



Chapter II: Alternatives

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CHAPTER II: ALTERNATIVES

A. How to Read This Chapter

This chapter presents the management alternatives that are considered and analyzed in this Environmental Impact Statement. Section B provides a brief summary of the basic “theme” of each alternative. Section B also provides a description of alternatives that were considered but not analyzed in detail.

Section C provides the detailed description of alternatives. Consistent with the rest of the document, this section is organized by Issue. For each major Issue, the alternative description provides the following:

- Goals
- Management Common to All Action Alternatives: These are management actions that would happen under any alternative. Sub-headings under this topic will vary by Issue, but may include Inventory and Monitoring, Land Use Requirements, or Implementation-level Planning.
- Detailed description of the alternative.
- Comparison table for each Issue.

In addition, as required by NEPA, there is an alternative effects comparison table for all alternatives presented in Table 13.

Some alternative descriptions in this chapter (particularly for Travel Management) include a description of “Implementation-level Considerations”. As described in Chapter I, Resource Management Plans (RMPs) provide broad, general direction for management of BLM-managed lands. After the RMP is approved, RMP decisions become effective immediately. Implementation-level decisions will only be effective after additional action. Before specific implementation-level projects can be implemented on the ground, an implementation plan must be completed, and all implementation plans must tier to and be in compliance with the RMP. Implementation-level considerations are described in this chapter for Travel Management to show the BLM’s intent for travel management in a given area. However, these considerations are subject to change based on public review and comment during subsequent implementation planning.

B. General Description of the Alternatives

1. Alternative A: No Action

Alternative A, the No Action Alternative, would continue present management practices and present levels of resource use based on the existing Southcentral Management Framework Plan (MFP) (BLM 1980a) and other management decision documents. Valid decisions contained in the Southcentral MFP would be implemented if not already completed. Direction contained in existing laws, regulation and policy would also continue to be implemented, sometimes superseding provisions in the Southcentral MFP. The current levels, methods and mix of multiple use management of public land in the planning area would continue, and resource values would receive attention at present levels. In general, most activities would be analyzed on a case-by-case basis and few uses would be limited or excluded as long as they were consistent with State and Federal laws.

2. Alternative B: Resource Development

Alternative B lays the groundwork for active management to facilitate resource development. In this alternative, constraints to protect resource values or habitat would be implemented in very specific geographic areas rather than across the planning area or in special designations. With the exception of the Delta and Gulkana Wild and Scenic River corridors, all ANCSA (d)(1) withdrawals would be revoked on lands retained in long-term Federal ownership. This would allow increased potential for mineral exploration and development. Revocation of PLO 5150, which established the transportation and utility corridor within which the Trans-Alaska Pipeline is located, would be recommended to the Secretary of the Interior. This revocation would allow for conveyance of this corridor to the State of Alaska. This alternative includes the highest level of forest and woodland treatments. Travel and trail restrictions would be minimized. Recreation management would focus on development of facilities to handle increasing uses. Management of State- and Native-selected lands is mostly custodial.

3. Alternative C: Resource Conservation

Alternative C emphasizes active measures to protect and enhance resource values. Production of minerals and services would be more constrained than in Alternatives B or D and in some cases and some areas, uses would be excluded to protect sensitive resources. Areas of Critical Environmental Concern (ACEC), Special Recreation Management Areas (SRMA), and a Research Natural Area (RNA) are identified, and specific measures proposed to protect or enhance values within these areas. Limited and closed areas are proposed for Off Highway Vehicles to protect habitat, soil and vegetation resources, or recreation experiences. Some ANCSA (d)(1) withdrawals are revoked but others are maintained in order to protect or maintain resource values. This alternative treats lands selected by the State and by Native Corporations or Villages as if it were to be retained in long-term Federal ownership.

4. Alternative D: BLM Proposed RMP

Alternative D is the BLM's Preferred Alternative and represents the Proposed Resource Management Plan. It emphasizes a moderate level of protection, use, and enhancement of resources and services. Constraints to protect resources would be implemented, but would be less restrictive than under Alternative C. This alternative would designate one RNA and four SRMAs, and measures to protect certain resource values would be applied to other geographical areas emphasized under Alternative C. This alternative would revoke many ANCSA (d)(1) withdrawals but would retain some of these withdrawals in areas where strong resource protection is needed. This alternative retains most of PLO 5150, except for 83,000 acres north of Paxson. This alternative describes interim and long-term management strategies for lands selected by the State, or Native Corporations or Villages.

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

5. Alternatives Analyzed but Not Considered in Detail

a) Eureka Special Recreation Management Area

This area consisting of four townships of dual, State and Native, selected lands around Eureka was considered as an SRMA in a preliminary packet of draft alternatives put

together by the Glennallen Field Office during this planning process. This area was dropped from consideration as an SRMA for the following reasons:

- It is a relatively small area. Trail networks that start in this area continue onto State lands. A designated trail system on BLM-managed lands would be discontinuous with surrounding State lands, making administration very difficult.
- The State has indicated that this area is a high priority for conveyance if it is not conveyed to the Native Corporation. The BLM is reluctant to invest money in intensive trail management or facilities if there is a high probability of the area being conveyed.

b) Stuart Creek Non-motorized Area

The area west of the Richardson Highway in the headwaters of the Tonsina River and Stuart Creek area was proposed by the public for consideration as an area closed to motorized vehicles. Alternative C considers designation of 281,000 acres as closed to OHVs; however, this area was not included in that consideration for the following reasons:

- Existing uses, including Special Recreation Permits and established motorized trails, would make it difficult to administer this area as a non-motorized area.
- The area is predominantly State-selected and portions are shown by the State as being of high priority for conveyance.

c) Clearwater Mountains Non-motorized Area

The area of the Clearwater Mountains north of the Denali Highway and east of the Susitna River was also proposed by the public for consideration as an area closed to motorized vehicles. The preliminary alternative packet produced by the BLM showed this area as proposed for seasonal or yearlong closure to OHVs under Alternatives C and D. However, this area, which was State-selected, has since been conveyed to the State.

d) Transfer of BLM-managed Lands in the Bering Glacier Area to the National Park Service

This proposal to transfer lands in the Bering Glacier area to Wrangell-St. Elias National Park and Preserve was submitted by an organization. This Proposed RMP/Final EIS considers alternatives that provide a full range of protection for the natural and cultural resource values found in the Bering Glacier area. Additionally, this proposal is inconsistent with the planning criteria described in Chapter I.

e) Denali Highway Area of Critical Environmental Concern

This proposal was submitted by two different organizations. While this area meets the criteria for designation of an ACEC set forth in 43 CFR 1610.7, the BLM believed that it was better suited for consideration as a SRMA. This decision was based on the high level of recreation use that occurs in the area. Alternatives considered in this Proposed RMP/Final EIS consider a full range of protection for the area, including closure to mineral entry (considered under Alternative C).

f) Copper River Watershed Area of Critical Environmental Concern

A Copper River Watershed ACEC was brought up through scoping, but was eliminated from detailed analysis for the following reasons:

- BLM currently manages only 15 percent of the lands within the watershed, 50 percent of which are selected lands that will probably not be retained under Federal management.
- Strong protective measures will be continued along the Gulkana River, BLM's largest piece of unencumbered land in the watershed, through the proposed SRMA designation and continued management as a Wild and Scenic River.
- Protective measures will be put into place through measures identified for the West Fork Area and the Tiekkel SRMA.
- Application of ROPs and Stips for permitted activities apply strong protective measures for anadromous streams.

C. Alternative Descriptions Related to Issues

The following narrative provides a detailed description of proposed management that responds to each of the issues identified in Chapter I. Goals are listed under each issue. These are followed by a description of objectives, management actions, and allocations proposed to achieve the goals and to address the issue. Goals are constant across alternatives. Objectives, management actions, and allocations may change. Management that is common across the alternatives is presented first, followed by descriptions of management by alternative.

1. Issue 1: Travel Management

Issue Statement: Manage access, roads, and use of OHVs for various purposes, including recreation, commercial uses, subsistence activities, and general enjoyment of public lands, while protecting natural and cultural resources.

a) Goals

- Manage trails to provide access to public lands, recreation, and subsistence opportunities.
- Manage trails to provide a diversity of recreation experiences and opportunities, including motorized and non-motorized.
- Manage trails to minimize resource impacts and reduce user conflicts.
- Manage trails with an emphasis on education where appropriate.
- Manage OHV use associated with permitted and development activities to provide for access while protecting resources.

b) Management Common to All Action Alternatives

(1) Inventory and Monitoring

These monitoring/assessment projects would be common to all action alternatives (Alternatives B, C, and D):

- Trail inventory and assessment work would continue, with an emphasis on BLM public lands (unencumbered) designated as “limited” to OHVs. Inventory and assessment would be necessary in these areas to identify all existing trails and assess trail density and resource impacts. This information would be used in implementation-level designation of specific trails. Inventory and assessment information would also be used to prioritize trail maintenance needs.
- Through contract and survey, characterize trail users, their perception of resource impacts associated with trails (summer and winter), their tolerances of such impacts, user displacement, and tolerance of trail management actions (such as designations, hardening, etc.). Use this information in site-specific implementation decisions regarding identification, construction, or closure of trails. Priority for this work would be Delta Wild and Scenic River, followed by proposed Bering Glacier RNA, followed by any proposed SRMAs.

(2) Implementation-level Planning

Each area designated as “limited” or “closed” to OHVs would have an implementation-level plan completed. This plan would show a complete inventory of trails in the area, describe specific resource concerns or conflicts, and describe specific designated trails and conditions of limitations (seasonal, weight, or vehicle class, etc). These planning processes would include public, State, and Native coordination. These plans would describe tools necessary for implementation (method of signing specific trails, trailhead development, education/interpretation, map production, and law enforcement). These plans would identify and prioritize specific maintenance needs, as well as opportunities for trail development or loops, both motorized and non-motorized. Priority for implementation-level planning would be BLM public lands (unencumbered). Implementation-level planning for these lands would occur within five years of the signing of the Record of Decision for this RMP. Implementation-level considerations are included in the following description of alternatives for Travel Management in order to provide the public with an indication of the BLM’s management intent for each area. These considerations are subject to change based on public involvement and comment during implementation planning.

(3) Land Use Requirements

Permitted activities and uses that involve OHV use would contain stipulations stating that OHV use would be consistent with management in limited and closed areas. If necessary, permitted cross-country travel would be stipulated in a manner that minimizes impacts (i.e., winter use or low ground pressure tires). Specific operating procedures related to OHVs can be found in *Required Operating Procedures* in Appendix C.

(4) Access

The BLM will continue to review and reserve ANCSA section 17(b) easements under the law and regulations to ensure legal access to publicly owned lands as the remainder of the ANCSA corporation’s land entitlements are conveyed. Realignment of reserved 17(b) easements will be considered on a case-by-case basis to resolve on-the-ground issues.

BLM is committed to working with the land owner, state and other federal agencies and subject to availability of funds, personnel and approval, BLM will locate, mark and monitor easements and help educate easement users to understand the rights reserved to the U.S. and the rights of the private land owner with priority based on:

- Easements accessing lands that are permanently managed by the BLM or are important to BLM programs,
- Easements receiving high use,
- Easements required to implement an activity or implementation plan,
- Easements where land owners support the activity allowed by the easement, and

- Easements where maintenance or education would mitigate environmental damage to the easement or BLM-managed lands.

These criteria would be used to prioritize other discretionary actions such as maintenance on 17(b) easements. An implementation level plan for the management of 17(b) easements will be developed cooperatively with Ahtna Inc. to clearly outline management goals and actions associated with 17(b) easements.

The U.S. has a non-possessory interest in a reserved 17(b) easement, which is the right to use the land for a specified purpose. This does not allow BLM to take civil or criminal action against uses, such as wandering from the easement, camping more than 24 hours or fishing from the easement, when the uses do not interfere with the reserved uses of the easement.

A more detailed explanation of ANCSA section 17(b) easements is found in Chapter III on page 187.

To date, the State of Alaska has determined that approximately 650 R.S. 2477 routes throughout the State satisfy the requirements of R.S. 2477; the State continues to research additional routes. The assertion of these routes has not been recognized and current BLM policy is to defer any processing of R.S. 2477 assertions except where there is a demonstrated and compelling need to make a determination. Land use planning decisions do not affect valid R.S. 2477 rights or future assertions; however, if a route should be recognized, the BLM would consider it as a designated or existing trail where it crosses BLM-managed lands.

A more detailed explanation of R.S. 2477 routes is found in Chapter III on page 187.

All proposals for OHV management considered below 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.” The following would be employed in implementation-level planning to ensure consistency with section 811:

- Distinction (by area) between recreational and subsistence uses.
- Allowances in areas “limited” to OHVs for subsistence use, which may include
 - Travel off existing or designated trails for game retrieval,
 - Use of classes of vehicles otherwise restricted for recreational use, and
 - Lifting of seasonal restrictions during subsistence hunting seasons.

Applicable exceptions would be considered in implementation-level planning based on traditional use of a given area, use of the area for subsistence activities, and other management objectives for the area.

Decisions made within this RMP and in implementation-level planning will be consistent with Title XI of ANILCA, which addresses access into Conservation System Units, in this

case the Delta and Gulkana Wild and Scenic River corridors. The BLM, under any alternative, would consider application for Transportation and Utility System right-of-ways across the Wild and Scenic River corridors. Applications would be subject to NEPA analysis and Section 7 (WSRA) analysis. Analysis would need to consider impacts to the outstandingly remarkable values and the free-flowing nature of the rivers and would need to consider feasible alternative routes. Title XI also allows for access to inholdings and recognizes valid existing rights.

c) Alternative A

(1) OHV Management and Trails

Currently, the Tangle Lakes Archaeological District (TLAD) area is designated as “limited” to OHV use. OHVs must stay on designation roads and trails from May 15 to October 16 (Federal Register 1980). The Delta and Gulkana Wild and Scenic River corridors also carry a “limited” designation with OHVs having to stay on existing trails, according to 1983 river management plans (BLM 1983a; BLM 1983b). All other areas are “open.” There are no restrictions on snowmachines once there is adequate snow cover.

(2) Roads

Proposals for new road construction are considered in applications for Rights-of-Way on a case-by-case basis. The Delta and Gulkana Wild and Scenic River corridors are avoidance areas for new road construction.

d) Alternative B

(1) OHV Management and Trails

Same as under Alternative A.

(2) Roads

Proposals for new road construction would be considered in applications for Rights-of-Way on a case-by-case basis. There would be no avoidance areas, but guidelines and stipulations described in the *Required Operating Procedures*, Appendix C would be followed.

e) **Alternative C**

Roads and trails would be managed as follows for each of the travel management areas described below. Map 3 on page 61 shows the location of each travel management area, and all summer trails currently GPSed. Other (i.e., uninventoried) trails may exist in the area.

On State- and Native-selected lands, the following criteria would apply for OHVs, consistent with 11 AAC 96.025 and “Generally Allowed Uses on State Land” (ADNR 2004):

- Highway vehicles with a curb weight less than 10,000 pounds and off-road or all-terrain vehicles with a curb weight of less than 1,500 pounds will utilize existing trails, whenever possible.
- If necessary (game retrieval, etc.), travel off existing trails will be conducted in a manner that minimizes: a) disturbance of vegetation, soil stability, or drainage systems; b) changing the character of, polluting, or introducing silt and sediment into streams, lakes, ponds, water holes, seeps, and marshes; and c) disturbance of fish and wildlife resources.
- Interim management will emphasize education but citations could be issued if deliberate violations of these conditions result in significant resource damage.

(1) West Fork Area

Includes 490,000 acres, predominantly State-selected.

(a) RMP Decision

Area would be designated as “limited” to OHVs. No new road construction would be permitted in this area.

(b) Implementation-level Considerations

OHVs would be restricted to designated trails from May 1 to August 31. Designated trails would avoid primary trumpeter swan breeding and nesting habitat and wetlands. Outside of these seasonal dates, OHVs would be required to utilize existing trails, whenever possible, consistent with the description provided above under *Alternative C* on page 44. Designated trails for snowmachines may be considered in the future if research shows definitive impacts to quality of moose winter range or significant impacts to predator/prey relationships with increased use.

(2) Delta Bison Calving Area

Includes 19,000 acres, all BLM public lands (unencumbered).

(a) RMP Decision

Area would be designated as “limited” to OHVs. Road construction permitted for resource development but subject to seasonal restrictions from May 1 to June 30.

(b) Implementation-level Considerations

OHVs would be restricted to designated trails from April 15 to October 15. Designated trails would avoid calving areas. There would be no snowmachine restrictions.

(3) Nelchina Caribou Calving Area

Includes 389,000 acres, predominantly State-selected.

(a) RMP Decision

Area would be designated as “limited” to OHVs. No new road construction would be allowed.

(b) Implementation-level Considerations

OHVs would be restricted to designated trails from May 1 to June 15. Designated trails would avoid caribou calving areas. Outside of the indicated season, OHVs would be required to utilize existing trails, whenever possible, consistent with description provided above under (II)(B)(1)(e). There would be no snowmachine restrictions.

(4) Delta WSR Corridor Area

Includes 44,000 acres, all unencumbered BLM land.

(a) RMP Decision

Area would be designated as “limited” to OHVs. BLM’s management intent under Alternative C, consistent with protection and enhancement of outstandingly remarkable values on the river, is to permit no new road construction. However, BLM will comply with Title XI of ANILCA, as discussed on page 42.

(b) Implementation-level Consideration

OHVs would be limited to designated trails. Designated trails would be located to minimize resource damage, maintain primitive and semi-primitive recreation experience, and facilitate maintenance of designated trails. Some trails would be designated as non-motorized and a non-motorized trail system out of Tangle Lakes campground would be developed. Snowmachines would be limited to designated trails within the Wild and Scenic River corridor.

(5) Delta Range Area (including Delta Mountain Sub-unit)

Includes 359,000 acres, mostly BLM public lands (unencumbered) but some State-selected land.

(a) RMP Decision

This area would be designated as “limited” to OHVs. The Delta Mountain Sub-unit (labeled A on Map 3) would be closed year-round to motorized use, other than permitted uses associated with resource development. Snowmachine use outside the defined sub-unit would be unrestricted. New road construction would only be permitted to support the transportation and utility corridor.

(b) Implementation-level Considerations

OHV use would be limited to designated trails, which would be located to minimize resource damage; maintain primitive, semi-primitive, and roaded natural recreation experiences; and facilitate maintenance of designated trails. Non-motorized hiking trails may be considered off the Richardson Highway or in the Jarvis Creek area.

(6) Denali Highway Area

Includes 374,000 acres, most of which are State-selected.

(a) RMP Decision

This area would be designated as “limited” to OHVs. No new road construction would be permitted.

(b) Implementation-level Considerations

OHVs would be limited to designated trails. Designated trails would be located to minimize resource damage, minimize impacts to the viewshed, and maintain a diversity of recreational experiences. Some trails would be designated as non-motorized, with non-motorized trail loops developed out of campgrounds, waysides, or interpretive sites. Some vehicle class restrictions would apply. There would be

no immediate snowmachine restrictions, but designated trails for snowmachines may be considered in the future if winter trail density and encounters are exceeding user tolerances.

(7) Gulkana WSR Corridor Area

Includes 105,000 acres, most of which are unencumbered BLM lands.

(a) RMP Decisions

This area would be designated as “limited” to OHVs. BLM’s management intent under this alternative, consistent with management under a wild classification, is no new road construction. However, BLM will comply with Title XI of ANILCA, as discussed on page 42.

(b) Implementation-level Considerations

OHVs would be limited to the following designated trails: Swede Lake, Hungry Hollow, Middle Fork, and Haggard Creek. Haggard Creek trail would be closed to motorized use from April 15 to August 15. Within the Wild and Scenic River corridor, there would be a 1,500 pound GVW limit on vehicles used for recreational purposes. Snowmachines would be limited to designated trails within the Gulkana Wild and Scenic River corridor.

(8) Tiekel Area (including Tonsina Sub-units)

This area includes 848,000 acres, most of which are State-selected lands.

(a) RMP Decisions

This area would be designated as “limited” to OHVs. The northern portion of the Tonsina sub-unit (labeled B on Map 3) would be closed to motorized vehicles from April 15 to October 15. The southern portion of the Tonsina sub-unit (labeled C on Map 3) would be closed year-round to all motor vehicles, including helicopter-supported recreational activities. Snowmachines would not be permitted in the southern portion of the Tonsina sub-unit. No new road construction outside the transportation and utility corridor would be allowed.

(b) Implementation-level Considerations

OHVs would be limited to designated trails. Trails would be designated to minimize resource damage, to maintain semi-primitive and primitive recreation experiences, and to minimize impacts to the viewshed. Some specific trails would be designated as non-motorized. Construction of both non-motorized and motorized loops would be considered. Some vehicle class restrictions would apply on specific trails. Snowmachines would not be permitted on some specific non-motorized trails.

(9) Bering Glacier Area

This area includes 940,000 acres, most of which are BLM public lands (unencumbered).

(a) RMP Decisions

This area would be designated as “limited” to OHVs. No new road construction would be allowed.

(b) Implementation-level Considerations

OHVs would be limited to designated trails. Trails would be designated to avoid nunataks, sensitive waterfowl areas, and to prevent unmanaged proliferation of trails. There would be no snowmachine restrictions.

(10) Tangle Lakes Archaeological District (TLAD) Area

This area includes 196,000 acres, most of which is State-selected.

(a) RMP Decisions

Management of this area would continue as presently managed. OHVs must stay on designated trails (Swede Lake Trail, South Landmark Gap Trail, Osar Lake Trail, Dickey Lake Trail, and Alphabet Hills Trail) from May 15 to October 16. Trails would be designated to avoid cultural resources in the area and to prevent unmanaged proliferation of trails. Consideration would be given to class restrictions on specific trails (such as weight limits). No new road construction would be allowed.

(11) Chistochina-Cantwell Area

This area consists of Native-selected and dual-selected lands in the Chistochina planning region and in the Cantwell area. The area consists of 683,000 acres.

(a) RMP Decisions

This area would be designated as “limited” to OHVs. Road construction would be considered on a case-by-case basis, consistent with section 906(k) of ANILCA.

(b) Implementation-level Considerations

OHVs within this area would be limited to designated trails. Trails would be designated to protect traditional and culturally significant sites and areas associated with ANCSA 14(h) Native selections. A secondary goal of trail designation would be to limit unmanaged proliferation of trails and their associated impacts. Vehicle class restrictions such as weight limitations would be considered on specific trails,

consistent with existing 17(b) easement weight limitations. Some trails may be maintained as non-motorized.

(12) Other State- and Native-selected Lands

(a) RMP Decisions

Within these areas (2,470,000 acres), OHV use would be “limited,” consistent with the description provided above under *Alternative C* on page 44. Road construction would be permitted on a case-by-case basis, utilizing measures described in *Appendix C: Required Operating Procedures*.

(13) Other Unencumbered BLM Lands

(a) RMP Decisions

These areas (139,000 acres) would be designated as “limited” to OHVs.

(b) Implementation-level Considerations

OHVs would be limited to designated trails. In the Slana settlement area, trails and roads necessary to access homesites would be designated.

f) Alternative D – Proposed RMP

Roads and trails would be managed as follows for each of the travel management areas described below. Map 4 on page 63 shows the location of each travel management area, and all summer trails currently GPSed. Other (i.e., uninventoried) trails may exist in the area.

On State- and Native-selected lands, the following criteria would apply for OHVs, consistent with 11 AAC 96.025 and “Generally Allowed Uses on State Land” (ADNR 2004):

- Highway vehicles with a curb weight less than 10,000 pounds and off-road or all-terrain vehicles with a curb weight of less than 1,500 pounds will utilize existing trails, whenever possible.
- If necessary (game retrieval, etc.), travel off existing trails will be conducted in a manner that minimizes: a) disturbance of vegetation, soil stability, or drainage systems; b) changing the character of, polluting, or introducing silt and sediment into streams, lakes, ponds, water holes, seeps, and marshes; and c) disturbance of fish and wildlife resources.
- Interim management will emphasize education but citations could be issued if deliberate violations of these conditions result in significant resource damage.

