

## **APPENDIX C**

### **Alaska National Interest Lands Conservation Act Section 810 Evaluation**



## CONTENTS

<b>Introduction .....</b>	<b>1</b>
<b>Subsistence Evaluation Factors under Section 810(a) of ANILCA.....</b>	<b>2</b>
<b>Evaluations and Findings for All Alternatives and the Cumulative Case .....</b>	<b>3</b>
Evaluation and Findings for Alternative A (No Action Alternative, Preferred Alternative) .....	7
Evaluation of the Effect of Use, Occupancy, or Disposition on Subsistence Use and Need .....	7
Evaluation of the Availability of Other Lands.....	7
Evaluation of Other Alternatives that Would Reduce or Eliminate the Use, Occupancy, or	
Disposition of Public Lands Needed for Subsistence Purposes.....	7
Findings .....	7
Evaluation and Findings for Alternative B (Partial Revocation).....	8
Evaluation of the Effect of Use, Occupancy, or Disposition on Subsistence Use and Need .....	8
Evaluation of the Availability of Other Lands.....	30
Evaluation of Other Alternatives that Would Reduce or Eliminate the Use, Occupancy, or	
Disposition of Public Lands Needed for Subsistence Purposes.....	31
Findings .....	31
Evaluation and Findings for Alternative C (Partial Revocation).....	36
Evaluation of the Effect of Use, Occupancy, or Disposition on Subsistence Use and Need .....	36
Evaluation of the Availability of Other Lands.....	49
Evaluation of Other Alternatives that Would Reduce or Eliminate the Use, Occupancy, or	
Disposition of Public Lands Needed for Subsistence Purposes.....	50
Findings .....	50
Evaluation and Findings for Alternative D (2021 Proposed Action) .....	55
Evaluation of the Effect of Use, Occupancy, or Disposition on Subsistence Use and Need .....	55
Evaluation of the Availability of Other Lands.....	68
Evaluation of Other Alternatives that Would Reduce or Eliminate the Use, Occupancy, or	
Disposition of Public Lands Needed for Subsistence Purposes.....	68
Findings .....	68
Evaluation and Findings for the Cumulative Case .....	73
Evaluation of the Effect of Use, Occupancy, or Disposition on Subsistence Use and Need .....	73
Evaluation of the Availability of Other Lands.....	77
Evaluation of Other Alternatives that Would Reduce or Eliminate the Use, Occupancy, or	
Disposition of Public Lands Needed for Subsistence Purposes.....	78
Findings .....	78
<b>Notice and Hearings.....</b>	<b>85</b>
<b>Subsistence Determinations Under ANILCA Sections 810(a)(3)(A), (B), and (C).....</b>	<b>85</b>
<b>Literature Cited .....</b>	<b>86</b>

## Figures

Figure C-1. ANCSA 17(d)(1) subsistence analysis communities.....	5
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## Tables

Table C-1. Percentage of Use Areas Overlapping Lands Where 17(d)(1) Withdrawals Would be Revoked in Areas More Likely to Be Developed or Losing Federal Subsistence Priority, Alternative B.....	10
Table C-2. Acres Within 50 Miles of Analysis Communities with No Subsistence Use Area Data Where 17(d)(1) Withdrawals Would be Revoked that are More Likely to Be Developed or Would Lose Federal Subsistence Priority, Alternative B.....	15
Table C-3. Overall Community Impact Ranking, ANCSA 17(d)(1) Withdrawals Final EIS, Alternative B.....	16
Table C-4. Summary of Findings, Alternative B.....	32
Table C-5. Percentage of Use Areas Overlapping Where 17(d)(1) Withdrawals Would be Revoked and the Areas More Likely to Be Developed or Losing Federal Subsistence Priority, Alternative C.....	38
Table C-6. Acres Within 50 Miles of Analysis Communities with No Subsistence Use Area Data Where 17(d)(1) Withdrawals Would be Revoked that are More Likely to Be Developed or Would Lose Federal Subsistence Priority, Alternative C.....	42
Table C-7. Loss of Federal Subsistence Priority within Game Management Unit 13 by Community, Alternative C.....	44
Table C-8. Overall Community Impact Ranking, ANCSA 17(d)(1) Withdrawals Final EIS, Alternative C.....	45
Table C-9. Summary of Findings, Alternative C.....	51
Table C-10. Percentage of Use Areas Overlapping Where 17(d)(1) Withdrawals Would be Revoked and That Are More Likely to Be Developed or Losing Federal Subsistence Priority, Alternative D.....	57
Table C-11. Acres Within 50 Miles of Analysis Communities with No Subsistence Use Area Data Where 17(d)(1) Withdrawals Would be Revoked that are More Likely to Be Developed or Would Lose Federal Subsistence Priority, Alternative D.....	61
Table C-12. Loss of Federal Subsistence Priority within Game Management Unit 13 by Community, Alternative D.....	63
Table C-13. Overall Community Impact Ranking, ANCSA 17(d)(1) Withdrawals Final EIS, Alternative D.....	64
Table C-14. Summary of Findings, Alternative D.....	69
Table C-15. Summary of Findings.....	79

## ABBREVIATIONS

ACEC	areas of critical environmental concern
ANC	Alaska Native Corporation
ANCSA	Alaska Native Claims Settlement Act
ANILCA	Alaska National Interest Lands Conservation Act
BLM	Bureau of Land Management
C&T	customary and traditional
EIS	environmental impact statement
DOI	U.S. Department of the Interior
GMU	game management unit
PLO	Public Land Order
ROW	right-of-way
Secretary	Secretary of the Interior
SRB&A	Stephen R. Braund & Associates

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## INTRODUCTION

This evaluation of subsistence impacts has been prepared for the Alaska Native Claims Settlement Act (ANCSA) 17(d)(1) withdrawals environmental impact statement (EIS), which analyzes the environmental consequences of revoking ANCSA 17(d)(1) withdrawals on certain lands as identified in Public Land Orders (PLOs) 7899 through 7903. These PLOs purported to revoke 17(d)(1) withdrawals on lands in the Kobuk-Seward Peninsula, Ring of Fire, Bay, Bering Sea-Western Interior, and East Alaska planning areas and were signed in 2021; only PLO 7899, which would revoke withdrawals on lands in the Kobuk-Seward Peninsula planning area, was published in the *Federal Register*, and the U.S. Department of the Interior (DOI) subsequently extended the opening order by 60 days to allow for additional review. The DOI identified procedural and legal defects in the decision-making process for PLOs 7899 through 7903, including insufficient analysis under the National Environmental Policy Act, failure to follow Section 106 of the National Historic Preservation Act, and failure to adequately analyze potential impacts on subsistence hunting and fishing. The final EIS allows the DOI to address these identified deficiencies.

ANCSA 17(d)(1) withdrawals were originally established in 1972 and 1973 pursuant to passage of ANCSA in 1971. Sixteen PLOs withdrew lands from disposal or appropriation to maintain the status quo of the lands to “[e]nsure that the public interest in these lands is properly protected” and until Alaska Native Corporations (ANCs) could make their land selections. The withdrawals established by these 16 PLOs are evaluated as the 17(d)(1) withdrawals in the decision area. The ANCs have completed their land selections.

The resource management plans/EISs for each of the five planning areas covered in the ANCSA 17(d)(1) withdrawals final EIS recommended revocation of all 17(d)(1) withdrawals, and PLOs 7899 through 7903 would have implemented these recommendations. Full revocation of the 17(d)(1) withdrawals would allow for the public land laws to be fully implemented, including the selection of Native allotments by Alaska Native veterans, the selection of lands pursuant to the Alaska Statehood Act (including allowing State top filed lands to become effective selections), and the opening of lands to location and entry under the U.S. mining laws as well as to mineral leasing. Because PLOs 7899 through 7903 were put on hold almost immediately for further review, on August 15, 2022, and August 9, 2023, the DOI published the Secretary of the Interior’s (Secretary) revocation of the 17(d)(1) withdrawals in part for 27.8 million acres within the decision area to allow only selections of Native allotments by Alaska Native veterans pursuant to the John D. Dingell Jr. Conservation, Management, and Recreation Act of 2019 (PLOs 7912 and 7929).

The final EIS provides a detailed analysis of the No Action Alternative and three action alternatives:

- Alternative A (No Action Alternative, Preferred Alternative): Alternative A would retain the withdrawal of all lands currently subject to ANCSA 17(d)(1) withdrawals within the decision area, preserving the status quo without regard to PLOs 7899 through 7903.
- Alternative B (Partial Revocation): Alternative B would revoke in part withdrawals to allow State of Alaska Priority 1 and 2 top filed lands to convert to Alaska Statehood Act selections only where conflicts with natural resources, cultural resources, subsistence resources, recreational resources, or proposed or existing areas of critical environmental concern (ACECs) would be minimized. All other lands would remain withdrawn.
- Alternative C (Partial Revocation): Alternative C would revoke in full the 17(d)(1) withdrawals where the lands have high mineral potential and revoke the 17(d)(1) withdrawals in part for all State of Alaska Priority 1 and 2 top filed lands that are not on high mineral potential lands. All other lands would remain withdrawn.
- Alternative D (2021 Proposed Action): Alternative D would revoke all ANCSA 17(d)(1) withdrawals consistent with PLOs 7899 through 7903.

## SUBSISTENCE EVALUATION FACTORS UNDER SECTION 810(A) OF ANILCA

Section 810(a) of the Alaska National Interest Lands Conservation Act (ANILCA), 16 United States Code 3120(a), 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.” Revoking the 17(d)(1) withdrawals would open the lands to the application of the public land laws and is likely to lead to the non-discretionary disposition of public lands. Given this, an evaluation of potential impacts on subsistence under ANILCA 810(a) must be completed for the proposed action evaluated in the ANCSA 17(d)(1) withdrawals final EIS. ANILCA requires that this evaluation include findings on three specific issues, as follows:

- The effect of use, occupancy, or disposition of public lands on subsistence uses and needs
- The availability of other lands for the purposes sought to be achieved
- Other alternatives that would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes

Three criteria are considered when determining if a significant restriction of subsistence uses and needs may result from the proposed action, alternatives, or in the cumulative case, as follows:

1. Reduction in the abundance of harvestable resources used for subsistence purposes
2. Reduction in the availability of resources used for subsistence caused by alteration of their distribution, migration patterns, or location
3. Limitations on access to subsistence resources, including from increased competition for the resources

Each alternative must be analyzed according to these criteria. ANILCA 810 also requires that cumulative impacts be analyzed. This approach helps the reader understand how the subsistence restrictions that could be caused by activities proposed under the four alternatives, including the No Action Alternative, add to those that could be caused by past, present, or future activities that have occurred or could occur in the surrounding area.

An alternative would be considered to significantly restrict subsistence uses if it can be expected to substantially reduce the opportunity to use subsistence resources. Substantial reductions are generally caused by large reductions in resource abundance, a major redistribution of resources, extensive interference with access, or major increases in the use of those resources by non-subsistence users.

If the analysis determines that the proposed action, alternatives, or the cumulative impacts may significantly restrict subsistence uses, the head of the Federal agency having jurisdiction over the Federal public lands in question is required to notify the State of Alaska and appropriate regional and local subsistence committees. It also must conduct ANILCA 810 hearings in the vicinity of potentially affected communities. In all, 19 ANILCA 810 hearings were held during the public comment period for the draft EIS and draft ANILCA 810 evaluation; meeting details are in EIS Appendix H.

The findings for certain communities were revised in the final EIS to either “will not significantly restrict subsistence uses” or “will significantly restrict subsistence uses” based on changes to alternatives, new information, and changes to analysis methods. For communities where the significant restriction remains, the head of the Federal agency having jurisdiction may prohibit the action or approve the action after making the following determinations:

- Such a significant restriction of subsistence uses is necessary, consistent with sound management principles for the use of the public lands. The proposed activity would involve the minimal



amount of public land necessary to accomplish the purpose of the use, occupancy, or other disposition

- Reasonable steps would be taken to minimize adverse effects on subsistence uses and resources resulting from such actions (ANILCA 810(a)(3))

The head of the Federal agency having jurisdiction can then authorize use of the public lands.

## **EVALUATIONS AND FINDINGS FOR ALL ALTERNATIVES AND THE CUMULATIVE CASE**

Chapter 2 of the final EIS includes a description of the four alternatives (including the No Action Alternative), including acres of 17(d)(1) withdrawals retained and revoked by land status (e.g., State top filed, State priority, high mineral potential lands).

Chapter 3 of the final EIS, Affected Environment and Environmental Consequences, describes the current environmental status of the decision area and the potential effects of the alternative scenarios to the physical, biological, and social environment if the action is taken. It also includes a description of the reasonably foreseeable development scenario and land selection assumptions. In particular, final EIS Section 3.14, Subsistence, addresses the affected environment and environmental consequences for subsistence under three key issues: subsistence user access, subsistence resource abundance, and subsistence resource availability. That section is organized to inform the Bureau of Land Management's (BLM's) findings of significance based on the factors previously listed in the Subsistence Evaluation Factors under ANILCA 810(a) section. Other relevant sections include final EIS Section 3.15, Terrestrial Mammals; final EIS Section 3.7, Fish and Aquatic Species; and final EIS Section 3.2, Birds and Special Status Bird Species. This analysis uses the information in the final EIS to evaluate potential impacts to subsistence uses and needs pursuant to ANILCA 810(a).

In the Affected Environment sections under each subsistence issue statement, the final EIS provides baseline subsistence data for all 223 rural communities located within 50 miles of the 17(d)(1) withdrawals (Figure C-1). The Environmental Consequences sections focus the analysis on a subset of 138 subsistence analysis communities that would be most likely to be affected by revocation of withdrawals. As indicated in Sections 3.14.1.2, 3.14.2.2, and 3.14.3.2 of the final EIS (Environmental Consequences), revocation of 17(d)(1) withdrawals would affect user access, resource abundance, and resource availability in two primary ways. First, the revocation would allow State top filings to become effective State selections. These lands would no longer be considered public lands per ANILCA, and rural residents would lose Federal subsistence priority on these lands permanently if conveyed or temporarily while the land is effectively selected by the State. If the lands are conveyed, the lands would also no longer be Federally managed to guarantee continued subsistence access or to mitigate the effects on subsistence from development on the adjacent lands subject to Federal subsistence priority. Second, the revocation would open lands to the General Mining Law and mineral leasing, which can lead to development on the Federal lands. The effects of the revocation of 17(d)(1) withdrawals are expected to be greatest where the lands are both more likely to be developed and likely conveyed out of Federal ownership.

Thus, the focused analysis area for subsistence consists of lands more likely to be developed or where there would be a loss of Federal subsistence priority upon revocation of any 17(d)(1) withdrawals. These are the parcels where subsistence users may experience impacts related to development or loss of Federal subsistence priority. There are 138 analysis communities within 50 miles of, or with subsistence use areas overlapping, the subsistence focused analysis area. This ANILCA 810 evaluation considers impacts to the 138 focused analysis area communities because these are the communities likely to experience an impact resulting from revocation of 17(d)(1) withdrawals.

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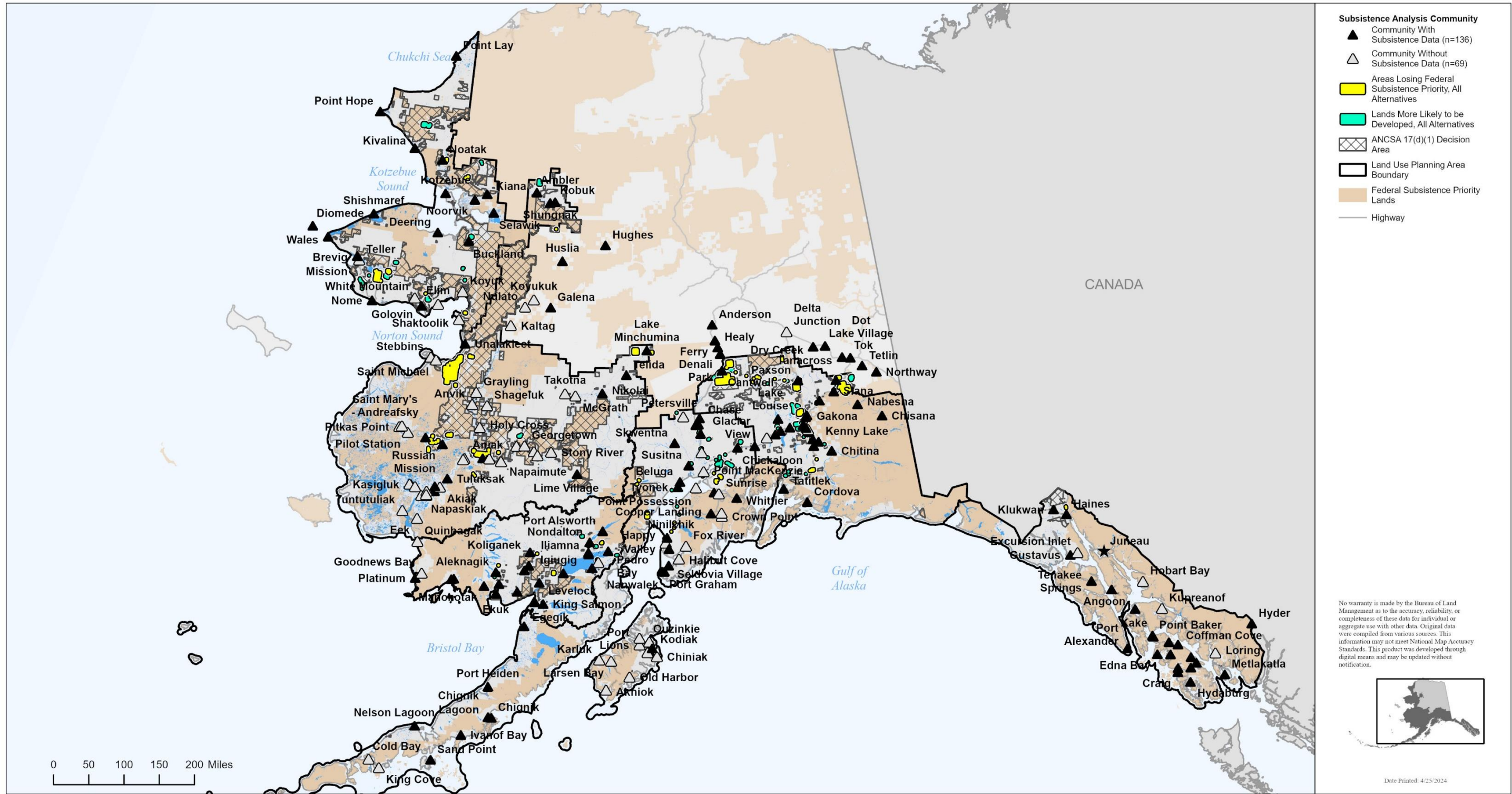


Figure C-1. ANCSA 17(d)(1) subsistence analysis communities.

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Under each alternative, impacts are considered for communities in terms of their proximity to the focused analysis area, specifically lands where there would be a loss of Federal subsistence priority upon revocation of 17(d)(1) withdrawals, and lands more likely to be developed once conveyed.

## **Evaluation and Findings for Alternative A (No Action Alternative, Preferred Alternative)**

Under Alternative A, the Secretary would retain all 17(d)(1) withdrawals throughout the five planning areas. Retaining withdrawals would preserve the status quo without regard to PLOs 7899 through 7903.

### ***Evaluation of the Effect of Use, Occupancy, or Disposition on Subsistence Use and Need***

Under Alternative A, all 17(d)(1) withdrawals would be retained, and there would be no change from baseline conditions. Under the No Action Alternative, there would be a continuation of existing conditions, including ongoing impacts to user access through subsistence management, development activities and infrastructure, security policies, and climate change. Selected or top filed parcels would remain so under Alternative A; therefore, subsistence management on these lands would not change. In the Bay and Ring of Fire planning areas, all areas subject to 17(d)(1) withdrawals would remain closed to mineral entry, whereas in other planning areas, a portion of the lands subject to 17(d)(1) withdrawals are already open to mineral entry, depending on the specific terms of their PLOs and would remain open to mineral entry under the No Action Alternative. The Kobuk-Seward Peninsula planning area has the greatest amount of land already open to mineral entry that would remain open under the No Action Alternative; therefore, this planning area is already experiencing ongoing impacts to user access, resource abundance, and resource availability resulting from development infrastructure, activities, and restrictions, and this would only increase should the Secretary revoke the 17(d)(1) withdrawals under any action alternative (see the Increased Lands Open to Development Section in final EIS Section 3.4.1.2.2).

### ***Evaluation of the Availability of Other Lands***

The evaluation for Alternative A regarding the availability of other lands is not applicable because Alternative A does not propose further disposition or use of public lands beyond the status quo.

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

Under Alternative A, revocation of 17(d)(1) withdrawals would not occur. Therefore, there is no need to evaluate other ways to implement the proposed action. Final EIS Section 2.6 discusses alternatives that were considered but eliminated from the analysis and the justifications for elimination of these alternatives.

### ***Findings***

Under Alternative A, the Secretary would retain all 17(d)(1) withdrawals in the five planning areas. Retaining withdrawals would preserve the status quo without regard to PLOs 7899 through 7903. Top filed parcels would not become effective selections under Alternative A, and therefore subsistence management on these lands would not change. Under Alternative A, there would be a continuation of

existing conditions, including ongoing impacts to user access through subsistence management, development activities and infrastructure, security policies, and climate change.

