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APPENDIX E: ANILCA SECTION 810 ANALYSIS OF SUBSISTENCE IMPACTS

This appendix uses the information presented in the East Alaska Proposed RMP/Final EIS to evaluate the potential impacts to subsistence pursuant to sec. 810(a) of the Alaska National Interest Land Conservation Act (ANILCA).

A. Subsistence Evaluation Factors

Section 810(a) of ANILCA requires that an evaluation of subsistence uses and needs be completed for any Federal determination to "withdraw, reserve, lease, or otherwise permit the use, occupancy, or disposition of public lands." As such, an evaluation of potential impacts to subsistence under ANILCA sec. 810 must be completed for the East Alaska Proposed RMP/Final EIS. ANILCA requires that this evaluation include findings on three specific issues:

- 1. The effect of use, occupancy, or disposition on subsistence uses and needs,
- 2. The availability of other lands for the purpose sought to be achieved, and
- Other alternatives that would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes (16 U.S.C. sec. 3120).

The evaluation and findings required by ANILCA sec. 810 are set out for each of the four alternatives considered in the East Alaska Proposed RMP/Final EIS. A finding that any of the alternatives of the proposed action may significantly restrict subsistence uses imposes additional requirements, including provisions for notices to the State of Alaska and appropriate regional and local subsistence committees, a hearing in the vicinity of the area involved, and the making of the following determinations, as required by sec. 810(a)(3):

- Such a significant restriction of subsistence uses is necessary, and is consistent with sound management principles for the utilization of the public lands.
- The proposed activity will involve the minimal amount of public lands necessary to accomplish the purposes of use, occupancy, or other disposition.
- Reasonable steps will be taken to minimize adverse effects upon subsistence uses and resources resulting from such actions.

To determine if a significant restriction of subsistence uses and needs may result from any one of the alternatives discussed in the East Alaska Proposed RMP/Final EIS, including their cumulative effects, the following three factors in particular are considered:

- A reduction in the availability of subsistence resources caused by a decline in the population or amount of harvestable resources.
- Reductions in the availability of resources used for subsistence purposes caused by alteration of their normal locations and distribution patterns.

• Limitations on access to subsistence resources, including from increased competition for the resources.

A significant restriction to subsistence may occur in at least two instances: 1) when an action substantially reduces populations or their availability to subsistence users, and 2) when an action substantially limits access by subsistence users to resources. Chapter III: Affected Environment of the East Alaska Proposed RMP/Final EIS provides information on areas and resources important for subsistence use, and the degree of dependence of affected people on different subsistence populations. Chapter IV, Environmental Consequences, provides much of the data on levels of reductions and limitations under each alternative, which was used to determine whether the action would cause a significant restriction to subsistence. The information contained in the Proposed RMP/Final EIS is the primary data used in this analysis.

Section B below outlines evaluations and findings for each of the four alternatives discussed in the Proposed RMP/Final EIS. A subsistence evaluation and findings under ANILCA sec. 810 must also include a cumulative impacts analysis. The most intensive cumulative case, as discussed in Chapter IV: Environmental Consequences, is evaluated in Section C of this analysis on page E-16.

This approach will help the reader to separate the subsistence restrictions that would potentially be caused by activities proposed under the four alternatives from those that would potentially be caused by the compounding of past, present, and future activities that could occur, or have already occurred, in the surrounding area.

B. ANILCA Sec. 810(a) Evaluations and Findings for All Alternatives

The following evaluations are based on information relating to the environmental and subsistence consequences of Alternatives A through D as presented in Chapter IV: Environmental Consequences of the East Alaska Proposed RMP/Final EIS and in the ROPs and Stips in Appendix C. Effects are also considered for the alternatives to which they apply. The evaluations and findings focus on potential impacts to the subsistence resources themselves, as well as access to the resources.

B.1 Evaluation and Findings for Alternative A

Alternative A of the Proposed RMP/Final EIS is the No Action Alternative. Selection of this alternative would result in continued management of the lands within the planning area as specified in the 1980 Southcentral Management Framework Plan (MFP), as amended. In general under the No Action Alternative, 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.

B.1.1 Evaluation of the Effect of Use, Occupancy, or Disposition on Subsistence Uses and Needs

Under Alternative A, all existing withdrawals would be maintained including withdrawals from selection and withdrawals from mineral entry. Current management would be considered adequate and sustainable to meet subsistence needs. For this reason, this alternative would have no effect on of the use, occupancy, or disposition of subsistence uses or needs based on management of *Lands and Realty* and *Leasable and Locatable Minerals.*

B.1.1.a Travel and Recreation Management

Travel and recreation management under the status quo would result in the continued unmanaged and unplanned proliferation of OHV use. Additional and poorly planned OHV trails would continue to compromise the effectiveness of habitat refugia for fish and wildlife by allowing easier and increased access to those areas. Furthermore, unlimited access and unrestricted use would cause further habitat degradation that affects fish, wildlife, and non-game resources. Protective measures would be reactive, initiated as conflicts are identified and as issues are brought forth by the public. Under a reactive approach, protective measures would tend to mitigate direct and immediate impacts to a limited extent, but there would probably be an overall decline in resource abundance over the long-term. All users, including subsistence and sport, would continue to have unrestricted access to subsistence areas and resources.