(1) West Fork Area

This area includes 490,000 acres, predominantly State-selected, the same as under Alternative C.

(a) RMP Decisions

OHVs would be “limited” to existing trails, consistent with description provided above under *Alternative D* on page 49. The need for limitations is based on protection of wetlands and trumpeter swan breeding and nesting habitat and management of OHV trails to prevent unmanaged proliferation. This area consists of predominantly State-selected lands. BLM interim management of trails in the area would consist of inventory of trails in the area, definition of “existing” trails through mapping, and education regarding staying on existing trails. Under interim management there would be no snowmachine restrictions. Road construction would be considered if necessary for resource development, consistent with the measures described in *Appendix C: Required Operating Procedures and Oil and Gas Leasing Stipulations*.

(b) Implementation-level Considerations

If any lands in the area are retained in long-term Federal ownership, trails would be designated, with designation goals as described under Alternative C for this area on page 44. Long-term, designated trails for snowmachines may be considered in the future if research shows definitive impacts to quality of moose winter range or significant impacts to predator/prey relationships with increased use.

(2) Delta Bison Calving Area

This area includes 19,000 acres, all of which are BLM public lands (unencumbered), the same as under Alternative C.

(a) RMP Decisions

This area would be designated as “limited” to OHVs in order to minimize potential OHV impacts to bison calving habitat or calving bison. Road construction would be permitted for resource development, subject to seasonal restrictions from May 1 to June 15.

(b) Implementation-level Considerations

OHVs would be restricted to designated trails. Designated trails would avoid calving areas. There would be no snowmachine restrictions. Road construction would be permitted for resource development, subject to seasonal restrictions from May 1 to June 15.

(3) Nelchina Caribou Calving Area

This area includes 389,000 acres that are predominantly State-selected, the same as under Alternative C.

(a) RMP Decisions

OHVs would be “limited” to existing trails, consistent with description provided above under *Alternative D* on page 49. While the area currently has few trails, future OHV trail management is necessary in this area to prevent potential unmanaged proliferation of trails that might adversely impact caribou calving habitat or disturb calving caribou. This area consists of predominantly State-selected lands. BLM interim management of trails in the area would consist of inventory of trails in the area, definition of “existing” trails through mapping, and education regarding staying on existing trails. There would be no snowmachine restrictions. Road construction would be permitted for resource development, subject to seasonal restrictions from May 1 to June 15.

(b) Implementation-level Considerations

If any lands in the area are retained in long-term Federal ownership, trails would be designated, with designation goals as described under Alternative C for this area.

(4) Delta WSR Corridor Area

This area contains 44,000 acres, all of which are unencumbered BLM lands, the same as under Alternative C.

(a) RMP Decisions

This area would be designated as “limited” to OHVs. Designation of trails is necessary in this Wild and Scenic River corridor to comply with Title XI of ANILCA (specifically 43 CFR 36.11(g)) and to ensure management to protect outstandingly remarkable values. OHVs would be restricted to designated trails (Top of the World Trail, Rainy Creek Trail) from May 15 to October 16 or when there is an average of 12 inches snow or 6 inches frost. These are existing routes and will not limit access into the area for subsistence hunting or access to mining claims. Snowmachine use will not be limited at this time. There are other existing trails in the corridor (portage trail, trails out of Tangle Lakes Campground) that will be managed as non-motorized trails. This decision does not preclude future consideration of development of motorized or non-motorized trails, if consistent with protection of the outstandingly remarkable values of the river corridor.

Road construction would be avoided in all segments of the river, but overland transportation systems within or across the river corridor may be authorized if it is

determined that there are no economically feasible and prudent alternative routes. This is consistent with ANILCA, section 1105. Any road crossings of the river would be subject to evaluation consistent with section 7 of the Wild and Scenic River Act.

(b) Implementation-level Considerations

OHVs have been limited to designated trails by the RMP decisions listed above. If additional trails are considered for designation in the future, they would be located to minimize resource damage, maintain primitive and semi-primitive recreation experience, and facilitate maintenance of designated trails. Some trails would be designated as non-motorized and a non-motorized trail system out of Tangle Lakes Campground would be developed. Snowmachines may be limited to designated trails seasonally to minimize disturbance to heavy concentrations of wintering moose within the Wild and Scenic River corridor, subject to closure procedures in 43 CFR Part 36.11.

(5) Delta Range Area (including Delta Mountains Sub-unit)

This area consists of 276,000 acres, most of which are BLM public lands (unencumbered), though some are State-selected lands.

(a) RMP Decisions

This area would be designated as “limited” to OHVs. Limitations will be considered in order to prevent unmanaged proliferation of OHV trails and to maintain existing recreation experiences in the area. In order to maintain an existing non-motorized winter recreation experience in rugged, glaciated terrain, the Delta Mountains Sub-unit (labeled A on Map 4) would be closed to snowmachine use, though access to subsistence resources would be allowed. Seasonal closure would begin on October 15 or when there is 12 inches average snowfall or 6 inches of frost. Seasonal closure would run until May 15. Snowmachine use outside those defined sub-units would be unrestricted. OHV use for resource development will be permitted consistent with Required Operating Procedures. New road construction would be permitted in the transportation utility corridor and for resource development. Retention of temporary roads would be considered in areas managed for a roaded natural recreation experience.

(b) Implementation-level Considerations

OHV use would be limited to designated trails, which would be located to minimize resource damage; maintain primitive, semi-primitive, and roaded natural recreation experience; and facilitate maintenance of designated trails. Non-motorized hiking trails may be considered off the Richardson Highway or in the Jarvis Creek area.

(6) Denali Highway Area

This area consists of 374,000 acres, most of which are State-selected lands, the same as under Alternative C.

(a) RMP Decisions

OHVs would be “limited” to existing trails, consistent with the description provided above under *Alternative D* on page 49. OHV limitations will be considered in order to prevent unmanaged proliferation of OHV trails, to maintain existing recreation experiences and a diversity of dispersed and backcountry experiences, and to prevent visual impacts from unmanaged OHV use within the viewshed of the highway. This area is predominantly State-selected. BLM interim management of trails in the area would consist of inventory of trails in the area, definition of “existing” trails through mapping, and education regarding the importance of staying on existing trails. There would be no immediate snowmachine restrictions. Road construction would be permitted for resource development, utilizing guidelines for maintenance of VRM Class II and III viewsheds.

(b) Implementation-level Considerations

If any lands in the area are retained in long-term Federal ownership, trails would be designated, with designation goals as described for this area under *Alternative C* on page 44. Development of non-motorized loop trails would be considered on BLM recreational withdrawals located along the Denali Highway. Designated trails for snowmachines may be considered in the future (on lands retained in Federal ownership) if winter trail density and encounters are exceeding user tolerances, as determined through user surveys.

(7) Gulkana WSR Corridor Area

This area consists of 105,000 acres, most of which are unencumbered BLM, the same as under Alternative C.

(a) RMP Decisions

BLM’s management intent under this alternative, consistent with management under a wild classification, is no new road construction. However, BLM will comply with Title XI of ANILCA, as discussed on page 42. This area would be designated as “limited” to OHVs. Designated trails are necessary in this Wild and Scenic River corridor to comply with Title XI of ANILCA and to ensure management to protect outstandingly remarkable values. As identified through the Gulkana implementation planning process, use of OHVs would be limited to the following designated trails: Swede Lake Trail, Hungry Hollow Trail, Middle Fork Trail, Haggard Creek Trail, Dickey Lake Trail, Twelve Mile Creek Trail, South Middle Fork Trail, Northeast

Middle Fork Trail, Northwest Middle Fork trail, West Fork Trail, and Fish Lake Trail. Seasonal closure may be considered on Haggard Creek to minimize use during wet trail conditions, but access to subsistence resources would be allowed. Within the Wild and Scenic River corridor, there would be a 1,500 pound GVW limit on vehicles used for recreational purposes. There would be no snowmachine restrictions.

(8) Tiekel Area (including Tonsina Sub-units)

For Alternative D, this area only includes the unencumbered BLM lands within the Tiekel planning region, a large portion of which is located in the transportation and utility corridor.

(a) RMP Decisions

This area would be designated as “limited” to OHVs. Limitations will be considered in order to maintain existing backcountry and dispersed recreation experiences and to prevent unmanaged proliferation of OHV trails. If lands adjacent to the existing corridor are retained in long-term Federal ownership, management of OHVs would also be designated as “limited,” including some consideration of area closures for snowmachines consistent with the description under Alternative C for the Tonsina sub-unit (both North and South sub-units, labeled B and C, respectively, on Map 4), as described under the *Tiekel Area (Including Tonsina Sub-units)* section on page 47. Road construction would be permitted within the transportation and utility corridor for resource development or transportation and utility maintenance, consistent with measures identified in *Appendix C: Required Operating Procedures*. Use of temporary or winter roads would still be encouraged, but retention of roads may be considered if consistent with management for a roaded natural experience. If lands adjacent to the transportation and utility corridor are retained in long-term Federal ownership, new roads would not be permitted in areas being managed for a primitive recreation experience.

(b) Implementation-level Considerations

Within this area, OHVs would be limited to designated trails. Trails would be designated to minimize resource damage, to maintain a diversity of recreational opportunities, and to minimize impacts to the viewshed. Some specific trails would be designated non-motorized. Construction of both non-motorized and motorized loops would be considered. Some vehicle class restrictions (such as weight limitations) would apply on specific trails. Snowmachines would not be permitted on specific trails managed for non-motorized use.

(9) Bering Glacier Area

This area consists of 827,600 acres, all of which are BLM public lands (unencumbered).

(a) RMP Decisions

This area would be designated as “limited” to OHVs to prevent unmanaged proliferation of trails and to protect unique ecological values associated with this glacial environment. Road construction would be permitted for resource development, with special consideration for protection of resource values identified for the area. There would be no snowmachine restrictions.

(b) Implementation-level Considerations

OHVs would be limited to designated trails. Trails would be designated to avoid nunataks, sensitive waterfowl areas, and to prevent unmanaged proliferation of trails.

(10) Tangle Lakes Archaeological District (TLAD) Area

This area includes 196,000 acres, most of which is State-selected.

(a) RMP Decisions

Management of this area would continue as presently managed with “limited” designations in order to protect the high-density occurrence of archeological sites in the area. OHVs would be restricted to designated trails (Swede Lake Trail, South Landmark Gap Trail, Osar Lake Trail, Dickey Lake Trail, and Alphabet Hills Trail) from May 15 to October 16 or when there is an average of 12 inches snow or 6 inches frost. Trails would be designated to avoid cultural resources in the area and to prevent the unmanaged proliferation of trails. Road construction would be permitted if necessary for resource development. Proposed routes would be subject to compliance with requirements of the National Historic Preservation Act before potential authorization.

(b) Implementation-level Considerations

Consideration would be given to class restrictions such as weight limits on specific trails. Consideration would be given to designation of new trails (including non-motorized), consistent with recreation or subsistence management objectives for the area. New trails must be routed to avoid cultural resources.

(11) Chistochina-Cantwell Area

This area consists of Native-selected and dual-selected lands in the Chistochina planning region and in the Cantwell area. This area consists of 13,000 acres of Native-selected lands and 670,000 acres of dual-selected lands.

(a) RMP Decisions

OHV use within this area would be “limited” consistent with the description provided above under *Alternative D* on page 49 (OHVs to utilize existing trails whenever possible). The area will be limited in order to provide more intensive and proactive OHV management, as requested by Ahtna, Inc, the selecting entity. Where immediate concern exists regarding protection of traditional and cultural areas or sites, the BLM would work with the Native or village corporations to inventory, designate, and post trails to avoid negatively impacting such sites. Road construction would be considered on a case-by-case basis, consistent with section 906(k) of ANILCA and consistent with existing 17(b) easement limitations.

(b) Implementation-level Considerations

Consideration would be given to rerouting trails to avoid culturally sensitive sites, to maintaining some trails as non-motorized, and to education/interpretation at trailheads. Vehicle class restrictions (such as weight limitations) may be considered if necessary to minimize impacts. Where long-term traditional use is documented, consideration may be given to limiting some specific trails to recreational snowmachine use to allow for traditional trapping.

(12) Other State- and Native-selected Lands

(a) RMP Decisions

Within these areas (3,311,000 acres), OHVs use would be “limited,” consistent with the description provided above under *Alternative D* on page 49: OHVs must use existing roads and trails; activities must be conducted in a manner that minimizes disturbance of vegetation, soil stability, or drainage systems, and minimizes disturbance of fish and wildlife resources. Road construction would be permitted on a case-by-case basis, utilizing measures described in *Appendix C: Required Operating Procedures*.

(13) Other Unencumbered BLM Lands

(a) RMP Decisions

Within these areas (222,000 acres), OHVs would be “limited” to existing trails. On-the-ground management would consist of identification, posting, and education

regarding existing trails. Road construction would be permitted, consistent with measures identified in *Appendix C: Required Operating Procedures*.

Table 3 summarizes the preceding information.

Table 3. Travel Management – Alternative Summary

Issue	Alternative			
	A: No Action	B: Resource Development	C: Resource Conservation	D: Proposed RMP
<p>OHVs: Open, Limited, and Closed Areas</p> <p>NOTE – Limitations do not apply to snowmachines unless specially stated.</p>	<p>Open: 6,755,000 acres (96%)</p> <p>Limited to designated trails: 196,000 acres (3%) in TLAD</p> <p>Limited to existing trails: 105,000 acres (1%) in the Delta and Gulkana Wild and Scenic River corridors</p> <p>Closed: 0 acres (0%)</p>	<p>Same as A.</p>	<p>Open: 0 acres (0%)</p> <p>Limited to designated trails: 3,392,000 acres (48%)</p> <p>Limited to existing trails: 3,369,000 acres (48%)</p> <p>Closed: 295,000 acres (4%). 170,000 closed to snowmachines.</p> <p>Limitations are based on resource values and objectives for each unit but generally consist of designation of trails. The following areas would be “limited” to OHVs:</p> <ol style="list-style-type: none"> 1. All areas listed in the narrative. 2. Includes State- and Native-selected lands within these areas until conveyance occurs. 3. All unencumbered BLM lands would have designated trails. <p>Limitations would include some designation of non-motorized trails within these areas.</p> <p>In addition, State- and Native-selected lands outside of identified units would be designated as “limited.” Limited would be consistent with “Generally Allowed Uses on State Land”, which requires OHVs to stay on existing trails whenever possible.</p>	<p>Open: 0 acres (0%)</p> <p>Limited to designated trails: 1,692,000 acres (24%)</p> <p>Limited to existing trails: 5,320,000 acres (75%)</p> <p>Closed: 44,000 acres (0.6%), closed to snowmachines.</p> <p>Most BLM-managed lands would be designated as “limited” to OHVs, as follows:</p> <p>All unencumbered BLM lands would be limited, with limitations defined specifically by area-specific resource objectives</p> <p>State- and Native-selected lands would be “limited” to OHVs, with limitations consistent with the State’s current generally allowed uses, which requires OHVs to stay on existing trails whenever possible. BLM’s interim role would be education regarding use of existing trails. Management of TLAD would not change.</p> <p>The following area would be “closed” to OHVs:</p> <ol style="list-style-type: none"> 1. Delta Mountain Sub-unit in the Delta Range Area closed to

Issue	Alternative			
	A: No Action	B: Resource Development	C: Resource Conservation	D: Proposed RMP
<p>OHVs: Open, Limited, and Closed Areas (cont.)</p> <p>NOTE – Limitations do not apply to snowmachines unless specially stated.</p>			<p>The following areas would be “closed” to OHVs:</p> <ol style="list-style-type: none"> 1. Tonsina subunit in Tiekel Area (South unit closed year-round to motorized vehicles [including snowmachines], North unit closed 4/15 to 10/15); 2. Delta Mountain Sub-unit in Delta Range Area would be closed to OHVs (including snowmachines) year-round. 	<p>motorized vehicles (including snowmachines) 10/15 – 5/15 except snowmachine use to access subsistence hunting.</p>
Roads	<p>Proposals for new road construction considered in applications for Rights-Of-Way on a case-by-case basis. WSR corridors are avoidance areas for new construction.</p>	<p>Proposals for new road construction considered in applications for Rights-Of-Way on a case-by-case basis. No avoidance areas, but utilize guidelines described in <i>Required Operating Procedures</i>.</p>	<p>The following limitations would be applied to new road construction:</p> <ol style="list-style-type: none"> 1. Within West Fork Area, Nelchina Caribou Calving Area, Delta WSR Corridor Area, Denali Highway Area, Gulkana WSR Corridor Area, and Bering Glacier Area, there would be no new road construction, subject to Title XI of ANILCA in WSR corridors. 2. Within the Tiekel and Delta Range Areas there would be no new road construction outside the transportation and utility corridor. 3. Within the Delta Bison Area, construction would be allowed for resource development but closed seasonally 5/1 to 6/15. Outside of these areas, guidelines described in <i>Required Operating Procedures</i> would apply. 	<p>Proposals for new road construction considered in applications for Rights-Of-Way. Restrictions for new road construction and ROWs would be as follows:</p> <ol style="list-style-type: none"> 1. Delta Bison Area, Nelchina Caribou Calving Area, West Fork Area, Denali Highway Area: new roads permitted for resource development, but subject to seasonal or visual impact restrictions; 2. Delta WSR Corridor Area: Avoid in all segments subject to Title XI of ANILCA and recognition of valid existing rights. 3. Gulkana WSR Corridor Area no new construction, subject to Title XI of ANILCA and recognition of valid existing rights. 4. Tiekel and Delta Range Areas: permitted in transportation and utility corridor.

Map 3. Travel Management Areas - Alternative C

File size: 199 KB

File name: 03_travelc.pdf

Map size: 11x17

Map 4. Travel Management Areas - Alternative D

File size: 194 KB

File name: 04_traveld.pdf

Map size: 11x17

2. Issue 2: Recreation

Issue Statement: Manage recreation to provide a diversity of experiences on BLM-managed lands. Determine what measures are necessary to ensure that a diversity of recreational opportunities is maintained.

The following alternative descriptions rely heavily on Recreation Opportunity Spectrum (ROS) classes to identify specific recreation objectives for different areas. Map 29 shows the ROS classes, based on 2003 inventory and is included in *Chapter III, Issue 2: Recreation, Recreation Opportunity Spectrum*. Chapter III also includes a description of the recreation setting for each ROS class, including degree of naturalness, concentration of users, and expected impacts from management activities or roads and trails. The following alternative descriptions describe which areas would receive special recreation management emphasis (Special Recreation Management Areas or SRMAs) and how ROS classes would be managed within each area. Alternative tables that show all measures associated with each SRMA complement the narrative descriptions. These tables can be found in *Appendix A: SRMA Comparison Tables*. For specific measures regarding roads and OHV management, see *Issue 1: Travel Management Issue* described above on page 40.

a) Goals

- Manage recreation to maintain a diversity of recreational opportunities.
- Provide opportunities for commercial recreation consistent with area objectives for recreation management.

b) Management Common to All Action Alternatives

(1) Public Cabins

Public use cabins would be considered consistent with objectives described in each SRMA. In general, existing structures would be considered for public use cabins before the construction of new cabins. Planning may occur, but land status would need to be resolved before major investment occurs in a public cabin system. Outside of SRMAs, the following have been identified for potential public use cabins: Tyone cabin, Monsoon Lake cabin, and Welsh cabin on the Maclaren River.

(2) Inventory and Monitoring

Monitoring would include the following:

- Visitor use, both dispersed and developed sites.
- Characterization of trail users and tolerances, as described under *Issue 1: Travel Management* on page 40.
- Monitoring of campsite impacts, camp encounters, litter, and human waste, as described in the River Management Plan for the Delta National Wild and Scenic River, and the River Management Plan for the Gulkana National Wild River.
- Monitoring of commercial use activities and compliance with conditions of the permit.
- Assessment of visitor and resident recreation experiences and benefits.

Priority for monitoring would be based on:

1. Wild and Scenic River corridors,
2. Special Recreation Management Areas, and
3. Research Natural Areas.

(3) Gulkana Wild and Scenic River

Concurrent to the development of this RMP, the River Management Plan for the Gulkana is being revised. Under all alternatives, management of the Gulkana Wild and Scenic River corridor would be consistent with the revised plan, which would direct management to maintain primitive, semi-primitive motorized, and developed recreation experiences within the corridor. The revised plan would establish general visitor use limits through monitoring of camp encounters and appropriate management actions if standards are not met. In addition, it would set standards for campsite impacts, litter, and human waste, and take appropriate management actions to address these impacts (BLM 2005).

c) Alternative A

This alternative would continue current recreation management of rivers (two components of the National Wild and Scenic River System, the Delta and Gulkana), four campgrounds, two major waysides, and 24 developed trailheads. Current management guidance is provided by the 1980 Southcentral MFP and, except for the Wild and Scenic Rivers, there are no specific management objectives identified for recreation. Consequently, management reacts to the trend of increasing recreation use and associated impacts on a case-by-case basis. Generally, proposals for new recreational facilities or other recreational opportunities are generated by proponents outside the BLM. Applications for Special Recreation Permits (for commercial use) are handled on a case-by-case basis.

Under this alternative, no new recreation facilities would be developed, and no specific recreation objectives would be set. No areas would be designated as SRMAs.

d) Alternative B

In general, this alternative emphasizes resource development and development of recreational facilities to address increasing recreational use. Specific measures are identified for the specific areas described below.

(1) Delta WSR Corridor Area

No SRMA would be designated for this area. The area would be managed consistent with 1983 River Management Plan for the Delta National Wild and Scenic River. Management would be for semi-primitive non-motorized, semi-primitive motorized, and roaded natural experiences. Current primitive ROS classes would be allowed to trend towards semi-primitive non-motorized and semi-primitive motorized. Existing ANCSA (d)(1) withdrawals in the scenic and recreational portions of the river would be revoked to allow for mineral exploration and development. A public use cabin system would be considered. OHVs would be “limited” to existing trails. There would be no restrictions on snowmachine use. No general visitor use limits or commercial limits would be established. The following developed facilities would be considered: installation of more toilets along the river, improvement of the take-out to include installation of a toilet and increased signage, and renovation of the Tangle Lakes Campground.

(2) Gulkana WSR Corridor Area

No SRMA would be designated in this area.

(3) Denali Highway Area

The 135-mile Denali Highway would be designated as a Back Country Byway cooperatively with the State of Alaska, Department of Transportation. The area would not be designated as an SRMA, but it would be managed for semi-primitive motorized and roaded natural recreation experiences. Existing primitive recreation experiences would be allowed to trend towards semi-primitive motorized and roaded natural experiences. All existing ANCSA (d)(1) withdrawals would be revoked to allow for mineral exploration and development, with site-specific mitigation to protect visual resources. There would be no restrictions to OHV or snowmachine use. The public use cabin system would be considered. No general visitor use or commercial use limits would be considered. The following facilities would be considered to accommodate increased recreational use:

1. Three rest areas consisting of outhouses, garbage receptacles, education/interpretive displays, and possible day-hike trailheads. The areas

- would be located east of Canyon Creek, east of Susitna River crossing, and east of Maclaren Summit.
2. Two visitor centers: One at the junction of the Parks and Denali Highways in cooperation with the State, the Native Village of Cantwell, and Denali National Park and Preserve; and one in the Tangle Lakes area.
 3. Sixteen viewpoints consisting of pull-outs, garbage receptacles, and interpretive signs highlighting wildlife, geologic, cultural, or scenic features.
 4. A campground/boat-launch at Susitna River crossing.

(4) Tielkel Area

No SRMA would be designated; management would be for primitive, semi-primitive motorized, and roaded natural recreation experiences, with primitive experiences trending towards semi-primitive motorized experiences. The area would be open to OHVs and snowmachines. All existing ANCSA (d)(1) withdrawals would be revoked, except the inner corridor of the transportation and utility corridor. This would allow for increased mineral exploration and development. Public use cabins would be considered. No general visitor use or commercial capacities would be established. Recreational facilities would include development of two waysides in the Tielkel corridor on unencumbered BLM land, trailhead parking and signing at three different trails, and a bike path utilizing the old Richardson Highway.