This evaluation concludes that Alternative A would not result in a significant reduction in subsistence uses and would not significantly restrict subsistence uses and needs compared to current conditions. This finding applies to the 138 subsistence analysis communities evaluated in the final EIS. As there would be no environmental impacts should the Secretary select the No Action Alternative, there would be no cumulative impacts under the No Action Alternative either.

## **Evaluation and Findings for Alternative B (Partial Revocation)**

Alternative B would revoke 17(d)(1) withdrawals in part to allow Alaska Statehood Act selections on State of Alaska Priority 1 and 2 top filed lands only where conflicts with natural resources, cultural resources, subsistence resources, recreational resources, or proposed or existing ACECs would be minimized. Federal subsistence priority would no longer apply to approximately 41,000 acres of land that become effective selections upon such revocation and would likely be conveyed within 10 years of the Secretary's decision. All other lands would remain withdrawn under 17(d)(1) under Alternative B.

Because Alternative B is designed to not revoke withdrawals on State top filed lands that have more than minor conflicts with subsistence, direct impacts to subsistence would be lessened compared to the other alternatives; however, it is likely that subsistence activities do occur on lands where withdrawals would be revoked, and therefore impacts would be lessened but not eliminated. Primary impacts on subsistence user access, resource abundance, and resource availability would result from a change in subsistence management (i.e., loss of Federal subsistence priority) and the increase in the potential for development within these lands. How these may affect subsistence are discussed below.

### ***Evaluation of the Effect of Use, Occupancy, or Disposition on Subsistence Use and Need***

Under Alternative B, 433,000 acres of 17(d)(1) withdrawals would be revoked in part, allowing State top filings to fall into place and become selections on lands where there are no other encumbrances. It is assumed that State Priority 1 and 2 lands with top filings that fall into place would be conveyed to the State within 10 years of the record of decision.

To varying levels, a loss of Federal subsistence priority and an increase in development activity or infrastructure associated with revocation of withdrawals and changes from Federal to State management could affect subsistence user access, subsistence resource abundance, and subsistence resource availability. These effects would contribute to cumulative impacts to subsistence, as discussed below regarding the cumulative case. As discussed above, these impacts would be most likely to occur for communities near or with uses of lands in the focused analysis area, which captures lands where there would be a loss of Federal subsistence priority or where there is a higher potential for development.

Under Alternative B, 44 of the 138 focused analysis area communities have subsistence use areas that overlap with 17(d)(1) withdrawals that would lose some acres of Federal subsistence priority (Table C-1). These communities may experience changes in subsistence user access, resource abundance, and resource availability because of revocation of withdrawals and loss of Federal subsistence priority. Primary impacts would be to user access and resource availability, with the potential for indirect impacts to resource abundance. The East Alaska planning area has the most communities with a potential loss of Federal subsistence priority on certain lands (21 communities), followed by the Ring of Fire (13

communities), Bay (6 communities), and Kobuk-Seward Peninsula (4 communities) planning areas. The communities with the greatest acreage of use areas where Federal subsistence priority would be lost (more than 2,000 acres) are in the East Alaska and Kobuk-Seward Peninsula planning areas and include Ferry, Ambler, Kiana, Kotzebue, and Noorvik (see Table C-1). For communities with no subsistence use area data, Table C-2 provides the number of acres losing Federal subsistence priority within 50 miles of the community. These data help characterize the relative magnitude of either direct or indirect effects for these communities. None of the communities in the Kobuk-Seward Peninsula, Bering Sea-Western Interior, Bay, or East Alaska planning areas would experience a loss of Federal subsistence priority within 50 miles of their community. In the Ring of Fire planning area, nine communities would lose some acres of Federal subsistence priority, and in five communities, there would be a loss of 422 acres of Federal subsistence priority within 50 miles.

Data on proximity of the revoked parcels to each community provide another measure of the likelihood of potential impacts, and this analysis is available for all communities. Under Alternative B, three communities would lose Federal subsistence priority in some areas adjacent to (i.e., within 5 miles of) their community: Slana in the East Alaska planning area, King Salmon in the Bay planning area, and Lake Minchumina in the Bering Sea-Western Interior planning area (see final EIS Table 3.14-8). In addition, 11 communities would lose Federal subsistence priority in some lands central to their subsistence use areas (i.e., within 25 miles of the community), primarily in the Ring of Fire planning area, in addition to the East Alaska and Bay planning areas (see final EIS Table 3.14-8). These communities are the most likely to experience impacts from a loss of Federal subsistence priority under Alternative B.

Because hunting regulations in Alaska are generally issued by game management units (GMUs) and subunits, it is also useful to analyze the loss of Federal subsistence priority by GMU. Under Alternative B, no GMU would lose more than 1 percent of lands with Federal subsistence priority. GMU 19 in the Bering Sea-Western Interior planning area would lose the greatest acreage (22,674) and percentage (0.27 percent) of lands with Federal subsistence priority, followed by GMU 20 (East Alaska) and GMU 23 (Kobuk-Seward Peninsula) (see final EIS Table 3.14-9).

Also under Alternative B, 27 of the 138 focused analysis communities have subsistence use areas overlapping lands more likely to be developed, although all but two of these 34 communities would see an overlap of fewer than 10 acres (see Table C-1). These communities may also experience impacts to subsistence user access, resource abundance, and resource availability because of revocation of 17(d)(1) withdrawals and an increase in development activity and infrastructure in those areas. The East Alaska planning area has the only communities with more than 100 acres of subsistence uses where 17(d)(1) withdrawals would be revoked in areas more likely to be developed. Ring of Fire planning area communities have 5 or fewer acres of use areas overlapped by lands more likely to be developed, and the remaining planning areas (Kobuk-Seward Peninsula, Bering Sea-Western Interior, and Bay) have zero acres of use area overlap for any individual community.<sup>1</sup>

Two individual communities have more than 100 acres where 17(d)(1) withdrawals would be revoked in areas more likely to be developed under Alternative B (Table C-1). For communities with no subsistence use area data, Table C-2 provides the number of acres more likely to be developed within 50 miles of the community. No communities in the Kobuk-Seward Peninsula, Bering Sea-Western Interior, or Bay planning areas would see withdrawals revoked on lands more likely to be developed within 50 miles. No

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<sup>1</sup> Though there are withdrawals that would be revoked on lands that meet the RFD scenario's definition of *more likely to be developed* (see EIS Appendix D), these lands would not be developed under Alternative B except where they are conveyed to the State (priority conveyances). This is because 17(d)(1) withdrawals under Alternative B would be *partially* revoked *only* to allow State selection; they would not be revoked in a manner that would allow development on lands that stay in Federal management. Thus, this ANILCA 810 evaluation and the Subsistence section of the EIS report the acres more likely to be developed for Alternative B only where those acres overlap with lands more likely to be conveyed.



Ring of Fire planning area communities would have more than 5 acres of withdrawals revoked that are more likely to be developed within 50 miles of their community.

Under Alternative B, some areas where 17(d)(1) withdrawals would be revoked in areas more likely to be developed are adjacent to (i.e., within 5 miles of) one community (Slana) (see final EIS Table 3.14-8). Some areas where 17(d)(1) withdrawals would be revoked in areas more likely to be developed are central to (i.e., within 25 miles) five communities, comprising four in the East Alaska planning area and one in the Ring of Fire planning area. These communities are the most likely to experience impacts from an increase in development activities and infrastructure under Alternative B.

Table C-3 provides an overall impact ranking for each analysis community based on the quantity of use area acres overlapping lands that would lose Federal subsistence priority due to revocation of 17(d)(1) withdrawals where lands are more likely to be developed (or where the revoked withdrawals are within 50 miles of a community with no use area data) and based on the distance of these lands from each community. For quantity of acres overlapping lands where the 17(d) withdrawals would be revoked under Alternative B, the table applies a ranking of 0 to 3 as follows: 0 (no overlap with use areas), 1 (< 1,000 acres), 2 (between 1,000 and 10,000 acres; or, if no use area data, assumed “yes” based on 50-mile radius from community), and 3 (> 10,000 acres). For the distance analysis, the table applies a ranking of 0 to 3 as follows: 0 (no overlap with use areas), 1 (community > 25 miles from revocations), 2 (community between 5 and 25 miles from revocations), and 3 (community within 5 miles of revocations). Both the acreage and distance rankings are applied to each community for 1) lands where the 17(d)(1) withdrawals would be revoked in areas likely to be developed and 2) lands where the 17(d)(1) withdrawals would be revoked in areas where there would be a loss of Federal subsistence priority. The individual rankings are then summed to provide a final impact ranking of between 0 and 12 (the maximum ranking possible). This provides a measure of the relative impact to individual communities across the five planning areas resulting from implementation of Alternative B.

Communities in the East Alaska and Ring of Fire planning areas have the highest impact rankings and include the communities of Slana, Chistochina, and Mentasta Lake in the East Alaska planning area and Happy Valley, Ninilchik, Point Mackenzie, and Sunrise in the Ring of Fire planning area (see Table C-3).

Potential impacts to user access, resource abundance, and resource availability for potentially affected communities resulting from revocation of withdrawals and a subsequent change to subsistence management or increase in development are discussed in the following sections.

**Table C-1. Percentage of Use Areas Overlapping Lands Where 17(d)(1) Withdrawals Would be Revoked in Areas More Likely to Be Developed or Losing Federal Subsistence Priority, Alternative B**

Analysis Community	Planning Area	Acres of Use Areas Where 17(d) Withdrawals Would be Revoked and where Federal Subsistence Priority Would be Lost*		Acres of Use Areas Where 17(d)(1) Withdrawals Would be Revoked in Areas More Likely to be Developed†	
		No.	%	No.	%
Ambler	Kobuk-Seward Peninsula	2,865	0.01%	0	0.00%
Brevig Mission	Kobuk-Seward Peninsula	0	0.00%	0	0.00%
Buckland	Kobuk-Seward Peninsula	0	0.00%	0	0.00%
Deering	Kobuk-Seward Peninsula	0	0.00%	0	0.00%
Elim	Kobuk-Seward Peninsula	No	No	No	No
Golovin	Kobuk-Seward Peninsula	0	0.00%	0	0.00%



Analysis Community	Planning Area	Acres of Use Areas Where 17(d) Withdrawals Would be Revoked and where Federal Subsistence Priority Would be Lost*		Acres of Use Areas Where 17(d)(1) Withdrawals Would be Revoked in Areas More Likely to be Developed†	
		No.	%	No.	%
Kiana	Kobuk-Seward Peninsula	2,865	0.02%	0	0.00%
Kivalina	Kobuk-Seward Peninsula	0	0.00%	0	0.00%
Kobuk	Kobuk-Seward Peninsula	0	0.00%	0	0.00%
Kotzebue	Kobuk-Seward Peninsula	2,865	0.02%	0	0.00%
Koyuk	Kobuk-Seward Peninsula	No	No	No	No
Noatak	Kobuk-Seward Peninsula	0	0.00%	0	0.00%
Nome	Kobuk-Seward Peninsula	0	0.00%	0	0.00%
Noorvik	Kobuk-Seward Peninsula	2,865	0.02%	0	0.00%
Selawik	Kobuk-Seward Peninsula	0	0.00%	0	0.00%
Shaktolik	Kobuk-Seward Peninsula	No	No	No	No
Shungnak	Kobuk-Seward Peninsula	0	0.00%	0	0.00%
Teller	Kobuk-Seward Peninsula	No	No	No	No
White Mountain	Kobuk-Seward Peninsula	No	No	No	No
Akiachak	Bering Sea-Western Interior	0	0.00%	0	0.00%
Akiak	Bering Sea-Western Interior	N/A	N/A	No	No
Aniak	Bering Sea-Western Interior	0	0.00%	0	0.00%
Anvik	Bering Sea-Western Interior	No	No	N/A	N/A
Chuathbaluk	Bering Sea-Western Interior	No	No	N/A	N/A
Crooked Creek	Bering Sea-Western Interior	No	No	No	No
Galena	Bering Sea-Western Interior	0	0.00%	N/A	N/A
Georgetown	Bering Sea-Western Interior	No	No	No	No
Grayling	Bering Sea-Western Interior	No	No	N/A	N/A
Holy Cross	Bering Sea-Western Interior	No	No	N/A	N/A
Huslia	Bering Sea-Western Interior	0	0.00%	N/A	N/A
Lake Minchumina	Bering Sea-Western Interior	0	0.00%	N/A	N/A
Lower Kalskag	Bering Sea-Western Interior	No	No	N/A	N/A
Marshall	Bering Sea-Western Interior	0	0.00%	N/A	N/A
McGrath	Bering Sea-Western Interior	No	No	N/A	N/A
Napaimute	Bering Sea-Western Interior	No	No	No	No
Nikolai	Bering Sea-Western Interior	0	0.00%	N/A	N/A
Pilot Station	Bering Sea-Western Interior	No	No	N/A	N/A
Pitka's Point	Bering Sea-Western Interior	No	No	N/A	N/A
Red Devil	Bering Sea-Western Interior	No	No	No	No
Russian Mission	Bering Sea-Western Interior	0	0.00%	N/A	N/A
Saint Mary's	Bering Sea-Western Interior	No	No	N/A	N/A
Saint Michael	Bering Sea-Western Interior	No	No	N/A	N/A

Analysis Community	Planning Area	Acres of Use Areas Where 17(d) Withdrawals Would be Revoked and where Federal Subsistence Priority Would be Lost*		Acres of Use Areas Where 17(d)(1) Withdrawals Would be Revoked in Areas More Likely to be Developed†	
		No.	%	No.	%
Sleetmute	Bering Sea-Western Interior	N/A	N/A	No	No
Stebbins	Bering Sea-Western Interior	No	No	N/A	N/A
Stony River	Bering Sea-Western Interior	N/A	N/A	No	No
Takotna	Bering Sea-Western Interior	No	No	No	No
Telida	Bering Sea-Western Interior	0	0.00%	N/A	N/A
Tuluksak	Bering Sea-Western Interior	0	0.00%	0	0.00%
Unalakleet	Bering Sea-Western Interior	0	0.00%	N/A	N/A
Upper Kalskag	Bering Sea-Western Interior	No	No	N/A	N/A
Aleknagik	Bay	0	0.00%	0	0.00%
Clark's Point	Bay	0	0.00%	0	0.00%
Dillingham	Bay	1	0.00%	0	0.00%
Ekuk	Bay	No	No	No	No
Ekwok	Bay	18	0.00%	0	0.00%
Igiugig	Bay	0	0.00%	N/A	N/A
Iliamna	Bay	12	0.00%	0	0.00%
King Salmon	Bay	18	0.00%	0	0.00%
Kokhanok	Bay	0	0.00%	0	0.00%
Koliganek	Bay	0	0.00%	N/A	N/A
Levelock	Bay	0	0.00%	0	0.00%
Manokotak	Bay	0	0.00%	0	0.00%
Naknek	Bay	18	0.00%	0	0.00%
New Stuyahok	Bay	0	0.00%	0	0.00%
Newhalen	Bay	0	0.00%	0	0.00%
Nondalton	Bay	0	0.00%	0	0.00%
Pedro Bay	Bay	0	0.00%	0	0.00%
Platinum	Bay	0	0.00%	0	0.00%
Pope-Vannoy Landing	Bay	No	No	No	No
Port Alsworth	Bay	0	0.00%	0	0.00%
Portage Creek	Bay	0	0.00%	0	0.00%
South Naknek	Bay	18	0.00%	0	0.00%
Togiak	Bay	0	0.00%	0	0.00%
Twin Hills	Bay	0	0.00%	0	0.00%
Beluga	Ring of Fire	0	0.00%	0	0.00%
Chase	Ring of Fire	0	0.00%	0	0.00%
Chickaloon	Ring of Fire	0	0.00%	0	0.00%
Cooper Landing	Ring of Fire	5	0.00%	5	0.00%

Analysis Community	Planning Area	Acres of Use Areas Where 17(d) Withdrawals Would be Revoked and where Federal Subsistence Priority Would be Lost*		Acres of Use Areas Where 17(d)(1) Withdrawals Would be Revoked in Areas More Likely to be Developed†	
		No.	%	No.	%
Crown Point	Ring of Fire	Yes	Yes	N/A	N/A
Egegik	Ring of Fire	0	0.00%	0	0.00%
Fox River	Ring of Fire	Yes	Yes	Yes	Yes
Haines	Ring of Fire	0	0.00%	N/A	N/A
Halibut Cove	Ring of Fire	Yes	Yes	Yes	Yes
Happy Valley	Ring of Fire	Yes	Yes	Yes	Yes
Hope	Ring of Fire	0	0.00%	0	0.00%
Klukwan	Ring of Fire	0	0.00%	N/A	N/A
Moose Pass	Ring of Fire	Yes	Yes	N/A	N/A
Nanwalek	Ring of Fire	0	0.00%	0	0.00%
Nikolaevsk	Ring of Fire	0	0.00%	0	0.00%
Ninilchik	Ring of Fire	1	0.00%	1	0.00%
Petersville	Ring of Fire	N/A	N/A	No	No
Point MacKenzie	Ring of Fire	Yes	Yes	Yes	Yes
Point Possession	Ring of Fire	Yes	Yes	Yes	Yes
Seldovia	Ring of Fire	3	0.00%	3	0.00%
Skwentna	Ring of Fire	0	0.00%	0	0.00%
Sunrise	Ring of Fire	Yes	Yes	Yes	Yes
Susitna	Ring of Fire	0	0.00%	0	0.00%
Susitna North	Ring of Fire	N/A	N/A	No	No
Talkeetna	Ring of Fire	0	0.00%	0	0.00%
Trapper Creek	Ring of Fire	125	0.00%	2	0.00%
Tyonek	Ring of Fire	0	0.00%	0	0.00%
Whittier	Ring of Fire	0	0.00%	0	0.00%
Willow	Ring of Fire	Yes	Yes	Yes	Yes
Anderson	East Alaska	0	0.00%	0	0.00%
Cantwell	East Alaska	124	0.00%	0	0.00%
Chistochina	East Alaska	9	0.00%	9	0.00%
Chitina	East Alaska	9	0.00%	9	0.00%
Copper Center	East Alaska	133	0.00%	133	0.00%
Cordova	East Alaska	No	No	No	No
Delta Junction	East Alaska	No	No	N/A	N/A
Denali Park	East Alaska	74	0.00%	0	0.00%
Dot Lake	East Alaska	9	0.00%	9	0.00%
Dry Creek	East Alaska	0	0.00%	N/A	N/A
Eureka Roadhouse	East Alaska	No	No	No	No

Analysis Community	Planning Area	Acres of Use Areas Where 17(d) Withdrawals Would be Revoked and where Federal Subsistence Priority Would be Lost*		Acres of Use Areas Where 17(d)(1) Withdrawals Would be Revoked in Areas More Likely to be Developed†	
		No.	%	No.	%
Ferry	East Alaska	2,962	0.21%	0	0.00%
Gakona	East Alaska	9	0.00%	9	0.00%
Glacier View	East Alaska	0	0.00%	0	0.00%
Glennallen	East Alaska	133	0.00%	133	0.00%
Gulkana	East Alaska	9	0.00%	9	0.00%
Healy	East Alaska	124	0.00%	0	0.00%
Kenny Lake	East Alaska	9	0.00%	9	0.00%
Lake Louise	East Alaska	0	0.00%	0	0.00%
Mendeltna	East Alaska	9	0.00%	9	0.00%
Mentasta Lake	East Alaska	9	0.00%	9	0.00%
Nabesna	East Alaska	9	0.00%	9	0.00%
Nelchina	East Alaska	9	0.00%	9	0.00%
Northway	East Alaska	9	0.00%	9	0.00%
Paxson	East Alaska	0	0.00%	0	0.00%
Silver Springs	East Alaska	No	No	No	No
Slana	East Alaska	9	0.00%	9	0.00%
Tanacross	East Alaska	9	0.00%	9	0.00%
Tatitlek	East Alaska	0	0.00%	0	0.00%
Tazlina	East Alaska	0	0.00%	0	0.00%
Tetlin	East Alaska	0	0.00%	0	0.00%
Tok	East Alaska	9	0.00%	9	0.00%
Tolsona	East Alaska	0	0.00%	0	0.00%
Tonsina	East Alaska	9	0.00%	9	0.00%
Willow Creek	East Alaska	0	0.00%	0	0.00%

Notes: Communities with yes/no entries do not have available subsistence use areas data. Presence/absence of overlap is based on an assumed 50-mile radius of subsistence use around the community. For communities with no subsistence use area data, see Table C-2 for an analysis of revoked 17(d)(1) withdrawals within 50 miles of these analysis communities.

N/A = Community not within 50 miles/use area not overlapping analysis area.

\* Areas losing Federal subsistence use priority as a result of the decision from the final EIS are State top filings that are not otherwise encumbered that would immediately become effective selections.

† Though there are withdrawals that would be revoked on lands that meet the RFD scenario's definition of more likely to be developed (see EIS Appendix D), these lands would not be developed under Alternative B except where they are conveyed to the State (priority conveyances). This is because 17(d)(1) withdrawals under Alternative B would be *partially* revoked *only* to allow State selection; they would not be revoked in a manner that would allow development on lands that stay in Federal management. Acres reported here are areas more likely to be developed and conveyed.