B.1.1.b Natural and Cultural Resources

Under Alternative A there are no areas designated for additional protection of natural or cultural resources. Current management practices are considered sustainable in regards to subsistence resources therefore there should be no noticeable adverse effects to subsistence resources based on a lack of natural and cultural resource determinations under the No Action Alternative.

B.1.1.c Vegetation Management

The goal of vegetation management under all alternatives is to maintain the key ecosystem components and vegetative structure within the natural range. This would be accomplished through fire management and other vegetation manipulation practices, including the extraction of resources where practical. Under the No Action Alternative, the Authorizing Officer (AO) would retain adequate discretion to sufficiently prevent any impacts to subsistence practices or resources. Therefore, vegetation management under the No Action Alternative is not likely to have any adverse effects on subsistence uses and needs.

B.1.2 Evaluation of the Availability of Other Lands for the Purposes Sought to be Achieved

The Draft RMP/EIS considers all BLM managed lands located within the Glennallen Field Office boundaries, including selected lands. Conveyed lands, however, cannot be considered for management. Also, other Federal lands managed by the National Park Service and USDA Forest Service cannot be included. No other lands within the Field Office boundaries are available for meeting our multiple-use mandate.

B.1.3 Evaluation of Other Alternatives that Would Reduce or Eliminate the Use, Occupancy, or Disposition of Public Lands Needed for Subsistence Purposes

The only alternative that would eliminate the use of public lands needed for subsistence is to not allow or permit any activities that conflict with subsistence uses. However, such an alternative is not viable given the fact that the BLM manages public lands under FLPMA, which requires that the lands be managed for multiple-use. Changing FLPMA, and thus management of public lands, would require an act of Congress. Alternatives C and D reduce the use, occupancy, or disposition of public lands needed for subsistence purposes.

B.1.4 Findings

Under Alternative A management would continue under the existing MFP of 1980. The effects evaluation of the No Action Alternative on subsistence presented in *Chapter IV*, *Impacts by Alternative, Issue 7: Subsistence/Social and Economic Conditions, Alternative A* considers the effects of management of travel, recreation, natural and cultural resources, lands and realty, vegetation, and leasable and locatable minerals. This evaluation concludes that the No Action Alternative would have a negligible effect on subsistence species and on access to subsistence resources, and that ROPs and Stips that would be developed on a case-by-case basis by the BLM for all activities would serve to minimize, to the extent possible, impacts to subsistence uses by the communities of the planning area. Therefore, the land use decisions under this alternative would not significantly restrict subsistence uses. This finding applies to all communities which have a customary and traditional use determination for the planning area.

B.2 Evaluation and Findings for Alternative B

Alternative B lays the groundwork for active management to facilitate resource development. Constraints to protect resource values, including subsistence, would tend to be implemented in specific areas in response to proposed actions as opposed to broad areas in special designations. With the exception of the segments designated as wild of the Gulkana and Delta National Wild and Scenic River corridors, all ANCSA (d)(1) withdrawals would be revoked, as would PLO 5150 as amended by PLO 5151.

This would allow mineral and oil and gas exploration on over 97 percent of the planning area, pending State or Native conveyance. This would also allow the transportation and utility corridor to be conveyed to the State of Alaska. Travel and trail restrictions would be minimal. Recreation management would consist of building facilities to meet increasing demand.

B.2.1 Evaluation of the Effect of Use, Occupancy, or Disposition on Subsistence Uses and Needs

B.2.1.a Travel and Recreation Management

Travel management under Alternative B would result in the continued unmanaged and unplanned proliferation of OHV use. Additional and poorly planned OHV trails would continue to compromise the effectiveness of habitat refugia for fish and wildlife by allowing easier and increased access to those areas. Furthermore, unlimited access and unrestricted use would cause additional habitat degradation that affects fish, wildlife, and non-game resources. Mitigation would be reactive as problem areas are brought to the attention of the land manager.

Under Alternative B, recreation management would continue to be reactive. The ROPs outlined in Appendix C would minimize effects from permitted commercial activities. New road construction would be considered on a case-by-case basis with ROPs applied. Access for subsistence uses would not be affected as restrictions would not apply to federally-qualified users in pursuit of traditional activities.