(5) Other Areas

Outside of the areas described above, recreation management would be custodial, with most areas designated as “open” to OHVs and consideration of commercial or permitted activities on a case-by-case basis.

e) Alternative C

In general, this alternative emphasizes maintenance of existing recreational experiences through specific measures identified through designation of SRMAs.

(1) Delta WSR Corridor Area

See Map 5 on page 77. This area would be designated as an SRMA with a total area of approximately 44,000 acres. Objectives would be to maintain existing primitive, semi-primitive, and roaded natural recreation experiences and to protect the viewshed. The area would be designated as “limited” to OHVs, with implementation-level consideration given to designated trails for OHVs (including snowmachines), and maintenance of some trails for non-motorized use. BLM would recommend to the State that no motorized watercraft be permitted on Tangle Lakes. No public use cabins would be considered. General visitor use and commercial use limits to maintain the existing recreation experiences would be determined in an implementation-level plan. The river

corridor and viewshed would be managed as VRM Class I (Map 17 on page 111 displays the current VRM classes for the planning area). A discussion of VRM and definitions for VRM Classes are in Chapter III, *Issue 3: Natural and Cultural Resources, Visual Resources*.

(2) Gulkana WSR Corridor Area

See Map 6 on page 78. This area would be designated as an SRMA and would consist of 105,000 acres, 95 percent of which is unencumbered BLM lands. Specific management for this area is described above under *Management Common to All Alternatives* on page 66.

(3) Denali Highway Area

See Map 7 on page 79. This area would be designated as an SRMA, consisting of the foreground and middleground viewshed from the Denali Highway. This area consists of 559,000 acres, most of which are State-selected lands. Objectives would be to manage to maintain the existing recreation opportunities, including primitive, semi-primitive non-motorized, semi-primitive motorized, and roaded natural. The area would be designated as “limited” to OHVs, with implementation-level consideration given to designation of trails, vehicle weight limits on some trails, and closure to motorized use on some specific trails. The current ANCSA (d)(1) withdrawal against leasable minerals would remain in place and the area would be recommended for withdrawal from locatable mineral entry. No public use cabins would be considered. General visitor use and commercial use limits would be determined in an implementation-level plan, based on objectives described above. No new recreational facilities would be considered until visitor use limits are determined. The area would be managed as VRM Class II.

(4) Tiekel Area

See Map 8 on page 80. This area would be designated as an SRMA consisting of 848,000 acres, predominantly State-selected lands but also containing Native-selected and unencumbered BLM land. The area would be managed to maintain existing recreational opportunities (primitive, semi-primitive non-motorized, semi-primitive motorized, and roaded natural), with an emphasis (outside the transportation and utility corridor) on maintaining primitive recreation experiences. The area would be designated as “limited” to OHVs, with implementation-level consideration of designation of trails and maintenance of some specific trails as non-motorized. The Tonsina sub-unit would consist of two parts: the north sub-unit would be closed to motorized vehicles from April 15 to October 15; the south sub-unit would be closed yearlong to motorized vehicles.

Any existing ANCSA (d)(1) withdrawals against mineral entry would be maintained. No public use cabins would be considered. General visitor use and commercial use limits would be determined in implementation-level plans, based on objectives described above. Limits for commercial heli-skiing would be determined based on maintenance of

existing ROS classes. No commercial heli-ski operations would be permitted north of the Tiekel River or Stuart Creek. No new recreational facilities would be considered. The area would be managed under VRM Classes II, III, and IV.

(5) Delta Range Area

See Map 9 on page 81. This SRMA would consist of 359,000 acres, the majority of which are unencumbered BLM lands. Objectives for the area would be to maintain the existing ROS classes, which include primitive, semi-primitive non-motorized, semi-primitive motorized, and roaded natural classes, and to provide for opportunities for non-motorized recreation. OHVs (not including snowmachines) would be “limited” to designated trails and the area would include some non-motorized trails. BLM-managed portions of the Augustana, Fels, Canwell, Castner, and McCallum Creek glaciers and drainages would be designated non-motorized yearlong (see the Delta Mountains Sub-units on Map 9) in order to maintain existing opportunities for non-motorized backcountry skiing and mountaineering. The existing withdrawal against leasable mineral entry would be maintained and the area would be recommended for withdrawal against locatable mineral entry. No public cabins would be considered in the Jarvis Creek area. Recreational facilities would be limited to trailheads. Visitor use limits would be established for commercial recreational activities in the area, and no helicopter supported commercial activities would be permitted. The area would be managed under VRM Classes II and III.

(6) Other Areas

Areas outside those identified above would be managed as Extensive Recreation Management Areas, with recreation management based on maintenance of existing ROS classes within the areas. Inventory and monitoring identified in *Management Common to All Alternatives* on page 66 would occur.

f) Alternative D - Proposed RMP

This is the BLM’s Preferred Alternative. It identifies the following measures for these areas:

(1) Delta WSR Corridor Area

See Map 5 on page 77. This area, consisting of 44,000 acres of unencumbered BLM land, would be designated as an SRMA, with objectives to maintain existing recreation opportunities (primitive, semi-primitive non-motorized, semi-primitive motorized, and roaded natural), with emphasis on managing for a primitive experience in the portion of the Wild and Scenic River Corridor classified as wild. Another objective in this SRMA is managing to protect the VRM Class I viewshed. The area would be designated as “limited” to OHVs, with specific trails designated to minimize unmanaged proliferation of

trails, to reduce user conflicts, to continue to provide access to recreation and subsistence activities, and to maintain primitive and semi-primitive motorized experiences. Consistent with the 1983 River Management Plan for the Delta National Wild and Scenic River and during implementation-level planning, BLM would recommend to the State of Alaska limitations on motorized use on the Tangle Lakes. No public use cabins would be considered. General visitor use and commercial use limits would be established in implementation-level planning, consistent with objectives identified above. The Tangle Lakes Campground would be renovated, and the river take-out at mile 212 on the Richardson Highway would have increased signage. If the opportunity presents itself, acquisition of one of the area lodges for a visitor center would be considered.

(2) Gulkana WSR Corridor Area

See Map 6 on page 78. This area would be designated as an SRMA, including 105,000 acres, 95 percent of which is unencumbered BLM land. Specific management as described above under *Management Common to All Alternatives* on page 66.

(3) Denali Highway Area

See Map 7 on page 79. This area consists of the middleground and foreground viewshed off the Denali Highway. This is predominantly State-selected land. This section describes two management scenarios: *interim* describes management of State- and Native-selected lands in the area until conveyance occurs, and *long-term* describes management of lands if they are retained in long-term Federal ownership.

(a) Interim Management

No SRMA would be designated. Interim objectives would be to manage for roaded natural, semi-primitive non-motorized, and semi-primitive motorized recreation experiences, to mitigate impacts to the viewshed, and to provide education and interpretive opportunities. The area would be managed as “limited” for OHVs, consistent with State Statute 11 AAC 96.025, which limits OHVs to existing trails whenever possible. OHVs using areas within Tangle Lakes Archaeological District (TLAD) in this SRMA would be required to stay on designated trails from May 15 to October 16 or when there is an average of 12 inches snow or 6 inches frost. Snowmachine use would require adequate snow cover, but snowmachines would not be restricted to designated trails. There would be no mineral development on State- or Native-selected lands because of segregation due to selection. No public use cabins would be developed. On State- or Native-selected lands, no new recreational facilities would be considered until land status is resolved. Development of facilities may be considered on BLM recreational withdrawals along the highway, as described below. Education and interpretive sites would be consistent with direction in the Interpretive Master Plan for the Denali Highway (BUCY Associates 1999), with special consideration within TLAD given to protection

of artifacts. Applications for commercial recreation activities would be considered on a case-by-case basis.

(b) Long-term Management

SRMA designation would be considered if lands retained in Federal ownership are in large contiguous blocks. Objectives would be as described for the Denali Highway in *Alternative C* on page 69. The area would be designated as “limited” to OHVs, with implementation-level consideration of designated trails, maintenance of some non-motorized trails, and construction of day-hike and motorized trail loops, particularly associated with waysides and rest areas. Designated trails for snowmachines may be considered in future if winter trail densities and encounters are exceeding user tolerances, as determined through user surveys. The area would be open for locatable mineral entry and for leasable minerals. Public cabins would be considered in the area, in particular the Welsh cabin on the Maclaren River. Visitor use limits would be developed for commercial uses along the highway, consistent with management objectives and long-term development of recreational facilities. The following facilities would be developed if maintained in long-term Federal ownership or in association with BLM recreational withdrawals:

1. Day-use waysides at 39-mile (Maclaren River), 56-mile (Clearwater Creek), and 80-mile (Susitna River).
2. Possible boat launch at Susitna River.
3. Upgrade trailheads and use for presentation of education/interpretive material.
4. Develop education/interpretive sites to highlight the area’s wildlife, scenic, cultural, and geologic features, as outlined in the Interpretive Master Plan for the Denali Highway (BUCY Associates 1999).

(4) *Tiekel Area*

See Map 8 on page 80. This area consists predominantly of State-selected lands, although there is some Native-selected land as well. This section describes two management scenarios: *interim* describes management of State- and Native-selected lands in the area until conveyance occurs, and *long-term* describes management of the lands if they are retained in long-term Federal ownership.

(a) Interim Management

Under interim management, only the unencumbered BLM lands in the Tiekel corridor would be designated as an SRMA. Objectives would be to manage for roaded natural, semi-primitive non-motorized, and semi-primitive motorized recreation experiences within the corridor. OHVs would be “limited” to designated trails on unencumbered BLM lands. Implementation-level considerations would include maintenance of specific trails as non-motorized (including snowmachines), construction of both non-motorized and motorized trail loops, and vehicle class restrictions (such as weight limitations) on specific trails. Where these designations

affect trails on State-selected lands, the BLM would work with the State of Alaska on designations. Existing withdrawals against mineral leasing and locatable mineral entry within the transportation and utility corridor would remain in place. This area would be considered a priority area for forest management. This SRMA would not preclude timber management activities, but proposed timber sales would consider impacts to recreational facilities, experiences, and viewsheds. Temporary roads utilized for forestry access may be considered for retention if they are within areas managed for a roaded natural recreation experience. This SRMA is within the transportation and utility corridor; this would remain the area's primary purpose.

Visitor use limits would be determined for helicopter-supported commercial uses, consistent with existing ROS classes. Recreational facilities would include updating and development of selected trailheads, construction of one wayside, and consideration of a bike trail utilizing the old Richardson Highway. The Egan cabin would be considered for public use.

(b) Long-term Management

If large contiguous blocks within this area are retained in Federal ownership, they would be considered for inclusion into the SRMA, with objectives (for lands outside the transportation and utility corridor) emphasizing maintenance of primitive and semi-primitive recreation. OHVs would be "limited" to designated trails, with some trails designated non-motorized (including snowmachines). If contiguous blocks are retained in the southern portion of the Tonsina sub-unit, they would be managed consistent with direction described under Alternative C on page 47 (the area would be closed to recreational motorized use). Minimal or no development will be considered at trailheads that access areas managed for a primitive or semi-primitive recreation experience. Existing withdrawals associated with the transportation and utility corridor would be maintained, but other areas would be open to leasable and locatable mineral entry. Public use cabins would be considered, and visitor use limits for commercial heli-ski operations would be established based on maintenance of existing ROS classes. Consideration would be given to not authorizing heli-skiing in some areas managed for a primitive recreation experience.

(5) *Delta Range Area*

See Map 9 on page 81. This area would be designated a SRMA encompassing 276,000 acres, most of which are unencumbered BLM lands. Objectives for the area would be to maintain the existing ROS classes, which include primitive, semi-primitive non-motorized, semi-primitive motorized, and roaded natural. The area would be designated as "limited" to OHVs, with implementation-level consideration given to designated trails and maintenance of some non-motorized trails. BLM-managed portions of the Fels, Canwell, Castner, and McCallum Creek glaciers and drainages would be designated as closed to snowmachines (see Delta Mountains Sub-units on Map 9) from 10/15 – 5/15. This closure is based on the objective of maintaining existing non-motorized backcountry skiing and mountaineering experiences that have

traditionally occurred in this area and based on strong public comment requesting this specific closure (See Appendix J: Response to Comments). Snowmachines in these areas would be permitted to access subsistence hunting. The existing withdrawal against leasable mineral entry would be maintained but the area would be open for locatable mineral entry except within the inner corridor of the transportation and utility corridor. Public cabins would be considered in the Jarvis Creek area. Recreational facilities would include development of some trailheads and some improvement of dispersed camping sites in the Jarvis Creek area. Minimal or no development will be considered at trailheads that access areas managed for a primitive or semi-primitive recreation experience. No helicopter-supported commercial activities would be permitted in areas managed for a primitive recreation experience, in order to maintain primitive backcountry mountaineering experiences and to minimize potential safety concerns for backcountry skiers and mountaineers. Inventory and Monitoring identified in *Management Common to All Alternatives* on page 66 would take place to monitor use levels and to characterize winter users and their tolerance for increased snowmachine use and trail density. The area would be managed under VRM Classes II and III. Most of this SRMA is within the transportation and utility corridor; this would remain the area's primary purpose.

(6) Other Areas

Areas outside those identified above would be managed as Extensive Recreation Management Areas, with recreation management based on maintenance of existing ROS classes in the areas. Inventory and monitoring identified in *Management Common to All Alternatives* on page 66 could occur and standards may be identified for trail density in these areas based on monitoring and inventory information. Some education/interpretation at trailheads may occur, particularly at 17(b) easement trailheads within these areas.

Table 4 summarizes preceding information.

Table 4. Recreation – Alternative Summary

Issue	Alternative			
	A: No Action	B: Resource Development	C: Resource Conservation	D: Proposed RMP
<p>Special Recreation Management Areas</p>	<p>No SRMAs currently designated.</p> <p>Recreation management is custodial.</p>	<p>No SRMAs proposed.</p> <p>Some protection measures identified.</p> <p>See detailed alternative tables in Appendix A.</p>	<p>1,916,000 acres (27%) proposed for SRMA designation.</p> <p>The following SRMAs and objectives would be proposed:</p> <ol style="list-style-type: none"> Delta River (44,000 acres) Includes ANILCA-designated WSR corridor. Objective: Manage to maintain existing primitive, semi-primitive, and roaded-natural experiences. Gulkana River (105,000 acres) Includes ANILCA-designated corridor. Objective: Manage for primitive, semi-primitive, and undeveloped experiences. Delta Range (359,000 acres) Includes unencumbered BLM lands north of Summit Lake. Objective: Maintain primitive, semi-primitive motorized, and roaded natural experiences. Tiegel (848,000 acres) Objective: Manage for a primitive recreation experience outside of the transportation and utility corridor. 	<p>570,000 acres (9%) proposed for SRMA designation.</p> <p>The following SRMAs and objectives would be proposed:</p> <ol style="list-style-type: none"> Delta River (44,000 acres) Objective: Same as for Alternative C. Gulkana River (105,000 acres) Objective: Same as for Alternative C. Delta Range (276,000 acres) Objective: Same as for Alternative C. Tiegel (120,000 acres) Includes unencumbered BLM land. Objective: Manage for roaded natural, semi-primitive, and semi-primitive motorized experiences. <p>In other areas (Denali Highway and selected portions of Tiegel), some measures to meet objectives are identified. See alternative tables in Appendix A for detail. SRMA designation would be considered for lands retained in long-term Federal ownership in the Denali Highway and Tiegel areas.</p>

Issue	Alternative			
	A: No Action	B: Resource Development	C: Resource Conservation	D: Proposed RMP
Special Recreation Management Areas (cont.)			<p>5. Denali Highway (559,000 acres) Consists of fore and middle ground viewshed from Denali Highway. Objective: Manage to maintain primitive, semi-primitive motorized, and roaded-natural experiences.</p> <p>Specific measures are described in tables in Appendix A.</p>	
Back Country Byways	None designated	Denali Highway designated (135 miles)	None designated	None designated
Public Use Cabins	Public use cabins would be considered consistent with objectives described in each SRMA. Potential for public cabins would be emphasized in the Tielke SRMA. In general, existing structures would be considered for public use cabins before construction of new cabins. Planning may occur, but land status would need to be resolved before major investment occurs in a public cabin system. Outside of SRMAs, the following have been identified for potential public use cabins: 1) Tyone cabin; 2) Monsoon Lake cabin; 3) Welsh cabin, Maclaren River; 4) Jarvis Creek area.			
Education and Interpretation	Education and interpretation along the Denali Highway would follow the Interpretive Master Plan for the Denali Highway (BUCY 1999). Specific opportunities for education and interpretation for trailheads (including 17(b) easements) are described in "Management Guidance Common to All Alternatives." The BLM would continue to work with the Alaska Department of Transportation in identifying and implementing education and interpretive opportunities along the Glenn, Richardson, and Denali Highways.			
Commercial Use	Under Alternative D, appropriate levels of commercial use would be established: 1) Delta SRMA; 2) Gulkana SRMA; 3) Tielke SRMA (for heli-skiing); 4) Delta Range SRMA; and 5) Denali Highway, if lands are retained in long-term Federal ownership. Appropriate levels of use would be determined in implementation-level planning based on management objectives and anticipated encounters as determined through an activity planning process. Other factors such as current levels of use, safety, resource impacts, and operator tolerance and quality of experience would be considered.			

Map 5. Delta River SRMA - Alternatives C and D

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File name: 05_deltasrma.pdf

Map size: 8.5x11

Map 6. Gulkana River SRMA - Alternatives C and D

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Map size: 8.5x11

Map 7. Denali Highway SRMA - Alternative C

File size: 146 KB

File name: 07_denalizrma.pdf

Map size: 8.5x11

Map 8. Tiekel SRMA, Alternatives C and D

File size: 167 KB

File name: 08_tiekelsrma.pdf

Map size: 8.5x11

Map 9. Delta Range SRMA - Alternatives C and D

File size: 116 KB

File name: 09_deltarsrma.pdf

Map size: 8.5x11

3. Issue 3: Natural and Cultural Resources

Issue Statement: Manage to protect natural and cultural resources, including wildlife, fisheries, soil, water, air and vegetation, identified by resource specialists and identified through the public scoping process.

This section provides a narrative description of protective measures proposed under each alternative. For specific proposed areas (such as ACECs and the Bering Glacier RNA), detailed alternative comparison tables can be found in *Appendix B. Required Operating Procedures* and *Oil and Gas Leasing Stipulations* can be found in *Appendix C*.

a) Goals

Wildlife: In cooperation with ADF&G, ensure optimum populations and a natural abundance and diversity of wildlife resources, including those species that are considered BLM sensitive status species.

Wildlife: Perpetuate a diversity and abundance of waterfowl and wetland habitat.

Fisheries: Maintain and protect fish habitat on public lands and provide for the habitat needs of fish resources necessary to maintain or enhance such populations and to ensure the continued public use, economic and subsistence benefits of such resources. Maintain wild stocks of salmon and steelhead.

Cultural Resources: Protect and preserve important cultural and paleontological resources. Expand opportunities for scientific and educational uses of these resources.

Watersheds: Ensure that watersheds are in, or are making significant progress toward, a properly functioning physical condition that includes their upland, riparian, wetland, and aquatic areas. Manage to maintain riparian areas in proper functioning condition.

Vegetation and Soils: Manage to minimize negative impacts to soils and vegetation and to prevent soil erosion.

Delta and Gulkana Wild and Scenic River corridors: Manage to protect and enhance the values for which the rivers were designated, without limiting other uses that do not substantially interfere with public use and enjoyment of these values.

b) Management Common to All Alternatives

(1) Inventory and Monitoring

These monitoring/assessment projects would be common to all action alternatives (Alternatives B, C, and D) dependent on funding.

(a) Fisheries

- Support continued monitoring and assessment of riparian areas. Use this information as a baseline to support maintenance and enhancement projects.
- Continue the Gulkana fish counting tower operations. This cooperative effort with ADF&G provides the best Chinook salmon escapement data available for the Gulkana River.
- Continue inventorying for anadromous fish spawning habitat, particularly outside the Gulkana River.
- Continue to conduct Production Habitat Inventory.
- Continue to support work or studies to provide information on distribution and abundance of steelhead trout in the Gulkana River as well as other watersheds in the planning area.

(b) Cultural Resources

- Systematic (Section 110) surveys needed for most of the large blocks of land that BLM manages.
- Inventories needed on selected high probability areas that respond to planned management activities, including a) Holocene shorelines of Lake Ahtna; b) Gulkana and Delta River corridors; c) historic properties associated with Valdez trail; d) areas identified as “limited” for OHV use; e) proposed ACECs with cultural/paleontological values; f) proposed prescribed burning (habitat improvement) areas; g) any trail reroutes or construction; and h) lands identified for disposal.
- Archaeological testing/excavation to fill gaps about prehistory in the Copper River Basin. No sites currently identified.
- Paleontological inventory for Talkeetna Mountains, Alaska Range, and Chugach Range. Need a revised paleontological review, could be cooperative effort between BLM and University of Alaska-Fairbanks (UAF).

(c) Soil, Water, Vegetation

- Continue assessment of riparian areas, using proper functioning condition assessment methodology. Priority areas would include Wild and Scenic River corridors, ACECs, and riparian areas within anticipated or ongoing mining areas.
- Water rights application for the Gulkana River has been submitted to the State of Alaska. Complete instream flow needs assessment documentation and obtain water rights for the Delta Wild and Scenic River. In addition (second priority) any streams, lakes, or other riparian areas found to support a quality of fish habitat, recreation, or extractive resources, should be considered as a candidate for an instream flow reservation.
- Continue to monitor water flows and develop web-accessed information for the Gulkana and Delta Wild and Scenic Rivers.

- Continue soil surveys, with first priority to unencumbered BLM lands within the Bering and Tielke planning regions. Second priority is other unencumbered BLM lands and those designated as “limited” for OHVs.
- Continue assessment of OHV trails, using satellite imagery. First priority is within areas designated as limited to OHV use.
- Develop water quality data base in priority fish habitats and important recreation use areas to establish baseline for monitoring. In heavy use recreation rivers, include fecal coliform monitoring. First priority is Gulkana and Delta Wild and Scenic River corridors.
- Conduct a baseline inventory for sensitive plant species.
- Conduct a baseline inventory for invasive species present on BLM-managed lands within the planning area.

(d) Wildlife

- Conduct detailed condition assessments of critical moose habitats, especially in areas of intensive motorized use and/or mining operations.
- Work cooperatively with ADF&G to research effects of winter and summer OHV use on moose in critical habitat areas.
- Identify critical Dall sheep and mountain goat ranges in areas of current or potential high-level recreational activities (helicopter or snowcat-supported skiing) and within areas with high potential for mineral development.
- Identify critical habitat for high-profile furbearer species (wolverines, Canada lynx).
- Identify critical habitat for harbor seals in Vitus Lake/Bering Glacier area and Malaspina Glacier area.
- Continue annual bald eagle monitoring in Gulkana River watershed; conduct thorough analysis of existing data.
- Monitor effects of human disturbances on breeding, nesting, brood-rearing behavior of adult and young trumpeter swans.
- Resume annual monitoring of dusky Canada geese within the Bering Glacier area.
- Document usage/habitat preferences of Tule white-fronted geese and Vancouver Canada geese within the Bering Glacier area.
- Identify and document red-throated loons usage in Bering Glacier/Vitus Lake area.
- Establish and monitor breeding bird survey transects. Develop and participate in research partnership efforts to gain better understanding of Threatened and Endangered bird occurrence and habitat in planning area. Monitor effects of fire (prescribed and natural) on breeding bird habitat and preference.

(2) Maintenance and Restoration

The following maintenance and restoration projects would be common to all action alternatives (Alternatives B, C, and D).

(a) Cultural Resources

- Coordinate with recreation on placement of educational/interpretive materials regarding cultural resources in the following areas. Levels of trailhead and wayside development vary by alternative: 1) Denali Highway (cultural values in TLAD); 2) Richardson Highway, Tielkel planning region (Valdez Trail, WAMCATS trail); 3) 17(b) easements; 4) cultural/traditional areas as identified by Native villages and corporations.
- Assist recreation/trails management with re-location of trails to protect cultural resources. Priorities for this activity are TLAD and the Tielkel planning region.
- Identify opportunities for historic cabin restoration, maintenance on lands to be retained by BLM.