**Table C-2. Acres Within 50 Miles of Analysis Communities with No Subsistence Use Area Data Where 17(d)(1) Withdrawals Would be Revoked that are More Likely to Be Developed or Would Lose Federal Subsistence Priority, Alternative B**

Analysis Community	Planning Area	Acres within 50 Miles of Community	
		Areas More Likely to be Developed (priority conveyances only)	Areas Losing Federal Subsistence Priority
Elim	Kobuk-Seward Peninsula	0	0
Koyuk	Kobuk-Seward Peninsula	0	0
Shaktolik	Kobuk-Seward Peninsula	0	0
Teller	Kobuk-Seward Peninsula	0	0
White Mountain	Kobuk-Seward Peninsula	0	0
Akiak	Bering Sea-Western Interior	0	0
Anvik	Bering Sea-Western Interior	0	0
Chuathbaluk	Bering Sea-Western Interior	0	0
Crooked Creek	Bering Sea-Western Interior	0	0
Georgetown	Bering Sea-Western Interior	0	0
Grayling	Bering Sea-Western Interior	0	0
Holy Cross	Bering Sea-Western Interior	0	0
Lower Kalskag	Bering Sea-Western Interior	0	0
McGrath	Bering Sea-Western Interior	0	0
Napaimute	Bering Sea-Western Interior	0	0
Pilot Station	Bering Sea-Western Interior	0	0
Pitka's Point	Bering Sea-Western Interior	0	0
Red Devil	Bering Sea-Western Interior	0	0
Saint Mary's	Bering Sea-Western Interior	0	0
Saint Michael	Bering Sea-Western Interior	0	0
Sleetmute	Bering Sea-Western Interior	0	0
Stebbins	Bering Sea-Western Interior	0	0
Stony River	Bering Sea-Western Interior	0	0
Takotna	Bering Sea-Western Interior	0	0
Upper Kalskag	Bering Sea-Western Interior	0	0
Ekuk	Bay	0	0
Pope-Vannoy Landing	Bay	0	0
Crown Point	Ring of Fire	0	191
Fox River	Ring of Fire	5	5
Halibut Cove	Ring of Fire	< 1	1
Happy Valley	Ring of Fire	5	5
Moose Pass	Ring of Fire	0	422
Petersville	Ring of Fire	0	0
Point MacKenzie	Ring of Fire	2	422
Point Possession	Ring of Fire	< 1	422

Analysis Community	Planning Area	Acres within 50 Miles of Community	
		Areas More Likely to be Developed (priority conveyances only)	Areas Losing Federal Subsistence Priority
Sunrise	Ring of Fire	1	422
Susitna North	Ring of Fire	0	0
Willow	Ring of Fire	3	422
Cordova	East Alaska	0	0
Delta Junction	East Alaska	0	0
Eureka Roadhouse	East Alaska	0	0
Silver Springs	East Alaska	0	0

**Table C-3. Overall Community Impact Ranking, ANCSA 17(d)(1) Withdrawals Final EIS, Alternative B**

Analysis Community	Planning Area	Lands More Likely to Be Developed*		Lands Losing Federal Subsistence Priority†		Impact Ranking
		Distance from Community	Acreage (Use Areas or Within 50 Miles)	Distance from Community	Acreage (Use Areas or Within 50 Miles)	
Slana	East Alaska	Adjacent	9	Adjacent	9	8
Chistochina	East Alaska	Central	9	Central	9	6
Mentasta Lake	East Alaska	Central	9	Central	9	6
Happy Valley	Ring of Fire	Peripheral	5	Central	5	5
Ninilchik	Ring of Fire	Peripheral	1	Central	1	5
Point MacKenzie	Ring of Fire	Peripheral	2	Central	422	5
Sunrise	Ring of Fire	Peripheral	1	Central	422	5
King Salmon	Bay	None	0	Adjacent	18	4
Chitina	East Alaska	Peripheral	9	Peripheral	9	4
Copper Center	East Alaska	Peripheral	133	Peripheral	133	4
Dot Lake	East Alaska	Peripheral	9	Peripheral	9	4
Glennallen	East Alaska	Peripheral	133	Peripheral	133	4
Gulkana	East Alaska	Peripheral	9	Peripheral	9	4
Kenny Lake	East Alaska	Peripheral	9	Peripheral	9	4
Mendeltna	East Alaska	Peripheral	9	Peripheral	9	4
Nabesna	East Alaska	Peripheral	9	Peripheral	9	4
Nelchina	East Alaska	Peripheral	9	Peripheral	9	4
Northway	East Alaska	Peripheral	9	Peripheral	9	4
Tanacross	East Alaska	Peripheral	9	Peripheral	9	4
Tok	East Alaska	Peripheral	9	Peripheral	9	4
Tonsina	East Alaska	Peripheral	9	Peripheral	9	4
Cooper Landing	Ring of Fire	Peripheral	5	Peripheral	5	4

Analysis Community	Planning Area	Lands More Likely to Be Developed*		Lands Losing Federal Subsistence Priority†		Impact Ranking
		Distance from Community	Acreage (Use Areas or Within 50 Miles)	Distance from Community	Acreage (Use Areas or Within 50 Miles)	
Fox River	Ring of Fire	Peripheral	5	Peripheral	5	4
Halibut Cove	Ring of Fire	Peripheral	1	Peripheral	1	4
Point Possession	Ring of Fire	Peripheral	1	Peripheral	422	4
Seldovia	Ring of Fire	Peripheral	3	Peripheral	3	4
Trapper Creek	Ring of Fire	Peripheral	2	Peripheral	125	4
Willow	Ring of Fire	Peripheral	3	Peripheral	422	4
Naknek	Bay	None	0	Central	18	3
South Naknek	Bay	None	0	Central	18	3
Lake Minchumina	Bering Sea-Western Interior	None	0	Adjacent	0	3
Ambler	Kobuk-Seward Peninsula	None	0	Peripheral	2,865	3
Kiana	Kobuk-Seward Peninsula	None	0	Peripheral	2,865	3
Kotzebue	Kobuk-Seward Peninsula	None	0	Peripheral	2,865	3
Noorvik	Kobuk-Seward Peninsula	None	0	Peripheral	2,865	3
Dillingham	Bay	None	0	Peripheral	1	2
Ekwok	Bay	None	0	Peripheral	18	2
Iliamna	Bay	None	0	Peripheral	12	2
Anderson	East Alaska	None	0	Peripheral	0	2
Cantwell	East Alaska	None	0	Peripheral	124	2
Denali Park	East Alaska	None	0	Peripheral	74	2
Eureka Roadhouse	East Alaska	Peripheral	1	None	0	2
Ferry	East Alaska	None	0	None	2,962	2
Gakona	East Alaska	None	9	None	9	2
Healy	East Alaska	None	0	Peripheral	124	2
Tazlina	East Alaska	None	0	None	0	2
Crown Point	Ring of Fire	None	0	Peripheral	191	2
Haines	Ring of Fire	None	0	Central	0	2
Hope	Ring of Fire	None	0	Central	0	2
Klukwan	Ring of Fire	None	0	Central	0	2
Moose Pass	Ring of Fire	None	0	Peripheral	422	2
Nanwalek	Ring of Fire	None	0	Peripheral	0	2
Nikolaevsk	Ring of Fire	None	0	Peripheral	0	2
Tyonek	Ring of Fire	None	0	Peripheral	<1	2
Whittier	Ring of Fire	Peripheral	0	Peripheral	0	2
Levelock	Bay	None	0	Peripheral	0	1
Portage Creek	Bay	None	0	Peripheral	0	1
Telida	Bering Sea-Western Interior	None	0	Peripheral	0	1

Analysis Community	Planning Area	Lands More Likely to Be Developed*		Lands Losing Federal Subsistence Priority†		Impact Ranking
		Distance from Community	Acreage (Use Areas or Within 50 Miles)	Distance from Community	Acreage (Use Areas or Within 50 Miles)	
Noatak	Kobuk-Seward Peninsula	None	0	Peripheral	0	1
Egegik	Ring of Fire	None	0	Peripheral	0	1
Susitna	Ring of Fire	None	0	Peripheral	0	1
Aleknagik	Bay	None	0	None	0	0
Clark's Point	Bay	None	0	None	0	0
Ekuk	Bay	None	0	None	0	0
Igiugig	Bay	None	0	None	0	0
Kokhanok	Bay	None	0	None	0	0
Koliganek	Bay	None	0	None	0	0
Manokotak	Bay	None	0	None	0	0
New Stuyahok	Bay	None	0	None	0	0
Newhalen	Bay	None	0	None	0	0
Nondalton	Bay	None	0	None	0	0
Pedro Bay	Bay	None	0	None	0	0
Platinum	Bay	None	0	None	0	0
Pope-Vannoy Landing	Bay	None	0	None	0	0
Port Alsworth	Bay	None	0	None	0	0
Togiak	Bay	None	0	None	0	0
Twin Hills	Bay	None	0	None	0	0
Akiachak	Bering Sea-Western Interior	None	0	None	0	0
Akiak	Bering Sea-Western Interior	None	0	None	0	0
Aniak	Bering Sea-Western Interior	None	0	None	0	0
Anvik	Bering Sea-Western Interior	None	0	None	0	0
Chuathbaluk	Bering Sea-Western Interior	None	0	None	0	0
Crooked Creek	Bering Sea-Western Interior	None	0	None	0	0
Galena	Bering Sea-Western Interior	None	0	None	0	0
Georgetown	Bering Sea-Western Interior	None	0	None	0	0
Grayling	Bering Sea-Western Interior	None	0	None	0	0
Holy Cross	Bering Sea-Western Interior	None	0	None	0	0
Huslia	Bering Sea-Western Interior	None	0	None	0	0
Lower Kalskag	Bering Sea-Western Interior	None	0	None	0	0
Marshall	Bering Sea-Western Interior	None	0	None	0	0
McGrath	Bering Sea-Western Interior	None	0	None	0	0
Napaimute	Bering Sea-Western Interior	None	0	None	0	0
Nikolai	Bering Sea-Western Interior	None	0	None	0	0



Analysis Community	Planning Area	Lands More Likely to Be Developed*		Lands Losing Federal Subsistence Priority†		Impact Ranking
		Distance from Community	Acreage (Use Areas or Within 50 Miles)	Distance from Community	Acreage (Use Areas or Within 50 Miles)	
Pilot Station	Bering Sea-Western Interior	None	0	None	0	0
Pitka's Point	Bering Sea-Western Interior	None	0	None	0	0
Red Devil	Bering Sea-Western Interior	None	0	None	0	0
Russian Mission	Bering Sea-Western Interior	None	0	None	0	0
Saint Mary's	Bering Sea-Western Interior	None	0	None	0	0
Saint Michael	Bering Sea-Western Interior	None	0	None	0	0
Sleetmute	Bering Sea-Western Interior	None	0	None	0	0
Stebbins	Bering Sea-Western Interior	None	0	None	0	0
Stony River	Bering Sea-Western Interior	None	0	None	0	0
Takotna	Bering Sea-Western Interior	None	0	None	0	0
Tuluksak	Bering Sea-Western Interior	None	0	None	0	0
Unalakleet	Bering Sea-Western Interior	None	0	None	0	0
Upper Kalskag	Bering Sea-Western Interior	None	0	None	0	0
Cordova	East Alaska	None	0	None	0	0
Delta Junction	East Alaska	None	0	None	0	0
Dry Creek	East Alaska	None	0	None	0	0
Glacier View	East Alaska	None	0	None	0	0
Lake Louise	East Alaska	None	0	None	0	0
Paxson	East Alaska	None	0	None	0	0
Silver Springs	East Alaska	None	0	None	0	0
Tatitlek	East Alaska	None	0	None	0	0
Tetlin	East Alaska	None	0	None	0	0
Tolsona	East Alaska	None	0	None	0	0
Willow Creek	East Alaska	None	0	None	0	0
Brevig Mission	Kobuk-Seward Peninsula	None	0	None	0	0
Buckland	Kobuk-Seward Peninsula	None	0	None	0	0
Deering	Kobuk-Seward Peninsula	None	0	None	0	0
Elim	Kobuk-Seward Peninsula	None	0	None	0	0
Golovin	Kobuk-Seward Peninsula	None	0	None	0	0
Kivalina	Kobuk-Seward Peninsula	None	0	None	0	0
Kobuk	Kobuk-Seward Peninsula	None	0	None	0	0
Koyuk	Kobuk-Seward Peninsula	None	0	None	0	0
Nome	Kobuk-Seward Peninsula	None	0	None	0	0
Selawik	Kobuk-Seward Peninsula	None	0	None	0	0
Shaktolik	Kobuk-Seward Peninsula	None	0	None	0	0
Shungnak	Kobuk-Seward Peninsula	None	0	None	0	0

Analysis Community	Planning Area	Lands More Likely to Be Developed*		Lands Losing Federal Subsistence Priority†		Impact Ranking
		Distance from Community	Acreage (Use Areas or Within 50 Miles)	Distance from Community	Acreage (Use Areas or Within 50 Miles)	
Teller	Kobuk-Seward Peninsula	None	0	None	0	0
White Mountain	Kobuk-Seward Peninsula	None	0	None	0	0
Beluga	Ring of Fire	None	0	None	0	0
Chase	Ring of Fire	None	0	None	0	0
Chickaloon	Ring of Fire	None	0	None	0	0
Petersville	Ring of Fire	None	0	None	0	0
Skwentna	Ring of Fire	None	0	None	0	0
Susitna North	Ring of Fire	None	0	None	0	0
Talkeetna	Ring of Fire	None	0	None	0	0

Notes: Distance from Community categorized as follows:

None (no color) = No subsistence use area overlap with lands where 17(d)(1) withdrawals would be revoked, or (if use area data not available), community more than 50 miles from where 17(d)(1) withdrawals would be revoked.

Peripheral (yellow) = Community more than 25 miles from where 17(d)(1) withdrawals would be revoked.

Central (orange) = Community between 5 and 25 miles from where 17(d)(1) withdrawals would be revoked.

Adjacent (red) = Community within 5 miles of where 17(d)(1) withdrawals would be revoked.

Acreage categorized as follows:

0 = None

Low (yellow) = < 1,000 acres overlapping areas losing Federal subsistence priority or areas more likely to be developed.

Medium (orange) = between 1,000 and 10,000 acres overlapping areas losing Federal subsistence priority or areas more likely to be developed.

High (red) = > 10,000 acres overlapping areas losing Federal subsistence priority or areas more likely to be developed.

Impact ranking (calculated by summing the values for each community) categorized as follows:

None (no color) = zero

Peripheral/fewer than 1,000 acres (yellow) = 1

Central/between 1,000 and 10,000 acres/"yes" (orange) = 2

Adjacent/more than 10,000 acres (red) = 3

\* Though there are withdrawals that would be revoked on lands that meet the RFD scenario's definition of more likely to be developed (see EIS Appendix D), these lands would not be developed under Alternative B except where they are conveyed to the State (priority conveyances). This is because 17(d)(1) withdrawals under Alternative B would be *partially* revoked *only* to allow State selection; they would not be revoked in a manner that would allow development on lands that stay in Federal management. Acres reported here are areas more likely to be developed and conveyed.

† Areas losing Federal subsistence use priority following any Secretarial revocation of 17(d)(1) withdrawals are State top filings that are not otherwise encumbered that would immediately become effective selections.

## SUBSISTENCE USER ACCESS

Data on subsistence management, subsistence use areas, and the timing of subsistence activities, all of which could be affected through revocation of 17(d)(1) withdrawals, are provided in final EIS Section 3.14, Subsistence, and in final EIS Appendix G, Subsistence Technical Appendix. These data are relevant to understanding how changes in user access could affect individual communities.

## Loss of Federal Subsistence Priority

As discussed above, under Alternative B, revocation of 17(d)(1) withdrawals on lands with State top filings and no ANC selections would allow State top filings to fall into place and become selections. On these lands, rural residents would lose Federal subsistence priority and instead be subject to State hunting regulations. However, not all revocations of 17(d)(1) withdrawals on top filed lands would result in the loss of Federal subsistence priority. A change from Federal to ANC management on lands where the State top filed over ANC selections would not affect subsistence management because ANC selections are already not available for Federal subsistence priority.

On a state-wide basis, revocation of 17(d)(1) withdrawals would not lead to any more or fewer acres removed from the Federal subsistence priority management in the long term because the State's entitlement under the Alaska Statehood Act is finite, but any revocation of these withdrawals would shift those impacts to communities that would not have been impacted but for the revocation. In the short term, revocation of the 17(d)(1) withdrawals would lead to an increase in lands removed from Federal subsistence priority management because it would add to the State-selected land, but it would not automatically cause the reduction of any overselections. This effect would be temporary, however, as the State either relinquishes its overselections or the BLM rejects the State's overselections pursuant to ANILCA 906(f). However, until these lands are relinquished by the State or rejected by the BLM, Federal subsistence priority would be lost. Despite this being a temporary effect, even a temporary loss of Federal subsistence priority could result in long-term changes to subsistence harvesting patterns, as subsistence users often adapt quickly to changes to access.

Once conveyed to the State, the BLM cannot guarantee continued subsistence access under ANILCA. Although the State usually provides for generally allowed uses, which can occur without a permit on most lands, subsistence access is not guaranteed like it is under Federal regulations. For example, in an area outside of the decision area, State law prohibits use of off-highway vehicles within 5 miles of the Dalton Highway, which if the land were conveyed to the State would block access for subsistence users to the surrounding Federal lands. Therefore, conveyances, even to the State, can restrict or block subsistence access to adjacent lands that remain under Federal management.

On 17(d)(1) withdrawals with no ANC or State selections, subsistence is Federally managed, and priority is given to subsistence uses by rural residents as compared to other uses (e.g., non-rural uses and sport hunting). The Federal Subsistence Board identifies communities with customary and traditional (C&T) uses of certain species (e.g., the caribou's western Arctic herd); where there is such a determination, only those communities have a subsistence priority in the relevant area (see final EIS Section 3.14.1.1.1, Subsistence Management). In addition, the Federal Subsistence Board oversees management of subsistence hunting and fishing on Federal public lands and makes decisions based on recommendations from regional advisory councils, which include representation by rural residents. In contrast, the State's regulations allow all Alaska residents, regardless of rural or non-rural residency, to qualify as subsistence users, and there is no subsistence priority for rural residents.

Therefore, how lands are managed for subsistence can have substantial impacts for rural residents who have a higher reliance on wild resources than non-rural Alaska residents. In areas where rural and urban residents have equal subsistence priority (i.e., State-managed lands), particularly in areas popular to outside (i.e., non-rural) hunters, rural residents may experience greater competition for subsistence resources. In circumstances where resource populations are down (e.g., recent decrease in the size of the Western Arctic, Nelchina, and Mulchatna herds), differences in subsistence management can affect harvester success. Guettabi et al. (2016) found a correlation between increased numbers of moose hunters within a GMU and decreased moose harvests for rural households within those GMUs.

Although in most cases non-rural residents can hunt on Federal lands according to State regulations, in certain circumstances, Federal regulations supersede State regulations. This is often in response to declines in resource populations. For example, on Federal lands in the Kanuti Controlled Use Area in GMU 24B, taking of moose is only permitted by Federally qualified subsistence users in GMU 24, Koyukuk, and Galena (Alaska Department of Fish and Game 2022; Federal Subsistence Management Program 2020). In GMU 23 along the Noatak River, caribou hunting is closed to non-rural users (Federal Subsistence Management Program 2020). In recent years, there have been similar closures for salmon harvesting along the Kuskokwim River.

In addition to hunting closures for non-rural residents, rural residents sometimes benefit from Federal subsistence priority through expanded or earlier hunting seasons, which increase their access to hunting grounds. For example, in GMU 13, the moose hunting season for Federally qualified subsistence users on Federal lands begins on August 1. According to State regulations, the earliest moose hunt, which is available only by application, is August 20, and all other seasons begin September 1 (Alaska Department of Fish and Game 2022; Federal Subsistence Management Program 2020). The earlier moose hunting season for rural residents provides an advantage to these residents so that they can begin hunting over 2 weeks before non-rural hunters.

In the examples above, a loss of Federal subsistence priority on certain lands would reduce access and remove advantages for rural residents, resulting in increased competition with non-rural residents and reduced harvesting success. In some cases, the reduction in lands with Federal subsistence priority could result in local residents traveling farther to access lands where Federal subsistence priority remains.

The East Alaska planning area would see the greatest number of communities and lands affected by a loss of Federal subsistence priority. The East Alaska planning area could be particularly vulnerable to a loss of Federal subsistence priority because much of the planning area is roaded and connected to larger urban hubs (Anchorage and Fairbanks), the area is more densely populated, and competition among rural users and between rural and nonrural users is high. As an example of the high use of the area, the Glennallen Field Office, located in the East Alaska planning area, issues approximately 65 percent of all Federal subsistence permits in Alaska, and the Wrangell-St. Elias National Park and Preserve, located in the same planning area, issues an additional 12 percent of all Federal subsistence permits. Other planning areas are less likely to require Federal subsistence permits because they have fewer users overall. Between 2010 and 2022, permits for moose and caribou hunting in GMU 13 were issued primarily to residents of Delta Junction, Copper Center, Glennallen, Gakona, Kenny Lake, Tazlina, Slana, Cantwell, and Chickaloon (see final EIS Table 3.14-11).