B.2.1.b Natural and Cultural Resources

Under Alternative B, there would be no areas designated for additional protection of natural or cultural resource values. Current management practices are considered sustainable in regards to subsistence resources. Under Alternative B, ROPs that are designed to protect resources would apply to all permitted activities. These ROPs should give sufficient protection to the resource values that the area designations were proposed to protect. Therefore, there should be no noticeable adverse effects to subsistence resources based on natural and cultural resource determinations of Alternative B.

B.2.1.c Lands and Realty

Alternative B would revoke ANCSA (d)(1) withdrawals and PLO 5150, a combination of which withdrew the transportation and utility corridor from the land base that was available for State selection and conveyance. If these withdrawals are lifted, underlying State land selections would thus become valid. Federal subsistence regulations only apply to unencumbered (non-selected) lands. Revocation of these withdrawals could have a significant impact on subsistence activities for communities having a customary and traditional use determination for Game Management Unit 13 in two ways.

First, it would significantly reduce the area that is open for Federal hunting purposes. Approximately 300,000 acres, representing 63 percent of the Federal hunting area in Unit 13, are within the transportation and utility corridor. Furthermore, the transportation and utility corridor is strategically located along the current migration route of the Nelchina Caribou Herd, such that in most years virtually 100 percent of the herd passes through the Federal hunting area. In a typical year, over 80 percent of the moose and caribou that are harvested under Federal regulations in Unit 13 are taken within the corridor.

Second, the transportation and utility corridor provides for a unique access situation to the Federal hunting areas. The corridor follows or overlaps the Richardson Highway for more than 75 road miles. This provides substantial access to the Federal hunting areas by means of highway vehicles. Also, there are three State Controlled Use Areas that overlap the corridor and the Federal hunting areas. OHV use within these Controlled Use Areas is restricted for hunting purposes. This creates an excellent opportunity for subsistence hunters without OHVs to participate in subsistence hunting without the disadvantage of having to compete with hunters with OHVs.

Outside the transportation and utility corridor, there are only 5.5 additional highway miles that provides access to the Federal hunting areas. These additional 5.5 miles are all on the Denali Highway, which is not maintained in the winter and therefore requires the use of OHVs for access during a significant part of the hunting seasons. The remainder of the Federal hunt areas can only be accessed by OHV, airplane, or boat year round.

If the transportation and utility corridor were to be eliminated from the Federal hunting area, it is likely that the hunters who hunt in that area would seek new hunting areas. This would create significant increased competition as hunters, especially in the few remaining easily accessible areas. This could lead to a localized depletion of resources. Furthermore, highly congested areas may be bypassed by migrating animals. Overall, Federal subsistence harvest of moose and caribou would likely go down, although it is difficult to predict by how much.

Revocation of ANCSA (d)(1) withdrawals and PLO 5150 would significantly reduce the availability of game resources to Federal subsistence users, and would limit the access to the remaining areas.

B.2.1.d Vegetation Management

The goal of vegetation management under Alternative B is to maintain the key ecosystem components and vegetative structure within the natural range. This would be accomplished through fire management and other vegetation manipulation practices, including the extraction of resources where practical. Under Alternative B, the AO would retain adequate discretion to sufficiently prevent any impacts to

subsistence practices or resources. Vegetation management under Alternative B is not likely to have any adverse effects on subsistence management

B.2.1.e Leasable and Locatable Minerals

Alternative B would open up 97 percent of the land base to mineral extraction, including oil and gas development, pending State or Native conveyance. Specific impacts to fish and wildlife species and habitats are discussed in Chapter IV, and will only be summarized here as they pertain to subsistence use patterns.

ROPs would apply to all permitted activities that are designed to minimize effects to fish and wildlife and their habitats. The ROPs adequately protect fish habitat by prohibiting instream activities except under rare circumstances. Wildlife species, on the other hand, would be impacted due to loss of habitat. The location of mineral exploration and development activities would determine what impact there is to subsistence. If activities were located within key migration routes, animals may bypass Federal hunting areas for the duration of activities. If activities were located in winter range, calving grounds, or refugia, there could be a loss due to overall fitness. Roads and associated other infrastructure may allow increased exploitation of resources by non-subsistence users. Non-game subsistence resources may also be affected based on the placement of activities. Surface disturbing activities would remove that land from a resource production status (i.e., berries), although it is unlikely that this would be on a large enough scale to be significant.

In summary, anything that negatively affects fish and wildlife, or fish and wildlife habitat, will also have a negative effect on subsistence. Mineral exploration and development activities under Alternative B would have more impacts on subsistence wildlife species than any of the other alternatives. These impacts to subsistence resources and access would probably be localized and minimal. The ROPs should be adequate to ensure that significant restrictions to subsistence uses and needs would not occur.