(b) Fisheries

- Cooperate with ADF&G on increasing the population of steelhead and rainbow trout in the Gulkana River by habitat manipulation and other enhancement techniques.
- Provide educational information through Gulkana website regarding waterflow levels and potential rafting and boating impacts to spawning beds.
- Cooperate with other BLM programs in identifying need for re-location, closure, or maintenance of OHV trails to avoid crucial habitat features.

(3) Land Use Requirements

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

(4) Wild and Scenic River Eligibility and Suitability

The Wild and Scenic Rivers Act mandates that land management agencies evaluate rivers for possible inclusion into the National Wild and Scenic Rivers System (NWSRS). As part of the land use planning process and based on thorough evaluation and assessment conducted in 1989 and on public comment received on the Draft RMP/EIS, 15 rivers in the planning area were determined to be eligible for inclusion and were classified using criteria in the Wild and Scenic Rivers Act and the BLM's 8351 Manual (BLM 1993) (see discussion in *Chapter III, Issue 3: Natural and Cultural Resources*;

Wild and Scenic Rivers). Eligibility simply means the segments are free-flowing and, with their adjacent land area, possess at least one outstandingly remarkable value. Based on strong public comment received during the comment period on the Draft RMP/EIS, it was determined that suitability assessment will be conducted once ANCSA and State entitlements are met and land status has been stabilized. This determination was based on public comment and the fact that the suitability analysis presented in the Draft used land status as its strongest criteria. Appendix I of this Proposed RMP/Final EIS contains a list of the eligible rivers, classification of those rivers, a description of the outstandingly remarkable values, and interim protective measures.

(5) *Gulkana Wild and Scenic River*

Concurrent to the development of this RMP, the River Management Plan for the Gulkana is being revised. Under all alternatives, management of the Gulkana Wild and Scenic River corridor would be consistent with the revised plan. ANILCA-designated mineral withdrawals would remain in place on all segments of the river. New roads would generally not be permitted within or across the wild river corridor unless a determination was made that the road would be compatible with the purposes for which the river's was designated and that there is no economically feasible and prudent alternative route or location.

(6) *Public Water Supplies*

In order to comply with the Safe Drinking Water Act and protect the quality and quantity of drinking water, the BLM will consult with owners/operators of potentially affected, federally-regulated public water supply systems when proposing management actions in State designated Source Water Protection Areas. Public water supply systems are defined as systems that provide water for human consumption through pipes or other constructed conveyances to at least 15 service connections or serve an average of at least 25 people for at least 60 days a year. 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.

c) *Alternative A*

This alternative continues current management. Guidance for protection of specific resource values or concerns is provided in the 1980 Southcentral MFP. Direction in this document is very general. Most protective measures for specific resource concerns (such as caribou calving or waterfowl habitat) were tied to the adoption of ACECs, which were never designated. Therefore, specific measures for protection of these values were never described or adopted.

Currently, proposed permitted or authorized uses are analyzed in appropriate NEPA documents. Based on NEPA analysis, mitigation is developed to minimize impacts from

proposed activities. The resulting stipulations are included in the permit that authorizes the activity. Casual uses such as OHV use are generally not managed.

d) Alternative B

This alternative emphasizes resource development. Measures for resource protection would be applied on a site-specific basis for permitted activities based on guidelines provided in *Appendix C: Required Operating Procedures*. Protective measures would not be applied over general areas such as ACECs or the proposed Bering Glacier RNA. In general, within Alternative B, most ANCSA (d)(1) withdrawals would be revoked to allow for the greatest potential for mineral exploration and development.

The following measures described below are from *Appendix C: Required Operating Procedures*.

(1) Delta Bison Calving Area

Within defined calving areas, the following uses would not be permitted from May 1 to June 15: a) surface disturbing activities, b) FLPMA leases or permits that exceed 14 days of activity, or c) mining exploration. Aircraft associated with permitted activities would maintain an altitude of at least 1,000 feet. No oil and gas exploration or development activities may occur from May 1 to June 15.

(2) Nelchina Caribou Calving Area

Within defined calving areas, the following uses would not be permitted from May 1 to June 15: a) surface disturbing activities, b) FLPMA leases or permits that exceed 14 days of activity, or c) mining exploration. Aircraft associated with permitted activities would maintain an altitude of at least 1,000 feet. No oil and gas exploration or development activities may occur from May 1 to June 15.

(3) Moose Winter Range

Within defined moose winter range, the following use would not be permitted from October 15 to March 31: a) surface disturbing activities, or b) FLPMA leases or permits that exceed 14 days of activity. Aircraft associated with permitted activities would maintain an altitude of 1,000 feet. For oil and gas activities, these areas would be closed to drilling, pipeline construction, road construction, or construction of permanent facilities from October 15 to March 31. Exceptions may be granted for mining activities where no feasible alternative exists and for other activities based on actual occupancy of the area by wintering moose. Exception, waiver, and modification conditions for oil and gas stipulations are described under the *Oil and Gas Leasing Stipulations* in *Appendix C*.

(4) Raptor Nests

Within one-fourth mile of bald eagle nests, the following uses would not be permitted from April 1 to August 31: a) surface disturbing activities, or b) FLPMA leases or permits. Aircraft associated with permitted activities would maintain an altitude of 1,000 feet within one-half mile of documented eagle nests. Appropriate buffers around other raptor nests would be determined based on site-specific analysis. For oil and gas activities, areas within one-fourth mile of bald eagle nests would be closed to drilling, pipeline construction, road construction, or construction of permanent facilities from April 1 to August 31.

(5) Sensitive Status Species

Procedures outlined in *Required Operating Procedures in Appendix C* would be followed for species with special statuses (i.e., threatened, endangered, or Sensitive Status Species).

(6) Mountain Goats and Dall Sheep

In critical mountain goat and Dall sheep, helicopters used in support of permitted activities would maintain one-half mile horizontal and 1,500 foot vertical distance from goats or sheep. Heli-ski landings or skiing is not permitted in mountain goat or Dall sheep critical ranges, as identified based on ADF&G maps and refined by monitoring. For oil and gas activities, no surface disturbance would occur on slopes greater than 25 percent.

(7) Trumpeter Swans

Within one-fourth mile of the shores of waterbodies that contain trumpeter swan nests, the following uses would not be permitted from May 1 to August 31: a) ground disturbance or surface use exceeding 14 days, b) FLPMA leases, c) FLPMA permits where surface use exceeds 14 days, or d) overland access to permitted activities. Exceptions may be granted for mining operations on a site-specific basis where no feasible alternative exists and where mitigation measures can be identified to minimize impacts. The same areas would be closed to oil and gas drilling, pipeline construction, road construction, or construction of permanent facilities.

(8) Fish and Fish Habitat

Measures identified in *Appendix C: Required Operating Procedures* would be used based on site-specific analysis. They include the following: a) no exploratory oil and gas drilling, oil and gas roads, well pads, and other permanent facilities within 500 feet of fish-bearing rivers and lakes; and b) general guidelines for road or trail crossings. For casual use, such as use of OHVs, anadromous stream crossings would be permitted by Alaska Department of Natural Resources.

(9) Riparian Areas and Water Quality

Measures identified in *Appendix C: Required Operating Procedures* would be used, dependent on site-specific analysis. These measures include guidelines to maintain proper functioning condition of riparian areas and specific measures for mining, mineral material development, and oil and gas activities.

(10) Wetlands

The following measures are identified: a) Utilize winter access whenever possible and avoid road or trail construction in wetlands; b) in snow-free months, if wetlands cannot be avoided, low ground pressure vehicles would be used wherever possible; and c) all activities would comply with Federal and State permit requirements for alteration of wetlands.

(11) Soils and Vegetation

Protective measures for permitted activities are described in *Appendix C: Required Operating Procedures* and include guidelines for mining, revegetation, oil and gas exploration and development, vegetation treatment, road construction, and other permitted activities. Casual use of OHVs is only limited within the Delta and Gulkana Wild and Scenic River corridors and TLAD.

(12) Cultural Resources

Within TLAD, trails are designated to avoid cultural sites and mitigation is identified for other projects. Outside of TLAD, compliance with Section 106 of the National Historic Preservation Act is also required for project proposals. When a proposed, discretionary land use has the potential for affecting the characteristics that qualify as cultural property for the National Register of Historic Places, mitigation would be considered.

(13) Bering Glacier Area

This area would be open for locatable and leasable mineral development, but under seasonal restrictions to protect identified resource values. Site-specific restrictions are to be determined based on the nature and duration of the specific activity. *Appendix C: Required Operating Procedures* would be applied to all permitted activities, and the *Oil and Gas Leasing Stipulations* also found in *Appendix C* would apply to oil and gas leases in the area.

(14) Visual Resources

Visual Resource Management (VRM) classes would be established as shown on Map 15, page 107. VRM Classes were established using the process described in *Chapter III, Issue 3: Natural and Cultural Resources, Visual Resources*. VRM classes would be Class II for the Delta and Gulkana Wild and Scenic River corridors to protect the

viewshed while still allowing for some management activities. The Denali Highway viewshed, the Bering Glacier, and the viewshed from the Richardson Highway where resource development is possible but some protection of the visual resources is important would all be designated as Class III. All other areas would be designated as Class IV.

(15) Invasive Plant Species

As identified in *Appendix C: Required Operating Procedures*: a) burn plans for prescribed burning would address invasive species (any known occurrences, post-burn monitoring, or treatment); and b) equipment used for timber sales would be inspected prior to use on the sale, especially if contractor is from outside the Copper River Basin.

(16) Delta WSR Corridor Area

Existing ANCSA (d)(1) withdrawals in the scenic and recreational portions of the river corridor would be revoked to allow for mineral exploration and development. New roads would be permitted within the scenic and recreational portions of the river corridor, with locations and construction techniques selected to minimize adverse effects on the values for which the river was established.

e) Alternative C

This alternative emphasizes resource conservation. In addition to the measures in *Appendix C: Required Operating Procedures* described under Alternative B, the following are proposed by each resource category identified:

(1) Delta Bison Calving Area

See Map 10 on page 101. The bison calving range would be established as an ACEC to include 19,000 acres, all of which is unencumbered BLM lands. In addition to the measures described in *Appendix C: Required Operating Procedures*, measures identified within the ACEC to protect calving bison or bison habitat would include the following: 1) OHVs would be limited to designated trails from April 15 to October 15; 2) the area would be closed to mineral leasing through extension of existing withdrawal; 3) the area would be recommended for withdrawal from locatable mineral entry; 4) the area would not be available for FLPMA leases or FLPMA 302 permits; 5) no military permits would be issued; 6) no new roads or airstrips would be constructed; 7) ROWs would be avoided; and 8) no new mineral material sites would be permitted.

(2) Nelchina Caribou Calving Area

See Map 11 on page 102. The Nelchina caribou calving range would be established as an ACEC to include 389,000 acres, the majority of which are State-selected lands. In

addition to the measures described in *Appendix C: Required Operating Procedures*, management identified within the ACEC to protect calving caribou or caribou habitat would include the following: 1) OHVs would be limited to designated trails; 2) no new roads or airstrips would be constructed; 3) the area would be closed to all mineral entry by maintaining existing withdrawals; 4) no new mineral material sites would be permitted; 5) no FLPMA leases or FLPMA 302 permits would be allowed; 6) the area would be a ROW avoidance area; 7) no military permits would be issued; and 8) no prescribed fire would be permitted from May 1 to June 15.

(3) Moose Winter Range

In addition to measures described in *Appendix C: Required Operating Procedures*, management identified to protect moose winter range would include: 1) defined moose winter range open to mineral leasing would be subject to No Surface Occupancy (no placement of permanent oil and gas facilities); 2) within the Alphabet Hills/West Fork Gulkana area, this alternative would recommend maintenance of PLO 6329, which did not open approximately 700,000 acres to locatable mineral entry; and 3) only prescribed and wildland fire would be utilized to accomplish moose winter range habitat improvement, not forestry practices.

(4) Raptor Nests

In addition to measures described in *Appendix C: Required Operating Procedures*, management identified to protect raptor nests would include: 1) mineral leases would stipulate No Surface Occupancy within one-fourth mile of historically active bald eagle nest sites; and 2) areas within one-fourth mile of bald eagle nests would be unsuitable for surface mining of coal.

(5) Sensitive Status Species

Same as for Alternative B.

(6) Mountain Goats and Dall Sheep

Same as for Alternative B.

(7) Trumpeter Swans

See Map 12 on page 103. The West Fork ACEC would be designated, including 490,000 acres of predominantly State-selected lands. In addition to measures described in *Appendix C: Required Operating Procedures*, management identified within the ACEC to protect trumpeter swan habitat would include the following: 1) the area would be closed to mineral leasing or locatable mineral entry; 2) no new roads or airstrips would be constructed; 3) OHVs would be limited to designated trails, which would avoid swan habitat; 4) FLPMA leases and FLPMA 302 permits would not be

permitted; 5) ROWs would be avoided; and 6) permits for military activities would not be allowed.

For all other lands outside the West Fork ACEC, all primary trumpeter swan breeding habitat, displayed on Map 14, would have a No Surface Occupancy stipulation for oil and gas leasing, and the areas would be unsuitable for surface mining of coal.

(8) Fish and Fish Habitat

In addition to measures identified in *Appendix C: Required Operating Procedures*, Alternative C identifies several areas as limited to OHVs (see *Issue 1: Travel Management* on page 44). Designated trails within these areas would be selected to minimize vegetation, soil, and water impacts, particularly on stream and river approaches, to minimize sedimentation into streams and rivers. In addition, withdrawals against mineral leasing or locatable mineral entry would be maintained in the Nelchina and West Fork ACECs, the Tiekel, Gulkana, and Delta SRMAs, and the entire Bering Glacier RNA.

(9) Riparian Areas and Water Quality

Same as for Alternative B for specific measures, but more areas would remain withdrawn from mineral leasing and locatable mineral entry. In addition, most areas would be “limited” to OHVs, with trails designated to minimize sedimentation into riparian areas.

(10) Wetlands

Same as for Alternative B for specific measures. Alternative C also adopts the West Fork ACEC and the Bering Glacier RNA, both of which maintain mineral withdrawals in wetlands.

(11) Soils and Vegetation

This alternative limits OHV use on most BLM-managed lands to designated trails. The goal of trail designation in OHV limited areas is to minimize rutting, braiding, thermal erosion, and vegetation impacts associated with braided trails. This would be accomplished through the relocation of some segments of trails, hardening, vehicle class restrictions, and water drainage installation. In addition, Alternative C identifies more areas through ACEC and RNA designation where mineral development would be prohibited.

(12) Cultural Resources

Same as for Alternative B, but development activities that might potentially affect cultural resources would be more limited under this alternative.

(13) Bering Glacier Area

See Map 13 on page 104. This alternative would designate the Bering Glacier and surrounding area, consisting of 940,000 acres of unencumbered BLM and State-selected land, as an RNA. Management objectives for the area would be as follows:

- Protect habitats associated with the glacial environment and the retreating glacier in order to continue to provide opportunities for research.
- Protect wetlands that provide important habitat for migrating birds.
- Manage to continue to provide a primitive recreation experience.
- Conduct research activities in a manner that is least obtrusive to the area.
- Manage to protect anadromous fisheries habitat to support continued, long term subsistence use.

Measures to protect unique ecological values associated with glacier and glacier forelands include: 1) OHVs limited to designated trails to protect nesting waterfowl and nunataks; 2) no new road or airstrip construction; 3) withdrawal against mineral leasing or locatable mineral entry maintained; 4) no FLPMA leases or 302 permits unless associated with research activities; and 5) visitor use limits developed for Special Recreation Permits in the area, and no heli-recreation activities would be permitted.

(14) Visual Resources

VRM classes would be established as shown on Map 16, page 109. VRM classes would be Class I for the Gulkana and Delta Wild and Scenic River corridors, the Bering Glacier, and the Denali Highway viewshed to protect the natural landscape setting in these areas. Class II would be assigned to all foreground and middleground viewsheds from the Richardson and Glenn Highways, the TLAD, the Gulkana and Delta Wild and Scenic River corridors, and the West Fork ACEC to protect the viewshed but still allow for enhancement projects along the roads where development activities would occur. Class III would be assigned to the area between the Richardson, the Edgerton Highways, and the Copper River. Class IV would be assigned to all other areas.

(15) Invasive Plant Species

Same as for Alternative B. In addition, OHV limitations would minimize the potential spread of invasive species.

(16) Delta WSR Corridor Area

All existing withdrawals within the corridor would be maintained and 16,000 acres in the scenic portion that are currently open to locatable mineral entry would be recommended for withdrawal. No new road construction would be permitted.

f) Alternative D – Proposed RMP

Under this alternative, constraints to protect resources would be implemented, but would be less restrictive than under Alternative C.

(1) *Delta Bison Calving Area*

See Map 10 on page 101. This alternative would not designate this area as an ACEC, but a cooperative Habitat Management Plan would be developed with ADF&G for the area identified under Alternative C. In addition to those measures described in *Appendix C: Required Operating Procedures*, the following would apply to this area: 1) OHVs would be limited to designated trails from May 1 to June 15; 2) road construction would be permitted for resource development, but activity would be restricted from May 1 to June 15; and 4) maintain existing withdrawals against mineral leasing and locatable mineral entry (a portion of the area is currently open to locatable entry and would remain open).

(2) *Nelchina Caribou Calving Area*

No ACEC would be designated for this area. This area is predominantly State-selected. OHVs in this area would be limited to existing trails; otherwise, specific measures are the same as described under Alternative B.

(3) *Moose Winter Range*

Same as for Alternative B. In addition, moose winter range would be considered unsuitable for surface mining of coal.

(4) *Raptor Nests*

Same as for Alternative B.

(5) *Sensitive Status Species*

Same as for Alternative B.

(6) *Mountain Goats and Dall Sheep*

Same as for Alternative B for specific measures. However, some areas are identified as not available to helicopter-supported commercial activities (Delta Range Area and Bering Glacier Area).

(7) Trumpeter Swans

No ACEC would be designated for the area described in Alternative C. Interim management includes measures that would be the same as described in Alternative B. In addition, OHVs would be limited to existing trails.

For lands retained in long-term Federal ownership within the West Fork area, the measures listed in *Appendix C: Required Operating Procedures* would apply as well as the following: 1) OHVs would be limited to designated trails, which would be located to avoid trumpeter swan disturbance; 2) road construction would be permitted if necessary for resource development, subject to seasonal restrictions; temporary and winter roads would be utilized whenever possible; 3) the area would be open to mineral leasing, with seasonal stipulations as described in *Oil and Gas Stipulations* in *Appendix C*; 4) the area would be unacceptable for surface mining of coal; 5) there would be no mineral material development; and 6) the area would be a ROW avoidance area, overhead powerlines would be avoided in general, but not allowed in primary trumpeter swan breeding habitat.

(8) Fish and Fish Habitat

Alternative D designates most areas as “limited” to OHVs (see *Issue 1: Travel Management* narrative on page 49 or Table 3. Designated trails within these areas are chosen to minimize vegetation, soil, and water impacts, particularly on stream and river approaches to minimize sedimentation into streams and rivers. In addition, Alternative D maintains withdrawals against mineral leasing and locatable entry in the Wild and Scenic River corridors and in the western two-thirds of the Bering RNA, all containing important habitat for fish. Otherwise, specific measures for permitted activities are as described in Alternative B for *Required Operating Procedures*.

(9) Riparian Areas and Water Quality

Same as for Alternative B, but, in addition, withdrawals against mineral leasing or locatable mineral entry are maintained in the Wild and Scenic River corridors and the western two-thirds of the Bering RNA. OHV trails designated under Alternative D are located to minimize impacts to riparian areas and water quality.

(10) Wetlands

Same as for Alternative B. Designation of the Bering Glacier RNA protects some wetlands and waterfowl habitat associated with the area.

(11) Soils and Vegetation

Alternative D designates most BLM-managed lands as “limited” to OHVs. In areas with designated trails, designation is aimed at minimizing impacts to soil and vegetation through rerouting, hardening, size limitations, or seasonal restrictions. In other areas,

OHVs are limited to existing trails to prevent unmanaged proliferation of trails and associated impacts to soils and vegetation. Alternative D adopts measures for protection of soils and vegetation described in *Appendix C: Required Operating Procedures* and in *Oil and Gas Leasing Stipulations*.

(12) Cultural Resources

Same as for Alternative B.

(13) Bering Glacier Area

See Map 13 on page 104. This alternative would designate only unencumbered BLM lands in the Bering Glacier area (827,000 acres) as an RNA, with measures and objectives as described under Alternative C on page 93, except road or airstrip construction would be permitted if consistent with protection of values identified, and the western two-thirds of the area would remain withdrawn from mineral leasing or locatable mineral entry. The Bering Glacier RNA will not preclude use by ADF&G for facilities for wildlife or fisheries management purposes.

(14) Visual Resources

VRM classes would be assigned as shown on Map 17 on page 111. Map 17 represents the current VRM Class Inventory for lands within the planning area. Class I would be assigned to the Delta and Gulkana Wild and Scenic River corridors to protect the natural landscape setting. Class II would occur along the Richardson Highway through the Alaska Range, along the Denali Highway viewshed, the viewsheds of the Gulkana and Delta Wild and Scenic Rivers, and in the Bering Glacier area to protect the viewshed but still allow for projects along the roads where development activities might occur. Class III would be assigned along the Tielke corridor, other viewsheds from the Richardson and Glenn Highways, and in the West Fork area where resource development is possible but some protection of visual resources is important. Class IV would cover all other areas.

(15) Invasive Plant Species

Same as for Alternative C.

(16) Delta Wild and Scenic River

Current withdrawals against leasable mineral entry would be maintained in the scenic and recreational portions of the river corridor (existing under PLO 5150), and a withdrawal from locatable mineral location would be recommended for the scenic and recreational portions. Access to existing mining operations would be permitted in a manner that minimizes disturbance to the river and scenic resources. Consistent with section 1110 of ANILCA, new road construction in the scenic and recreational portions of the river corridor may be authorized if it is determined that there are no economically

feasible and prudent alternative routes and a determination is made that construction would be compatible with values for which the river was established.

Table 5 summarizes the preceding information.

Table 5. Natural and Cultural Resources – Alternative Summary

Issue	Alternative			
	A: No Action	B: Resource Development	C: Resource Conservation	D: Proposed RMP
Special Areas Considered	No ACECs or RNAs currently designated.	No ACECs or RNAs proposed. Some measures identified to protect resource values within areas proposed under Alternatives C and D. See detailed alternative tables in Appendix B	Proposed ACECs: 898,000 acres (13%) Proposed RNA: 940,000 acres (13%) Total proposed: 1,838,000 acres (26%) The following would be designated: 1. Delta Bison Calving ACEC (19,000 acres) Unencumbered BLM land north of Summit Lake. Objectives: Protection of bison calving area and restoration or maintenance of habitat. 2. Nelchina Caribou Calving ACEC (389,000 acres) Mostly State-selected lands south of Susitna River. Objectives: Protection of caribou calving area. 3. West Fork ACEC (490,000 acres) Mostly State-selected lands adjacent to West Fork Gulkana. Objectives: Protection of trumpeter swan and waterfowl habitat and wetlands. 4. Bering Glacier RNA (939,000 acres) Unencumbered BLM lands and adjacent selected lands around Bering Glacier. Objectives: Protect unique ecological values associated with glacier and glacier forelands; continue research opportunities in the least obtrusive manner; protect wetlands; maintain primitive recreation experience; protect anadromous fisheries habitat	Proposed RNA: 827,000 acres (12%) The following would be designated: 1. Bering Glacier RNA (827,000 acres) Unencumbered BLM lands. Objectives: Same as for Alternative C. Some measures identified to protect resource values within other areas proposed under Alternative C. See narrative description or alternative tables in Appendix B for detail. If retained in long-term Federal ownership, some areas described under alternative C for West Fork and Nelchina Caribou Calving ACECs would be considered for ACEC designation.