## **Increased Lands Open to Development**

Under Alternative B, revocation of 17(d)(1) withdrawals on unencumbered lands with State top filings would allow State top filings to fall into place and become effective selections. It is assumed the selections could then be conveyed to the State within 10 years of the Secretary's decision. Once these selections have been conveyed, the State could authorize rights-of-way (ROWs), mineral exploration/development, and other development projects, which may or may not have otherwise been approved under BLM management. Under Alternative B, development would be most likely to impact the 34 communities with subsistence use areas overlapping lands more likely to be developed.

Development would affect user access by introducing infrastructure and human activity into previously undeveloped areas, and by imposing security and land use restrictions on local residents. Legal or regulatory barriers would reduce user access to traditional use areas. For example, hunters would be subject to restrictions regarding discharging firearms near pipelines, roads, buildings, and other facilities. Depending on the restricted distance at which a firearm can be discharged, subsistence users could have difficulty hunting in certain areas, particularly where pipelines or roads parallel the coastal or riverine areas. Miscommunication surrounding rules and restrictions around development and unpleasant interactions with oil field, mine, and other workers may dissuade residents from accessing development areas.

Infrastructure associated with mineral (including oil and gas) exploration, development, and production, in addition to other non-oil and gas infrastructure projects, could include future gravel and ice roads, pipelines, gravel pads, bridges, gravel mines, and runways. Infrastructure could cause direct loss of subsistence use areas for analysis communities in the five planning areas. Loss of subsistence use areas

could result in 1) residents having to travel farther to access more suitable hunting areas and 2) the loss of opportunities to pass on knowledge regarding particular hunting and harvesting areas to the next generation.

Development of roads, pipelines, and other linear infrastructures can present barriers (either perceived or actual) for subsistence users. Infrastructure such as roads, bridges, and pipelines can act as physical obstructions to subsistence users, particularly if they are not designed to account for overland travel by snowmachine or four-wheeler, or if bridges and causeways obstruct boat travel along rivers or coastlines. For example, hunters traveling overland by snowmachine may not be able to cross over high roads, particularly when pulling a heavy load. In addition, hunters may have to divert around infrastructure (e.g., construction material sites) or mine pits for safety reasons. Bridges can affect boat travel along smaller waterways or in unusually high water conditions. In most regions, subsistence users may travel along coastal areas or rivers by boat to hunt caribou, moose, and other resources. The existence of infrastructure in these areas may affect these hunting activities if hunters are not able to shoot inland due to the presence of roads and pipelines and concerns about safety. Similarly, in areas where residents use roads to access hunting areas, pipelines and other infrastructure placed along roadways can obstruct offroad travel and hunting.

In some cases, roads that are built in support of development projects may be open to local residents to use, and in these cases, roads can provide a benefit to subsistence users by increasing access to new or traditional use areas. Roads can be particularly beneficial to residents with no boats, snowmachines, or four-wheelers. In addition, roads can facilitate access into traditional harvesting areas at times when access is difficult, such as during spring breakup when rivers are not yet navigable and snow conditions are poor. Potential negative effects on user access associated with increased road use include increased competition within and between rural communities, and a shift in use toward road-accessible areas and away from other traditional hunting and harvesting areas. Roads connecting rural communities to one another can increase competition between communities by concentrating hunters along corridors and affecting community use area patterns. In addition, reduced use of traditional areas due to a shift toward road-based hunting can limit opportunities to pass on knowledge to younger generations regarding traditional places and their associated uses.

If roads are constructed but are closed to local access for security or other reasons, there would be larger direct effects on subsistence user access. If residents are physically unable to cross over roads or under pipelines, or if they are restricted to crossing in designated crossing areas only, they may have to travel farther to access harvesting areas. Although road access for local subsistence users may be restricted, it is possible that both residents and nonlocal hunters would use cleared ROWs as travel corridors to access hunting areas, thus increasing local competition along the corridor.

Roads built from the main transportation system into previously roadless areas would have the greatest impact on local communities, subsistence economies, and culture. Local communities and subsistence users would experience both an increase in access in addition to increased competition from outside residents. Studies comparing road-connected to non-road-connected communities show that road-connected communities have substantially lower subsistence harvests than non-road-connected communities (Guettabi et al. 2016; Magdanz et al. 2016).

Although actual infrastructure would likely be limited to a small proportion of communities' overall subsistence use areas, areas excluded from subsistence use would likely be greater than the footprint of a development project due to security and firearm restrictions or general avoidance by hunters. Subsistence users may also avoid harvesting resources in certain areas or along waterways downstream from development due to concerns about contamination.

## **SUBSISTENCE RESOURCE ABUNDANCE**

Data on subsistence harvest amounts and participation levels, which could be affected through revocation of 17(d)(1) withdrawals, are provided in final EIS Section 3.14.2.1, Affected Environment, and in final EIS Appendix G, Subsistence Technical Appendix. These data are relevant to understanding how changes in resource abundance could affect individual communities.

### **Loss of Federal Subsistence Priority**

A loss of Federal subsistence priority could impact resource abundance for subsistence users if there is an increase in the number of hunters taking resources or an increase in harvests, particularly where resource populations are already vulnerable and where Federal regulations prohibit hunting by non-rural residents. For example, in GMU 23 along the Noatak River, caribou hunting is closed to non-rural users (Federal Subsistence Management Program 2022). In other cases, the Federal Subsistence Board has approved special actions to temporarily close Federal lands to hunting and fishing (e.g., Kuskokwim River salmon fishery) by non-Federally qualified users. Such restrictions are meant to address declines in resource populations and to allow for the continuation of subsistence uses pursuant to ANILCA 815. If these lands changed from Federal to State management, this priority for rural residents would no longer exist, and local residents would likely see an increase in outside hunters on certain lands, thus increasing pressure on resource populations. Impacts on resource abundance would be more likely to occur if revocation of 17(d)(1) withdrawals results in loss of Federal subsistence priority over a large area or in a key habitat for a specific resource.

For some herds, hunting closures apply to rural and non-rural residents alike. In these areas, hunting closures for one species (e.g., caribou) could result in increased pressure on other resources (e.g., moose or bear) in that GMU, and loss of Federal subsistence priority on lands in that GMU could compound the impacts on rural subsistence users. Currently, there are full hunting closures on the Nelchina (GMUs 11, 12, and 13) and Mulchatna (GMUs 9, 17, 18, and 19) herds. GMU 13 may be particularly vulnerable to impacts from a loss of Federal subsistence priority given the recent substantial decline of the Nelchina Caribou herd, the high number of lands that could lose Federal subsistence priority in the GMU, and the high levels of competition within GMU 13 due to its road connectedness. As discussed in EIS Section 3.14.1.2.3, Alternative B, the Glennallen Field Office, located in GMU 13 in the East Alaska planning area, issues approximately 65 percent of all Federal subsistence permits in Alaska. In 2023, the Federal Subsistence Board approved Temporary Wildlife Special Action WSA23-04 to close Federal lands to caribou hunting by all users in GMUs 11, 12, and 13 for the 2023–2024 season, with exceptions for traditional religious ceremonies and cultural or educational programs. The Alaska Department of Fish and Game also closed the Nelchina caribou hunt for the 2023–2024 state hunting seasons. The reduced opportunity for caribou hunting may increase hunting pressure on moose within GMU 13, thus reducing their abundance, and a loss of Federal subsistence priority would compound these changes by reducing local residents' hunting opportunities in those areas.

In addition to declining caribou populations and subsequent hunting closures shifting hunting pressure on moose within GMU 13, a decline in caribou could result in changes in predator-prey dynamics. This could result in higher predation on moose in the short term as wolves and bears shift to moose, but could also result in a decline in predator populations as described in final EIS Section 3.15.2.1, Terrestrial Mammals, Affected Environment, which could benefit caribou.

### **Increased Lands Open to Development**

The analysis communities all rely on harvests of subsistence resources, including large land mammals, marine mammals, salmon, non-salmon fish, furbearers and small land mammals, migratory birds, upland

game birds, marine invertebrates, and vegetation. Levels of resource use, in addition to resource focus, vary by community and region and depend on community location, cultural preferences, and the availability of different resources within a community's subsistence use area. In terms of contribution toward the total subsistence harvest, large land mammals, salmon, and non-salmon fish are typically among the top harvested resource categories across all planning areas (see the Harvest Data section in final EIS Appendix G, Subsistence Technical Appendix). Household participation in subsistence activities is high across all planning areas, with over half of households in all planning areas participating in subsistence harvesting of non-salmon fish, large land mammals, and vegetation (see the Harvest Data section in final EIS Appendix G, Subsistence Technical Appendix).

As discussed in final EIS Section 3.15, Terrestrial Mammals; Section 3.7, Fish and Aquatic Species; and Section 3.2, Birds and Special Status Bird Species, mineral and other development in areas where the 17(d)(1) withdrawal would be revoked under Alternative B could cause individual mortalities for caribou, moose, fish, and birds, although the potential for population-level effects under Alternative B is less likely than under the other alternatives. Localized changes in resource numbers could affect resource abundance for subsistence users. Although changes to resource abundance would be most likely to affect the 27 communities with some subsistence use areas overlapping lands more likely to be developed under Alternative B, impacts to migratory resources such as caribou and fish could extend outside areas where the 17(d)(1) withdrawals would be revoked to subsistence users who harvest these resources elsewhere. Development would be most likely to have population-level effects if it displaces resources from key habitat areas or has a substantial risk of large-scale contamination events (e.g., mining or oil development). Alternative B would revoke the 17(d)(1) withdrawals over large areas that overlap the range of the Nelchina, Western Arctic, and Denali caribou herds, including the migratory and winter range of the Western Arctic herd. Alternative B would retain 17(d)(1) withdrawals in high-value watersheds for fisheries and water quality, thus reducing the likelihood of population-level impacts to fish.

Development and other infrastructure (e.g., mines, drill sites, roads, ROWs, pipelines, and buildings) and activities would result in the removal, disturbance, or degradation of habitat for resources such as terrestrial mammals (caribou, moose), waterfowl, and fish, in addition to causing direct mortality. Construction activities that could affect resource abundance through removal or disturbance of habitat include blasting/mining, operation of construction equipment, excavation, placement of gravel, placement of ice roads and ice pads, construction noise, human presence, water withdrawal, installation of bridges and culverts, and air and ground traffic. Operation activities that could affect resource abundance would include transport of materials, accidental release of contaminants, vehicle and aircraft collisions, and ongoing loss of habitat due to the presence of infrastructure and human activity.

Habitat loss and disturbance can reduce calving rates and survival for terrestrial mammals, thus reducing their overall abundance. Caribou can be particularly sensitive to disturbances to calving grounds. In recent years, several herds within the five planning areas have experienced dramatic declines in herd size; these include the Western Arctic herd, Mulchatna herd, and Nelchina herd (see final EIS Section 3.15, Terrestrial Mammals and Special Status Species). The 17(d)(1) withdrawals south of Point Lay are within the calving, post-calving, and wintering range of the Western Arctic herd, and parcels in the eastern range of the Mulchatna herd have been used for calving and are frequently used in summer (see final EIS Section 3.15.1 for the caribou analysis). Moose are relatively widespread across the planning areas. A decrease in forage could affect caribou herd survival rates, particularly during winter when access to foraging grounds is more difficult. Dall sheep would also be vulnerable to habitat loss and fragmentation as they have already experienced habitat fragmentation and impacts from climate change and in some regions have experienced dramatic declines in population (see final EIS Section 3.15.4 for the other terrestrial mammal analysis). Mining could result in accidental discharges of chemicals and heavy metals, as well as dust deposition, which could affect terrestrial mammal (e.g., caribou, moose) health (and the

health of humans who consume these resources) and displace these animals from foraging habitat (see final EIS Section 3.15, Terrestrial Mammals). Increased exposure to aircraft disturbance may also affect body condition through increased energy expenditures (e.g., more time fleeing versus feeding or resting) (Sullender 2017). Furthermore, increased energy expenditures may result in reduced foraging rates and, ultimately, decreased mating success/pregnancy rates.

Certain activities such as pile driving, construction sedimentation, and stream diversions may alter or degrade fish habitat, thereby reducing egg survival downstream. The presence of roads and ROWs in addition to buildings, culverts, bridges, and gravel infrastructure could alter and degrade fish habitat both upstream and downstream from development projects, which could affect fish abundance for subsistence users in certain waterways. Waterfowl nesting and feeding near development infrastructure or mine and gravel sites may also experience direct habitat loss or may ingest chemicals associated with construction activities and dust deposition.

In addition to impacts associated with habitat disturbance, fragmentation, and degradation, development projects may also result in direct mortality of individual animals. Terrestrial mammals such as caribou and moose may experience direct mortality through vehicle strikes, particularly if they use roadways or ROWs as movement corridors or for insect relief. Individual animals may become ill through ingestion of chemicals used during development construction or operation. Clearing and grading along roads and ROWs could cause an increase in wildlife mortality (e.g., due to destruction of dens or clearing of habitat), particularly for resources such as small land mammals. If development activities occur within key habitat areas, such as calving grounds, then they would be more likely to affect herd survival (see final EIS Section 3.15, Terrestrial Mammals).

Fish could experience direct mortality through construction activities (e.g., driving of bridge piles), through water withdrawals (e.g., for the construction of ice roads or use as a water source), or through release of contaminants (e.g., oil spills). Water withdrawal may kill individual fish but would likely not have population-level effects. Mining could result in degradation of water quality through release of chemicals, heavy metals, and fugitive dust; increased sedimentation and changes in water quality could affect fish spawning grounds and egg survival (see final EIS Section 3.7, Fish and Aquatic Species). Waterfowl could experience direct mortality through aircraft collisions or collisions with buildings. Accidental discharges of chemicals and heavy metals, in addition to fugitive dust, could result in habitat loss and degradation for waterfowl (see final EIS Section 3.2, Birds and Special Status Bird Species). Although unlikely, large spills on land or in waterways could kill large numbers of waterfowl and fish. Finally, direct loss of vegetation resulting from gravel mining, gravel placement, infrastructure placement (e.g., roads, ice pads), accidental spills or discharges, and fugitive dust from roadways would cause decreased local abundance of vegetation (e.g., berries, wild greens) (see final EIS Section 3.16, Vegetation, Wetlands, and Special Status Plants), a key subsistence resource for many communities, near development projects.

Finally, if development and infrastructure projects result in an increase in local population (e.g., project workers move to the development region, or construction of roads results in more people moving to an area due to increased access), then harvesting pressure on local resources could increase, affecting resource populations.

Impacts to resource abundance would be more likely for already vulnerable resource populations. In the case of caribou, vulnerable populations include the Western Arctic herd, Nelchina herd, and Mulchatna herd. Western Alaska salmon stocks have also been on the decline in recent years, particularly in the Yukon and Kuskokwim rivers (see final EIS Section 3.7.2 for the fish and aquatic invertebrate populations analysis).



## **SUBSISTENCE RESOURCE AVAILABILITY**

Data on subsistence harvest amounts and participation levels, which could be affected through revocation of 17(d)(1) withdrawals, are provided in final EIS Section 3.14.2.1, Affected Environment, and in final EIS Appendix G, Subsistence Technical Appendix. These data are relevant to understanding how changes in resource availability could affect individual communities.

### **Loss of Federal Subsistence Priority**

Similar to the impacts on resource abundance described above, a loss of Federal subsistence priority could increase the number of hunters taking resources in addition to the number of resources being taken, thus increasing competition and reducing resource availability to local rural users. This would occur primarily in areas where resources are scarce, populations are vulnerable, and Federal regulations currently prohibit hunting of those resources by non-rural residents. These impacts would be greater in areas where competition for resources is already high, such as in GMU 13 that is road-connected, requires and issues a majority of Federal subsistence permits in the state, and has recently closed hunting of the Nelchina herd due to population declines (see final EIS Section 3.14.2.2.1).

### **Increased Lands Open to Development**

As discussed above in the Subsistence Resource Abundance section, across all five planning areas, large land mammals, salmon, and non-salmon fish are typically among the top harvested resource categories (see the Harvest Data section in final EIS Appendix G, Subsistence Technical Appendix). In addition, on average, over half of households in the planning areas participate in subsistence harvesting of non-salmon fish, large land mammals, and vegetation (see the Harvest Data section in final EIS Appendix G, Subsistence Technical Appendix). Therefore, impacts to the migration, distribution, or behavior of these resources could have substantial impacts on their availability to the analysis communities.

Revocation of 17(d)(1) withdrawals under Alternative B would result in State top filings becoming effective selections. Once these selections have been conveyed, the State could authorize ROWs, mineral exploration/development, and other development projects. These projects could result in new infrastructure (e.g., roads, pipelines, bridges, culverts, buildings, mine pits) and an increase in activity to support development, including ground and air traffic and construction activity and noise, and an increase in human presence.

Potential impacts on resource availability resulting from the abovementioned development infrastructure and activities include the displacement of resources from areas of development activity, diversion of resources from their usual migratory routes (e.g., caribou), contamination, and skittish behavior, all of which may result in reduced harvest opportunities. This general disturbance of wildlife could result in subsistence resources being unavailable at the times and places that subsistence users are accustomed to finding them. Impacts to resource availability would be most likely for the 27 analysis communities with some subsistence use areas overlapping lands more likely to be developed under Alternative B (see Table C-1). If development causes large-scale changes in migratory patterns for resources such as caribou and fish, then more communities could be affected. The magnitude of impacts from development, including the number of communities impacted, would depend on the types and location of development projects that occur.

Below are resource-specific discussions of potential development-related impacts to resource availability for the communities most likely to be affected. Impacts to the availability of marine mammals and marine invertebrates directly resulting from revocation of 17(d)(1) withdrawals are relatively unlikely as these withdrawals are of land rather than marine areas.

## **Terrestrial Mammals**

Across all five planning areas, terrestrial mammals are among the top harvested species (see final EIS Section 3.14) by community. Moose is among the top species harvested in all planning areas. Caribou is among the top species harvested in all regions except the Bering Sea-Western Interior planning area. Deer is targeted only in the Ring of Fire and East Alaska (Prince William Sound subregion) planning areas. In some communities, other large land mammals such as black bear, brown bear, Dall sheep, elk, and mountain goat are an important component of the subsistence harvest.

Because of their migratory nature, caribou-related impacts have a greater potential to extend outside the immediate area of a development project. Impacts on the resource availability of caribou may result from changes in caribou migration, distribution, behavior, and health. Air traffic to support development projects has caused a commonly reported and observed impact on caribou on the North Slope and in Northwest Alaska (Georgette and Loon 1988; Stephen R. Braund & Associates [SRB&A] 2009, 2018; Sullender 2017). Air traffic is observed to cause behavioral changes, skittish behavior, and delayed or diverted crossing behavior, which in turn have impacts on caribou hunting success for local hunters. Harvesters report that air traffic can cause skittish behavior in caribou in addition to moose, causing them to stay inland away from riversides or diverting them from usual routes. Because revocation of 17(d)(1) withdrawals could increase the amount of development occurring on those lands, an associated increase in air traffic could impact the availability of caribou and other resources.

ROWs would have the largest impacts to terrestrial mammal availability because they extend across large areas and can result in changes to resource migrations and availability (see final EIS Section 3.15, Terrestrial Mammals). Linear features such as roads and pipelines can alter caribou movement (see final EIS Section 3.15, Terrestrial Mammals). Roads and associated road traffic are believed to cause behavioral and migratory changes in caribou, which can affect hunting success. Deflections or delays of caribou movement from roads and associated ground traffic and human activity have been documented in the traditional knowledge of harvesters (SRB&A 2014, 2018, 2023) and during behavioral studies on caribou, particularly for maternal caribou (ABR, Inc., and SRB&A 2014; see final EIS Section 3.15, Terrestrial Mammals). Impacts from roads are particularly high during times of high ground traffic. Because ROWs including roads would be a necessary component of any development, the revocation of the 17(d)(1) withdrawals could lead to negative impacts for terrestrial mammals.

Impacts to moose, deer, and other large land mammal availability would generally be on a smaller geographic scale than for caribou because these resources have smaller ranges and because residents do not rely on seasonal migratory movements when hunting them. Therefore, impacts to hunting would occur primarily near roads and other development areas where these resources could exhibit avoidance, skittishness, or other behavioral changes. Although moose may initially exhibit avoidance of road corridors and development areas, they also tend to habituate relatively quickly to human activity (see final EIS Section 3.15, Terrestrial Mammals). Moose and deer may also be attracted to ROWs as movement corridors or because of the availability of new vegetation in retained areas, which could affect the distribution of the resources in addition to creating hunting corridors due to a higher concentration of moose within the ROWs. Mountain goats and Dall sheep are likely to exhibit displacement from development infrastructure and activities (see final EIS Section 3.15.4 for the other terrestrial mammals analysis).

Development could also affect the availability of furbearers to hunters and trappers. Residents in development areas have reported that furbearers such as wolves and wolverine can be particularly sensitive to noise and human activity and tend to avoid developed areas (SRB&A 2009). This could affect availability of these resources to furbearer harvesters, particularly if development occurs near existing traplines.