B.2.2 Evaluation of the Availability of Other Lands for the Purposes Sought to be Achieved

The Draft RMP/EIS considers all BLM managed lands located within the Glennallen Field Office boundaries, including selected lands. Conveyed lands, however, cannot be considered for management. Other Federal lands managed by the National Park Service and USDA Forest Service cannot be included. No other lands within the Field Office boundaries are available for meeting the BLM's multiple-use mandate.

B.2.3 Evaluation of Other Alternatives that Would Reduce or Eliminate the Use, Occupancy, or Disposition of Public Lands Needed for Subsistence Purposes

The only alternative that would eliminate the use of public lands needed for subsistence is to not allow or permit any activities that conflict with subsistence uses. However,

such an alternative is not viable given the fact that the BLM manages public lands under FLPMA, which requires that the lands be managed for multiple-use. Changing FLPMA, and thus management of public lands, would require another act of Congress.

Alternatives A, C, and D reduce the use, occupancy, or disposition of public lands needed for subsistence purposes.

B.2.4 Findings

This evaluation considers the effects of management of travel, recreation, natural and cultural resources, lands and realty, vegetation, leasable and locatable minerals, and the effectiveness of the associated ROPs and Stips (Appendix C) as presented by the BLM. The analysis concludes that the effect of Alternative B to subsistence would be greater than that of any of the other alternatives, but effects would remain localized and would not significantly affect subsistence species or resources on a population scale. Adequate ROPs and Stips have been incorporated into Alternative B to ensure that significant reduction to subsistence species and resources is unlikely to occur.

However, actions taken under Alternative B would significantly affect access to subsistence resources and subsistence use patterns by the 26 communities that have a customary and traditional use determination for Unit 13. An issue in this evaluation is the revocation of the ANCSA (d)(1) and PLO 5150 withdrawals, which would reduce the BLM-managed Federal subsistence hunting areas by 63 percent. Furthermore, the remaining 37 percent of the existing BLM-managed Federal hunting areas would be accessible at only a few locations by highway vehicle. This reduced access could cause a shift in user patterns, resulting in increased competition and a decline in harvest. Alternative B is not considered likely to directly reduce key subsistence populations. Alternative B has the clear potential to significantly restrict subsistence uses, triggering the additional requirements of hearings and formal determinations for compliance with sec. 810.

B.3 Evaluation and Findings for Alternative C

Alternative C emphasizes active measures to protect and enhance resource values, which for the most part enhances subsistence opportunities. Production of minerals and services would be more constrained than in the other alternatives. Three Areas of Critical Environmental Concern, one Research Natural Area, and five Special Recreation Management Areas, would be designated with specific measures proposed to protect or enhance resources values. Travel and OHV management would be designated as "limited" or "closed" to protect resource values. Some ANCSA (d)(1) withdrawals would be revoked, but not PLO 5150 which constitutes the transportation and utility corridor.

B.3.1 Evaluation of the Effect of Use, Occupancy, or Disposition on Subsistence Uses and Needs

B.3.1.a Travel and Recreation Management

Under Alternative C, recreation management would focus on maintaining the quality of existing experiences, and providing for a variety of motorized and non-motorized uses. In general, motorized transportation allows users to get farther faster. The result is that fish and wildlife are disturbed more often. This can result in adverse effects in a variety of ways, ranging from direct killing or catching to increased energy expenditure that reduces overall fitness. Recreation management under Alternative C is aggressive in halting the unmanaged proliferation of OHV trails and establishing visitor use limits. Although these measures do not apply to users engaged in traditional subsistence activities, they would benefit the subsistence resources by limiting the recreational pursuit of these resources.

B.3.1.b Natural and Cultural Resources

Under Alternative C, there would be four areas designated for additional protection of natural and cultural resource values. Three of the four areas were created for the protection of wildlife species, so it is anticipated that these additional protective measures would benefit subsistence species and resources. There should be no adverse effects to subsistence resources or access based on resource value determinations of Alternative C.

B.3.1.c Lands and Realty

Under Alternative C, most of the ANCSA (d)(1) withdrawals would be retained, most notably the transportation and utility corridor. The net result is that no additional land selections can be validated. Since no additional land selections can be validated, lands that are currently open to Federal subsistence hunting would continue to be so. Therefore, lands and realty options under Alternative C would have no effect on subsistence uses or needs.

B.3.1.d Vegetation Management

The goal of vegetation management under Alternative C is to maintain the key ecosystem components and vegetative structure within the natural range. This would be accomplished through fire management and other vegetation manipulation practices, including the extraction of resources where practical. Under Alternative C, a combination of the ROPs and the discretion of the AO should sufficiently prevent any impacts to subsistence practices or resources. Vegetation management under Alternative C is not likely to have any adverse effects on subsistence management

B.3.1.e Leasable and Locatable Minerals

Alternative C would revoke some of the ANCSA (d)(1) withdrawals and modify PLO 5150 to allow for metalliferous metals, which would open up 59 percent of the land base to mineral extraction, including oil and gas. Specific impacts to fish and wildlife species and habitats are discussed previously, and will only be summarized here as they pertain to subsistence use patterns.