Issue	Alternative			
	A: No Action	B: Resource Development	C: Resource Conservation	D: Proposed RMP
Required Operating Procedures and Oil and Gas Stipulations	<p><i>Required Operation Procedures</i> described in <i>Appendix C</i> are common to all action alternatives. These procedures apply to all permitted activities on BLM-managed lands within the planning area.</p> <p><i>Oil and Gas Leasing Stipulations</i> described in <i>Appendix C</i> are common to all action alternatives. They apply to all oil and gas leasing that would occur on BLM-managed lands within the planning area.</p>			
Withdrawals	<p>ANCSA (d)(1) withdrawals are maintained in some alternatives in order to provide strong resource protection. These withdrawals (as applied to protection of special values) are described in the narrative above for each alternative. In addition, a summary of withdrawal recommendations is presented under <i>Issue 4: Lands and Realty, Withdrawal Review</i> on page 116.</p>			

Map 10. Delta Bison Calving ACEC - Alternative C

File size: 99 KB

File name: 10_deltaacec.pdf

Map size: 8.5x11

Map 11. Nelchina Caribou Calving ACEC - Alternative C

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File name: 11_nelchinaacec.pdf

Map size: 8.5x11

Map 12. West Fork ACEC - Alternative C

File size: 83 KB

File name: 12_westforkacec.pdf

Map size: 8.5x11

Map 13. Bering Glacier RNA - Alternatives C and D

File size: 102 KB

File name: 13_beingrna.pdf

Map size: 8.5x11

Map 14. Primary Trumpeter Swan Breeding Habitat

File size: 183 KB

File name: 14_ptsbh.pdf

Map size: 11x17

Map 15. VRM Classes - Alternative B

File size: 188 KB

File name: 15_vrmb.pdf

Map size: 11x17

Map 16. Visual Resource Management Classes - Alternative C

File size: 191 KB

File name: 16_vrmc.pdf

Map size: 11x17

Map 17. Visual Resource Management Classes - Alternative D

File size: 193 KB

File name: 17vrmd.pdf

Map size: 11x17

4. Issue 4: Lands and Realty

Issue Statement: Determine the appropriate mix of lands and realty actions needed to provide a balance between land use and resource protection. Establish conditions that would apply if the Slana settlement area is made available for disposal, considering the effects of disposal on the social and environmental conditions of the area.

a) Goals

- Support the BLM-Alaska State Office in the Alaska Conveyances which involve the survey and conveyance of lands to the State of Alaska, Native Corporations, Native Allottees, and other inholders.
- Provide a balance between land use (rights-of-way, land use permits, leases and sales) and resource protection that best serves the public at large.
- Provide support to other BLM programs to protect and enhance resources.

b) Management Common to All Action Alternatives

(1) Land Disposals

(a) Entitlement and Settlement

Provide support in the implementation and conveyance of lands pursuant to legislative mandates. These mandates include the Alaska Statehood Act, Alaska Native Claims Settlement Act, and the 1906 Native Allotment Act.

(b) Federal Land Policy and Management Act (FLPMA) Sec. 203

Public lands meeting one or more of the following criteria could be disposed of through FLPMA Section 203:

1. A tract that was acquired for a specific purpose and is no longer required for that or any other Federal purpose.
2. A tract whose disposal would serve important public objectives, including but not limited to, expansion of communities and economic development that cannot be achieved prudently or feasibly on other than public lands and that outweigh other public objectives and values, including but not limited to, recreation and scenic values, which would be maintaining such a tract in Federal ownership.
3. Such tract, because of its location or other characteristics is difficult and uneconomic to manage as part of the public lands and is not suitable for management by another Federal department or agency.

(c) Lands not to be disposed of

1. Lands withdrawn from the public land laws or segregated by State or Native selection.
2. Lands with mining claims of record under section 314 of FLPMA unless BLM policy is changed in the future to allow for their disposal.
3. Lands within the Delta and Gulkana Wild and Scenic River corridors.

(2) Other Disposals

(a) Recreation and Public Purposes (R&PP) Act

1. Lands identified for disposal under this authority that are selected by either the State or Native corporations would have to be fully adjudicated before the BLM would entertain a sale.
2. In most instances, the BLM would first lease lands under this act and only convey the lands after the project is constructed in compliance with an approved development and management plan. An important exception to this would be tracts proposed as sanitary landfills, which would always be sold; they would not be leased.
3. Application for tracts to be used as a sanitary landfill would only be conveyed with a clause that would prohibit reversion to the Federal government.
4. Existing leases shall be converted to patents if the lands are used for sanitary landfills.

(b) Act of August 1, 1956 Public Land Order (PLO 1613 Sales)

The BLM would continue to convey PLO 1613 lots to qualified applicants. PLO 1613 lots only exist along the Glenn, Richardson, and Tok Cut-off Highways.

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

Process airport conveyances as requested by the Federal Aviation Administration (FAA). Each conveyance shall contain appropriate covenants and reservation requested by the FAA. As a condition to each conveyance, the property interest conveyed shall 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.

(3) Exchanges

The BLM would strive to process mutually benefiting public interest land exchanges. Exchanges are authorized in Alaska by FLPMA, ANCSA, and ANILCA. When considering public interest, full consideration shall be given to efficient management of public lands and to secure important objectives including: protection of fish and wildlife, cultural resource, wilderness and aesthetic values, enhancement of recreational

opportunities, consolidation of mineral and timber holdings for more logical and efficient management expansion of communities, promotion of multiple use values, and fulfillment of public needs. Exchanges would not be actively sought out until State and Native entitlements are fulfilled.

(4) Acquisitions

Acquire private lands through purchase or exchange with willing owners within areas identified for long-term Federal management and retention and to further the programs of the Secretary, including access. When feasible, the BLM would acquire less than fee title to property if management goals could be achieved.

(5) Land Use Authorizations

(a) FLPMA Leases

All FLPMA leases would be at fair market value. No lease would be issued for the Wild and Scenic River corridors, unless for a purpose to maintain or enhance the outstandingly remarkable values. Cabins or permanent structures used for private recreation cannot be authorized under this authority. FLPMA lease proposals on selected lands would require the views from the Native Corporation to be considered on Native selected land and concurrence from the State on State selected lands. Proposals for leases for cabins for uses such as guiding or trapping would be subject to the following criteria:

- Proximity to other private property or existing authorized structures,
- Proximity to existing transportation routes or systems, and
- Documentation of customary lifestyle and need.

(b) R&PP Leases

Recreation and Public Purposes (R&PP) leases would not be issued for sanitary landfill purposes. Existing leases for sanitary landfill purposes may be converted to patents without a reverter clause. No lease would be issued for the Wild and Scenic River corridors. R&PP lease proposals on selected lands would require the views from the Native Corporation to be considered on Native selected land and concurrence from the State on State selected lands.

(c) Permits

Permits cover occupancy, use, or development of a site. Specific exclusion areas are described in the narrative below. In general:

- Cabin or permanent structure permits cannot be issued for private recreation purposes, and
- Trapping shelters would be authorized by short-term (three years maximum) Section 302 permits renewable at the discretion of BLM and tied to the applicant's customary lifestyle and need. Guide shelters would only be

authorized in conjunction with Special Recreation Permits issued under FLPMA authority. Criteria for consideration of issuance of such permits is the same as described above for cabin leases.

Regarding permits, selected lands would be treated as follows:

Native-selected: Prior to the issuance of 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.

State-selected: In accordance with 906(k) of ANILCA, the BLM must receive a letter of concurrence prior to issuance of any use authorization. The BLM may then incorporate comments in the terms and conditions of the use authorization if in compliance with Federal laws and regulations. If the State objects, the BLM would not issue the use authorization. If the proposal is on land that has been top-filed by the State, pursuant to 906(e) of ANILCA, a letter of concurrence is not required.

(d) Unauthorized Use

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

1. Removal of the structure,
2. Relinquishment to the U.S. Government for management purposes, and
3. Authorization by lease or permit for legitimate uses if consistent with identified area objectives.

Under numbers 2 and 3 above, the criteria listed above for cabins under lease and permits would be used. Criteria for prioritizing unauthorized cases are as follows:

- Situations involving new trespass, 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, and
- Other selected lands.

(6) *Withdrawal Review*

Table 6 displays some of the withdrawals in the planning area, their segregative effect, and the recommendation under Alternatives B, C, and D. Under Alternative A, no withdrawal review would be conducted, thus all withdrawals would be maintained. A discussion of these withdrawals is also included in *Chapter III, Issue 4: Lands and Realty, Withdrawals*.

ANCSA (d)(1) withdrawals are a series of public land orders issued from 1972 to 1975 that placed a protective withdrawal on Federal lands for the purpose of study and review to determine the proper classification and “to ascertain the public values in the land.”

The intent was to limit appropriation of the lands in order to complete inventories of resources and assessment of values which would then allow for an orderly development of BLM's management objectives for present and future public needs. In the 1980's, studies and assessments were completed and opening orders were issued on some lands covered by ANCSA (d)(1) Withdrawals. No further actions have been done since that time and this land use planning process is now the means to assess resource values and make recommendations on opening lands withdrawn by the ANCSA (d)(1) orders. Table 7 displays the recommendations, by Alternative, for ANCSA (d)(1) Withdrawal maintenance or revocation.

c) Alternative A

Under Alternative A, the Lands and Realty program would continue in its current role of supporting other BLM programs, providing for land use authorizations, and supporting the Alaska State Office in Alaska conveyances. No specific lands would be identified for disposal (including Slana). The program focus for Slana would be resolution of unauthorized use through trespass, and facilitation of right-of-way requests in the area for access to homesites and other infrastructure associated with settlement. No lands would specifically be identified for exchange or acquisition. Land use authorizations such as FLPMA leases and permits would continue to be dealt with on a case-by-case basis, as would be the case with other unauthorized uses, such as trespass cabins. Withdrawal review would not occur for ANCSA (d)(1) withdrawals or other smaller administrative withdrawals. Some uses would continue to be constrained by such withdrawals.

d) Alternative B

(1) *Land Disposals*

Slana: Lands in the Slana area (approximately 10,000 acres) would be available for disposal to the public at large by competitive or modified bidding procedures.

Other disposals: Isolated, unmanageable tracts resulting from highway realignment along the Richardson and Glenn Highways would be made available for disposal.

Exchanges: No exchanges would take place until all Native and State entitlements are met. Afterwards, exchanges would be considered in the Chistochina-Slana, Tiekel, and Denali planning regions.

(2) *Acquisitions*

No areas are identified for acquisition.

Table 6. Summary of Withdrawals and Recommendations under Alternatives B, C, and D

Withdrawal Type	Acres Withdrawn	Department	Segregative Effect	Recommendation
Lighthouse Reserves	3,286	US Coast Guard	Closed to settlement, location, sale, entry, or other disposition.	Maintain until administration can be transferred to another agency.
Air Navigation Sites	1,402	BLM & FAA	Closed to settlement, location, sale, entry or other disposition, including State selection.	Maintain until FAA deems them no longer necessary.
Administrative Site	48	BLM	Closed to public land laws including State selection, the mining laws and mineral entry	Maintain.
Recreational Withdrawals	4,413	BLM	Closed to all forms of appropriation under the public land laws, including mining, but not the mineral leasing laws.	Maintain withdrawals.
Recreational Withdrawal	15	DOD	Withdrawn from all forms of appropriation under the public land laws, mining, but not the mineral leasing laws nor disposal of materials under the act of July 31, 1947.	Maintain withdrawals.
Military Withdrawal (Black Rapids Training Sites)	2,795	DOD	Withdrawn from all forms of appropriation under the public land laws, mining, but not the mineral leasing laws nor disposal of materials under the act of July 31, 1947.	Maintain.
AK Railroad Withdrawals	5,006	AKRR	Closed to public land laws including State selection, the mining laws and mineral leasing laws.	Maintain.
Power Site Classifications (PSC)	105,225	BLM	Closed to public land laws, including State selection but not ANCSA entitlement; open to mineral location (subject to regulations in 43 CFR 3731); and open to mineral leasing.	Maintain.
Power Projects	42,112	AEA & FERC	Power Project W/D are Closed to public land laws, including State selection and open to mineral location (subject to regulation in 43 CFR 3731), in the application State. Upon issuance of a preliminary permit or license by FERC they are closed to mineral location. It is open to mineral leasing throughout.	Maintain.

Note: The recommendations in Table 6 only apply to the action alternatives (Alternatives B, C, and D). Alternative A would not have a withdrawal review; therefore, all existing withdrawals would be maintained.

(3) Rights-of-Way

No areas would be identified for ROW avoidance or exclusion. Granting of ROWs would be subject to the *Required Operating Procedures* in Appendix C.

(4) FLPMA and R&PP Leases

No areas would be identified for lease avoidance or exclusion.

(5) FLPMA Sec. 302 Permits

No areas would be identified for permit avoidance or exclusion; permits would be subject to the measures identified in *Appendix C: Required Operating Procedures*.

(6) Withdrawals

ANCSA (d)(1) Withdrawals: With the exception of the ANILCA-designated wild portions of the Delta and Gulkana Wild and Scenic Rivers, all ANCSA (d)(1) withdrawals would be revoked.

Transportation and Utility Corridor Withdrawals: PLO 5150 would be revoked, allowing for the conveyance of the transportation and utility corridor to the State of Alaska. Map 44 in Chapter III in the *Issue 4: Lands and Realty, Transportation and Utility Corridor* section shows the location of the transportation and utility corridor. This action is considered to respond to a request by the Governor. Based on comments submitted to this planning process, the State feels that state ownership of the corridor is appropriate. They feel that federal retention of the corridor is no longer necessary and that it makes for inefficient management of scattered land tracts.

e) Alternative C

(1) Land Disposals

Slana: No disposals would occur other than resolution of failed claims in the existing settlement area.

Other disposals: No other areas or tracts of land would be identified for disposal.

Exchanges: No exchanges would be considered until all State and Native entitlements are met. No exchanges would be considered that would result in a net loss of Federal land.

(2) Acquisitions

The following would be considered emphasis areas for acquisitions: 1) West Fork Gulkana ACEC; 2) Delta River SRMA; 3) Denali Highway SRMA; 4) Gulkana River SRMA; 5) Tielke SRMA; and 6) Bering Glacier RNA.

(3) Rights-of-Way

For the protection of specific resource values, no ROWs would be permitted in the following areas: 1) Delta River SRMA; 2) Denali Highway SRMA; 3) Gulkana River SRMA; 4) Tielke SRMA (except within the transportation and utility corridor); and 5) the Bering Glacier RNA. The following would be ROW avoidance areas: 1) Delta Bison Calving ACEC; 2) Nelchina Caribou Calving ACEC; and 3) West Fork ACEC.

(4) FLPMA and R&PP Leases

No leases would be considered in the following areas: 1) Delta Bison Calving ACEC; 2) Nelchina Caribou Calving ACEC; 3) West Fork ACEC; 4) Denali Highway SRMA; 5) Gulkana River SRMA; 6) Tielke SRMA; and 7) Bering Glacier RNA.

(5) FLPMA Sec. 302 Permits

No permits would be issued for the following areas: 1) Delta Bison Calving ACEC; 2) Nelchina Caribou Calving ACEC; 3) Delta River SRMA; 4) Denali Highway SRMA; 5) Gulkana River SRMA; and 6) Tielke SRMA. In the Bering Glacier RNA, permits associated with research activities would be allowed. In the West Fork ACEC, no new occupancy permits (cabins) would be issued. Other (non-occupancy) permits would be considered, consistent with protection of values identified for the area.

(6) Withdrawals

ANCSA (d)(1) Withdrawals: The following areas and associated withdrawals would be maintained: 1) scenic and recreational portions of the Delta Wild and Scenic River corridor (PLOs 5180 and 5150); 2) the Bering Glacier RNA (PLO 5179); 3) wild portions of the ANILCA-designated Delta and Gulkana Wild and Scenic River corridors; 4) inner and outer transportation and utility corridor (PLO 5150); 5) PLO 5179 that provides the "outer corridor" on the Gulkana Wild and Scenic River; and 6) the Nelchina Caribou Calving ACEC (PLO 5174). In addition, the following areas would be recommended for withdrawal: 1) Recommend closure of 16,000 acres within the scenic portion of the Delta Wild and Scenic River corridor to prohibit mineral entry under the mining laws; and 2) recommend closing the Denali SRMA from locatable mineral entry.

This alternative would maintain withdrawals against leasable and locatable minerals on approximately 2,888,000 acres.

Transportation and Utility Corridor Withdrawals: Recommend closure of the outer corridor to locatable mineral entry. Map 44 in Chapter III in the *Issue 4: Lands and Realty, Transportation and Utility Corridor* section shows the location of the transportation and utility corridor.

f) Alternative D – Proposed RMP

(1) Land Disposals

Slana: All lands within the Slana settlement area (approximately 10,000 acres) would be available for FLPMA Sec. 203 disposal, under the following priority:

1. Lands would be sold non-competitively to the claimant where the lands contain improvements that are still owned, occupied, or used by the claimant.
2. Lands may be sold with a preference right to a failed claimant where improvements exist that are owned but no longer used by the failed claimant.
3. The remaining lands may be disposed of at the discretion of the Glennallen Field Office, in close consultation with the community of Slana and Ahtna, Inc.. Further disposals would be used to consolidate land patterns or provide lands for community infrastructure. Disposal to the general public at large by competitive or modified competitive bid will not be considered.

Steps one and two are targeted at resolving unauthorized use on failed claims.

Other disposals: Isolated, unmanageable tracts resulting from highway realignment along the Richardson and Glenn Highways would be made available for disposal.

Exchanges: No exchanges would take place until all Native and State entitlements are met. Afterwards, exchanges would be considered in the Chistochina/Slana, Tiekkel, and Denali planning regions. Exchanges would be considered to consolidate scattered parcels to facilitate Federal subsistence management.

(2) Acquisitions

The following would be identified as emphasis areas for acquisitions: 1) Delta River SRMA; 2) Gulkana River SRMA; 3) Bering Glacier RNA; and 4) Denali Highway, if lands in the area are retained in long-term Federal ownership.

(3) Rights-of-Way

The following areas would be identified as ROW avoidance areas: 1) West Fork area, no overhead powerlines permitted in primary trumpeter swan habitat; 2) Delta River SRMA; 3) Gulkana River SRMA; and 4) Bering Glacier RNA. ROWs would be permitted within the Delta bison calving area and Nelchina caribou calving area, subject to seasonal constraints. ROWs permitted within the Denali Highway area would give

special consideration to minimizing impacts to the viewshed. Within the Delta River SRMA and the Gulkana River SRMA, applications for transportation and utility systems would be evaluated consistent with Title XI of ANILCA.

The Slana settlement area has been identified as an area where the need for future rights-of-way will be necessary, to access homesites and to provide for community infrastructure.

(4) FLPMA and R&PP Leases

No leases would be permitted within the Gulkana or Delta Wild and Scenic River corridors. Within the following areas, leases would be permitted only if consistent with protection of values identified for the area: 1) Nelchina caribou calving area; 2) West Fork area; 3) Denali Highway area; and 4) Bering Glacier RNA.

(5) FLPMA Sec. 302 Permits

Within the Delta bison calving area, the Nelchina caribou calving area, West Fork area, Delta River SRMA, Denali Highway area, Gulkana River SRMA, Tiekel SRMA, and Bering Glacier RNA, occupancy type permits, such as commercial use cabins, would be authorized only under the following conditions:

- No new permanent structures would be built within the area.
- Existing structures would be authorized only if they can clearly be tied to a commercial enterprise such as guiding or trapping.

Other (non-occupancy) permits would be authorized in these areas if consistent with protection of the values or objectives identified for the area.

(6) Withdrawals

ANCSA (d)(1) Withdrawals: The following withdrawals would be maintained: 1) Scenic and recreational portions of the Delta Wild and Scenic river corridor (portions of PLOs 5180 and 5150); 2) the western two-thirds of the Bering Glacier RNA; 3) ANILCA withdrawals within wild portions of the Delta and Gulkana Wild and Scenic Rivers; 4) PLO 5150 for the inner and outer transportation and utility corridor, except for that portion north of Paxson through which the pipeline does not run; and 5) existing withdrawals in the Slana settlement area.

In addition, the following withdrawal would be recommended: Recommend a closure on 16,000 acres within the scenic portion of the Delta Wild and Scenic River corridor to prohibit mineral entry under the mining laws. Alternative D would also recommend modification of ANCSA (d)(1) withdrawals to allow for locatable mineral entry in approximately 700,000 acres in the area around the Alphabet Hills.

Alternative D would maintain withdrawals on approximately 1,110,000 acres.

Transportation and Utility Corridor Withdrawals: This alternative would maintain most the existing withdrawals on the transportation and utility corridor. However, PLO 5150 would be modified to allow for 83,000 acres to be conveyed to the State. These lands include the Gunn Creek segment which is northeast of Paxson, and approximately 59,000 acres north of Paxson and west of the Delta river (see Map 18). This modification would allow for conveyance of approximately 18 percent of the Transportation and Utility corridor lands currently managed by BLM in this planning area. No inner corridor lands would be made available for conveyance under this alternative. Conveyance of these lands to the State would remove them from lands available for federal subsistence hunting. See Chapter 4 for an analysis of the effects of this action.

Table 7 summarizes the preceding information.

Table 7. Lands and Realty – Alternative Summary

Issue	Alternative			
	A: No Action	B: Resource Development	C: Resource Conservation	D: Proposed RMP
Slana disposal	No disposals would occur other than resolution of failed claims.	Lands would be available for disposal to public at large by competitive or modified bidding procedures.	Same as A.	All lands within the Slana settlement would be available for FLPMA Sec 203 disposal, under the following scenarios: <ol style="list-style-type: none"> 1. May be sold non-competitively to the claimant where the lands contain improvements which are still owned, occupied or used by the claimant. 2. Lands may be sold with a preference right to a failed claimant where improvements exist which are owned but no longer used by the failed claimant. 3. Remaining lands can be disposed on at the discretion of the Glennallen Field Office in close consultation with the affected communities with goals to provide infrastructure and consolidate land management. Disposal to the public at large by competitive bid will not be considered.
Acquisition	Wild and Scenic River corridors currently emphasized for acquisition opportunities.	BLM would not pursue any acquisitions.	The following would be emphasis areas for acquisition: 1) WSR corridors; 2) West Fork ACEC; 3) Denali Highway SRMA; 4) Tielke SRMA; and 5) Bering RNA.	With landowner's cooperation, acquire private inholdings within the following areas: <ol style="list-style-type: none"> 1. WSR corridors 2. Bering Glacier RNA. 3. Denali Highway, if lands are retained in long-term Federal ownership.

Issue	Alternative			
	A: No Action	B: Resource Development	C: Resource Conservation	D: Proposed RMP
Other FLPMA disposals	No lands currently identified for disposal.	Same as D.	No lands would be made available for disposal.	Specific tracts identified based on criteria outlined in <i>Management Guidance Common to all Alternatives</i> . Include isolated, unmanageable tracts resulting from highway re-alignment.
WITHDRAWALS				
ANCSA (d)(1) Withdrawals	All ANCSA (d)(1) withdrawals are in place, as modified by the subsequent PLOs.	Revoke all ANCSA (d)(1) withdrawals, except within the wild segments of the Delta and Gulkana WSR corridors.	In addition to those identified in Alternative D, the following ANCSA (d)(1) withdrawals would be maintained against mineral leasing and locatable mineral entry: <ol style="list-style-type: none"> 1. PLO 5179 which provides the "outer corridor" on the Gulkana W&SR; 2. ANCSA (d)(1) withdrawal within the Nelchina ACEC. In addition, the following would be recommended: <ol style="list-style-type: none"> 1. Recommend withdrawal of Denali SRMA to leasable minerals and mineral entry. 	Recommend maintenance of the following ANCSA (d)(1) withdrawals: <ol style="list-style-type: none"> 1. Scenic and recreational portions of the Delta WSR corridor (PLOs 5180 and 5150); 2. PLO 5179 in western 2/3 of Bering RNA. 3. ANILCA withdrawals within Wild portions of the Delta and Gulkana would be maintained. 4. Eighty-two percent of PLO 5150 for the inner and outer transportation and utility corridor. All other ANCSA (d)(1) withdrawals applicable to BLM-managed lands within the planning area would be recommended for revocation. In addition, the following withdrawal would be recommended: 16,000 acres within the scenic portion of the Delta WSR corridor to prohibit mineral entry under the mining laws. The following recommendation would occur: Allow locatable mineral entry in 700,000 acres in the Alphabet Hills area.