## **Birds**

Analysis communities in the five planning areas harvest both waterfowl and upland birds, with waterfowl generally harvested in greater quantities and by a larger segment of the population (see the Harvest Data section in final EIS Appendix G, Subsistence Technical Appendix). Impacts to resource availability of waterfowl may include changes in distribution due to removal of habitat and disturbance from development-related noise, traffic, and human activity (see final EIS Section 3.2, Birds and Special Status Bird Species). Noise; human presence; and ground, vessel, and air traffic during construction and operations of development projects may also cause temporary disturbances to or displacement of waterfowl, causing temporary changes to harvester success, particularly if these activities occur during the spring or fall waterfowl hunting season. Waterfowl hunters often hunt in small, specific locations and at hunting camps. Therefore, although overall disturbance of waterfowl habitat may be low, in certain areas there may be larger impacts to waterfowl hunters if displacement from traditional hunting areas occurs. In general, impacts would likely affect resource availability on an individual level but not at a community level.

## **Fish**

Fish species are among the top species harvested in all five planning areas, with both salmon and non-salmon fish typically making up a substantial portion of communities' annual harvest. Fish are harvested in marine waters, along rivers, and in lakes. Commonly harvested anadromous fish species in the planning areas include salmon, whitefish, smelt, and Dolly Varden. Common marine fish species include halibut, herring, cod, and rockfish. Lake and riverine species include northern pike, grayling, and lake trout.

Construction activities tied to the reasonably foreseeable development that may affect fish availability to subsistence communities include installation of bridges and culverts, related pile installation, stream diversions, stream excavation, water withdrawal, blasting at material sites, and contamination. Fish could be temporarily diverted, displaced, or obstructed due to culvert placement, excavation, or stream diversion. Ice roads and pads may also temporarily block fish passage if the compacted ice takes longer to melt. Construction activities in waterways could also increase stream turbidity that could affect downstream harvesting areas or make these areas less desirable for fishing in the short term.

Streams and riverbeds may experience increased sedimentation or alteration over time due to placer mining or suction dredge mining, or the presence of culverts and bridge piers. If culverts and bridges are not properly maintained or if erosion-control measures are not taken, fish migrations could be temporarily disrupted or blocked, which could reduce fish availability for subsistence users (see final EIS Section 3.7, Fish and Aquatic Species). Ice roads and pads may also temporarily block fish passage if the compacted ice takes longer to melt. The risk of contamination from dust deposition, discharge of chemicals or heavy metals, and fuel or contaminant spills would continue through the life of any project; depending on the magnitude, spills could have far-reaching impacts on upstream and downstream subsistence users. Avoidance of fish and contamination concerns may be particularly likely for subsistence users in drainages that are downstream from mining activities.

The introduction of invasive species (both fish and/or aquatic plants) could also impact fish habitat and/or productivity and impact fish availability to subsistence users. The introduction of invasive species could become a long-term impact if their spread is uncontrolled, reducing fish availability for subsistence users in the planning areas. If fuel or other contaminant spills occur near fish-bearing streams, subsistence harvesters may avoid harvesting fish if they are perceived (or confirmed) to be contaminated or unhealthy. In the case of larger spills, contamination concerns and avoidance may extend to communities located downstream from project footprints.

Changes in the availability of fish species would be most likely to affect subsistence users in the 27 communities with use areas overlapping lands more likely to be developed under Alternative B should the Secretary revoke the 17(d)(1) withdrawals in relevant part. However, communities downstream from the decision area could experience impacts if projects result in changes in fish distribution or the timing of fish migrations. Subsistence users often harvest different fish species at specific times and places, and if these patterns are disrupted, they may experience declines in harvest success or have difficulty accessing traditional use areas when resources become available in those areas (e.g., if the fish arrive late and subsistence users cannot use boats to access them).

### **Vegetation**

Harvesting of vegetation is a key subsistence activity across all planning areas, particularly in terms of community participation. Across the five planning areas, an average of between 63% and 90% of households participate in vegetation harvesting annually.

Development activities that may affect the availability of vegetation may include clearing of ROWs and other lands for infrastructure, fugitive dust from roadways, and contamination from fuel spills. Infrastructure development would result in the removal of vegetation and could directly affect berry and plant harvesting areas for local communities. Residents often pick berries in small, discrete areas, sometimes with only one harvesting spot for a less commonly found species. Thus, removal of those areas could have impacts on individual harvesters or, in the case of community-wide berry patches, could extend to a community-wide impact.

### **Evaluation of the Availability of Other Lands**

ANCSA 17(d)(1) withdrawals were originally established in 1972–1973. The purpose for the project is to review the revocation of 17(d)(1) withdrawals as indicated in PLOs 7899 through 7903, and to provide for the orderly management of the public lands in the decision area in a way that is consistent with the purposes of the 17(d)(1) withdrawals to ensure “the public interest in these lands is properly protected.” The BLM has designed Alternative B specifically to evaluate the possibility of providing the State with all their Priority 1 and 2 top filings that would not interfere with important public land resources so that they can complete their selections and fulfill their entitlements. The State currently has more than adequate effective selections to fulfill its entitlement. Selection of Alternative B for implementation would result in the opening of lands for which the State has expressed a greater desire to receive than its current selections. Alternative B would revoke all 17(d)(1) withdrawals with State Priority 1 and 2 top filings, except for lands identified as having more than minimal conflict with natural resources, cultural resources, subsistence resources, recreational resources, or proposed or existing ACECs. No other lands within the decision area were identified as State Priority 1 or 2 top filings without important natural resources, cultural resources, subsistence resources, recreational resources, or proposed or existing ACECs.

While other lands are available for the State to receive its complete entitlement, if implemented, Alternative B would lead to the conveyance of Statehood selections that have low conflict with subsistence. The lands that the State may receive elsewhere due to its current effective selections may have greater conflict with subsistence and thus this alternative has the potential to reduce conflicts with subsistence use within the other lands that would have been conveyed but for these lands being opened to State selection.

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

Alternative B revokes the 17(d)(1) withdrawals in part only to allow for the selection of lands under the Alaska Statehood Act, which allows the top filed selection to fall into place. The amount of land the State can receive is defined by the Alaska Statehood Act, and no actions taken by the Secretary can reduce or eliminate that disposition of the public lands. The other action alternatives evaluated in the final EIS would include broader revocation of 17(d)(1) withdrawals, including those considered for revocation under Alternative B. Selection of the No Action Alternative would not reduce disposition of the public lands under the Alaska Statehood Act but would merely shift it to another part of the State.

### ***Findings***

This evaluation concludes that Alternative B may result in significant restriction to subsistence uses affecting user access, abundance, and availability of subsistence resources for 74 rural communities that are

- peripheral, adjacent, or central to lands losing Federal subsistence priority under this alternative;
- have subsistence use areas overlapping lands losing Federal subsistence priority under this alternative; or
- have C&T use determinations in subunits of GMU 13 where there would be a loss of Federal subsistence priority.

Subsistence user access for those communities may be affected due to a loss of Federal subsistence priority, resulting in an increase in competition for subsistence resources from non-rural, non-Federally-qualified hunters. See Table C-4 for a list of the analyzed communities where this action may significantly restrict subsistence uses and where it would not significantly restrict subsistence uses due to the loss of Federal subsistence priority.

In addition, revocation of 17(d)(1) withdrawals under Alternative B and the eventual conveyance of land to the State could lead to mineral development, which would not be allowed in the lands still included in the 17(d)(1) withdrawals. This would cause an increase in potential for resource development, which may result in significant restriction to subsistence uses affecting user access and resource abundance and availability for 29 rural communities that are

- peripheral, adjacent, or central to lands revoked and more likely to be developed under this alternative or
- have subsistence use areas overlapping lands revoked and more likely to be developed under this alternative.

See Table C-4 for a list of the analyzed communities where this action may significantly restrict subsistence uses and where it would not significantly restrict subsistence uses due to development following the conveyance of land to the State made possible only through the Secretary revoking the 17(d)(1) withdrawals in part to allow for State selection.

**Table C-4. Summary of Findings, Alternative B**

Analysis Community	Loss of Federal Subsistence Priority		Increased Potential for Development	
	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use
Akiak		X		X
Akiachak		X		X
Aleknagik		X		X
Ambler	X			X
Anderson	X			X
Aniak		X		X
Anvik		X		X
Beluga		X		X
Brevig Mission		X		X
Buckland		X		X
Cantwell	X			X
Chase	X			X
Chickaloon	X			X
Chistochina	X		X	
Chitina	X		X	
Chuathbaluk		X		X
Clark's Point		X		X
Cooper Landing	X		X	
Copper Center	X		X	
Cordova		X		X
Crooked Creek		X		X
Crown Point	X			X
Deering		X		X
Delta Junction	X			X
Denali Park	X			X
Dillingham	X			X
Dot Lake	X		X	
Dry Creek	X			X
Egegik	X			X
Ekuk		X		X
Ekwok	X			X
Elim		X		X
Eureka Roadhouse	X			X
Ferry	X			X
Fox River	X		X	
Gakona	X		X	

Analysis Community	Loss of Federal Subsistence Priority		Increased Potential for Development	
	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use
Galena		X		X
Georgetown		X		X
Glacier View	X			X
Glennallen	X		X	
Golovin		X		X
Grayling		X		X
Gulkana	X		X	
Haines	X			X
Halibut Cove	X		X	
Happy Valley	X		X	
Healy	X			X
Healy Lake*	X			X
Holy Cross		X		X
Hope	X			X
Huslia		X		X
Igiugig		X		X
Iliamna	X			X
Kenny Lake	X		X	
Kiana	X			X
King Salmon	X			X
Kivalina		X		X
Klukwan	X			X
Kobuk		X		X
Kokhanok		X		X
Koliganek		X		X
Kotzebue	X			X
Koyuk		X		X
Lake Louise	X			X
Lake Minchumina	X			X
Levelock	X			X
Lower Kalskag		X		X
Manokotak		X		X
Marshall		X		X
McCarthy*	X			X
McGrath		X		X
Mendeltna	X		X	
Mentasta Lake	X		X	

Analysis Community	Loss of Federal Subsistence Priority		Increased Potential for Development	
	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use
Moose Pass	X			X
Nabesna	X		X	
Naknek	X			X
Nanwalek	X			X
Napaimute		X		X
Nelchina	X		X	
New Stuyahok		X		X
Newhalen		X		X
Nikolaevsk	X			X
Nikolai		X		X
Ninilchik	X		X	
Noatak	X			X
Nome		X		X
Nondalton		X		X
Noorvik	X			X
Northway	X		X	
Paxson	X			X
Pedro Bay		X		X
Petersville		X		X
Pilot Station		X		X
Pitka's Point		X		X
Platinum		X		X
Point MacKenzie	X		X	
Point Possession	X		X	
Pope-Vannoy Landing		X		X
Port Alsworth		X		X
Portage Creek	X			X
Red Devil		X		X
Russian Mission		X		X
Saint Mary's		X		X
Saint Michael		X		X
Selawik		X		X
Seldovia	X		X	
Shaktoolik		X		X
Shungnak		X		X
Silver Springs	X			X
Skwentna		X		X



Analysis Community	Loss of Federal Subsistence Priority		Increased Potential for Development	
	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use
Slana	X		X	
Sleetmute		X		X
South Naknek	X			X
Stebbins		X		X
Stony River		X		X
Sunrise	X		X	
Susitna	X			X
Susitna North		X		X
Takotna		X		X
Talkeetna		X		X
Tanacross	X		X	
Tatitlek		X		X
Tazlina	X			X
Telida	X			X
Teller		X		X
Tetlin	X			X
Togiak		X		X
Tok	X		X	
Tolsona	X			X
Tonsina	X		X	
Trapper Creek	X		X	
Tuluksak		X		X
Twin Hills		X		X
Tyonek	X			X
Unalakleet		X		X
Upper Kalskag		X		X
White Mountain		X		X
Whittier	X		X	
Willow	X		X	
Willow Creek	X			X

\* The communities of Healy Lake and McCarthy were not included as analysis communities because they did not meet the original criteria for analysis community selection. The addition of harvest ticket data for GMU 13 identified potential effects for these communities and therefore they are included in the final significance findings.

## **Evaluation and Findings for Alternative C (Partial Revocation)**

Under Alternative C, 17(d)(1) withdrawals would be revoked in full for the lands that have high mineral potential, including the State of Alaska's top filed lands that overlap these lands. Alternative C would also revoke in part withdrawals on Priority 1 and 2 top filed lands that do not have high mineral potential, for the purposes of opening these lands to selection, even where there may be conflicts with important public land resources. All other lands would remain withdrawn. Upon revocation of the 17(d)(1) withdrawals, it is assumed that lands would convert to selections and be conveyed within 10 years of the record of decision. Federal subsistence priority would no longer apply to 567,000 acres of land that become effective selections upon revocation.

Because Alternative C does not take resource conflict concerns into consideration (as Alternative B does) and revokes withdrawals on additional lands with high mineral potential, this alternative would increase the potential for direct impacts to subsistence access. Primary impacts on subsistence user access, resource abundance, and resource availability would result from a change in subsistence management (i.e., loss of Federal subsistence priority) or an increase in the potential for development and are discussed under Alternative B. Differences between Alternatives B and C are discussed below.

### ***Evaluation of the Effect of Use, Occupancy, or Disposition on Subsistence Use and Need***

Under Alternative C, the 17(d)(1) withdrawals would be revoked in full across 5,345,000 acres with high mineral potential, and revoked in part across an additional 457,000 acres of State top filed Priority 1 and 2 lands, allowing State top filings to fall into place and become selections on lands where there are no other encumbrances. In total, 1,048,000 acres of State top filed Priority 1 and 2 lands would be revoked in full or in part under Alternative C, and 567,000 of these acres are not encumbered and therefore would immediately become effective selections upon revocation of withdrawals. Under Alternative C, the 17(d)(1) withdrawals would also be revoked across 145,000 acres of Priority 3 and 4 top filed lands. Unless otherwise encumbered, these lands would become effective State selections and lose the Federal subsistence priority, but only until the selections are relinquished by the State or rejected by the BLM within 10 years due to overselection. Thus, the loss of Federal subsistence priority on State Priority 3 and 4 top filings would be temporary. Although the loss would be temporary as defined in the final EIS, even a temporary loss of Federal subsistence priority could have longer term effects on subsistence uses because local subsistence users may quickly alter use patterns in response to changes in land management. On the North Slope, for example, access to industrial roads led to documentable changes in subsistence use patterns within several years of road construction (SRB&A 2023). Alternative C would revoke withdrawals across a greater number of acres than under Alternative B, including the full revocation of withdrawals in lands with high mineral potential, thus increasing the likelihood of potential impacts to subsistence, particularly related to the potential for development.

Under Alternative C, 100 of the 138 focused analysis area communities use areas overlap with 17(d)(1) withdrawals that would lose Federal subsistence priority under Alternative C (Table C-5), compared to 44 analysis communities under Alternative B (see Table C-1). This analysis includes lands where there would be a permanent loss of Federal subsistence priority, in addition to lands where there would be a temporary loss of Federal subsistence priority (i.e., State Priority 3 and 4 top filed lands that are eventually relinquished). The planning area with the greatest number of communities potentially affected under Alternative C in terms of a loss of Federal subsistence priority is the East Alaska (29 communities) planning area, followed by the Bay (23 communities), Bering Sea-Western Interior (21 communities), Ring of Fire (20 communities), and Kobuk-Seward Peninsula (7 communities) planning areas.

Twenty-four communities would have a loss of Federal subsistence priority of more than 10,000 acres, 17 of which are in the East Alaska planning area (Table C-5). In addition, for communities with no subsistence use area data, nine additional communities would see a loss of Federal subsistence priority on at least 10,000 acres within 50 miles of their community, comprising six communities in the Bering Sea-Western Interior planning area, one community in the Kobuk-Seward Peninsula planning area, and one community in the East Alaska planning area (see Table C-6).

Based on available data, communities losing the highest percentage of use areas that currently have Federal subsistence priority include Ferry (95 percent), Trapper Creek (88 percent), Denali Park (36 percent), Dot Lake (33 percent), Cantwell (33 percent), Healy (19 percent), Tolsona (13 percent), and Paxson (10 percent).

Under Alternative C, eight communities would lose Federal subsistence priority in some areas adjacent to (i.e., within 5 miles of) eight communities, comprising Glennallen, Mentasta Lake, Paxson, and Slana in the East Alaska planning area; King Salmon and Pope-Vannoy Landing in the Bay planning area; and Aniak and Lake Minchumina in the Bering Sea-Western Interior planning area (see final EIS Table 3.14-8). In addition, 40 communities would lose Federal subsistence priority in some lands central to their subsistence use areas (i.e., within 25 miles of the community), primarily in the East Alaska, Bering Sea-Western Interior, and Bay planning areas (see final EIS Table 3.14-8). These communities are the most likely to experience impacts from a loss of Federal subsistence priority under Alternative C.

Under Alternative C, GMU 13 in the East Alaska planning area would lose the greatest percentage of lands with Federal subsistence priority, at 10.87 percent of lands, or 215,442 acres (see final EIS Table 3.14-9). GMU 13C would lose nearly all (97.31 percent) lands with Federal subsistence priority, and Healy Lake and McCarthy, who only have C&T use determinations for that subunit (GMU 13C), would therefore lose nearly all subsistence priority opportunities within GMU 13 (see Table C-7). Federal lands represent a small proportion (approximately 1 percent; 49,919 acres) of Unit 13C, compared to higher numbers of Federal lands in GMUs 13B (454,962 acres) and 13E (964,306 acres). Communities with a high reliance on GMU 13 for moose and caribou harvests, including Delta Junction, Copper Center, Glennallen, Kenny Lake, Gakona, Tazlina, Slana, and Cantwell (see final EIS Table 3.14-11), could experience increased competition for resources with the loss of Federal subsistence priority. The East Alaska planning area could be particularly vulnerable to a loss of Federal subsistence priority because much of the planning area is road-connected to larger urban hubs (Anchorage and Fairbanks), the area is more densely populated, and competition among rural users and between rural and non-rural users is high. In addition, the recent decline in the Nelchina caribou herd has resulted in hunting closures in GMU 13 for that herd, which could increase pressure on moose. In addition to declining caribou populations and subsequent hunting closures shifting hunting pressure on moose within GMU 13, a decline in caribou could result in changes in predator-prey dynamics. This could result in higher predation on moose in the short term as wolves and bears shift to moose, but could also result in a decline in predator populations as described in final EIS Section 3.15.2.1, Terrestrial Mammals, Affected Environment, which could benefit caribou.

In addition to GMU 13, GMU 22 in the Kobuk-Seward Peninsula planning area would lose 3.41 percent of lands with Federal subsistence priority under Alternative C, and an even greater number of acres (245,637) than GMU 13 (see final EIS Table 3.14-9). Lands losing Federal subsistence priority in GMU 22 are near Nome, Brevig Mission, and Saint Michael.

Also under Alternative C, 100 of the 138 analysis communities have subsistence use areas overlapping lands more likely to be developed (Table C-6). The planning area with the greatest number of communities potentially affected under Alternative C in terms of an increase in development is the East Alaska (31 communities) planning area, followed by the Ring of Fire (24 communities), Bay (20

communities), Kobuk-Seward Peninsula (16 communities), and Bering Sea-Western Interior (9 communities) planning areas. The individual communities with the greatest number of use areas overlapped by 17(d)(1) withdrawals that would be revoked and the area more likely to be developed under Alternative C (more than 20,000 acres) are Copper Center, Tonsina, Glennallen, Gulkana, Mendeltna, Nelchina, Mentasta Lake, Nome, Tok, and Gakona (see Table C-6). In addition, though subsistence use area data are not available to measure direct impacts, three additional communities would have at least 10,000 acres of 17(d)(1) withdrawals revoked and be more likely to be developed within 50 miles of their community, comprising Silver Springs and Eureka Roadhouse in the East Alaska planning area and Teller in the Kobuk-Seward Peninsula planning area (see Table 3.14-5).

Under Alternative C, 13 communities are adjacent to (i.e., within 5 miles of) areas where the 17(d)(1) withdrawals would be revoked and that are more likely to be developed, comprising six communities in the East Alaska planning area, four communities in the Ring of Fire planning area, two communities in the Bay planning area, and one community in the Bering Sea-Western Interior planning area (see final EIS Table 3.14-8). Fifty communities are central to (i.e., within 25 miles of) where the 17(d)(1) withdrawals would be revoked and the area more likely to be developed in the five planning areas, comprising 18 in the East Alaska planning area, 11 in the Bay planning area, 10 in the Ring of Fire planning area, seven in the Kobuk-Seward Peninsula planning area, and four in the Bering Sea-Western Interior planning area (see final EIS Table 3.14-8).

Table C-8 provides an overall impact ranking for each subsistence focused analysis community based on the quantity of use area acres overlapping lands that would lose Federal subsistence priority should the 17(d)(1) withdrawals be revoked and lands more likely to be developed (or where the revoked withdrawals are within 50 miles of a community with no use area data) and based on the distance of these lands from each community. Under Alternative C, communities in the East Alaska and Ring of Fire planning areas have the highest impact rankings. The communities with the highest ranking are the communities of Glennallen, Slana, Mentasta Lake, Cantwell, Chistochina, Copper Center, Gakona, Gulkana, Mendeltna, Paxson, Silver Springs, and Tonsina in the East Alaska planning area and Talkeetna, Trapper Creek, and Point Mackenzie in the Ring of Fire planning area (see Table C-8). In the other planning areas, communities with the highest impact rankings include Red Devil, Aniak, Crooked Creek, Napaimute, and Georgetown in the Bering Sea-Western Interior planning area; King Salmon, Aleknagik, Iliamna, Naknek, and Pope-Vannoy Landing in the Bay planning area; and Nome, Brevig Mission, Teller, and Ambler in the Kobuk-Seward Peninsula planning area.