ROPs that are designed to minimize effects to fish and wildlife and their habitats would apply to all activities. The ROPs adequately protect fish habitat by prohibiting instream activities except under rare circumstances. Wildlife species, on the other hand, would be impacted due to loss of habitat. The location of mineral exploration and development activities would determine what impact there is to subsistence. If activities were located within key migration routes, animals may bypass Federal hunting areas for the duration of activities. If activities were located in winter range, calving grounds, or refugia, there could be a loss due to overall fitness. Also, roads and associated other infrastructure may allow all resources (fish, wildlife, non-game resources) to be much more exploited by non-subsistence users. Non-game subsistence resources may also be affected based on the placement of activities. Surface disturbing activities would remove that land from a resource production status (i.e., berries), although it is unlikely that this would be on a large enough scale to be significant.

In summary, anything that negatively affects fish and wildlife, or fish and wildlife habitat will also have a negative effect on subsistence. Mineral exploration activities under Alternative C are minimal, but would still have impacts on subsistence wildlife species and habitat. These impacts to subsistence resources and access would probably be localized and minimal. The ROPs should be adequate to ensure that significant restrictions to subsistence uses and needs would not occur.

B.3.2 Evaluation of the Availability of Other Lands for the Purposes Sought to be Achieved

The East Alaska Resource Management Plan considers all BLM managed lands located within the Glennallen Field Office boundaries, including selected lands. Conveyed lands, however, cannot be considered for management. Also, other Federal lands managed by the National Park Service and USDA Forest Service cannot be included. No other lands within the Field Office boundaries are available for meeting the BLM's multiple-use mandate.

B.3.3 Evaluation of Other Alternatives that Would Reduce or Eliminate the Use, Occupancy, or Disposition of Public Lands Needed for Subsistence Purposes

The only alternative that would reduce or eliminate the use of public lands needed for subsistence is to not allow or permit any activities that conflict with subsistence uses. However, such an alternative is not viable given the fact that the BLM manages public lands under FLPMA, which requires that the lands be managed for multiple-use. Changing FLPMA, and thus management of public lands, would require another act of Congress.

B.3.4 Findings

This evaluation considers the effects of management of travel, recreation, natural and cultural resources, lands and realty, vegetation, leasable and locatable minerals, and the effectiveness of the associated ROPs and Stipulations (Appendix C) as presented by the BLM. The analysis concludes that Alternative C would have a negligible effect on subsistence species, access to subsistence resources, or subsistence use, and that the effect would be less than that of any of the other Alternatives. The effect would be localized and would not significantly affect subsistence species or resources on a population scale. Adequate ROPs and Stipulations have been incorporated into Alternative C to ensure that significant reduction to subsistence species and resources is unlikely to occur. In sum, the land use actions authorized under Alternative C would not significantly restrict subsistence uses.

B.4 Evaluation and Findings for Alternative D (Proposed RMP)

Alternative D emphasizes a moderate and balanced level of protection, use, and enhancement of resources and services. Constraints to protect resources would be implemented, but would be less restrictive than under Alternative C. This alternative would designate one Research Natural Area and three Special Recreation Management Areas, with measures to protect certain resource values applied to the other geographical areas emphasized under Alternative C. This alternative would revoke many ANCSA (d)(1) withdrawals, but would retain some in areas where strong resource protection is needed, including most portions of the transportation and utility corridor. This alternative represents the mix and variety of actions that in the opinion of the BLM, best resolve the issues and management concerns in consideration of all values and programs, and this is considered the BLM's Preferred Alternative.

B.4.1 Evaluation of the Effect of Use, Occupancy, or Disposition on Subsistence Uses and Needs

B.4.1.a Travel and Recreation Management

Under Alternative D, recreation management would focus on maintaining the quality of existing experiences, and providing for a variety of motorized and non-motorized uses. In general, motorized use allows users to get farther faster. The result is that fish and wildlife are disturbed more often. This can be negative in a variety of ways, ranging from direct killing or catching to increased energy expenditure that reduces overall fitness. Travel management under Alternative D is aggressive in halting the unmanaged proliferation of OHV trails and establishing visitor use limits on unencumbered BLM lands. BLM would focus on education on selected lands to promote ethical riding and raise awareness of the impacts of cross-country travel. Although these measures do not apply to users engaged in traditional subsistence activities, they would benefit the subsistence resources by limiting the recreational pursuit of these resources. In the short-term, there probably would be no impacts from Alternative D on subsistence uses, needs, and access. Over the long-term, however, as trails are inventoried and designated, Alternative D would likely have a beneficial effect on the abundance and distribution of subsistence resources.