Issue	Alternative			
	A: No Action	B: Resource Development	C: Resource Conservation	D: Proposed RMP
PLO 5150 (transportation and utility corridor)	PLO 5150 currently maintained for use as transportation and utility corridor. This unencumbered BLM land provides the majority of the Federal subsistence hunting area.	Revoke PLO 5150 to allow for mineral entry (leasing and locatable) and to allow for State conveyance.	Modify PLO 5150 to exclude metalliferous metals.	Recommend maintenance of most of PLO 5150 (as amended to include 5151), with one exception: modify to allow disposal of scattered, unmanageable parcels created by re-alignment of Richardson Highway, subject to site-specific analysis. In addition, the PLO would be modified to allow State conveyance of 83,000 acres north of Paxson.

Map 18. Revocations of Portions of PLO 5150 – Alternative D

File size: 108 KB

File name: 18_plo51550.pdf

Map size: 8.5x11

5. **Issue 5: Vegetation Management**

Issue Statement: Manage vegetation to provide for forest health, personal and commercial wood products, and fish and wildlife habitat. Determine what role fire will play in vegetation management.

a) **Goals**

Wildlife habitat and forestry:

- Maintain and restore the health, productivity, and biological diversity of forest and woodland ecosystems.
- Consistent with other resource values, provide personal use wood products for local consumption and opportunities for commercial harvests.
- Manage wildlife habitat to ensure wildlife productivity, consistent with State of Alaska wildlife management objectives.
- Maintain and restore big game and upland game habitat to sustain or increase wildlife populations.

Fire management:

- Protect human life and property.
- Use wildland fire and fuel treatments 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.

b) **Management Common to All Alternatives**

(1) Inventory and Monitoring

These monitoring/assessment projects would be common to all action alternatives (Alternatives B, C, and D).

- **Wildlife:** Conduct detailed condition assessments of crucial caribou habitats. Monitor fire (prescribed and wildland) in caribou habitat with focus on effects to lichen and overall quality of caribou habitat.
- **Wildlife:** In cooperation with ADF&G, evaluate current condition of bison calving range on Delta River. Collect information regarding desired conditions within critical habitats.
- **Forestry:** Forest inventory would be conducted (coordinate with State of Alaska to prevent duplication of efforts) to determine location and volume of commercial forest products. Priority for inventory efforts would be those areas identified under *Management Areas* in Table 8. Vegetation Management - Alternative

Summary. Old growth forest stands would be identified as a part of any inventory effort.

(2) Fire and Fuels Management

Management of the wildland fire and fuels program would focus on maintaining the key ecosystem components of vegetation composition and structure intact and functioning within their historical range. Fire management choices recognize fire is an essential ecological process and natural change agent of Alaskan ecosystems and provide for the protection of human life and site-specific values. Wildland fire and prescribed fire would be used to achieve habitat improvement objectives or desired conditions as described in alternative narrative descriptions below. Fire suppression classes are assessed on an annual basis by an interagency team and changes are made based on resource objectives or other factors. “Indicators” for changes in suppression classes are described in alternative narratives below. All actions proposed are consistent with guidance set forth in the Final Land Use Plan Amendment and EA for Wildland Fire and Fuels Management for Alaska which was signed in July 2005 (BLM 2005c).

(3) Grazing

Any livestock grazing within the project area is subject to permitting processes conforming with special recreation use permits and is subject to practices described in *Required Operating Procedures*.

(4) Land Use Requirements

All vegetation management practices would be conducted consistent with guidelines described in *Required Operating Procedures*.

(5) Desired Conditions

- **Timber stands managed for commercial production of white spruce:** These stands occur on floodplains and alluvial terraces on well-drained soils. These stands would be managed to maintain white spruce as the dominant tree species, which may require thinning to minimize early seral competition from other species. Bark beetle-kill trees within these stands would be salvaged where possible as firewood or house logs.
- **Timber stands managed for improvement of wildlife habitat:** In mixed white spruce-aspen/poplar/birch stands where wildlife habitat improvement is the primary objective, desired condition would be maintenance of white spruce with a component of aspen, balsam poplar, or paper birch. These stands would have shrub-dominated early seral stages after harvest, a wildland or prescribed fire, or mechanical treatment of mature or bark beetle-kill white spruce.
- **Moose habitat:** Desired condition is a mosaic pattern of upland spruce woodland cover types interspersed with a lower seral expression dominated by

alder and willow. Upland woodland cover types are mixed with stream terraces and flood plains dominated by sedge and mixed age classes of alder and willow.

- **Caribou habitat:** Summer range would be similar to the description for moose habitat. For caribou winter range, desired condition is uplands spruce woodland cover type where lichen and various herbs dominate the ground layer.
- **Bison calving area:** Delta floodplain, grass-dominated plant communities interspersed with scattered pockets of cottonwood, white spruce, and balsam poplar.
- **Dall sheep and mountain goat habitat:** Open high elevation grass and forb-dominated plant communities with a minor shrub or tree component.

c) Alternative A

Guidance for vegetation management is provided in the Southcentral MFP but is very general in nature. It calls for management to enhance critical moose habitat and custodial forestry management until economic conditions are more favorable for harvest. The Glennallen Field Office has identified a large prescribed burn unit in the Alphabet Hills with the primary objective of moose habitat improvement. In 2004, the BLM, in cooperation with State DNR and ADF&G, conducted a prescribed burn in the area that covered approximately 40,000 acres, all within the prescribed unit. Portions of the unit that were not burned would be targeted in future years. A wildland fire may also be used to meet this objective. Some commercial timber sales have occurred, most focused on salvage of bark beetle-kill white spruce. The Glennallen Field Office averages approximately 40 acres per year in commercial sales. Permits are issued for personal and commercial firewood.

d) Alternative B

(1) Forestry Products

This alternative would take an aggressive approach at salvage of bark beetle-kill spruce on approximately 360,000 acres on BLM-managed lands within the Tielke planning region. For the purposes of this analysis, this alternative assumes timber harvest at a rate of 100 - 200 acres per year. Where necessary, timber sale contracts would authorize construction of temporary roads to access timber sales. Where compatible with other resource objectives, retention of temporary roads would be considered. Personal use and commercial firewood permits would continue to be issued. In addition, the BLM would work with Native corporations or village corporations to identify specific areas on Native- or dual-selected lands where public-use firewood areas could be designated. These areas would be located to reduce hazardous fuels. Wildland or prescribed fire may also be used to improve forest health.

(2) *Wildlife Habitat*

Emphasis is on improvement of critical moose winter range to achieve desired conditions as described above. The preferred method of treatment to achieve stated objectives would be timber harvest and utilization of forest products. However, prescribed or wildland fires may also be used to meet this objective. Some road construction would be necessary to access treatment areas.

e) *Alternative C*

(1) *Forestry Products*

Commercial timber sales would only be utilized to achieve other resource objectives, such as wildlife habitat improvement or fuels reduction. This alternative anticipates a harvest level of 10 - 20 acres per year. To minimize construction of roads, only winter harvest would be permitted. Commercial sales would not be permitted in areas designated as ACECs or RNAs. The BLM would focus forestry efforts on designation of public firewood or house log gathering areas, emphasizing minimal and temporary road construction (working with DOT to construct gravel access “ramps” off the main highways). No personal firewood gathering would be permitted in the Wild and Scenic River corridors.

(2) *Wildlife Habitat*

Habitat objectives would be accomplished through wildland or prescribed fire. Commercial timber sales would only be used where the primary objective is improvement of wildlife habitat or fuels reduction.

(3) *Fuels Reduction*

Fuels reduction would be accomplished through personal or commercial firewood permits, not commercial timber or salvage sales. In areas away from urban interface, wildland or prescribed fire instead of commercial timber sales would be used for fuels reduction.

f) *Alternative D – Proposed RMP*

(1) *Forestry Products*

Commercial timber sales would be considered in the Tiekel planning region, and would include BLM public lands associated with the transportation and utility corridor but would also be adjacent to State- and Native-selected lands and lands in the Tonsina Bluffs

area. This area constitutes approximately 144,000 acres of commercial timber, most of which has a high bark beetle-kill component. However, due to access limitations and a limited market in the area, this analysis assumes an annual harvest level of 40 - 100 acres per year. Forestry objectives in these areas are:

- Increase access for personal and commercial wood products.
- Improve forest health through salvage of bark beetle-kill spruce.
- Consider potential for commercial harvest.
- Benefit wildlife habitat.
- Manage for desired conditions described above.
- Reduce hazardous fuels.

Within all harvest areas, the use of temporary roads or winter sales would be emphasized.

Commercial harvest would be considered in other areas to accomplish other resource objectives such as fuels reduction or wildlife habitat improvement.

Forestry practices are allowed within the Bering Glacier RNA, but the primary objective of any forestry practice would be enhancement or protection of values identified for the area. Forestry practices would be allowed within SRMAs. Emphasis would be on temporary roads or winter sales, but consideration would be given to retaining roads where areas are managed for roaded natural experiences. Cutting units would be designed to meet VRM objectives. Commercial harvest would not be permitted within the Gulkana or Delta Wild and Scenic River corridors.

The BLM would continue to issue permits for personal use and commercial firewood. In the transportation and utility corridor within the Tiekel planning region, consideration would be given to designating specific areas for public firewood gathering and providing access to these areas. Access may consist of gravel access ramps off the highway and low-grade temporary two-track where site conditions allow. In addition, the BLM would work with Native corporations or village corporations to identify specific areas on Native- or dual-selected lands where public-use firewood areas could be designated. These areas would be located to reduce hazardous fuels. Personal use firewood permits would be allowed in the Gulkana and Delta Wild and Scenic River corridors, consistent with the current river plans. However, this practice would be monitored closely to ensure that it does not cause impact the viewshed.

(2) *Wildlife Habitat*

(a) Bison

Wildland fire and prescribed burning would be used to improve Delta bison calving range on over 15,000 acres (see Map 10 on page 101). Objectives would be to increase forage productivity and maintain grass dominated vegetation communities. See also *Desired Conditions* on page 129 under *Management Common to All Alternatives*.

(b) Caribou

Wildland and prescribed fire would be utilized within portions of the Nelchina caribou summer range to create a mosaic of burned and unburned areas. To maintain mixed age classes of lichen on Nelchina caribou traditional winter range, less than 10 percent of the range would be burned every decade. If large wildfires occur on or adjacent to winter range, changing the suppression class to full or modified would be considered. See also *Desired Conditions* on page 129 under *Management Common to All Alternatives*.

(c) Dall Sheep

Based on inventory, areas for maintenance or enhancement of Dall sheep range would be identified. Fuels treatment projects and wildland fire would be used to achieve objectives. See also *Desired Conditions* on page 129 under *Management Common to All Alternatives*.

(d) Moose

The BLM would use wildland fire and pursue vegetation treatment such as prescribed burning, mechanical treatment, or logging to improve moose habitat and achieve desired condition described above. The first priority for such projects is critical winter range (see Map 37 in Chapter III in the *Issue 3: Natural and Cultural Resources, Wildlife* section) on BLM public lands (unencumbered). The second priority is critical winter range on State- or Native-selected lands. Combined, there are an estimated 1,450,000 acres of moose winter range on BLM-managed lands in the planning area. Wherever possible, wildlife objectives would be combined with fuels reduction or forestry objectives.

(3) Fuels Reduction

Opportunities would be explored to combine forestry and wildlife objectives and achieve fuels reduction. Highest priority areas would be State- and Native-selected lands near rural communities and villages.

Table 8 summarizes the preceding forestry information and Table 9 summarizes the preceding wildlife information.

Table 8. Vegetation Management, Forestry – Alternative Summary

Issue	Alternative			
	A: No Action	B: Resource Development	C: Resource Conservation	D: Proposed RMP
Forestry Areas				
Tiegel	No specific area designated.	Same as Alternative D but include all BLM-managed lands within the Tiegel region.	Should only include unencumbered BLM lands. No commercial sales, only personal use firewood gathering should be permitted.	This area includes unencumbered BLM lands as well as adjacent State- and Native-selected lands in the Tiegel region. Forestry objectives in this area are: <ol style="list-style-type: none"> 1. Increase access for personal and commercial wood products and biomass material; 2. salvage bark beetle-kill spruce; 3. consider potential for commercial harvest; 4. benefit wildlife habitat; 5. manage for white spruce/deciduous timber stands as described in general objectives. 6. Reduce hazardous fuels.
Scattered firewood/house log areas	No specific area designated.	Coordinate with Native or village corporations to identify public-use firewood areas in areas to reduce hazardous fuels.	Designate public-use firewood or house log gathering areas, emphasizing minimal or temporary road construction.	This area would be based on inventory but includes BLM-managed lands in vicinity of towns or villages. Forestry objectives are: <ol style="list-style-type: none"> 1. In cooperation with State and Natives, identify areas for personal firewood and house log gathering; 2. Clearly mark access to areas and boundaries to prevent unintentional trespass; 3. Provide for secondary objectives such as fuels reduction and habitat improvement.

Issue	Alternative			
	A: No Action	B: Resource Development	C: Resource Conservation	D: Proposed RMP
Kenny Lake area (Tonsina bluffs)	No specific area designated.	Same as Alternative D.	Allow only personal use firewood permits in this area.	This area consists of BLM-managed lands around Kenny Lake/Tonsina bluffs. Forestry objectives are the same as described for the Tiekel forestry emphasis area.
Constraints				
Wild and Scenic River corridors	Some personal use firewood gathering currently allowed under permit.	Same as Alternative A.	Do not allow personal use firewood cutting or commercial sales in WSR corridors.	Personal use firewood gathering allowed consistent with river management plans. Would meet VRM Class I objectives.
Areas of Critical Environmental Concern or Research Natural Areas.	No current timber sales in any of the proposed ACEC areas. Some personal use firewood gathering currently permitted.	Consider commercial sales, mitigate impacts through measures identified in <i>Required Operating Procedures</i> .	No commercial sales allowed. Personal use firewood gathering permitted, consistent with measures identified in ACEC.	Forestry practices allowed, but primary objective of any forestry practice would be enhancement or protection of values identified within ACEC. Personal use firewood gathering permitted, consistent with measures identified in ACEC.
Special Recreation Management Areas	Some commercial sales have occurred but none currently in place.	Consider commercial sales, mitigate impacts through measures identified in <i>Required Operating Procedures</i> .	Permit only for personal use firewood or where primary objective is wildlife habitat improvement.	Forestry practices allowed. Emphasis would be on temporary roads, with consideration to retain roads where roaded-natural is objective (within highway corridors). Design cutting units to meet VRM objectives.
Timber sale contracts and personal use firewood or house log permits would adhere to general measures described in <i>Required Operating Procedures</i> Appendix C. Specific stipulations based on these mitigation measures may be developed on a project-by-project bases, to address specific resource concerns.				

Table 9. Vegetation Management, Wildlife – Alternative Summary

Issue	Alternative			
	A: No Action	B: Resource Development	C: Resource Conservation	D: Proposed RMP
Improvement and Enhancement				
Moose	Alphabet Hills prescribed burn would continue to be implemented with primary objective of improving moose habitat. Wildland fire may be used to improve habitat.	Utilize commercial timber sales where possible to accomplish objectives. Identifies 1.4 million acres potential prescribed burning.	Utilize only prescribed and wildland fire to accomplish objectives.	Use wildland fire and pursue vegetation treatment such as prescribed burning, mechanical treatment, or logging with emphasis on improving moose habitat, with objectives as described under wildlife objectives in alternative narrative. First priority for such projects is winter range (see Map 37, 1,450,000 acres). Second priority is general distribution areas.
Bison	Nothing proposed.	Nothing proposed.	Use only prescribed and wildland fire to accomplish objectives.	Pursue vegetation treatment opportunities such as prescribed burning to improve Delta bison calving range over 15,000 acres. Objectives are to increase forage productivity and maintain grass dominated vegetation communities.
Caribou	Alphabet Hills prescribed burn is within the Nelchina caribou range.	Nothing proposed.	Same as D Alternative.	Within portions of the Nelchina caribou summer range, utilize wildland and prescribed fire to create a mosaic of burned/unburned areas. On Nelchina caribou winter range, manage for less than 10% of range to be burned every decade, to maintain mixed age classes of lichen. If large wildfires occur, consider changing suppression class to full or modified.
Dall Sheep	Currently, limited inventory work is being done to refine Dall sheep ranges.	Nothing proposed.	Use only prescribed and wildland fire to accomplish objectives.	Based on inventory, identify areas for maintenance or enhancement of Dall sheep range. Use fuels treatment projects and wildland fire to achieve objectives.

6. Issue 6: Leasable and Locatable Minerals

Issue Statement: Determine which areas should be made available for mineral exploration and development.

a) Goals

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

b) Management Common to All Alternatives

(1) Management Areas

Lands currently under selection by the State and Native corporations are segregated from locatable mineral entry or from mineral leasing to avoid potential encumbrances on selected lands prior to conveyance. These lands comprise approximately 5.5 million acres out of the 7.1 million 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 lands are retained long-term in Federal ownership (i.e., not conveyed to the State or Native corporations).

(2) Inventory and Monitoring

The Glennallen Field Office would continue to work with the BLM’s Division of Energy and Solid Minerals to provide detailed mineral assessments for specific areas (ANILCA sec. 1010).

(3) Solid Leasable Minerals (Other Than Coal)

Solid leasable minerals include chlorides, sulfates, carbonates, borates, silicates or nitrates of potassium or sodium and related products; sulphur on all acquired lands; phosphate, including associated and related minerals; oil shale, and gilsonite (including all vein-type solid hydrocarbons). Deposits of these minerals are unlikely to occur on BLM-managed lands in the planning area (see Chapter III). If deposits were discovered, subsequent leasing, exploration, and development would be considered on a case-by-case basis.

(4) Renewable Energy

As described in Chapter III, some potential does exist within the planning area for development of solar, wind, or biomass renewable energy facilities. No permits or leases for these activities are currently issued within the planning and to date no interest has been expressed. The Glennallen Field Office would consider applications for permit or lease to conduct such leases, subject to the constraints for leasing and permitting as described under *Issue 4: Lands and Realty, Management Common to All Action Alternatives, Land Use Authorizations* on page 115.

(5) Coal

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

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).

(6) Leasable Minerals (Including Oil, Natural Gas, Coalbed Methane and Geothermal Steam)

Leasing would be subject to *Standard Lease Terms* and those applicable as outlined under *Oil and Gas Lease Stipulations* and *Required Operating Procedures* in Appendix C.

All areas open to mineral leasing would be open to geophysical exploration except those lands containing No Surface Occupancy restrictions, which would only be available for geophysical exploration in winter conditions, subject to stipulations and through Casual Use as described under 43 CFR 3150.05(b) during non-winter conditions.

All areas closed to mineral leasing would be closed to geophysical exploration.

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.

Coalbed methane development is authorized by the same process as oil and gas.

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

1. *Open Subject to Standard Lease Terms and Conditions:* These are areas where it has been determined through the planning process that the standard terms and conditions of the lease form are sufficient to protect other land uses or resource values.
2. *Open Subject to Seasonal or Other Minor Constraints:* These are areas where it has been determined that moderately restrictive lease stipulations may be required to mitigate impacts to other land uses or resource values. Category 2 leases frequently involve timing limitations such as restricting construction activities in designated big game crucial habitats, or controlled surface use stipulations such as creating a buffer zone around a critical resource.
3. *Open Subject to NSO or Other Major Constraints:* These are areas where it has been determined through the planning process that highly restrictive lease stipulations are necessary to protect resources. Category 3 leases may prohibit the construction of well production and support facilities. These areas can be subject to directional drilling, if technologically and economically feasible.
4. *Closed to Leasing:* These are areas where it has been determined that other land uses or resource values cannot be adequately protected, and appropriate protection can be ensured only by closing the land to leasing through either statutory or administrative requirements.

(7) Locatable Minerals

Mining of locatable minerals would be subject to the surface management regulations found in 43 CFR 3809. Surface occupancy under the mining laws would be limited to uses incident to the mining operation. Bonding would be required in accordance with BLM policy. Specific measures that would be utilized to minimize surface impacts and to facilitate rehabilitation and revegetation of mined areas can be found in Required Operating Procedures in Appendix C.

All operations must file a Plan of Operations with the BLM. The Plan 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.

c) Alternative A

(1) Leasable Minerals

Currently there are no mineral leases on BLM-managed lands within the planning area. Most BLM-managed lands are closed to leasing because of State or Native selections or underlying ANCSA (d)(1) withdrawals. Under Alternative A, no withdrawal review would occur and all ANCSA (d)(1) withdrawals would remain in place, pending some legislation or unrelated management direction. Map 19 shows areas open for mineral leasing, pending State or Native selections. For the purposes of this analysis, it is assumed that under Alternative A no leasing would occur.

1. Areas open to leasing subject to the terms and conditions of the standard lease form: 2,731,000 acres, of which 2,563,000 acres are State- or Native-selected.
2. Areas closed to leasing: 4,325,000 acres, which includes the Wild and Scenic River corridors and those areas closed by ANCSA (d)(1) withdrawals.

(2) Locatable Minerals

As with leasable minerals, most BLM-managed lands are currently closed to locatable mineral entry because of State or Native selections or underlying ANCSA (d)(1) withdrawals. Approximately 3 percent of existing BLM-managed lands are open, either through valid existing claims, exclusion from ANCSA (d)(1) withdrawals, or they are not selected. There are currently two active mining operations that submit Plans of Operations. Both are small operations, with disturbance less than 5 acres. Under Alternative A, no withdrawal review would occur and all ANCSA (d)(1) withdrawals would remain in place. Glennallen Field Office would continue to administer active claims through Plans of Operations but potential for future exploration and development on BLM-managed lands would be limited. Map 20 shows areas open for locatable mineral entry, pending State or Native selections.

1. Areas open to mineral entry: 2,149,000 acres, of which 1,903,000 acres are State- or Native-selected.
2. Areas closed to mineral entry: 4,907,000 acres including wild portions of Wild and Scenic River corridors and areas closed by ANCSA (d)(1) withdrawals.

(3) Mineral Materials

Mineral material sales are considered on a case-by-case basis, with specific operating stipulations developed through the NEPA process.

d) Alternative B

(1) *Leasable Minerals (Oil and Gas)*

1. Areas open to leasing subject to the terms and conditions of the standard lease form: 5,195,000 acres, of which approximately 4.7 million acres are State- or Native-selected.
2. Areas open to leasing, subject to minor constraints such as seasonal restrictions: 1,724,000 acres, 898,000 acres of which are State- or Native-selected lands. These areas include important bison or caribou calving areas, eagle nest buffers, moose winter range, and trumpeter swan seasonal constraints.
3. Areas open to leasing, subject to major constraints such as No Surface Occupancy: 0 acres.
4. Areas closed to leasing: 137,000 acres, which includes the wild portions of the Delta and Gulkana Wild and Scenic Rivers.

Map 21 shows areas that would be open for oil and gas leasing and to locatable mineral entry, pending State and Native selections. Because an area is open for leasing does not mean that leasing or development will occur. Actual development is dependent on several factors, including: a) land status (State and Native selected lands have a segregation against mineral leasing); b) mineral potential; and c) access and marketability. For the purposes of this analysis, development under this alternative is assumed to be twice that described in Chapter IV under Resource Assumptions for Issue 6: Leasable and Locatable Minerals.

(2) *Locatable Minerals*

1. Areas open to the operation of the mining laws: 6,919,000 acres, of which approximately 5.5 million acres are currently State- or Native-selected.
2. Areas closed to the operation of the mining laws: 137,000 acres, which includes the wild portions of the Delta and Gulkana Wild and Scenic Rivers.