**Table C-5. Percentage of Use Areas Overlapping Where 17(d)(1) Withdrawals Would be Revoked and the Areas More Likely to Be Developed or Losing Federal Subsistence Priority, Alternative C**

Analysis Community	Planning Area	Acres of Use Areas Overlapping Withdrawals that Would be Revoked and Where Federal Subsistence Priority Would be Lost*		Acres of Use Areas Overlapping Withdrawals that Would be Revoked in Areas More Likely to be Developed	
		No.	%	No.	%
Ambler	Kobuk-Seward Peninsula	2,865	0.01%	5,606	0.02%
Brevig Mission	Kobuk-Seward Peninsula	15,786	0.42%	14,683	0.39%
Buckland	Kobuk-Seward Peninsula	0	0.00%	3,874	0.05%
Deering	Kobuk-Seward Peninsula	0	0.00%	3,667	0.05%
Elim	Kobuk-Seward Peninsula	No	No	Yes	Yes
Golovin	Kobuk-Seward Peninsula	0	0.00%	813	0.07%
Kiana	Kobuk-Seward Peninsula	2,865	0.02%	30	0.00%

Analysis Community	Planning Area	Acres of Use Areas Overlapping Withdrawals that Would be Revoked and Where Federal Subsistence Priority Would be Lost*		Acres of Use Areas Overlapping Withdrawals that Would be Revoked in Areas More Likely to be Developed	
		No.	%	No.	%
Kivalina	Kobuk-Seward Peninsula	0	0.00%	0	0.00%
Kobuk	Kobuk-Seward Peninsula	0	0.00%	1,909	0.01%
Kotzebue	Kobuk-Seward Peninsula	2,865	0.02%	3,697	0.03%
Koyuk	Kobuk-Seward Peninsula	No	No	Yes	Yes
Noatak	Kobuk-Seward Peninsula	0	0.00%	0	0.00%
Nome	Kobuk-Seward Peninsula	42,067	0.34%	27,896	0.23%
Noorvik	Kobuk-Seward Peninsula	2,865	0.02%	2,693	0.02%
Selawik	Kobuk-Seward Peninsula	0	0.00%	3,667	0.03%
Shaktolik	Kobuk-Seward Peninsula	No	No	No	No
Shungnak	Kobuk-Seward Peninsula	0	0.00%	5,576	0.02%
Teller	Kobuk-Seward Peninsula	Yes	Yes	Yes	Yes
White Mountain	Kobuk-Seward Peninsula	No	No	Yes	Yes
Akiachak	Bering Sea-Western Interior	732	0.01%	994	0.01%
Akiak	Bering Sea-Western Interior	N/A	N/A	No	No
Aniak	Bering Sea-Western Interior	3,502	0.04%	994	0.01%
Anvik	Bering Sea-Western Interior	Yes	Yes	N/A	N/A
Chuathbaluk	Bering Sea-Western Interior	Yes	Yes	N/A	N/A
Crooked Creek	Bering Sea-Western Interior	Yes	Yes	Yes	Yes
Galena	Bering Sea-Western Interior	0	0.00%	N/A	N/A
Georgetown	Bering Sea-Western Interior	Yes	Yes	Yes	Yes
Grayling	Bering Sea-Western Interior	Yes	Yes	N/A	N/A
Holy Cross	Bering Sea-Western Interior	Yes	Yes	N/A	N/A
Huslia	Bering Sea-Western Interior	0	0.00%	N/A	N/A
Lake Minchumina	Bering Sea-Western Interior	0	0.00%	N/A	N/A
Lower Kalskag	Bering Sea-Western Interior	Yes	Yes	N/A	N/A
Marshall	Bering Sea-Western Interior	2,210	0.10%	N/A	N/A
McGrath	Bering Sea-Western Interior	No	No	N/A	N/A
Napaimute	Bering Sea-Western Interior	Yes	Yes	Yes	Yes
Nikolai	Bering Sea-Western Interior	0	0.00%	N/A	N/A
Pilot Station	Bering Sea-Western Interior	Yes	Yes	N/A	N/A
Pitka's Point	Bering Sea-Western Interior	Yes	Yes	N/A	N/A
Red Devil	Bering Sea-Western Interior	Yes	Yes	Yes	Yes
Russian Mission	Bering Sea-Western Interior	67,998	1.37%	N/A	N/A
Saint Mary's	Bering Sea-Western Interior	Yes	Yes	N/A	N/A
Saint Michael	Bering Sea-Western Interior	Yes	Yes	N/A	N/A
Sleetmute	Bering Sea-Western Interior	N/A	N/A	Yes	Yes

Analysis Community	Planning Area	Acres of Use Areas Overlapping Withdrawals that Would be Revoked and Where Federal Subsistence Priority Would be Lost*		Acres of Use Areas Overlapping Withdrawals that Would be Revoked in Areas More Likely to be Developed	
		No.	%	No.	%
Stebbins	Bering Sea-Western Interior	Yes	Yes	N/A	N/A
Stony River	Bering Sea-Western Interior	N/A	N/A	Yes	Yes
Takotna	Bering Sea-Western Interior	No	No	No	No
Telida	Bering Sea-Western Interior	0	0.00%	N/A	N/A
Tuluksak	Bering Sea-Western Interior	726	0.02%	994	0.02%
Unalakleet	Bering Sea-Western Interior	59,807	3.35%	N/A	N/A
Upper Kalskag	Bering Sea-Western Interior	Yes	Yes	N/A	N/A
Aleknagik	Bay	4,000	0.04%	189	0.00%
Clark's Point	Bay	4,000	0.05%	189	0.00%
Dillingham	Bay	4,001	0.03%	189	0.00%
Ekuk	Bay	Yes	Yes	Yes	Yes
Ekwok	Bay	18	0.00%	0	0.00%
Igiugig	Bay	3,840	0.15%	N/A	N/A
Iliamna	Bay	4,529	0.03%	178	0.00%
King Salmon	Bay	3,858	0.09%	0	0.00%
Kokhanok	Bay	4,357	0.11%	72	0.00%
Koliganek	Bay	0	0.00%	N/A	N/A
Levelock	Bay	3,840	0.13%	0	0.00%
Manokotak	Bay	160	0.00%	189	0.00%
Naknek	Bay	3,858	0.06%	0	0.00%
New Stuyahok	Bay	3,840	0.04%	0	0.00%
Newhalen	Bay	551	0.01%	1	0.00%
Nondalton	Bay	517	0.01%	1	0.00%
Pedro Bay	Bay	420	0.04%	72	0.01%
Platinum	Bay	160	0.00%	189	0.00%
Pope-Vannoy Landing	Bay	Yes	Yes	Yes	Yes
Port Alsworth	Bay	4,342	0.03%	1	0.00%
Portage Creek	Bay	2,143	0.03%	12	0.00%
South Naknek	Bay	18	0.00%	0	0.00%
Togiak	Bay	160	0.00%	189	0.00%
Twin Hills	Bay	160	0.00%	189	0.00%
Beluga	Ring of Fire	0	0.00%	0	0.00%
Chase	Ring of Fire	2,164	0.09%	5,082	0.21%
Chickaloon	Ring of Fire	0	0.00%	2,328	0.32%
Cooper Landing	Ring of Fire	6	0.00%	581	0.01%
Crown Point	Ring of Fire	Yes	Yes	N/A	N/A

Analysis Community	Planning Area	Acres of Use Areas Overlapping Withdrawals that Would be Revoked and Where Federal Subsistence Priority Would be Lost*		Acres of Use Areas Overlapping Withdrawals that Would be Revoked in Areas More Likely to be Developed	
		No.	%	No.	%
Egegik	Ring of Fire	0	0.00%	0	0.00%
Fox River	Ring of Fire	Yes	Yes	Yes	Yes
Haines	Ring of Fire	0	0.00%	N/A	N/A
Halibut Cove	Ring of Fire	Yes	Yes	Yes	Yes
Happy Valley	Ring of Fire	Yes	Yes	Yes	Yes
Hope	Ring of Fire	0.0	0.00%	83	0.01%
Klukwan	Ring of Fire	0	0.00%	N/A	N/A
Moose Pass	Ring of Fire	Yes	Yes	N/A	N/A
Nanwalek	Ring of Fire	1.0	0.00%	272	0.01%
Nikolaevsk	Ring of Fire	0.4	0.00%	5	0.00%
Ninilchik	Ring of Fire	1	0.00%	159	0.00%
Petersville	Ring of Fire	No	No	Yes	Yes
Point MacKenzie	Ring of Fire	Yes	Yes	Yes	Yes
Point Possession	Ring of Fire	Yes	Yes	Yes	Yes
Seldovia	Ring of Fire	1,004	0.03%	815	0.02%
Skwentna	Ring of Fire	19,563	0.44%	1	0.00%
Sunrise	Ring of Fire	Yes	Yes	Yes	Yes
Susitna	Ring of Fire	0	0.00%	1	0.00%
Susitna North	Ring of Fire	N/A	N/A	Yes	Yes
Talkeetna	Ring of Fire	74,605	0.77%	14,960	0.15%
Trapper Creek	Ring of Fire	107,875	1.86%	5,703	0.10%
Tyonek	Ring of Fire	0.04	0.00%	0.24	0.00%
Whittier	Ring of Fire	1	0.00%	4,822	0.08%
Willow	Ring of Fire	Yes	Yes	Yes	Yes
Anderson	East Alaska	19,175	0.15%	4,079	0.03%
Cantwell	East Alaska	138,520	3.21%	6,328	0.15%
Chistochina	East Alaska	3,482	0.21%	11,701	0.71%
Chitina	East Alaska	2,165	0.15%	7,032	0.47%
Copper Center	East Alaska	39,075	0.69%	62,439	1.11%
Cordova	East Alaska	Yes	Yes	Yes	Yes
Delta Junction	East Alaska	No	No	N/A	N/A
Denali Park	East Alaska	21,479	0.54%	6,306	0.16%
Dot Lake	East Alaska	190	0.03%	795	0.14%
Dry Creek	East Alaska	0	0.00%	N/A	N/A
Eureka Roadhouse	East Alaska	No	No	Yes	Yes
Ferry	East Alaska	13,759	0.96%	410	0.03%

Analysis Community	Planning Area	Acres of Use Areas Overlapping Withdrawals that Would be Revoked and Where Federal Subsistence Priority Would be Lost*		Acres of Use Areas Overlapping Withdrawals that Would be Revoked in Areas More Likely to be Developed	
		No.	%	No.	%
Gakona	East Alaska	18,728	0.50%	24,645	0.65%
Glacier View	East Alaska	1	0.00%	60	0.00%
Glennallen	East Alaska	59,419	1.17%	56,094	1.11%
Gulkana	East Alaska	28,352	1.34%	52,468	2.47%
Healy	East Alaska	139,159	1.41%	6,175	0.06%
Kenny Lake	East Alaska	7,265	0.26%	16,519	0.59%
Lake Louise	East Alaska	0	0.00%	13,599	1.18%
Mendeltna	East Alaska	22,722	0.45%	49,971	1.00%
Mentasta Lake	East Alaska	87,808	0.95%	30,965	0.34%
Nabesna	East Alaska	57,314	2.49%	7,627	0.33%
Nelchina	East Alaska	22,722	0.44%	49,971	0.98%
Northway	East Alaska	190	0.01%	3,798	0.15%
Paxson	East Alaska	26,875	1.33%	6,889	0.34%
Silver Springs	East Alaska	Yes	Yes	Yes	Yes
Slana	East Alaska	69,112	3.42%	14,603	0.72%
Tanacross	East Alaska	844	0.03%	13,525	0.53%
Tatitlek	East Alaska	0	0.00%	0	0.00%
Tazlina	East Alaska	9,600	0.31%	5,999	0.19%
Tetlin	East Alaska	0	0.00%	0	0.00%
Tok	East Alaska	76,865	0.79%	26,746	0.27%
Tolsona	East Alaska	2,771	0.15%	1,100	0.06%
Tonsina	East Alaska	19,018	0.45%	57,613	1.35%
Willow Creek	East Alaska	291	0.25%	54	0.05%

Notes: Communities with yes/no entries do not have available subsistence use area data. Presence/absence of overlap is based on an assumed 50-mile radius of subsistence use around the community. For communities with no subsistence use area data, see Table C-6 for an analysis of revoked 17(d)(1) withdrawals within 50 miles of these analysis communities.

N/A = Community not within 50 miles/use area not overlapping analysis area.

\* Areas losing Federal subsistence use priority following revocation of 17(d)(1) withdrawals are State top filings that are not otherwise encumbered that would immediately become effective selections.

**Table C-6. Acres Within 50 Miles of Analysis Communities with No Subsistence Use Area Data Where 17(d)(1) Withdrawals Would be Revoked that are More Likely to Be Developed or Would Lose Federal Subsistence Priority, Alternative C**

Analysis Community	Planning Area	Acres within 50 Miles of Community	
		Areas Likely to be Developed	Areas Losing Federal Subsistence Priority
Elim	Kobuk-Seward Peninsula	4,027	0
Koyuk	Kobuk-Seward Peninsula	1,275	0



Analysis Community	Planning Area	Acres within 50 Miles of Community	
		Areas Likely to be Developed	Areas Losing Federal Subsistence Priority
Shaktoolik	Kobuk-Seward Peninsula	0	0
Teller	Kobuk-Seward Peninsula	22,180	42,067
White Mountain	Kobuk-Seward Peninsula	6,758	0
Akiak	Bering Sea-Western Interior	0	0
Anvik	Bering Sea-Western Interior	0	26,756
Chuathbaluk	Bering Sea-Western Interior	0	3,502
Crooked Creek	Bering Sea-Western Interior	1,632	1,920
Georgetown	Bering Sea-Western Interior	1,632	640
Grayling	Bering Sea-Western Interior	0	139,034
Holy Cross	Bering Sea-Western Interior	0	10,510
Lower Kalskag	Bering Sea-Western Interior	0	12,667
McGrath	Bering Sea-Western Interior	0	0
Napaimute	Bering Sea-Western Interior	1,632	3,502
Pilot Station	Bering Sea-Western Interior	0	6,690
Pitka's Point	Bering Sea-Western Interior	0	2,320
Red Devil	Bering Sea-Western Interior	1,632	111
Saint Mary's	Bering Sea-Western Interior	0	4,455
Saint Michael	Bering Sea-Western Interior	0	223,723
Sleetmute	Bering Sea-Western Interior	1,632	0
Stebbins	Bering Sea-Western Interior	0	223,723
Stony River	Bering Sea-Western Interior	994	0
Takotna	Bering Sea-Western Interior	0	0
Upper Kalskag	Bering Sea-Western Interior	0	12,762
Ekuk	Bay	189	160
Pope-Vannoy Landing	Bay	72	517
Crown Point	Ring of Fire	0	191
Fox River	Ring of Fire	581	6
Halibut Cove	Ring of Fire	270	1
Happy Valley	Ring of Fire	581	6
Moose Pass	Ring of Fire	0	444
Petersville	Ring of Fire	1,403	0
Point MacKenzie	Ring of Fire	3,052	1,982
Point Possession	Ring of Fire	392	1,982
Sunrise	Ring of Fire	2,526	1,982
Susitna North	Ring of Fire	1,952	0
Willow	Ring of Fire	4,446	1,982
Cordova	East Alaska	504	2,986
Delta Junction	East Alaska	0	0

Analysis Community	Planning Area	Acres within 50 Miles of Community	
		Areas Likely to be Developed	Areas Losing Federal Subsistence Priority
Eureka Roadhouse	East Alaska	13,642	0
Silver Springs	East Alaska	53,554	14,651

**Table C-7. Loss of Federal Subsistence Priority within Game Management Unit 13 by Community, Alternative C**

Analysis Community	Planning Area	C&T Use - Caribou	C&T Use - Moose	Acres of Federal Subsistence Priority	Federal Acres Losing Federal Subsistence Priority Under Alternative C	
					No.	%
Cantwell	East Alaska	13 ALL	13 ALL	1,981,876	215,442	10.87%
Chase	Ring of Fire	13 ALL	13 ALL	1,981,876	215,442	10.87%
Chickaloon	Ring of Fire	13 ALL	13 ALL	1,981,876	215,442	10.87%
Chistochina	East Alaska	13 ALL	13 ALL	1,981,876	215,442	10.87%
Chitina	East Alaska	13 ALL	13 ALL	1,981,876	215,442	10.87%
Copper Center	East Alaska	13 ALL	13 ALL	1,981,876	215,442	10.87%
Delta Junction	East Alaska	13B	13B	454,962	27,690	6.09%
Denali Park	East Alaska	13E	13E	964,306	121,535	12.60%
Dot Lake	East Alaska	13B	13B	454,962	27,690	6.09%
Dry Creek	East Alaska	13B	13B	454,962	27,690	6.09%
Eureka Roadhouse	East Alaska	13 ALL	13 ALL	1,981,876	215,442	10.87%
Gakona	East Alaska	13 ALL	13 ALL	1,981,876	215,442	10.87%
Glacier View	East Alaska	13 ALL	13 ALL	1,981,876	215,442	10.87%
Glennallen	East Alaska	13 ALL	13 ALL	1,981,876	215,442	10.87%
Gulkana	East Alaska	13 ALL	13 ALL	1,981,876	215,442	10.87%
Healy Lake	East Alaska	13C	13C	49,919	48,579	97.31%
Kenny Lake	East Alaska	13 ALL	13 ALL	1,981,876	215,442	10.87%
Lake Louise	East Alaska	13 ALL	13 ALL	1,981,876	215,442	10.87%
McCarthy	East Alaska	13C	None	49,919	48,579	97.31%
Mendeltna	East Alaska	13 ALL	13 ALL	1,981,876	215,442	10.87%
Mentasta Lake	East Alaska	13 ALL	13 ALL	1,981,876	215,442	10.87%
Nabesna	East Alaska	13 ALL	13C	1,981,876	215,442	10.87%
Nelchina	East Alaska	13 ALL	13 ALL	1,981,876	215,442	10.87%
Northway	East Alaska	None	13 ALL	1,981,876	215,442	10.87%
Paxson	East Alaska	13 ALL	13 ALL	1,981,876	215,442	10.87%
Silver Springs	East Alaska	13 ALL	13 ALL	1,981,876	215,442	10.87%
Slana	East Alaska	13 ALL	13 ALL	1,981,876	215,442	10.87%
Tanacross	East Alaska	None	13 ALL	1,981,876	215,442	10.87%

Analysis Community	Planning Area	C&T Use - Caribou	C&T Use - Moose	Acres of Federal Subsistence Priority	Federal Acres Losing Federal Subsistence Priority Under Alternative C	
					No.	%
Tazlina	East Alaska	13 ALL	13 ALL	1,981,876	215,442	10.87%
Tetlin	East Alaska	None	13 ALL	1,981,876	215,442	10.87%
Tok	East Alaska	None	13 ALL	1,981,876	215,442	10.87%
Tolsona	East Alaska	13 ALL	13 ALL	1,981,876	215,442	10.87%
Tonsina	East Alaska	13 ALL	13 ALL	1,981,876	215,442	10.87%
Willow Creek	East Alaska	13 ALL	13 ALL	1,981,876	215,442	10.87%

**Table C-8. Overall Community Impact Ranking, ANCSA 17(d)(1) Withdrawals Final EIS, Alternative C**

Analysis Community	Planning Area	Lands More Likely to Be Developed		Lands Losing Federal Subsistence Priority*		Impact Ranking
		Distance from Community	Acreage (use areas or within 50 miles)	Distance from Community	Acreage (use areas or within 50 miles)	
Glennallen	East Alaska	Adjacent	56,094	Adjacent	59,419	12
Slana	East Alaska	Adjacent	14,603	Adjacent	69,112	12
Mentasta Lake	East Alaska	Central	30,965	Adjacent	87,808	11
Cantwell	East Alaska	Adjacent	6,328	Central	138,520	10
Chistochina	East Alaska	Adjacent	11,701	Central	3,482	10
Copper Center	East Alaska	Central	62,439	Central	39,075	10
Gakona	East Alaska	Central	24,645	Central	18,728	10
Gulkana	East Alaska	Central	52,468	Central	28,352	10
Mendeltna	East Alaska	Adjacent	49,971	Peripheral	22,722	10
Paxson	East Alaska	Central	6,889	Adjacent	26,875	10
Silver Springs	East Alaska	Central	53,554	Central	14,651	10
Talkeetna	Ring of Fire	Adjacent	14,960	Peripheral	74,605	10
Tonsina	East Alaska	Central	57,613	Central	19,018	10
Denali Park	East Alaska	Central	6,306	Central	21,479	9
Kenny Lake	East Alaska	Central	16,519	Central	7,265	9
King Salmon	Bay	Adjacent	0.3	Adjacent	3,858	9
Nelchina	East Alaska	Central	49,971	Peripheral	22,722	9
Nome	Kobuk-Seward Peninsula	Central	27,896	Peripheral	42,067	9
Tazlina	East Alaska	Adjacent	5,999	Central	9,600	9
Trapper Creek	Ring of Fire	Adjacent	5,703	Peripheral	107,875	9
Aleknagik	Bay	Adjacent	189	Central	4,000	8
Brevig Mission	Kobuk-Seward Peninsula	Peripheral	14,683	Peripheral	15,786	8
Chitina	East Alaska	Central	7,032	Central	2,165	8