B.4.1.b Natural and Cultural Resources

Under Alternative D, no Areas of Critical Environmental Concern are proposed, though one Research Natural Area is proposed. Additional protective measures would be implemented in order to protect resource values of the other areas identified under Alternative C. There should be no adverse effects to subsistence resources or access based on natural and cultural resource determinations of Alternative D.

B.4.1.c Lands and Realty

Under Alternative D, most of the ANCSA (d)(1) withdrawals would be retained, most notably 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, Chapter II). These areas represent approximately sixteen percent of the BLM-managed lands on which the Federal subsistence priority applies. However, these parcels have less access and less concentrated Federal subsistence hunting effort than other BLM-managed lands. The areas are off the highway and require access by foot, OHV, or snowmachine. Additionally, approximately 50 percent of the northern area, west of the Delta River, is mountainous, glaciated terrain, where no caribou or moose harvest occurs. Based on annual harvest data since 1994, the average annual federal subsistence harvest from these parcels for caribou is less than five percent of the total Federal subsistence harvest in the region. For moose, the average annual federal subsistence harvest from these parcels is approximately 10 percent. This would still leave a viable unit available for rural priority and federal harvest on

the remainder of the BLM-managed lands where the Federal subsistence priority is implemented.

B.4.1.d Vegetation Management

The goal of vegetation management under Alternative D is to maintain the key ecosystem components and vegetative structure within the natural range. This would be accomplished through fire management and other vegetation manipulation practices, including the extraction of resources where practical. Under Alternative D, a combination of the ROPs and the discretion of the AO should sufficiently prevent any impacts to subsistence practices or resources. Vegetation management under all alternatives is not likely to have any adverse effects on subsistence management

B.4.1.e Leasable and Locatable Minerals

Alternative D would revoke some of the ANCSA (d)(1) withdrawals the effect being 80 percent of the land base would be open to mineral extraction, including oil and gas leasing, pending State or Native conveyance. This, however, would not effect most lands currently available for the federal subsistence hunt, as they are withdrawn, either by ANILCA-designated Wild and Scenic Rivers (Delta and Gulkana) or the transportation and utility corridor. PLO 5150, as amended by PLO, 5151, would mostly remain in place, as discussed above. Specific impacts to fish and wildlife species and habitats are discussed previously, and will only be summarized here as they pertain to subsistence use patterns.

ROPs that are designed to minimize effects to fish and wildlife and their habitats would apply to all permitted activities. The ROPs adequately protect fish habitat by prohibiting instream activities except under rare circumstances. Wildlife species, on the other hand, would be impacted due to loss of habitat. The location of activities would determine what impact there is to subsistence. If activities were located within key migration routes, animals may bypass Federal hunting areas for the duration of activities. If activities were located in winter range, calving grounds, or refugia, there could be a loss due to overall fitness. Also, roads and associated other infrastructure may allow all resources (fish, wildlife, non-game resources) to be much more exploited by non-subsistence users. Non-game subsistence resources may also be affected based on the placement of activities. Surface disturbing activities would remove that land from a resource production status (i.e., berries), although it is unlikely that this would be on a large enough scale to be significant.

In summary, anything that negatively affects fish and wildlife, or fish and wildlife habitat, would also have a negative effect on subsistence. Exact impacts are hard to predict because of unknown potential for mineral exploration and development. The likelihood of anything happening on a large scale during the life of this plan is generally considered to be small. Therefore, any impacts to subsistence resources and access would probably be localized and minimal. The ROPs and Stips

(Appendix C) should be adequate to ensure that significant restrictions to subsistence uses and needs would not occur.

B.4.2 Evaluation of the Availability of Other Lands for the Purposes Sought to be Achieved

The East Alaska Resource Management Plan considers all BLM managed lands located within the Glennallen Field Office boundaries, including selected lands. Conveyed lands, however, cannot be considered for management. Also, other Federal lands managed by the National Park Service and USDA Forest Service cannot be included. No other lands within the Field Office boundaries are available for meeting the BLM's multiple-use mandate.

B.4.3 Evaluation of Other Alternatives that Would Reduce or Eliminate the Use, Occupancy, or Disposition of Public Lands Needed for Subsistence Purposes

The only alternative that would eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes would be an alternative that prohibited any activity that conflicted with subsistence use or subsistence users. However, the BLM operates under a multiple-use mandate as directed by FLPMA. This mandate prevents us from managing resources based on single resources, such as subsistence. Changing FLPMA, and thus management of public lands, would require another act of Congress.

Alternative C reduces the use, occupancy, or disposition of public lands needed for subsistence purposes.