Map 21 shows areas that would be open for oil and gas leasing and to locatable mineral entry, pending State and Native selections.

(3) *Mineral Materials*

Where mineral material sales occur, practices described in *Required Operating Procedures* (Appendix C) would be followed. Under Alternative B, only the Gulkana Wild and Scenic River corridor and the wild segment of the Delta Wild and Scenic River corridor would be excluded from mineral material sale.

e) Alternative C

(1) Leasable Minerals (Oil and Gas)

1. Areas open to leasing subject to the terms and conditions of the standard lease form: 1,819,000 acres, all of which are State- or Native-selected land.
2. Areas open to leasing, subject to minor constraints such as seasonal restrictions: 0 acres.
3. Areas open to leasing, subject to major constraints such as No Surface Occupancy: 2,322,000 acres, most of which is State- or Native-selected land. These lands include: a) all Class II VRM areas; b) moose winter range; c) trumpeter swan breeding and nesting habitat; d) areas within 200 feet of anadromous streams and rivers; and e) areas within one-fourth mile of eagle nests.
4. Areas closed to leasing: 2,915,000 acres, 1.5 million acres of which are State- or Native-selected. These lands include: a) all segments within the Delta and Gulkana Wild and Scenic River corridors; b) all lands within the Bering Glacier RNA; c) lands within the transportation and utility corridor; d) lands within the Nelchina Caribou Calving ACEC; e) lands within the Tiekel SRMA; and f) lands within the West Fork ACEC.

Map 22 shows areas that would be open to oil and gas leasing, pending State and Native selections. Note that 2.3 million acres of those shown would be subject to No Surface Occupancy stipulations as described above. This leaves 1.8 million acres open to leasing subject to the terms and conditions of the standard lease form. However, all of these 1.8 million acres are State- or Native-selected. For the purposes of this analysis, it is assumed that little to no actual oil and gas development would occur under this alternative.

(2) Locatable Minerals

1. Lands open to the operation of the mining laws: 3,319,000 acres, 3.2 million acres of which are State- or Native-selected.
2. Lands closed to the operation of the mining laws: 3,737,000 acres, 2.5 million acres of which are State- or Native-selected. These lands include: a) all segments of the Delta and Gulkana Wild and Scenic River corridors; b) Slana settlement area; c) inner corridor of the transportation and utility corridor; d) the Bering Glacier RNA; e) Denali Highway SRMA; f) Nelchina Caribou Calving ACEC; g) Delta River viewshed; h) Tiekel SRMA; and i) PLO 6329 in the Alphabet Hills.

Map 23 shows areas that would be open to locatable mineral entry under this alternative, pending State and Native selections.

(3) Mineral Materials

Where mineral material sales occur, practices described in *Required Operating Procedures* (Appendix C) would be followed. The following areas would be excluded from mineral material sale or development: a) Delta Bison Calving ACEC; b) Nelchina Caribou Calving ACEC; c) West Fork ACEC; d) all of the Delta River SRMA; e) Denali Highway SRMA; f) Gulkana River SRMA; g) Tiekkel SRMA; and h) Bering Glacier RNA.

f) Alternative D – Proposed RMP

(1) Leasable Minerals (Oil and Gas)

1. Areas open to leasing subject to the terms and conditions of the standard lease form: 3,863,000 acres, 3.8 million acres of which are State- or Native-selected.
2. Areas open to leasing, subject to minor constraints such as seasonal restrictions: 1,730,000 acres, 1.7 million acres of which are State- or Native-selected. These lands include a) moose winter range; b) caribou and bison calving areas; c) areas within one-fourth mile of bald eagle nests; d) swan nesting habitat; and e) areas greater than 25 percent slope. Specific stipulations related to these areas or resource concerns are described in *Oil and Gas Leasing Stipulations* in Appendix C.
3. Areas open to leasing, subject to major constraints such as No Surface Occupancy: 0 (none).
4. Areas closed to leasing: 1,463,000 acres, all of which are BLM public lands (unencumbered). These lands include: a) all segments of the Wild and Scenic Rivers; b) the western two-thirds of the Bering Glacier RNA; and c) lands within the transportation and utility corridor.

Map 24 displays areas that would be open to oil and gas leasing, pending State and Native selections. Because an area is open for leasing does not mean that leasing or development will occur. Actual development is dependent on several factors, including: a) land status (State and Native selected lands have a segregation against mineral leasing); b) mineral potential; and c) access and marketability. For the purposes of this analysis, development under this alternative is assumed to be at the level described in Chapter IV under Resource Assumptions; Issue 6: Leasable and Locatable Minerals.

(2) Locatable Minerals

1. Lands open to the operation of the mining laws: 5,988,000 acres, 5.5 million of which is State- or Native-selected. These lands include 700,000 acres of State-selected land in the Alphabet Hills areas which would be opened through a modification of PLO 6329.
2. Lands closed to the operation of the mining laws: 1,068,000 acres, all of which are BLM public lands (unencumbered). These include the following: a) all portions of the Delta and Gulkana Wild and Scenic River (this would require recommended

withdrawal of 16,000 acres in the scenic portion of the Delta); b) Slana settlement area; c) inner corridor of the transportation and utility corridor; and d) the western two-thirds of the Bering Research Natural Area.

Map 25 displays areas that would be open to locatable mineral entry, pending State and Native selections.

(3) Mineral Materials

Where mineral material sales occur, practices described in *Required Operating Procedures* (Appendix C) would be followed. The bison calving area, Nelchina caribou calving area, and West Fork area would be open subject to seasonal stipulations. The Delta Wild and Scenic River corridor would be open in the recreational portion, closed in the scenic and wild portions. The Gulkana Wild and Scenic River corridor would be closed. The Denali Highway viewshed would be an avoidance area. If necessary, mineral material development could occur with mitigation for visual resource impacts. Mineral material development would be permitted within the Tiekel SRMA, subject to mitigation for visual impacts. No mineral material development would be permitted in the Bering Glacier RNA. Rationale

Table 10 summarizes the preceding leasable minerals oil and gas information. Table 11 summarizes the preceding locatable minerals information.

Table 10. Leasable Minerals, Oil and Gas – Alternative Summary

Issue	Alternative			
	A: No Action	B: Resource Development	C: Resource Conservation	D: Proposed RMP
Closed to Leasing	Currently, most BLM-managed lands would be closed to mineral leasing because of State or Native selections or underlying ANCSA (d)(1) withdrawals.	137,000 acres (2%) closed to oil and gas leasing. Revoke all ANCSA (d)(1) withdrawals. Only wild portions of WSR corridors would be closed to leasing.	2,915,000 acres (41%) closed to oil and gas leasing. In addition to those lands identified in Alternative D, the following would be closed to mineral leasing if retained in Federal ownership: <ol style="list-style-type: none"> 1. Lands within the Nelchina Caribou Calving ACEC; 2. Lands within the Tiegel SRMA; 3. Lands within the West Fork ACEC. 	1,463,000 acres (21%) closed to oil and gas leasing. BLM would recommend revocation of most ANCSA (d) (1) withdrawals to allow for mineral leasing on lands retained in Federal ownership. The following areas would be closed to mineral leasing: <ol style="list-style-type: none"> 1. All segments within WSR corridors, including scenic and recreational portions of the Delta; 2. Western two-thirds of the Bering Glacier RNA; 3. Lands within the transportation and utility corridor (PLO 5150).
Open to Leasing with No Surface Occupancy (NSO) Stipulations	No Federal leases currently occur on BLM-managed lands within the planning area.	0 acres (0%)	2,322,000 acres (33%), most of which is State- or Native-selected. All Class I and II VRM areas not already closed to leasing; <ol style="list-style-type: none"> 1. Areas identified below under alternative D for moose winter range, caribou calving, trumpeter swan breeding and nesting, and raptor nests would be NSO. 	0 acres (0%)

Issue	Alternative			
	A: No Action	B: Resource Development	C: Resource Conservation	D: Proposed RMP
			2. Areas within 200 feet of anadromous streams and rivers.	
Open with Seasonal and Minor Constraints	0 acres (0%) No Federal leases currently occur on BLM-managed lands within the planning area.	1,724,000 acres (24%), 898,000 of which are State- or Native-selected. Specific areas and constraints are described in the next 5 rows of this table.	0 acres (0%). These acres categorized under No Surface Occupancy in this alternative.	1,730,000 acres (24%), 1.7 million of which are State- or Native-selected.
Big Game Seasonal Constraints	No Federal leases currently occur on BLM-managed lands within the planning area.	Same as Alternative D.	See NSO category above.	To protect big game and big game habitat, oil and gas exploration and development activities would be: <ol style="list-style-type: none"> 1. limited on moose winter range between October 15 and March 31; 2. would be prohibited on caribou calving areas between May 1 and June 15. See <i>Oil and Gas Leasing Stipulations</i> for specific stips and exceptions.
Raptor Nests	No Federal leases currently occur on BLM-managed lands within the planning area.	Same as Alternative D.	See NSO category above.	To protect bald eagle nest sites, no oil and gas exploration and development activities would be permitted within one-fourth mile of historically active nest sites from April 1 to August 31. Other raptor nests would be considered on a case-by-case basis. See <i>Oil and Gas Leasing Stipulations</i> for specifics.

Issue	Alternative			
	A: No Action	B: Resource Development	C: Resource Conservation	D: Proposed RMP
Trumpeter Swans	No Federal leases currently occur on BLM-managed lands within the planning area.	Same as Alternative D.	See NSO category above.	To protect trumpeter swan nesting habitat, no oil and gas exploration or development activities would be permitted within one-fourth mile of documented active swan nests from May 1 to August 31. See <i>Oil and Gas Leasing Stipulations</i> for specific stipulations and exceptions.
Threatened and Endangered Species	No Federal leases currently occur on BLM-managed lands within the planning area.	Same as Alternative D.	See NSO category above.	To protect threatened or endangered species, no surface use, disturbance or occupancy would be permitted on areas known or suspected to be essential habitat. See <i>Oil and Gas Leasing Stipulations</i> for specifics.
Slope and Mountain Goat/Dall Sheep Critical Habitat	No Federal leases currently occur on BLM-managed lands within the planning area.	Same as Alternative D.	See NSO category above.	To prevent erosion and disturbance to critical mountain goat and dall sheep habitat, no surface disturbance on slopes greater than 25%. See <i>Oil and Gas Leasing Stipulations</i> for specifics.
Open Subject to Standard Lease Stipulations	No Federal leases currently occur on BLM-managed lands within the planning area.	5,195,000 acres (74%), 4.7 million of which are State- or Native-selected.	1,819,000 acres (26%), all of which is State- or Native-selected.	3,863,000 acres (55%), 3.8 million of which are State- or Native-selected.

Table 11. Locatable Minerals – Alternative Summary

Issue	Alternative			
	A: No Action	B: Resource Development	C: Resource Conservation	D: Proposed RMP
Closed Areas	<p>Most BLM-managed lands are currently withdrawn from mineral entry because of ANCSA (d)(1) withdrawals or State and Native selections. This RMP would not affect segregations against mineral entry due to State and Native selection. Mining activities are currently taking place on some BLM-managed lands because valid existing rights or because certain areas were excluded from ANCSA (d)(1) withdrawals or State and Native selections.</p>	<p>137,000 (2%) acres</p> <p>Revoke all ANCSA (d)(1) withdrawals. Open all areas other than wild portions of WSR corridors, subject to reasonable 3809 surface regulations.</p>	<p>3,737,000 acres (53%), 2.5 million of which are State- or Native-selected.</p> <p>Add the following to the list in D:</p> <ol style="list-style-type: none"> 1. Recommend withdrawing lands within the Denali Highway SRMA from mineral entry; 2. Maintain ANCSA (d)(1) withdrawals within the Nelchina Caribou Calving ACEC; 3. recommend withdrawing unencumbered BLM lands within distance Class 1 (foreground and middle ground) of the Delta River viewshed from mineral entry; 4. recommend withdrawing BLM-managed lands within the Tiekel SRMA from mineral entry. 5. Maintain the current PLO 6329 withdrawal against mineral entry in the Alphabet Hills. <p>Items 1, 3, and 4 would</p>	<p>1,068,000 acres (15%)</p> <p>The following areas would be closed to locatable mineral entry:</p> <ol style="list-style-type: none"> 1. All portions of the WSR corridors, including scenic and recreational segments of the Delta; 2. Slana settlement area; 3. inner corridor of the transportation and utility corridor (PLO 5150); 4. Western one-third of Bering Glacier RNA. <p>All ANCSA (d)(1) withdrawals outside these areas that exclude mineral entry would be modified or revoked to allow locatable entry.</p> <p>In addition, PLO 6329 would be modified to allow for mineral entry in 700,000 acres in the Alphabet Hills area. This area is currently State-selected so this modification would only take effect if lands were retained in long-term Federal ownership.</p>

Issue	Alternative			
	A: No Action	B: Resource Development	C: Resource Conservation	D: Proposed RMP
			require congressional approval.	
Open Areas	2,149,000 acres (30%) 1.9 of which are State- or Native-selected.	6,919,000 acres (98%), 5.5 of which are State- or Native-selected.	3,319,000 acres (47%), 3.2 million of which are State- or Native-selected.	5,988,000 acres (85%), 5.5 million of which are State- or Native-selected.

Map 19. Areas open to Oil and Gas Leasing - Alternative A

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Map size: 11x17

Map 20. Areas open to Mineral Entry- Alternative A

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Map size: 11x17

**Map 21. Areas open to Oil and Gas Leasing and Mineral Entry-
Alternative B**

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File name: 21_locleasb.pdf

Map size: 11x17

Map 22. Areas open to Oil and Gas Leasing - Alternative C

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Map size: 11x17

Map 23. Areas open to Mineral Entry - Alternative C

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File name: 23_locc.pdf

Map size: 11x17

Map 24. Areas open to Oil and Gas Leasing- Alternative D

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File name: 24_leasd.pdf

Map size: 11x17

Map 25. Areas open to Mineral Entry- Alternative D

File size: 254 KB

File name: 25_locd.pdf

Map size: 11x17

**Map 26. Areas Open to Mineral Entry and Oil and Gas Leasing –
Alternative D – Bering Glacier RNA**

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File name: 26_beringmin.pdf

Map size: 8.5x11

7. Issue 7: Subsistence/Social and Economic Conditions

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

a) Goals

- Conserve healthy populations through management and protection of habitat and subsistence harvest permitting and regulations.
- Provide reasonable access to subsistence resources.

b) Management Guidance Common to All Alternatives

Decisions made within this RMP will not affect the BLM's role in administration of subsistence on Federal public lands. Under all alternatives, the BLM will continue to carry out or participate in the following administrative functions:

1. **Involve Subsistence Users in Issues Identification:** Ten Regional Advisory Councils 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. BLM field staff members, along with those of other agencies, meet twice each year with the Regional Councils to identify emerging issues in conservation, allocation, and appropriate regulation of subsistence harvests.
2. **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.
3. **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.
4. **Develop Interagency Subsistence Management Regulations and Policies:** With heavy reliance on Regional Council input and interagency coordination, the development of subsistence regulations is a multi-step process.
5. **Manage Subsistence Harvests:** Although regulatory authority for subsistence management rests with the Federal Subsistence Board, implementation of Federal subsistence hunting and fishing opportunities rests largely on local Federal agency

field staff. Tasks include distribution of Federal regulation booklets, responding to questions, issuing Federal subsistence permits, contacting hunters in the field, and assisting in tallying permit and harvest reports.

c) Alternative A

Alternative A continues current management of all resources. The current levels, methods, and mix of multiple use management (as described for each issue above) would continue, and resource values (including subsistence resources) would receive attention at present levels. In general, most activities would be analyzed on a case-by-case basis and few uses would be limited or excluded as long as they were consistent with State and Federal laws. This alternative provides few constraints on activities that could potentially negatively impact subsistence resources. Access to subsistence resources would only be constrained by changing land status as entitlements are met.

d) Alternative B

This alternative provides very few area-wide constraints on development activities. Most areas would be opened for mineral exploration and development and very few areas would have management restrictions on OHVs. Access to subsistence resources would only be constrained by changing land status as entitlements are met.

This is the only alternative that proposes complete revocation of PLO 5150 (the transportation and utility corridor). This would allow conveyance of this area to the State of Alaska and would constitute a loss of 453,514 acres of Federal subsistence hunting area, in an area that currently provides 80 percent of the Federal subsistence caribou and moose harvest.

e) Alternative C

This alternative would provide the highest level of protection for resource values (including subsistence resources) through establishment of special management areas with area-wide constraints. This alternative also provides the highest level of OHV management and restrictions.

f) Alternative D – Proposed RMP

This alternative has some area-wide constraints, but relies more on the *Required Operating Procedures* for site-specific protection of resources. OHV management attempts to halt unmanaged proliferation of trails, with emphasis on correcting adverse resource impacts from OHV use.

Under Alternative D, PLO 5150 would be modified to allow for 83,000 acres to be conveyed to the State. These lands include the Gunn Creek segment which is northeast of Paxson, and approximately 59,000 acres north of Paxson and west of the Delta river (see Map18). These areas represent approximately sixteen percent of the BLM-managed lands on which the Federal subsistence priority applies. The effects of this action on subsistence is described in Chapter 4 and in the ANILCA section 810 analysis found in Appendix E.

Table 12 summarizes the preceding information with regards to impacts to Subsistence.

Table 12. Alternative Comparison – Subsistence

Issue	Alternative			
	A: No Action	B: Resource Development	C: Resource Conservation	D: Proposed RMP
Travel Management	No change: Long term negative effect on habitat/populations but increased access.	Same as Alternative A.	Limits OHV use and road construction. Some areas closed to motorized use. Long term positive effect on habitat/populations but decreased access.	Limits OHV use and road construction in some areas. Long term positive effect on habitat/populations, maintains access.
Cultural/Natural Resources	No change: Impacts to subsistence and habitat/populations considered on case-by-case basis. Does not provide protection of resources proposed by C or D.	Protects resources on a site-specific basis but encourages increased resource development. Does not provide protection of subsistence resources proposed by C or D.	Identifies ACECs and the Bering RNA that would provide strong resource protection, area wide, to subsistence resources. Provides strongest subsistence resource protection.	Identifies the Bering RNA and provides resource protection in other areas through application of area-wide standards and Required Operating Procedures.
Lands and Realty	No change. Would not modify PLO 5150 to allow for conveyance of transportation and utility corridor to the State. Would retain federal subsistence hunting areas.	Would modify PLO 5150 to allow for conveyance of the transportation and utility corridor to the State. Would significantly impact current federal subsistence hunting area.	Would retain BLM management of the transportation and utility corridor. No change to federal subsistence hunting area.	Would retain BLM management of most of the transportation and utility corridor. Areas of heaviest annual harvest (adjacent to Richardson Highway) would be retained.
Vegetation Management	No change. Provides minimal habitat improvement to improve habitat/populations for subsistence species.	Identifies the most acres for habitat improvement through commercial harvest or prescribed burning. Trade-off would be increased road construction with timber harvest.	Identifies fewest acres for habitat improvement through timber harvest or prescribed burning. Relies on wildland fire.	Identifies 1.5 million acres for habitat improvement through prescribed or wildland fire and forestry practices. Long term habitat benefit for subsistence species.

Issue	Alternative			
	A: No Action	B: Resource Development	C: Resource Conservation	D: Proposed RMP
Minerals	No change. Very little mineral exploration or development would occur. No mineral leasing would occur. No impact on subsistence resources.	Opens most area for locatable mineral entry and mineral leasing. Applies stipulations to minimize resource impacts but overall has most potential for negative impacts to habitat/populations.	Area-wide constraints allow for very little potential mineral entry or mineral leasing. Few impacts on subsistence resources.	Opens some areas for locatable mineral entry and mineral leasing and provides stipulations to minimize resource impacts. Less potential than B for negative impacts to subsistence resources.

D. Effects Comparison by Issue and Alternative

Table 13 summarizes the direct and indirect effects under each alternative for all resources, where effects were found (a more detailed description is provided in Chapter IV). Cumulative effects are described in detail in Chapter IV.

This comparison table focuses on environmental effects and does not display alternative proposals, such as for Locatable and Leasable minerals, Lands and Realty, ACECs, or Wild and Scenic Rivers. These management proposals and allowable uses are displayed in the summary tables in Chapter II, by Issue, and explained in Chapter II narrative. Effects of the proposals on resources, subsistence, and socioeconomics are compared in the following table and discussed in detail in Chapter IV.

Table 13. Effects Comparison by Issue and Alternative

Effects on	A: No Action	B: Resource Development	C: Resource Conservation	D: Proposed RMP	Cumulative Effects
Off-Highway Vehicles	Existing OHV designations would remain in place in TLAD and trails in the Delta and Gulkana Wild and Scenic River corridors. No new travel restrictions would be implemented under Alternative A. Once on public lands, there would be very few limits to OHV access.	Same as Alternative A.	Would limit OHV travel (not including snowmachines) to existing or designated trails on 96 percent of BLM-managed lands, and close 4 percent to OHV use. While access to public lands would still be provided, unlimited motorized access on public lands would no longer be available. This alternative is the most restrictive on motorized user's ability to access public lands using motorized means.	Would limit OHV travel (not including snowmachines) to existing or designated trails on 99 percent of all BLM-managed lands, and close 1 percent to OHV use. Closure of some specific trails to motorized use would be considered in implementation-level planning. This alternative is slightly less restrictive on motorized user's ability to access all public lands using motorized means than Alternative C, and more restrictive than alternatives A or B.	Within the planning area, OHV users would be presented with a mix of opportunities, varying degrees of trail maintenance, and varying off-road regulations. OHV management within the 13 million acres of Wrangell-St. Elias National Park and Preserve would continue as limited to OHVs, with travel limited to designated trails. Native lands would be restricted in most areas, with general public use limited to easements. As Native Corporation entitlements are met, this could mean a net loss of trails that are currently available on Native-selected lands. For the most part, State lands would remain open to OHVs, subject to 11 AAC 96.025 "Conditions for Generally Allowed Uses". Exceptions would be State lands within TLAD and other small areas where OHV use may be regulated by Special Use Land Designations. Other State lands may be subject to Controlled Use Area regulations, where OHV use may be limited to accomplish game management objectives or to provide a particular type of hunting experience. In general within the planning area, OHV use is expected to become more restricted over the planning period, regardless of the alternative selected by BLM.