Analysis Community	Planning Area	Lands More Likely to Be Developed		Lands Losing Federal Subsistence Priority*		Impact Ranking
		Distance from Community	Acreage (use areas or within 50 miles)	Distance from Community	Acreage (use areas or within 50 miles)	
Healy	East Alaska	Peripheral	6,175	Central	139,159	8
Nabesna	East Alaska	Peripheral	7,627	Central	57,314	8
Point MacKenzie	Ring of Fire	Central	3,052	Central	1,982	8
Teller	Kobuk-Seward Peninsula	Peripheral	22,180	Peripheral	42,067	8
Tok	East Alaska	Peripheral	26,746	Peripheral	76,865	8
Tolsona	East Alaska	Central	1,100	Central	2,771	8
Ambler	Kobuk-Seward Peninsula	Central	5,606	Peripheral	2,865	7
Anderson	East Alaska	Peripheral	4,079	Peripheral	19,175	7
Aniak	Bering Sea-Western Interior	Peripheral	994	Adjacent	3,502	7
Chase	Ring of Fire	Central	5,082	Peripheral	2,164	7
Crooked Creek	Bering Sea-Western Interior	Central	1,632	Peripheral	1,920	7
Iliamna	Bay	Central	178	Central	4,529	7
Naknek	Bay	Central	0.3	Central	3,858	7
Napaimute	Bering Sea-Western Interior	Peripheral	1,632	Central	3,502	7
Pope-Vannoy Landing	Bay	Central	72	Adjacent	517	7
Red Devil	Bering Sea-Western Interior	Adjacent	1,632	Peripheral	111	7
Sunrise	Ring of Fire	Peripheral	2,526	Central	1,982	7
Willow	Ring of Fire	Central	4,446	Peripheral	1,982	7
Clark's Point	Bay	Central	189	Peripheral	4,000	6
Dillingham	Bay	Central	189	Peripheral	4,001	6
Ferry	East Alaska	Peripheral	410	Peripheral	13,759	6
Georgetown	Bering Sea-Western Interior	Central	1,632	Peripheral	640	6
Happy Valley	Ring of Fire	Central	581	Central	6	6
Kokhanok	Bay	Peripheral	72	Central	4,357	6
Kotzebue	Kobuk-Seward Peninsula	Peripheral	3,697	Peripheral	2,865	6
Lake Louise	East Alaska	Central	13,599	Peripheral	0	6
Newhalen	Bay	Central	1	Central	551	6
Ninilchik	Ring of Fire	Central	159	Central	1	6
Noorvik	Kobuk-Seward Peninsula	Peripheral	2,693	Peripheral	2,865	6
Pedro Bay	Bay	Central	72	Central	420	6
Point Possession	Ring of Fire	Central	392	Peripheral	1,982	6
Port Alsworth	Bay	Central	1	Peripheral	4,342	6
Skwentna	Ring of Fire	Peripheral	1	Peripheral	19,563	6
South Naknek	Bay	Central	0.3	Central	18	6
Tanacross	East Alaska	Peripheral	13,525	Peripheral	844	6
Willow Creek	East Alaska	Central	54	Central	291	6

Analysis Community	Planning Area	Lands More Likely to Be Developed		Lands Losing Federal Subsistence Priority*		Impact Ranking
		Distance from Community	Acreage (use areas or within 50 miles)	Distance from Community	Acreage (use areas or within 50 miles)	
Chickaloon	Ring of Fire	Central	2,328	Peripheral	0	5
Cordova	East Alaska	Peripheral	504	Peripheral	2,986	5
Eureka Roadhouse	East Alaska	Central	13,642	None	0	5
Glacier View	East Alaska	Central	60	Peripheral	1	5
Kiana	Kobuk-Seward Peninsula	Peripheral	30	Peripheral	2,865	5
Levelock	Bay	Peripheral	0	Central	3,840	5
Manokotak	Bay	Central	189	Peripheral	160	5
Nondalton	Bay	Central	1	Peripheral	517	5
Northway	East Alaska	Peripheral	3,798	Peripheral	190	5
Portage Creek	Bay	Peripheral	12	Peripheral	2,143	5
Russian Mission	Bering Sea-Western Interior	None	0	Central	67,998	5
Saint Michael	Bering Sea-Western Interior	None	0	Central	223,723	5
Seldovia	Ring of Fire	Peripheral	815	Peripheral	1,004	5
Stebbins	Bering Sea-Western Interior	None	0	Central	223,723	5
Susitna	Ring of Fire	Adjacent	1	Peripheral	0	5
Susitna North	Ring of Fire	Adjacent	1,952	None	0	5
Tyonek	Ring of Fire	Central	0.24	Peripheral	0.04	5
Unalakleet	Bering Sea-Western Interior	None	0	Central	59,807	5
Upper Kalskag	Bering Sea-Western Interior	None	0	Central	12,762	5
Whittier	Ring of Fire	Peripheral	4,822	Peripheral	1	5
Akiachak	Bering Sea-Western Interior	Peripheral	994	Peripheral	732	4
Anvik	Bering Sea-Western Interior	None	0	Peripheral	26,756	4
Beluga	Ring of Fire	Central	0.5	Peripheral	0	4
Buckland	Kobuk-Seward Peninsula	Central	3,874	None	0	4
Chuathbaluk	Bering Sea-Western Interior	None	0	Central	3,502	4
Cooper Landing	Ring of Fire	Peripheral	581	Peripheral	6	4
Dot Lake	East Alaska	Peripheral	795	Peripheral	190	4
Ekuk	Bay	Peripheral	189	Peripheral	160	4
Ekwok	Bay	Peripheral	0.3	Peripheral	18	4
Elim	Kobuk-Seward Peninsula	Central	4,027	None	0	4
Fox River	Ring of Fire	Peripheral	581	Peripheral	6	4
Grayling	Bering Sea-Western Interior	None	0	Peripheral	139,034	4
Halibut Cove	Ring of Fire	Peripheral	270	Peripheral	1	4
Holy Cross	Bering Sea-Western Interior	None	0	Peripheral	10,510	4
Hope	Ring of Fire	Peripheral	83	Central	0	4
Igiugig	Bay	None	0	Central	3,840	4

Analysis Community	Planning Area	Lands More Likely to Be Developed		Lands Losing Federal Subsistence Priority*		Impact Ranking
		Distance from Community	Acreage (use areas or within 50 miles)	Distance from Community	Acreage (use areas or within 50 miles)	
Koyuk	Kobuk-Seward Peninsula	Central	1,275	None	0	4
Lower Kalskag	Bering Sea-Western Interior	None	0	Central	12,667	4
Marshall	Bering Sea-Western Interior	None	0	Central	2,210	4
Nanwalek	Ring of Fire	Peripheral	272	Peripheral	1.0	4
New Stuyahok	Bay	Peripheral	0	Peripheral	3,840	4
Nikolaevsk	Ring of Fire	Peripheral	5	Peripheral	0.4	4
Petersville	Ring of Fire	Central	1,403	None	0	4
Platinum	Bay	Peripheral	189	Peripheral	160	4
Sleetmute	Bering Sea-Western Interior	Central	1,632	None	0	4
Togiak	Bay	Peripheral	189	Peripheral	160	4
Tuluksak	Bering Sea-Western Interior	Peripheral	994	Peripheral	726	4
Twin Hills	Bay	Peripheral	189	Peripheral	160	4
White Mountain	Kobuk-Seward Peninsula	Central	6,758	None	0	4
Deering	Kobuk-Seward Peninsula	Peripheral	3,667	None	0	3
Golovin	Kobuk-Seward Peninsula	Central	813	None	0	3
Kobuk	Kobuk-Seward Peninsula	Peripheral	1,909	None	0	3
Lake Minchumina	Bering Sea-Western Interior	None	0	Adjacent	0	3
Pilot Station	Bering Sea-Western Interior	None	0	Peripheral	6,690	3
Pitka's Point	Bering Sea-Western Interior	None	0	Peripheral	2,320	3
Saint Mary's	Bering Sea-Western Interior	None	0	Peripheral	4,455	3
Selawik	Kobuk-Seward Peninsula	Peripheral	3,667	None	0	3
Shungnak	Kobuk-Seward Peninsula	Peripheral	5,576	None	0	3
Stony River	Bering Sea-Western Interior	Central	994	None	0	3
Tatitlek	East Alaska	Central	0	Peripheral	0	3
Tetlin	East Alaska	Central	0	Peripheral	0	3
Crown Point	Ring of Fire	None	0	Peripheral	191	2
Egegik	Ring of Fire	Peripheral	0	Peripheral	0	2
Haines	Ring of Fire	None	0	Central	0	2
Klukwan	Ring of Fire	None	0	Central	0	2
Moose Pass	Ring of Fire	None	0	Peripheral	444	2
Koliganek	Bay	None	0	Peripheral	0	1
Noatak	Kobuk-Seward Peninsula	None	0	Peripheral	0	1
Telida	Bering Sea-Western Interior	None	0	Peripheral	0	1
Akiak	Bering Sea-Western Interior	None	0	None	0	0
Delta Junction	East Alaska	None	0	None	0	0
Dry Creek	East Alaska	None	0	None	0	0

Analysis Community	Planning Area	Lands More Likely to Be Developed		Lands Losing Federal Subsistence Priority*		Impact Ranking
		Distance from Community	Acreage (use areas or within 50 miles)	Distance from Community	Acreage (use areas or within 50 miles)	
Galena	Bering Sea-Western Interior	None	0	None	0	0
Huslia	Bering Sea-Western Interior	None	0	None	0	0
Kivalina	Kobuk-Seward Peninsula	None	0	None	0	0
McGrath	Bering Sea-Western Interior	None	0	None	0	0
Nikolai	Bering Sea-Western Interior	None	0	None	0	0
Shaktoolik	Kobuk-Seward Peninsula	None	0	None	0	0
Takotna	Bering Sea-Western Interior	None	0	None	0	0

Notes:

Distance from Community categorized as follows:

None (no color) = No subsistence use area overlap with areas where 17(d)(1) withdrawals would be revoked, or (if use area data not available), community more than 50 miles from where 17(d)(1) withdrawals would be revoked.

Peripheral (yellow) = Community more than 25 miles from 17(d)(1) withdrawals that would be revoked.

Central (orange) = Community between 5 and 25 miles from 17(d)(1) withdrawals that would be revoked.

Adjacent (red) = Community within 5 miles of 17(d)(1) withdrawals that would be revoked.

Acreage categorized as follows:

0 = None.

Low (yellow) = < 1,000 acres overlapping areas losing Federal subsistence priority or areas more likely to be developed.

Medium (orange) = between 1,000 and 10,000 acres overlapping areas losing Federal subsistence priority or areas more likely to be developed.

High (red) = > 10,000 acres overlapping areas losing Federal subsistence priority or areas more likely to be developed.

Impact ranking (calculated by summing the values for each community) categorized as follows:

None (no color) = zero

Peripheral/fewer than 1,000 acres (yellow) = 1

Central/between 1,000 and 10,000 acres/"yes" (orange) = 2

Adjacent/more than 10,000 acres (red) = 3

\* Areas losing Federal subsistence use priority following revocation of 17(d)(1) withdrawals are State top filings that are not otherwise encumbered that would immediately become effective selections.

## Evaluation of the Availability of Other Lands

ANCSA 17(d)(1) withdrawals were originally established in 1972–1973. The purpose for the project is to review the revocation of 17(d)(1) withdrawals as indicated in PLOs 7899 through 7903, and to provide for the orderly management of the public lands in the decision area in a way that is consistent with the purposes of the 17(d)(1) withdrawals to ensure “the public interest in these lands is properly protected.” The BLM designed Alternative C specifically to evaluate the possibility of providing the State with all their Priority 1 and 2 top filings so that they can complete their selections to fulfill their entitlements. Alternative C is also designed to evaluate the possibility of providing for the development of lands with high mineral potential. Alternative C would revoke all 17(d)(1) withdrawals within lands in the decision area to allow for Alaska Statehood Act selection for all remaining State Priority 1 and 2 top filings and to revoke the 17(d)(1) withdrawals in areas of high mineral potential. There are no other available lands within the decision area with high mineral potential or that would open the State’s most desirable lands.

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

Alternative C both revokes in full and in part 17(d)(1) withdrawals to allow for State top filed selections to fall into place and to provide for the selection and disposition of lands that have a high potential for development. The amount of land the State can receive is defined by the Alaska Statehood Act, and no actions taken by the Secretary can reduce or eliminate that disposition of the public lands. The other action alternatives evaluated in the final EIS would include a broader revocation of 17(d)(1) withdrawals under Alternative D, and a narrower revocation of 17(d)(1) withdrawals in part, under Alternative B. Selection of the No Action Alternative would not reduce disposition of the public lands under the Alaska Statehood Act but would merely shift it to another part of the State.

The use and occupancy of lands that remain in Federal management following the proposed full revocation for high mineral potential lands would be managed consistent with the BLM RMP applicable to the area; the primary change in use and occupancy of these lands would be allowance of mineral entry and non-discretionary public land laws, such as the existing and future selections of Native allotments by Alaska Native veterans pursuant to the John D. Dingell Jr. Conservation, Management, and Recreation Act, and the conveyance of State -selected lands assuming no restrictions other than the revoked 17(d)(1) withdrawals. With the 17(d)(1) withdrawals revoked, the land would also be open to mineral leasing where not already allowable and where allowable under the applicable RMP.

## ***Findings***

Because Alternative C does not take resource conflict concerns into consideration (as Alternative B does) and revokes 17(d)(1) withdrawals on additional lands with high mineral potential, this alternative would increase the potential for direct impacts to subsistence access. Primary impacts on subsistence user access, resource abundance, and resource availability would result from a change in subsistence management (i.e., loss of Federal subsistence priority) or an increase in the potential for development.

This evaluation concludes that Alternative C may result in significant restriction to subsistence uses affecting user access for 118 rural communities that

- are peripheral, adjacent, or central to lands losing Federal subsistence priority under this alternative;
- have subsistence use areas overlapping lands losing Federal subsistence priority under this alternative; or
- have C&T use determinations in subunits of GMU 13 where there would be a loss of Federal subsistence priority.

Subsistence user access for those communities would be affected due to a loss of Federal subsistence priority, resulting in an increase in competition for subsistence resources from non-rural, non-Federally-qualified hunters. See Table C-9 for a list of the communities in the analysis area where this action may significantly restrict subsistence uses and where it would not significantly restrict subsistence uses due to loss of Federal subsistence priority.

In addition, revocation of 17(d)(1) withdrawals under Alternative C may result in unselected Federal lands becoming open to mineral entry and leasing, which would increase the potential for resource development that may result in significant restriction to subsistence uses. This restriction would apply to user access and resource abundance and availability for 105 rural communities that



- are peripheral, adjacent, or central to lands revoked and more likely to be developed under this alternative or
- have subsistence use areas overlapping lands revoked and more likely to be developed under this alternative.

This evaluation assumes that the potential for ROWs, mineral exploration and development, and other development projects would increase when the lands are conveyed to the State, especially in areas identified as more likely to be developed. See Table C-9 for a list of the communities in the analysis area where this action may significantly restrict subsistence uses and where it would not significantly restrict subsistence uses due to opening lands to mineral extraction in areas more likely to be developed.

**Table C-9. Summary of Findings, Alternative C**

Analysis Community	Loss of Federal Subsistence Priority		Increased Potential for Development	
	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use
Akiak		X		X
Akiachak	X		X	
Aleknagik	X		X	
Ambler	X		X	
Anderson	X		X	
Aniak	X		X	
Anvik	X			X
Beluga	X		X	
Brevig Mission	X		X	
Buckland		X	X	
Cantwell	X		X	
Chase	X		X	
Chickaloon	X		X	
Chistochina	X		X	
Chitina	X		X	
Chuathbaluk	X			X
Clark's Point	X		X	
Cooper Landing	X		X	
Copper Center	X		X	
Cordova	X		X	
Crooked Creek	X		X	
Crown Point	X			X
Deering		X	X	
Delta Junction	X			X
Denali Park	X		X	
Dillingham	X		X	

Analysis Community	Loss of Federal Subsistence Priority		Increased Potential for Development	
	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use
Dot Lake	X		X	
Dry Creek		X		X
Egegik	X		X	
Ekuk	X		X	
Ekwok	X		X	
Elim		X	X	
Eureka Roadhouse	X		X	
Ferry	X		X	
Fox River	X		X	
Gakona	X		X	
Galena		X		X
Georgetown	X		X	
Glacier View	X		X	
Glennallen	X		X	
Golovin		X	X	
Grayling	X			X
Gulkana	X		X	
Haines	X			X
Halibut Cove	X		X	
Happy Valley	X		X	
Healy	X		X	
Healy Lake*	X			X
Holy Cross	X			X
Hope	X		X	
Huslia		X		X
Igiugig	X			X
Iliamna	X		X	
Kenny Lake	X		X	
Kiana	X		X	
King Salmon	X		X	
Kivalina		X		X
Klukwan	X			X
Kobuk		X	X	
Kokhanok	X		X	
Koliganek	X			X
Kotzebue	X		X	
Koyuk		X	X	

Analysis Community	Loss of Federal Subsistence Priority		Increased Potential for Development	
	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use
Lake Louise	X		X	
Lake Minchumina	X			X
Levelock	X		X	
Lower Kalskag	X			X
Manokotak	X		X	
Marshall	X			X
McCarthy*	X			X
McGrath		X		X
Mendeltna	X		X	
Mentasta Lake	X		X	
Moose Pass	X			X
Nabesna	X		X	
Naknek	X		X	
Nanwalek	X		X	
Napaimute	X		X	
Nelchina	X		X	
New Stuyahok	X		X	
Newhalen	X		X	
Nikolaevsk	X		X	
Nikolai		X		X
Ninilchik	X		X	
Noatak	X			X
Nome	X		X	
Nondalton	X		X	
Noorvik	X		X	
Northway	X		X	
Paxson	X		X	
Pedro Bay	X		X	
Petersville		X	X	
Pilot Station	X			X
Pitka's Point	X			X
Platinum	X		X	
Point MacKenzie	X		X	
Point Possession	X		X	
Pope-Vannoy Landing	X		X	
Port Alsworth	X		X	
Portage Creek	X		X	

Analysis Community	Loss of Federal Subsistence Priority		Increased Potential for Development	
	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use
Red Devil	X		X	
Russian Mission	X			X
Saint Mary's	X			X
Saint Michael	X			X
Selawik		X	X	
Seldovia	X		X	
Shaktoolik		X		X
Shungnak		X	X	
Silver Springs	X		X	
Skwentna	X		X	
Slana	X		X	
Sleetmute		X	X	
South Naknek	X		X	
Stebbins	X			X
Stony River		X	X	
Sunrise	X		X	
Susitna	X		X	
Susitna North		X	X	
Takotna		X		X
Talkeetna	X		X	
Tanacross	X		X	
Tatitlek	X		X	
Tazlina	X		X	
Telida	X			X
Teller	X		X	
Tetlin	X		X	
Togiak	X		X	
Tok	X		X	
Tolsona	X		X	
Tonsina	X		X	
Trapper Creek	X		X	
Tuluksak	X		X	
Twin Hills	X		X	
Tyonek	X		X	
Unalakleet	X			X
Upper Kalskag	X			X
White Mountain		X	X	

Analysis Community	Loss of Federal Subsistence Priority		Increased Potential for Development	
	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use
Whittier	X		X	
Willow	X		X	
Willow Creek	X		X	

\* The communities of Healy Lake and McCarthy were not included as analysis communities because they did not meet the original criteria for analysis community selection. The addition of harvest ticket data for GMU 13 identified potential effects for these communities and therefore they are included in the final significance findings.

## Evaluation and Findings for Alternative D (2021 Proposed Action)

Under Alternative D, all 17(d)(1) withdrawals would be revoked. No lands would remain withdrawn under ANCSA 17(d)(1). Like Alternative C, Alternative D would revoke withdrawals even on State top filed lands that have been identified as having conflicts with subsistence, in addition to revoking withdrawals on additional lands with high mineral potential. Federal subsistence priority would no longer apply to approximately 567,000 acres of land that would become effective selections upon revocation of 17(d)(1) withdrawals. Approximately 400,000 acres where the 17(d)(1) withdrawals would be revoked under Alternative D are Priority 3 and 4 top filed lands, which would be rejected or relinquished within 10 years of the revocation due to overselection unless otherwise encumbered; thus, the Federal subsistence priority would apply again. This alternative would increase the potential for direct impacts to subsistence access. Primary impacts on subsistence user access, resource abundance, and resource availability would result from a change in subsistence management (i.e., loss of Federal subsistence priority) or an increase in the potential for development and are discussed under Alternative B. Differences under Alternative D as compared to Alternatives B and C are discussed below.

