLM-managed lands would remain closed to leasable and most locatable mineral exploration and development. Residents' main livelihood is dependent upon a mix of subsistence hunting and fishing, commercial fishing, sports hunting</p>  | <p>Alternative B would allow leasable and locatable mineral exploration and development on BLM lands in areas previously closed to those activities. Year round activities from these sources could increase the amount of area affected, the duration of effects, and spread the effects where development occurs. Disturbances to residents' current economic pursuits from these</p>  | <p>Alternative C would designate two ACECs for protection of resource values and anticipates less mineral development than Alternatives B or D. At the anticipated development level, this alternative would have little impact on subsistence hunting and fishing, commercial fishing, outfitter/guiding, and support services for those activities.</p>   | <p>Same as Alternative B.</p> |

| Alternative A   | Alternative B  | Alternative C  | Alternative D  |
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| and fishing guiding, and support services for those activities. Under this alternative, there would be minimal effects to those activities from authorized uses on BLM lands.   | sources would be greater than in Alternative A.  |  |  |
| <p><b>Cumulative Effects:</b> Alaska Natives are the predominant residents of southwestern Alaska, the area potentially most affected by activities under Alternatives B, C, and D and other activities associated with cumulative projects in Alaska. Effects on Alaska Natives could occur because of their reliance on subsistence foods, and potential effects could impact subsistence resources and harvest practices. Potential cumulative effects from noise, disturbance, and spills on subsistence resources, harvest practices and socio-cultural patterns would focus on communities throughout the planning area. The commercial fishing industry has long since affected considerable changes in the cultures of southwest Alaska. Expanded locatable mineral exploration and development, and development of supporting infrastructure would bring about disturbances to subsistence species and harvest patterns cumulatively. Southwestern Alaska still has vast undisturbed areas, but the subsistence hunting environment continues to change in response to increased visitation and development.</p> |  |  |  |
| <p><b>Effects to Subsistence</b></p>  |  |  |  |
| <p>Impacts from authorized activities such as exploration or development of locatable minerals, leases, 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 under this alternative. There would be no limits on OHV use. Unlimited access by OHVs can provided increased access to subsistence resources but can also bring increased competition for resources.</p>   | <p>Impacts would have a larger footprint than in Alternative A. The Koggiling Creek planning block is projected to be the location of any leasable mineral exploration and development, and while all unencumbered BLM lands in the planning area would be open to locatable mineral exploration and development, this alternative anticipates actual surface disturbance from mining on only 115 acres. Subsistence hunters may be reluctant to hunt in areas used for development purposes or for intensive recreational activities, as demonstrated by the historic and current hunting patterns summarized in Chapter III. Subsistence users tend to shift away from their traditional harvest areas when too much activity from outside sources occurs. There would be no limits on where OHVs could travel. BLM-managed lands would be managed as an Extensive</p> | <p>This alternative anticipates the development of one gas field in the Koggiling Creek planning block and 43 acres of actual disturbance from mining. Subsistence hunters may be reluctant to hunt in areas used for development purposes or for intensive recreational activities, as demonstrated by the historic and current hunting patterns summarized in Chapter III. Subsistence users tend to shift away from their traditional harvest areas when too much activity from outside sources occurs. There would be limits on where OHVs could travel, and weight limits would be at 2,000 pounds. BLM-managed lands would be managed as an Extensive Recreation Management Area with few restrictions. The proposed Carter Spit ACEC, Bristol Bay ACEC, and three WSR segments might provide some benefit to subsistence resources by providing protective measures and</p> | <p>Impacts would have a larger footprint than in Alternative A. The Koggiling Creek planning block is projected to be the location of any leasable mineral exploration and development, and while all unencumbered BLM lands in the planning area would be open to locatable mineral exploration and development, this alternative anticipates actual surface disturbance from mining on only 115 acres. Subsistence hunters may be reluctant to hunt in areas used for development purposes or for intensive recreational activities, as demonstrated by the historic and current hunting patterns summarized in Chapter III. Subsistence users tend to shift away from their traditional harvest areas when too much activity from outside sources occurs. There would be no limits on where OHVs could travel. BLM-managed lands would be managed as an Extensive</p> |

| Alternative A   | Alternative B   | Alternative C   | Alternative D   |
|---|---|---|---|
|   | <p>Recreation Management Area with few restrictions. New applications for outfitter/guiding on BLM lands would require a Special Recreation Permit. These permits are discretionary and prior to issuance are subject to an ANILCA 810 review to determine impacts to subsistence resources or opportunities.</p> | <p>limiting some resource development. New applications for outfitter/guiding on BLM lands would require a Special Recreation Permit. These permits are discretionary and prior to issuance are subject to an ANILCA 810 review to determine impacts to subsistence resources or opportunities.</p> | <p>Recreation Management Area with few restrictions. New applications for outfitter/guiding on BLM lands would require a Special Recreation Permit. These permits are discretionary and prior to issuance are subject to an ANILCA 810 review to determine impacts to subsistence resources or opportunities.</p> |
| <p><b>Cumulative Impacts:</b> 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 consequently 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> |   |   |   |