B.4.4 Findings

This evaluation considers the effects of management of travel, recreation, natural and cultural resources, lands and realty, vegetation, leasable and locatable minerals, and the effectiveness of the associated stipulations and ROPs and Stips as presented by the BLM. The analysis concludes that Alternative D (the Proposed RMP) would have a negligible effect on subsistence species, access to subsistence resources, or subsistence uses by the communities of that have a customary and traditional use determination for Units 13 and 6. The effect would be localized, of short duration, and would not significantly affect subsistence species or resources on a population scale. Adequate ROPs and Stips have been incorporated into Alternative D to ensure that significant reduction to subsistence species and resources is unlikely to occur. In sum, land uses under Alternative D would not significantly restrict subsistence uses.

C. Evaluation and Findings for the Cumulative Case

The goal of the cumulative analysis is to evaluate the incremental impact of the current action in conjunction with all past, present, and reasonably foreseeable future actions in or near the East Alaska planning area. The cumulative analysis considers in general activities that are likely to happen, and activities that were identified as being of great concern during scoping. The Cumulative Impacts are discussed in greater detail in Chapter IV: Environmental Impacts. Two reasonably foreseeable future activities were identified that may negatively impact subsistence uses when analyzed cumulatively. These are an increase in resource development on non-Federal land, and an increase in settlement on non-Federal lands.

C.1.1 Evaluation of the Effect of Such Use, Occupancy, or Disposition on Subsistence Uses and Needs

Assuming increased resource development and settlement on State and private lands (including Native corporation 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 limited areas) to manage OHV use. Continued unmanaged proliferation of OHV trails in the area 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, particularly in the Denali Highway area, could cause critical habitat loss or displacement of some animals from traditional migration routes. Increased access to subsistence resources would be off-set by increased competition with recreationists and sport-hunters.

C.1.2 Evaluation of the Availability of Other Lands for the Purposes Sought to be Achieved

The East Alaska Resource Management Plan considers all BLM managed lands located within the Glennallen Field Office boundaries, including selected lands. Conveyed lands, however, cannot be considered for management. Also, other Federal lands managed by the National Park Service and USDA Forest Service cannot be included. No other lands within the Field Office boundaries are available for meeting the BLM's multiple-use mandate.

C.1.3 Evaluation of Other Alternatives that Would Reduce or Eliminate the Use, Occupancy, or Disposition of Public Lands Needed for Subsistence Purposes

The only alternative that would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes would be an alternative that prohibited any activity that conflicted with subsistence use or subsistence users. However, the

BLM operates under a multiple-use mandate as directed by FLPMA. This mandate prevents us from managing resources based on single resources, such as subsistence. Changing FLPMA, and thus management of public lands, would require another act of Congress.

C.1.4 Findings

The cumulative case, as presented in this analysis, would result in a reasonably foreseeable and significant restriction of subsistence use for the communities which have a customary and traditional use determination for Unit 13. This requires a positive finding, and additional compliance, including hearings and formal determinations as required in ANILCA sec. 810. This restriction would be due to an alteration in the distribution of resources, a decrease in abundance, and an increase in competition from non-subsistence users.

Although procedures will be in place to ensure that future development affects access as little as possible, it is still probable the total area available for subsistence purposes will be reduced. Infrastructure associated with resource development located in core caribou and moose habitat areas would result in the displacement, and possible reduction, of the population. Population growth would result in a greater number of residents relying on local resources to meet their needs. In addition, construction of roads for resource extraction and settlement would allow access to the area, thus causing an increase in competition for subsistence resources by sport hunters.

D. Notice and Hearings

ANILCA sec. 810(a) provides that no "withdrawal, reservation, lease, permit, or other use, occupancy or disposition of the public lands which would significantly restrict subsistence uses shall be effected" until the Federal agency gives the required notice and holds a hearing in accordance with ANILCA sec. 810(a)(1) and (2). The BLM provided notice in the Federal Register that it made positive findings pursuant to ANILCA sec. 810 that Alternative B and the Cumulative Case as presented in the East Alaska Draft RMP/EIS met the "may significantly restrict" threshold. As a result, public hearings were held in the potentially affected communities. Notice of these hearings were provided in the Federal Register and by way of the local media.

On April 29, 2005 a Notice of Availability for the East Alaska Draft RMP/EIS was published in the Federal Register by the Environmental Protection Agency (Federal Register 2005.) This began a 90 day comment period on the Draft. From May 16th through May 26th BLM held public meetings in Chistochina, Glennallen, Valdez, Cordova, Anchorage, Fairbanks, and Delta Junction with attendance of 134 stakeholders.

The main purpose for the public hearings was to gather testimony on the impacts to subsistence by alternatives presented in the Draft. Alternative B of the Draft RMP/EIS proposed the revocation of Public Land Order 5150 which makes up the transportation

and utility corridor that houses the Trans-Alaska Pipeline System. This action, as identified by this ANICLA section 810 Analysis, would significantly restrict subsistence uses and therefore required that subsistence hearings be held in the area affected by the proposed action.