Effects on	A: No Action	B: Resource Development	C: Resource Conservation	D: Proposed RMP	Cumulative Effects
Recreation	Resource development would be minimal under this alternative due to existing constraints from withdrawals. Most effects to recreation would be from increasing user trends and from unmanaged OHV use. In areas accessible to these activities, some primitive and most semi-primitive recreation experiences would trend towards semi-primitive motorized or roaded-natural experiences. Lack of facility development in high use areas like the Denali Highway would decrease quality of experience over time.	This alternative would result in existing recreation experiences trending into at least the next class of development along the ROS. For example, many semi-primitive experiences currently available near existing roadways would trend towards semi-primitive motorized or roaded natural experience. No attempts would be made to maintain primitive experiences, and, given currently increasing user trends, most would trend towards semi-primitive or semi-primitive motorized. Without visitor use limits for commercial and general users in certain areas (developed in implementation planning), recreational experiences and natural resources would be degraded and user conflicts would develop.	This alternative would be the most effective at maintaining a diversity of recreational experiences over time based on stringent measures to regulate OHV use. Designation of five SRMAs would allow for intensive management of identified high value recreation resources. The establishment of visitor use limits (in implementation-level planning) in specific areas would help ensure the quality of recreation experiences for commercial and non-commercial users. Lack of facility development in this alternative could negatively effect recreation experiences in certain high-use areas.	This alternative would be the second most effective at maintaining a diversity of recreational experiences, in part due to measures to regulate OHV use. Four SRMAs would be designated and would allow for the preservation of high value recreation resources while managing recreation experiences and visual resource impacts. Development of additional facilities under this alternative would redirect recreational use to specific areas, alleviating unmanaged use of other areas while meeting public demand. Establishment of visitor use limits in specific areas (in implementation-level planning) would help ensure positive recreation experiences.	The planning area currently provides a tremendous diversity of recreation experiences, conditions that are expected to continue over the planning period regardless of the alternative selected for BLM-managed lands. The largest influence on recreation experience within the planning area is use of OHVs. Without management and some limitations on OHV use, the general trend, in OHV-accessible topography, is for primitive and semi-primitive recreation experiences to trend towards semi-primitive motorized and roaded natural experiences. However, much of the planning area is dominated by steep topography, wetlands, or dense vegetation that is inaccessible to most OHVs; these areas would be maintained to provide for primitive and generally inaccessible recreation experiences, regardless of the BLM's selected alternative. Helicopter-supported commercial recreation ventures and winter snowmachine use have the potential to access and potentially alter experiences in some of these areas.
Soils	Under this alternative, unmanaged proliferation of OHV trails would continue, with associated impacts to soils, particularly in high-use areas and areas of permafrost and wet soils. Low levels of timber harvest could cause localized adverse effects on soils from vegetation clearing and soil compaction. This alternative anticipates no mineral leasing and only a slight increase in mining activities, so less impacts to soils would occur from mining than under Alternatives B or D.	A larger acreage of soils could be disturbed compared to Alternative A due to the increase in lands available for mineral exploration and development. Effects on soils from mineral development activity could include oil spills, soil compaction, and loss of surrounding vegetation. Effects from OHV management would be the same as under Alternative A. An increase in anticipated timber harvest (to 100-200 acres per year) could cause more localized adverse effects to soils than any other alternatives.	A smaller acreage of soils would be disturbed compared to the other alternatives. Management actions proposed, including limitations on OHVs and designation of ACECs and area-wide protective measures, would limit resource development and associated soil disturbance potential.	A smaller acreage of soils would be disturbed compared to Alternative B due to limitations on OHVs and some area-wide restrictions to protect sensitive or unique areas. Anticipated timber harvest (40–100 acres per year) would cause localized adverse effects from vegetation clearing and soil compaction.	There would be a slight increase in activities that potentially cause soil disturbance or erosion on State, Native, and private lands within the planning area. Such activities would include an increase in the number and miles of OHV trails on State lands, as well as increased mineral exploration and development and forestry activities on State and Native lands. These activities would occur regardless of the alternative selected by the BLM. These impacts would have direct and indirect effects on soils but very little cumulative impact on site potential and soil productivity when combined with any actions proposed on BLM lands under any alternative. This conclusion is based on the small footprint of most development activities relative to the total planning area and the application of standards and guidelines described in State DNR Area Plans.

Effects on	A: No Action	B: Resource Development	C: Resource Conservation	D: Proposed RMP	Cumulative Effects
Water Resources	Under this alternative, unmanaged proliferation of OHV trails would continue, with associated impacts to water quality at some stream crossings. This alternative anticipates no mineral leasing and only a slight increase in mining activities, so less impacts to water quality would occur from mining than under Alternatives B or D.	A larger acreage of soils could be disturbed compared to Alternative A due to the increase in lands available for mineral exploration and development. Effects on water resources from mineral development activity could include increased erosion and sedimentation, temporary impoundments or diversions, water temperature increases, or other changes in water quality. Effects from OHV management would be the same as under Alternative A. An increase in anticipated timber harvest (to 100-200 acres per year) could cause more localized adverse effects to water resources than any other alternatives, although these effects would be mitigated through application of ROPs.	Effects to water resources from actions proposed under Alternative C would be localized and limited in scale. Effects would occur over a smaller acreage than Alternatives A, B or C due to limitations on OHVs and designation of ACECs and area-wide protective measures, which would limit resource development and associated soil disturbance potential.	Effects would occur over a smaller acreage than Alternatives A or B due to restrictions on mineral development placed on certain sensitive or unique areas, application of ROPs and stips, and limitations on OHV use to existing trails, although there are fewer restrictions than under Alternative C. Opening additional lands to mineral entry through withdrawal revocation could increase potential adverse effects to water resources, however the overall potential is low.	Under Alternatives C and D, water quality should improve over the long-term through management actions proposed in the alternatives, adoption of ROPs and Stips, and as a result of participating in cooperative planning efforts on a watershed basis with other land management agencies. Actions on adjacent lands under other ownerships that produce sedimentation or nutrient loading into streams that then flow through BLM-managed lands, or inappropriate storage containers, small dumps or other potential sources of contamination from activities on non-BLM-managed lands could impact water quality in certain instances. Increased powerboat use in unregulated State waters could adversely impact water quality for short periods during peak use. Short-term cumulative impacts could occur as the result of drought. Changes in any flow regime across BLM-managed lands could result from actions taken on other jurisdictions.
Fisheries	Continued unmanaged proliferation of OHVs under this alternative could result in localized adverse impacts through degradation of water quality and increased sedimentation at unauthorized crossings. This alternative anticipates no mineral leasing and limited mining on BLM-managed lands. Current timber harvest is limited (40 acres/year) and mostly occurs under frozen conditions.	A larger acreage of fish habitat could be disturbed compared to Alternative A due to the increase in lands available for mineral exploration and development. Effects on fish and fish habitat from mineral development activity could include increased mortality and degradation of water quality and fish habitat. Effects from OHV use would be the same as described under alternative A. Anticipated timber harvest would increase to 100 – 200 acres per year with some roads constructed. This alternative has more likelihood for adverse impacts from resource development than A, C, or D. However, effects would be mitigated by application of ROPs and Stips.	Effects could occur over a smaller acreage than Alternatives A, B, or D due to restrictions on mineral development through designation of ACECs and limitations to OHV use. Management actions proposed could restrict land use activities in certain areas, thereby reducing adverse effects on fish and fish habitat relative to current conditions. ROPs and stipulations would offer additional protections to fish and fish habitat. The likelihood of adverse effects on fish and fish habitat would be less than other alternatives.	Fish and fish habitat could have a greater potential for adverse effects under this alternative compared to Alternatives A or C, but less than Alternative B due to restrictions on mineral development and OHV use. The proposed Bering RNA and area-wide restrictions for other specific resource values could restrict land use activities in certain areas, thereby reducing adverse effects on fish and fish habitat. OHV use would be limited to existing or designated trails. Timber harvest at approximately 40–100 acres per year could cause localized adverse effects but would be minimized by application of ROPs and use of temporary roads.	A continuation of current water and land use practices, by private, State, and other Federal agencies would continue to affect fish habitat within the planning area. Higher intensity OHV use, timber harvest, and mineral development or exploration on lands upstream from BLM-managed lands within a watershed could continue to be a concern due to sediment and water quality issues that influence the quality of fish habitat downstream from the source. Habitat improvement gains through more intensive management of recreation activities as proposed under Alternatives C and D could be offset or enhanced by regulatory sport-fishing changes made by ADF&G. Coordination would continue to be essential.

Effects on	A: No Action	B: Resource Development	C: Resource Conservation	D: Proposed RMP	Cumulative Effects
<p>Wildlife</p>	<p>Continued unmanaged proliferation of OHVs under this alternative could result in localized adverse impacts through loss of wildlife refugia and habitat degradation. This alternative anticipates no mineral leasing and limited mining on BLM-managed lands. Current timber harvest is limited (40 acres/year) and mostly occurs under frozen conditions utilizing temporary roads. Overall, effects would be localized and would not occur at the population level.</p>	<p>Effects would occur over more of the planning area compared to Alternative A due to the increase in lands available for mineral exploration and development. Effects on fish and fish habitat from mineral development activity could include habitat degradation and displacement. Effects from OHV use would be the same as described under Alternative A. Anticipated timber harvest would increase to 100–200 acres per year with some roads constructed. This alternative has more likelihood for adverse impacts from resource development than Alternatives A, C, or D. However, effects would be mitigated by application of ROPs and Stips and overall, effects would be localized and would not occur at the population level.</p>	<p>Effects could occur over a smaller acreage than Alternatives A, B, or D due to restrictions on mineral development through designation of ACECs and limitations to OHV use. Management actions proposed, including seasonal protection against wildlife displacement in specific areas and application of ROPs and stipulations, would restrict land use activities in certain areas, thereby reducing adverse effects on wildlife and wildlife habitat relative to current conditions. The likelihood of effects on wildlife would be less compared to other alternatives. Overall, effects would be localized and would not occur at the population level.</p>	<p>Wildlife and wildlife habitat could have a greater potential for adverse effects under this alternative compared to Alternatives A or C, but less than Alternative B due to restrictions on mineral development and OHV use. The proposed Bering RNA and area-wide restrictions for other specific resource values could restrict land use activities in certain areas, thereby reducing adverse effects on wildlife and wildlife habitat. OHV use would be limited to existing or designated trails. Timber harvest at approximately 40–100 acres per year could cause localized adverse effects but would be minimized by application of ROPs and use of temporary roads, and in some cases will be designed to enhance wildlife habitat. Overall, effects would be localized and would not occur at the population level. This alternative proposes the greatest amount of habitat improvement through prescribed burning or wildland fire use.</p>	<p>Over the planning period, OHV management is expected to remain constrained within Wrangell-St. Elias National Park and Preserve and on private lands (including Native Corporation lands). State lands are expected to remain relatively open for OHV uses, where there would continue to be unmanaged proliferation of OHV trails. Over the planning period, habitat loss resulting from varying degrees of OHV use and regulation would be minor to insignificant, based on the amount of actual physical disturbance versus acres of available habitat. However, motorized access limited only by physical barriers would eventually lead to heavy hunting pressure and a subsequent drop in bull/cow ratios for moose and caribou, loss of security or refugia areas, and possible depletion of herd health during critical winter months. If these effects played out on State lands accessible to OHVs, lands with more regulated OHV management (such as lands managed by the National Park Service, Native Corporations, or the BLM under Alternatives C and D), may, over time, serve as wildlife refugia.</p> <p>Fire management in the planning area occurs under cooperative interagency planning. Therefore, fire impacts (positive or negative) occur across land status. Fire suppression classes can be adjusted on an annual basis to meet resource objectives (such as habitat improvement for moose balanced with maintenance of desired winter range for caribou).</p> <p>Maximum forest management activities outlined in Alternative B, combined with increased forestry practices and associated road construction on State and Native lands, could lead to a short-term reduction in big game security areas, fragmentation of specific habitats, increase in road density, and short-term loss of late-seral habitat in specific areas. Under this scenario, proposed forestry practices on BLM-managed lands would need to be adjusted to account for short-term negative impacts on other lands from large-scale forest practices.</p> <p>Minerals exploration and development at the levels described in Alternative B, combined with increased activity on State and Native lands, could lead to habitat loss and wildlife displacement, particularly if activities were to occur in critical habitat areas such as calving areas or wetlands that provide critical waterfowl habitat (such as the West Fork Gulkana area). If permanent road construction is necessary to facilitate development, habitat loss and wildlife displacement could occur even with seasonal constraints.</p>

Effects on	A: No Action	B: Resource Development	C: Resource Conservation	D: Proposed RMP	Cumulative Effects
Vegetation	Continued unmanaged proliferation of OHVs under this alternative could result in localized adverse impacts through removal of vegetation or vegetation crushing. This alternative anticipates no mineral leasing and limited mining on BLM-managed lands. Current timber harvest is limited and results in short term removal of vegetation but long-term vegetation benefits.	Effects could occur over more of the planning area compared to Alternative A, and a larger number of acres could be potentially disturbed due to the increase in lands available for mineral exploration and development. Impacts associated with mineral development include loss of vegetation and creation of disturbance conditions that would favor spread of noxious weeds. Effects from OHV management are the same as Alternative A. Timber harvest is anticipated at 100–200 acres per year, which would result in short term loss of vegetation but long term improvement in vegetation age class. Application of ROPs and Stips would offer additional protection to vegetation.	Effects would occur over a smaller acreage than Alternatives A, B, or D due to restrictions on mineral development through designation of ACECs and limitations to OHV use. Management actions proposed could restrict land use activities in certain areas, thereby reducing adverse effects on vegetation relative to current conditions. ROPs and Stips would offer additional protections to fish and fish habitat. The likelihood of adverse effects on vegetation would be less than other alternatives. However, opportunities for forest management through timber sales would be minimal under this alternative.	There is a greater potential for effects under this alternative compared to Alternatives A or C, but less than Alternative B due to restrictions on mineral development and OHV use. The proposed Bering RNA and area-wide restrictions for other specific resource values could restrict land use activities in certain areas, thereby reducing adverse effects on vegetation. OHV use would be limited to existing or designated trails. Timber harvest at approximately 40–100 acres per year would cause short term loss of vegetation but long term improvement in vegetation age class and diversity. Application of ROPs and Stips would offer additional protection to vegetation.	Within the planning area, forestry practices are expected to increase, particularly on Native lands, with a slight increase on State lands. This increase, combined with the selection of any of the alternatives, would have only a minor impact when expressed in terms of change to vegetation cover types throughout the planning area. Even at a maximum activity level, these increases would change less than 4 percent of the total cover classes within the planning area. Short-term effects are mostly positive for wildlife habitat improvement, with a temporary increase in shrub-dominated cover types. Long-term effect would be an increase in age and cover type diversity within the planning area. Wildland fire and prescribed fire have more potential than any other activity in the planning area to make landscape-level changes to vegetation composition. Alternatives B and D propose prescribed burning of up to 1.5 million acres. A large portion of this burning would occur on State-selected and State lands and would be conducted with interagency cooperation. At this scale and combined with an expected increase in wildland fire in the area, significant changes could occur in vegetation composition in woodland cover types over the planning area. Late-seral black and white spruce cover types would be interspersed with a mosaic of early seral shrub-dominated cover types.
Wetlands / Riparian Habitat	Under this alternative, unmanaged proliferation of OHV trails would continue, with associated impacts to wetlands through degradation and alteration of drainage patterns. This alternative anticipates no mineral leasing and only a slight increase in mining activities, so less impacts to wetlands would occur from mining than under alternatives B or D. Current timber sale activities occur at a rate of about 40 acres per year. Impacts to wetlands are minimal due to use of temporary roads and operations primarily in winter.	A larger acreage of wetlands could be disturbed compared to Alternative A due to the increase in lands available for mineral exploration and development. Effects on water resources from mineral development activity could include increased erosion and sedimentation, degradation, and alternation of drainage patterns. Effects from OHV management would be the same as under Alternative A. An increase in anticipated timber harvest (to 100-200 acres per year) could cause more localized adverse effects to water resources than any other alternatives, although these effects would be mitigated through application of ROPs.	Effects to wetlands from actions proposed under Alternative C would be localized and limited in scale. Effects would occur over a smaller acreage than Alternatives A, B or D due to limitations on OHVs and designation of ACECs and area-wide protective measures, which would limit resource development and associated wetland disturbance potential.	Effects would occur over a smaller acreage than Alternatives A or B due to restrictions on mineral development placed on certain sensitive or unique areas, application of ROPs and Stips, and limitations on OHV use to existing trails, although there are fewer restrictions than under alternative C. Opening additional lands to mineral entry through withdrawal revocation could increase potential adverse effects to wetlands. Application of ROPs and Stips would minimize impacts. Timber sales are anticipated at 40–100 acres per year. Impacts would be minimized from use of temporary roads, application of ROPs, and operations in frozen conditions.	Adoption of Alternative A or B, combined with increased resource development, settlement, and OHV activities on other lands within the planning area, could put some riparian and wetland areas into functioning at risk or non-functional categories. Most impacts to riparian areas and wetlands are local and development footprints are fairly small. However, mineral exploration and development or large-scale forestry activities without standards or stipulations to protect riparian and wetland areas could result in impacts to riparian and wetland vegetation and functionality.

Effects on	A: No Action	B: Resource Development	C: Resource Conservation	D: Proposed RMP	Cumulative Effects
Visual Resources	Continued unmanaged proliferation of OHVs under this alternative could result in localized adverse impacts through the alteration of the existing visual landscape. This alternative anticipates no mineral leasing and limited mining on BLM-managed lands. Current timber harvest is limited but can have impacts on visual resources, particularly in the short term.	Effects could occur over more of the planning area compared to Alternative A, and a larger number of acres could be potentially disturbed due to the increase in lands available for mineral exploration and development. Impacts associated with mineral development include alteration of the existing visual landscape. Effects from OHV management are the same as Alternative A. Timber harvest is anticipated at 100–200 acres per year. Application of ROPs and Stips would offer additional restrictions that could mitigate effects to visual resources. However the planning area would be designated primarily as VRM Classes III and IV, which allow for major landscape modifications.	Effects would occur over a smaller acreage than Alternatives A, B, or D due to more restrictive VRM classifications in several areas, restrictions on mineral development through designation of ACECs, and limitations to OHV use. Management actions proposed could restrict land use activities in certain areas, thereby reducing adverse effects on visual resources relative to current conditions. ROPs and stipulations would offer additional protections to visual resources. The likelihood of adverse effects on vegetation would be less than other alternatives. This alternative classifies areas mostly as VRM Classes I, II, and III.	There is a greater potential for effects under this alternative compared to Alternatives A or C, but less than Alternative B due to restrictions on mineral development and OHV use. The proposed Bering RNA and area-wide restrictions for other specific resource values could restrict land use activities in certain areas, thereby reducing adverse effects on visual resources. OHV use would be limited to existing or designated trails. Timber harvest at approximately 40–100 acres per year would cause short term impacts to visual resources but long term improvement in vegetation age class and diversity. Application of ROPs and Stips would offer additional protection to visual resources. This alternative classifies areas as a mix of VRM classes I–IV.	Increased timber harvest and mineral development on State, Native Corporation, or private lands and the occurrence of wild and prescribed fires on adjacent lands would continue to affect the visual features of form, line, color, and texture at the landscape level. These changes would influence the design of similar projects on adjacent BLM-managed lands where repeating these basic elements is an objective of the visual resource management class where the project is implemented.
Cultural Resources	Surveys for cultural resources would be conducted prior to all ground-disturbing activities which require advance authorization. Continued unmanaged proliferation of OHVs under this alternative could result in localized adverse impacts through the damage of surface features. This alternative anticipates no mineral leasing and limited mining on BLM-managed lands. Current timber harvest is limited and sale areas receive pre-sale survey and clearance.	Effects could occur over more of the planning area compared to Alternative A, and a larger number of acres could be potentially disturbed due to the increase in lands available for mineral exploration and development. Effects from OHV management are the same as Alternative A. Timber harvest is anticipated at 100–200 acres per year, but sale areas would receive cultural clearance. Application of ROPs and Stips would offer additional restrictions that could mitigate effects to cultural resources. Surveys for cultural resources would also be conducted prior to all ground-disturbing activities which require advance authorization.	Effects would occur over a smaller acreage than Alternatives A, B, or D due to restrictions on mineral development through designation of ACECs, and limitations to OHV use. Limiting OHVs to designated or existing trails would reduce cross-country travel and damage of surface features. Management actions proposed could restrict land use activities in certain areas, thereby reducing adverse effects on cultural resources relative to current conditions. ROPs and Stips would offer additional protections to cultural resources. The likelihood of adverse effects on cultural resources would be less than other alternatives. Surveys for cultural resources would also be conducted prior to all ground-disturbing activities which require advance authorization.	There is a greater potential for effects under this alternative compared to Alternatives A or C, but less than Alternative B due to restrictions on mineral development and OHV use. The proposed Bering RNA and area-wide restrictions for other specific resource values could restrict land use activities in certain areas, thereby reducing adverse effects on cultural resources. OHV use would be limited to existing or designated trails, which would reduce damage to surface features. Timber harvest is estimated at 40–100 acres per year but sale areas would receive cultural clearance pre-sale. Application of ROPs and Stips would offer additional protection to cultural resources. Surveys for cultural resources would be conducted prior to all permitted ground-disturbing activities.	Cumulative impacts to cultural resources could occur through incremental degradation of the resource base from a variety of sources that reduce the information and interpretive potential of historic and prehistoric properties, or that affect traditional cultural values important to Native Alaskans. Other regional resource, land use, and economic development planning efforts could affect the types and intensity of uses on private, State, or other Federal lands within the planning area and could therefore potentially affect the regional cultural resource data base. Development of lands that are not protected by Federal or State cultural resource statutes and regulatory protections could decrease the regional resource base and potentially limit management options within the planning area. Restrictions on recreational activities in other areas, regional population growth, and increases in current levels of resource extraction and development may increase the use intensity within the planning area, potentially affecting cultural resources.

Effects on	A: No Action	B: Resource Development	C: Resource Conservation	D: Proposed RMP	Cumulative Effects
Social and Economic Conditions	Timber sales would continue at a rate of 40 acres per year. No mineral leasing would occur and current small placer mining would be maintained. Recreation-related activities have the most potential to benefit the area economically. This alternative places no constraints on these activities, including use of OHVs.	Revocation of PLO 5150 and loss of the majority of the federal subsistence hunting unit could have immediate adverse effects, given the economic significance of subsistence hunting. Timber harvest and associated road construction anticipated under this alternative and increased opportunity for mineral exploration and development could create some jobs and have a positive economic effect. Effects from recreation management would be the same as described in Alternative A.	This alternative places the most area-wide constraints on resource development and consequently has the least potential for positive economic benefits.	There is a greater potential for adverse economic effects under this alternative compared to Alternatives A or C, but less than Alternative B due to the increase in lands available for mineral exploration and development. This alternative would also retain PLO 5150 and maintain the federal subsistence hunting area, an important economic consideration in the area.	Cumulatively, the potential economic benefits (in terms of employment opportunities and jobs created) could easily double dependent on resource development levels, particularly on State lands. Construction of a natural gas pipeline within the existing transportation and utility corridor (or alternate routes) on State and Federal lands could provide job opportunities and economic benefits over and above what is described for each alternative. Anticipated mining on State land north of the Denali Highway could provide local economic benefits through jobs and support services. The Copper River Basin has qualified as a potential borough, and formation of a borough in the area is being pushed by some State legislators (even though it is resisted locally). Formation of a borough could increase interest in resource development on BLM-managed lands as a source of revenue.
Subsistence	The Federal subsistence unit would be managed as is and PLO 5150 would be retained. This alternative anticipates low levels of resource development, with low levels of impacts on subsistence resources. Unmanaged proliferation of OHV trails could negatively effect subsistence resources and result in displacement of some subsistence users.	Revocation of PLO 5150 and loss of the majority of the federal subsistence hunting unit would have a significant impact on the availability of subsistence resources. Timber harvest and associated road construction anticipated under this alternative and increased opportunity for mineral exploration and development could have some localized negative impacts on subsistence resources. Negative impacts associated with unmanaged proliferation of OHV trails would be the same as Alternative A.	This alternative retains PLO 5150 and the federal subsistence hunting unit. In addition, this alternative places the most area-wide constraints on resource development and consequently would see the least amount of potential impacts to subsistence resources. Limiting OHV use to designated or existing trails would minimize habitat damage. Some access restrictions could occur under this alternative.	The Federal subsistence unit would be managed as is and most of PLO 5150 would be retained, thus continuing to provide a federal subsistence hunting unit. This alternative does allow for modification of PLO 5150 to allow conveyance of 83,000 acres to the State. While this comprises 16% of the total area currently available for federal subsistence harvest, it produces less than five percent of the annual harvest for caribou. This alternative allows for an increased level of resource development, but mitigates impacts through application of ROPs and stipulations and some area-wide constraints. OHV management attempts to strike a balance between minimizing off-road impacts to subsistence resources and continuing to provide for access to subsistence opportunities.	Assuming increased resource development and settlement on State, Native Corporation, and private lands in the planning area, adopting management described under Alternatives A or B could result in significant impacts to subsistence resources. Alternatives A and B make no attempt (except for in limited areas) to manage OHV use. Continued unmanaged proliferation of OHV trails would lead to increased competition for subsistence resources, additional disturbance to areas that serve as refugia for caribou and moose, and continued habitat degradation. This combined with a moderate increase in resource development with associated roads and infrastructure could cause critical habitat loss or displacement of some animals from traditional migration routes. Increased access to subsistence resources would be offset by increased competition with recreationists and sport-hunters.