Seven subsistence hearings were held and spoken testimony heard from village elders, Ahtna Inc., rural Alaskan residents, and the youth of the community as to the impacts revocation of PLO 5150 would have on their subsistence lifestyle. BLM also hosted a special session of the Southcentral Federal Regional Subsistence Advisory Council to allow the council to hear testimony on the revocation of PLO 5150 and submit a formal comment.

E. Subsistence Determinations Under ANILCA Sec. 810(a)(3)(A), (B), and (C)

ANILCA sec. 810(a) provides that no "withdrawal, reservation, lease, permit, or other use, occupancy or disposition of the public lands which would significantly restrict subsistence uses shall be effected" until the Federal agency gives the required notice and holds a hearing in accordance with ANILCA sec. 810(a)(1) and (2), and makes the three determinations required by ANILCA sec. 810(a)(3)(A), (B), and (C). The three determinations that must be made are: 1) that such a significant restriction of subsistence use is necessary, consistent with sound management principles for the utilization of the public lands; 2) that the proposed activity will involve the minimal amount of public lands necessary to accomplish the purposes of such use, occupancy, or other such disposition; and 3) that reasonable steps will be taken to minimize adverse impacts to subsistence uses and resources resulting from such actions (16 U.S.C. sec. 3120(a)(3)(A), (B), and (C)).

The BLM has found in this subsistence evaluation that Alternative B and the cumulative case considered in this Proposed RMP/Final EIS are likely to significantly restrict subsistence uses. Therefore, the BLM has undertaken the notice and hearing procedures required by ANILCA sec. 810 (a)(1) and (2) in conjunction with release of the East Alaska Draft RMP/EIS in order to solicit public comment from the potentially affected communities and subsistence users.

Public comment gathered as testimony from the hearings supported BLM's findings for Alternative B. The public clearly expressed that the actions proposed in Alternative B would significantly restrict access to subsistence resources available through the federally managed subsistence moose and caribou hunts. They also clearly expressed the concern that, even though State Tier II subsistence permits would be available for Unit 13, they have been traditionally very difficult to get, particularly for younger residents of the area.

Based on public comment and this ANILCA 810 analysis, the BLM has identified Alternative D as the Proposed RMP and it has been analyzed as such in the Final Environmental Impact Statement and in this 810 analysis. Analysis, as described on pp. E-13 - E-16 and Chapter IV of the FEIS, concludes that Alternative D would have a negligible effect on subsistence species, access to subsistence resources, or subsistence uses by the communities that have a customary and traditional use determination for Units 13 and 6. The effect would be localized, of short duration, and would not significantly affect subsistence species or resources on a population scale. Adequate ROPs and Stips have been incorporated into Alternative D to ensure that significant reduction to subsistence species and resources is unlikely to occur.

Under Alternative D, most of PLO 5150 would be retained, thus maintaining most of the pipeline/utility corridor in federal ownership. 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 Chapter 2). These areas represent approximately sixteen percent of the BLM-managed lands on which the Federal subsistence priority applies. However, these parcels have less access and less concentrated Federal subsistence hunting effort than other BLM-managed lands. The areas are off the highway and require access by foot, OHV, or snowmachine. Additionally, approximately 50 percent of the northern area, west of the Delta River, is mountainous, glaciated terrain, where no caribou or moose harvest occurs. Based on annual harvest data since 1994, the average annual federal subsistence harvest from these parcels for caribou is less than five percent of the total Federal subsistence harvest in the region. For moose, the average annual federal subsistence harvest from these parcels is approximately 10 percent. This would still leave a viable unit available for rural priority and federal harvest on the remainder of the BLM-managed lands where the Federal subsistence priority is implemented.

BLM does not consider the modification of PLO 5150 to allow these parcels to be conveyed to the State an action that would substantially limit access by subsistence users to resources. This determination is based on the following factors:

- Low annual harvest relative to other portions of the federal area, as explained above.
- Inaccessibility of the parcels described above that would be conveyed to the State. It was clearly expressed in public testimony that rural residents in the area depend on an easily accessible federal subsistence area to rely on when a State Tier II permit is not available. The federal lands that would be retained under the Proposed RMP (Alternative D) will maintain that accessibility and opportunity for caribou and moose harvest. The Proposed RMP retains all lands adjacent to the Richardson highway that are currently available in the federal subsistence unit.
- The Delta River corridor will still be available for federal subsistence hunting, as well as some lands adjacent to the corridor on the west side of the Delta River. Most moose harvest within the Delta drainage occurs on lands within the corridor or closely adjacent to it. These lands would be retained.

In sum, land uses under Alternative D would not significantly restrict subsistence uses.

Because the Proposed RMP (Alternative D) would not significantly restrict subsistence uses, no determination under ANILCA 810(a)(3)(A), (B), and (C) is necessary.

East Alaska Proposed RMP/Final EIS