### ***Evaluation of the Effect of Use, Occupancy, or Disposition on Subsistence Use and Need***

Under Alternative D, 17(d)(1) withdrawals would be revoked in full across 27,735,000 acres. As with Alternatives B and C, when lands are conveyed to the State, the land would lose Federal management. Because the 17(d)(1) withdrawals would be revoked across more acres, Alternative D would have the greatest potential for changes in management in the decision area and therefore the greatest potential for direct impacts on subsistence user access.

Under Alternative D, 117 of the 138 analysis communities have subsistence use areas overlapping 17(d)(1) withdrawals that would lose Federal subsistence priority, compared to 44 analysis communities under Alternative B and 100 communities under Alternative C (see Tables C-1, C-5, and C-10). This analysis includes lands where there would be a permanent loss of Federal subsistence priority in addition to lands where there would be a temporary loss of Federal subsistence priority (i.e., State Priority 3 and 4 top filed lands that are eventually relinquished). As discussed under Alternative C, even a temporary loss of Federal subsistence priority could have longer term effects on subsistence uses because local subsistence users may quickly alter use patterns in response to changes in land management. Because both Alternatives C and D revoke withdrawals on all Priority 1 and 2 lands, regardless of any conflict with important public land resources, any differences between these alternatives in terms of loss of

Federal subsistence priority are due to the revocation of additional Priority 3 and 4 lands and therefore reflect a temporary loss of Federal subsistence priority.

The planning area with the greatest number of communities potentially affected under Alternative D in terms of a loss of Federal subsistence priority is the East Alaska (31 communities) planning area, followed by the Ring of Fire (19 communities), Bering Sea-Western Interior (25 communities), Bay (24 communities), and Kobuk-Seward Peninsula (18 communities) planning areas. Like Alternative C, the communities with the greatest acreage of use areas where there would be a loss of Federal subsistence priority under Alternative D are located in the East Alaska and Ring of Fire planning areas and include Healy, Cantwell, and Trapper Creek (Table C-10). Twenty-five communities, comprising 17 in the East Alaska planning area, three in the Ring of Fire planning area, two in the Kobuk-Seward Peninsula planning area, and three in the Bering Sea-Western Interior planning area, would lose Federal subsistence priority on at least 10,000 acres of documented subsistence use areas (Table C-10). In addition, though subsistence use area data are not available to measure direct impacts, 13 additional communities would have at least 10,000 acres of 17(d)(1) withdrawals revoked and lose Federal subsistence priority within 50 miles of their community, comprising 10 in the Bering Sea-Western Interior planning area, one in the Kobuk-Seward Peninsula planning area, and one in the East Alaska planning area (see Table C-11).

Based on available data, communities losing the highest percentage of use areas that currently have Federal subsistence priority are the same as under Alternative C and include Chickaloon, Ferry, Trapper Creek, Denali Park, Dot Lake, and Cantwell. Under Alternative D, 10 communities would lose Federal subsistence priority in some areas adjacent to (i.e., within 5 miles of) their community, comprising four communities in the East Alaska planning area, three in the Bering Sea-Western Interior planning area, two in the Bay planning area, and one in the Kobuk-Seward Peninsula planning area (see final EIS Table 3.14-8).

Like Alternative C, GMU 13 in the East Alaska planning area would lose the greatest percentage of lands with Federal subsistence priority, at 10.87 percent of lands (see final EIS Table 3.14-9). GMU 13C would lose nearly all (97.32 percent) lands with Federal subsistence priority, and therefore Healy Lake and McCarthy, who only have GMU 13 C&T use determinations for subunit GMU 13C, would lose nearly all subsistence priority opportunities within GMU 13 (see Table C-12). In addition, communities with a high reliance on GMU 13 for moose and caribou harvests, including Delta Junction, Copper Center, Glennallen, Kenny Lake, Gakona, Tazlina, Slana, and Cantwell (see final EIS Table 3.14-11), could experience increased competition for resources with the loss of Federal subsistence priority, particularly given the recent decline in the Nelchina caribou herd and associated hunting closures in GMU 13. In addition to GMU 13, GMU 22 in the Kobuk-Seward Peninsula planning area would lose 3.93 percent of lands with Federal subsistence priority, and an even greater number of acres (283,273) than GMU 13 (see final EIS Table 3.14-9). Lands losing Federal subsistence priority in GMU 22 are near Nome, Brevig Mission, Shaktoolik, Unalakleet, and Saint Michael.

Also under Alternative D, 104 of the 138 focused analysis area communities have subsistence use areas overlapping lands more likely to be developed compared to 100 under Alternative C and 27 under Alternative B (see Tables C-1, C-5, and C-10). The planning area with the greatest number of communities potentially affected under Alternative D in terms of an increase in development is the East Alaska (31 communities) planning area, followed by the Ring of Fire (24 communities), Bay (21 communities), Kobuk-Seward Peninsula (19 communities), and Bering Sea-Western Interior (9 communities) planning areas.

Eleven individual communities have more than 20,000 acres where 17(d)(1) withdrawals would be revoked and that are more likely to be developed under Alternative D (Table C-10). In addition, though subsistence use area data are not available to measure direct impacts, three additional communities would

have at least 10,000 acres of 17(d)(1) withdrawals revoked and be more likely to be developed within 50 miles of their community, comprising Silver Springs and Eureka Roadhouse in the East Alaska planning area and Teller in the Kobuk-Seward Peninsula planning area (see Table C-11).

Under Alternative D, 15 communities are adjacent to (i.e., within 5 miles of) areas more likely to be developed should the 17(d)(1) withdrawals be revoked; these comprise six communities in the East Alaska planning area, four communities in the Ring of Fire planning area, three communities in the Bay planning area, and one community each in the Bering Sea-Western Interior and Kobuk-Seward Peninsula planning areas (see final EIS Table 3.14-8). Forty-eight communities are central to (i.e., within 25 miles of) areas where 17(d)(1) withdrawals would be revoked and that are more likely to be developed in the five planning areas (see final EIS Table 3.14-8). These communities are the most likely to experience impacts from an increase in development activities and infrastructure under Alternative D.

Table C-13 provides an overall impact ranking for each analysis community based on the quantity of use area acres overlapping lands losing Federal subsistence priority and lands more likely to be developed (or where the revoked 17(d)(1) withdrawals are within 50 miles of a community with no use area data) and based on and the distance of these lands from each community. Under Alternative D, the East Alaska planning area has communities with an impact ranking of 12. These communities are Glennallen and Slana. Mentasta Lake in the East Alaska planning area has an impact ranking of 11, and a number of additional East Alaska planning area communities have an impact ranking of 10 (see Table C-13). In the other planning areas, as under Alternative C, communities with the highest impact rankings include Talkeetna and Trapper Creek (Ring of Fire); Aniak, Crooked Creek, and Napaimute (Bering Sea-Western Interior); Aleknagik, King Salmon, Nondalton, and Pope-Vannoy Landing (Bay); and Nome and Noatak (Kobuk-Seward Peninsula).

**Table C-10. Percentage of Use Areas Overlapping Where 17(d)(1) Withdrawals Would be Revoked and That Are More Likely to Be Developed or Losing Federal Subsistence Priority, Alternative D**

Analysis Community	Planning Area	Acres of Use Areas Overlapping Withdrawals that Would be Revoked and Areas Where Federal Subsistence Priority Would be Lost*		Acres of Use Areas Overlapping Withdrawals that Would be Revoked and Areas More Likely to be Developed	
		No.	%	No.	%
Ambler	Kobuk-Seward Peninsula	3,010	0.01%	9,511	0.03%
Brevig Mission	Kobuk-Seward Peninsula	26,973	0.72%	20,676	0.55%
Buckland	Kobuk-Seward Peninsula	2,983	0.04%	4,593	0.06%
Deering	Kobuk-Seward Peninsula	2,983	0.04%	4,385	0.05%
Elim	Kobuk-Seward Peninsula	Yes	Yes	Yes	Yes
Golovin	Kobuk-Seward Peninsula	0	0.00%	813	0.07%
Kiana	Kobuk-Seward Peninsula	Yes	Yes	Yes	Yes
Kivalina	Kobuk-Seward Peninsula	0	0.00%	813	0.07%
Kobuk	Kobuk-Seward Peninsula	2,865	0.02%	30	0.00%
Kotzebue	Kobuk-Seward Peninsula	2,983	0.03%	15,666	0.14%
Koyuk	Kobuk-Seward Peninsula	145	0.00%	5,095	0.03%
Noatak	Kobuk-Seward Peninsula	3,179	0.03%	4,416	0.03%
Nome	Kobuk-Seward Peninsula	Yes	Yes	Yes	Yes

Analysis Community	Planning Area	Acres of Use Areas Overlapping Withdrawals that Would be Revoked and Areas Where Federal Subsistence Priority Would be Lost*		Acres of Use Areas Overlapping Withdrawals that Would be Revoked and Areas More Likely to be Developed	
		No.	%	No.	%
Noorvik	Kobuk-Seward Peninsula	2,983	0.01%	15,666	0.07%
Selawik	Kobuk-Seward Peninsula	53,720	0.44%	33,841	0.28%
Shaktoolik	Kobuk-Seward Peninsula	3,010	0.02%	18,095	0.12%
Shungnak	Kobuk-Seward Peninsula	145	0.00%	4,385	0.04%
Teller	Kobuk-Seward Peninsula	Yes	Yes	Yes	Yes
White Mountain	Kobuk-Seward Peninsula	Yes	Yes	Yes	Yes
Akiachak	Bering Sea-Western Interior	6,989	0.08%	994	0.01%
Akiak	Bering Sea-Western Interior	N/A	N/A	No	No
Aniak	Bering Sea-Western Interior	40,619	0.51%	1,050	0.01%
Anvik	Bering Sea-Western Interior	Yes	Yes	N/A	N/A
Chuathbaluk	Bering Sea-Western Interior	Yes	Yes	N/A	N/A
Crooked Creek	Bering Sea-Western Interior	Yes	Yes	Yes	Yes
Galena	Bering Sea-Western Interior	15	0.00%	N/A	N/A
Georgetown	Bering Sea-Western Interior	Yes	Yes	Yes	Yes
Grayling	Bering Sea-Western Interior	Yes	Yes	N/A	N/A
Holy Cross	Bering Sea-Western Interior	Yes	Yes	N/A	N/A
Huslia	Bering Sea-Western Interior	145	0.00%	N/A	N/A
Lake Minchumina	Bering Sea-Western Interior	0	0.00%	N/A	N/A
Lower Kalskag	Bering Sea-Western Interior	Yes	Yes	N/A	N/A
Marshall	Bering Sea-Western Interior	4,248	0.18%	N/A	N/A
McGrath	Bering Sea-Western Interior	Yes	Yes	N/A	N/A
Napaimute	Bering Sea-Western Interior	Yes	Yes	Yes	Yes
Nikolai	Bering Sea-Western Interior	0	0.00%	N/A	N/A
Pilot Station	Bering Sea-Western Interior	Yes	Yes	N/A	N/A
Pitka's Point	Bering Sea-Western Interior	Yes	Yes	N/A	N/A
Red Devil	Bering Sea-Western Interior	Yes	Yes	Yes	Yes
Russian Mission	Bering Sea-Western Interior	103,179	2.08%	N/A	N/A
Saint Mary's	Bering Sea-Western Interior	Yes	Yes	N/A	N/A
Saint Michael	Bering Sea-Western Interior	Yes	Yes	N/A	N/A
Sleetmute	Bering Sea-Western Interior	N/A	N/A	Yes	Yes
Stebbins	Bering Sea-Western Interior	Yes	Yes	N/A	N/A
Stony River	Bering Sea-Western Interior	N/A	N/A	Yes	Yes
Takotna	Bering Sea-Western Interior	Yes	Yes	No	No
Telida	Bering Sea-Western Interior	0	0.00%	N/A	N/A
Tuluksak	Bering Sea-Western Interior	804	0.02%	994	0.02%
Unalakleet	Bering Sea-Western Interior	68,078	3.81%	N/A	N/A



Analysis Community	Planning Area	Acres of Use Areas Overlapping Withdrawals that Would be Revoked and Areas Where Federal Subsistence Priority Would be Lost*		Acres of Use Areas Overlapping Withdrawals that Would be Revoked and Areas More Likely to be Developed	
		No.	%	No.	%
Upper Kalskag	Bering Sea-Western Interior	Yes	Yes	N/A	N/A
Aleknagik	Bay	4,076	0.04%	1,720	0.02%
Clark's Point	Bay	4,079	0.05%	239	0.00%
Dillingham	Bay	4,077	0.03%	1,452	0.01%
Ekuk	Bay	Yes	Yes	Yes	Yes
Ekwok	Bay	97	0.00%	28	0.00%
Igiugig	Bay	3,840	0.15%	N/A	N/A
Iliamna	Bay	5,266	0.03%	2,059	0.01%
King Salmon	Bay	3,860	0.09%	28	0.00%
Kokhanok	Bay	4,357	0.11%	690	0.02%
Koliganek	Bay	76	0.00%	N/A	N/A
Levelock	Bay	3,916	0.13%	0	0.00%
Manokotak	Bay	236	0.00%	211	0.00%
Naknek	Bay	3,860	0.06%	28	0.00%
New Stuyahok	Bay	3,916	0.05%	1,866	0.02%
Newhalen	Bay	1,287	0.03%	1,860	0.05%
Nondalton	Bay	1,254	0.03%	1,860	0.04%
Pedro Bay	Bay	1,081	0.09%	72	0.01%
Platinum	Bay	236	0.00%	211	0.00%
Pope-Vannoy Landing	Bay	Yes	Yes	Yes	Yes
Port Alsworth	Bay	5,079	0.03%	1,860	0.01%
Portage Creek	Bay	2,219	0.04%	34	0.00%
South Naknek	Bay	20	0.00%	28	0.00%
Togiak	Bay	236	0.00%	211	0.00%
Twin Hills	Bay	236	0.00%	211	0.00%
Beluga	Ring of Fire	0	0.00%	0	0.00%
Chase	Ring of Fire	2,164	0.09%	5,082	0.21%
Chickaloon	Ring of Fire	17	0.00%	2,341	0.32%
Cooper Landing	Ring of Fire	6	0.00%	581	0.01%
Crown Point	Ring of Fire	Yes	Yes	N/A	N/A
Egegik	Ring of Fire	0	0.00%	0	0.00%
Fox River	Ring of Fire	Yes	Yes	Yes	Yes
Haines	Ring of Fire	0	0.00%	N/A	N/A
Halibut Cove	Ring of Fire	Yes	Yes	Yes	Yes
Happy Valley	Ring of Fire	Yes	Yes	Yes	Yes
Hope	Ring of Fire	0	0.00%	83	0.01%

Analysis Community	Planning Area	Acres of Use Areas Overlapping Withdrawals that Would be Revoked and Areas Where Federal Subsistence Priority Would be Lost*		Acres of Use Areas Overlapping Withdrawals that Would be Revoked and Areas More Likely to be Developed	
		No.	%	No.	%
Klukwan	Ring of Fire	0	0.00%	N/A	N/A
Moose Pass	Ring of Fire	Yes	Yes	N/A	N/A
Nanwalek	Ring of Fire	1	0.00%	272	0.01%
Nikolaevsk	Ring of Fire	0	0.00%	5	0.00%
Ninilchik	Ring of Fire	1	0.00%	159	0.00%
Petersville	Ring of Fire	N/A	N/A	Yes	Yes
Point MacKenzie	Ring of Fire	Yes	Yes	Yes	Yes
Point Possession	Ring of Fire	Yes	Yes	Yes	Yes
Seldovia	Ring of Fire	1,004	0.03%	815	0.02%
Skwentna	Ring of Fire	19,563	0.44%	1	0.00%
Sunrise	Ring of Fire	Yes	Yes	Yes	Yes
Susitna	Ring of Fire	0	0.00%	1	0.00%
Susitna North	Ring of Fire	N/A	N/A	Yes	Yes
Talkeetna	Ring of Fire	74,605	0.77%	14,973	0.15%
Trapper Creek	Ring of Fire	107,875	1.86%	5,703	0.10%
Tyonek	Ring of Fire	0.2	0.00%	0.04	0.00%
Whittier	Ring of Fire	74	Yes	4,915	0.08%
Willow	Ring of Fire	Yes	Yes	Yes	Yes
Anderson	East Alaska	19,199	0.15%	4,103	0.03%
Cantwell	East Alaska	138,520	3.21%	6,330	0.15%
Chistochina	East Alaska	3,482	0.21%	11,737	0.71%
Chitina	East Alaska	2,165	0.15%	7,067	0.48%
Copper Center	East Alaska	39,148	0.69%	62,530	1.11%
Cordova	East Alaska	Yes	Yes	Yes	Yes
Delta Junction	East Alaska	Yes	Yes	N/A	N/A
Denali Park	East Alaska	21,479	0.54%	6,306	0.16%
Dot Lake	East Alaska	190	0.03%	795	0.14%
Dry Creek	East Alaska	0	0.00%	N/A	N/A
Eureka Roadhouse	East Alaska	Yes	Yes	Yes	Yes
Ferry	East Alaska	13,759	0.96%	410	0.03%
Gakona	East Alaska	18,728	0.50%	24,681	0.65%
Glacier View	East Alaska	74	0.00%	114	0.01%
Glennallen	East Alaska	59,493	1.18%	56,185	1.11%
Gulkana	East Alaska	28,352	1.34%	52,505	2.47%
Healy	East Alaska	139,159	1.41%	6,175	0.06%
Kenny Lake	East Alaska	7,265	0.26%	16,555	0.60%

Analysis Community	Planning Area	Acres of Use Areas Overlapping Withdrawals that Would be Revoked and Areas Where Federal Subsistence Priority Would be Lost*		Acres of Use Areas Overlapping Withdrawals that Would be Revoked and Areas More Likely to be Developed	
		No.	%	No.	%
Lake Louise	East Alaska	0	0.00%	13,599	1.18%
Mendeltna	East Alaska	22,795	0.45%	50,062	1.00%
Mentasta Lake	East Alaska	87,808	0.95%	31,001	0.34%
Nabesna	East Alaska	57,314	2.49%	7,627	0.33%
Nelchina	East Alaska	22,795	0.44%	50,062	0.98%
Northway	East Alaska	190	0.01%	3,798	0.15%
Paxson	East Alaska	26,875	1.33%	6,890	0.34%
Silver Springs	East Alaska	Yes	Yes	Yes	Yes
Slana	East Alaska	69,112	3.42%	14,603	0.72%
Tanacross	East Alaska	844	0.03%	13,525	0.53%
Tatitlek	East Alaska	0	0.00%	0	0.00%
Tazlina	East Alaska	9,600	0.31%	6,036	0.19%
Tetlin	East Alaska	0	0.00%	0	0.00%
Tok	East Alaska	76,865	0.79%	26,781	0.28%
Tolsona	East Alaska	2,771	0.15%	1,101	0.06%
Tonsina	East Alaska	19,018	0.45%	57,646	1.35%
Willow Creek	East Alaska	291	0.25%	54	0.05%

Notes: Communities with yes/no entries do not have available subsistence use area data. Presence/absence of overlap is based on an assumed 50 mile radius of subsistence use around the community. For communities with no subsistence use area data, see Table C-11 for an analysis of revoked 17(d)(1) withdrawals within 50 miles of these analysis communities.

N/A = Community not within 50 miles/use area not overlapping analysis area.

\* Areas losing Federal subsistence use priority following revocation of 17(d)(1) withdrawals are State top filings that are not otherwise encumbered that would immediately become effective selections.

**Table C-11. Acres Within 50 Miles of Analysis Communities with No Subsistence Use Area Data Where 17(d)(1) Withdrawals Would be Revoked that are More Likely to Be Developed or Would Lose Federal Subsistence Priority, Alternative D**

Analysis Community	Planning Area	Acres within 50 Miles of Community	
		Areas Likely to be Developed	Areas Losing Federal Subsistence Priority
Elim	Kobuk-Seward Peninsula	4,147	1,398
Koyuk	Kobuk-Seward Peninsula	1,394	1,265
Shaktolik	Kobuk-Seward Peninsula	120	1,265
Teller	Kobuk-Seward Peninsula	28,124	53,587
White Mountain	Kobuk-Seward Peninsula	9,897	133
Akiak	Bering Sea-Western Interior	0	0
Anvik	Bering Sea-Western Interior	0	45,490
Chuathbaluk	Bering Sea-Western Interior	0	40,619

Analysis Community	Planning Area	Acres within 50 Miles of Community	
		Areas Likely to be Developed	Areas Losing Federal Subsistence Priority
Crooked Creek	Bering Sea-Western Interior	3,414	14,065
Georgetown	Bering Sea-Western Interior	3,414	640
Grayling	Bering Sea-Western Interior	0	174,349
Holy Cross	Bering Sea-Western Interior	0	48,266
Lower Kalskag	Bering Sea-Western Interior	0	50,424
McGrath	Bering Sea-Western Interior	0	33
Napaimute	Bering Sea-Western Interior	3,414	40,619
Pilot Station	Bering Sea-Western Interior	0	8,481
Pitka's Point	Bering Sea-Western Interior	0	2,320
Red Devil	Bering Sea-Western Interior	3,414	111
Saint Mary's	Bering Sea-Western Interior	0	4,545
Saint Michael	Bering Sea-Western Interior	0	265,808
Sleetmute	Bering Sea-Western Interior	3,414	0
Stebbins	Bering Sea-Western Interior	0	263,326
Stony River	Bering Sea-Western Interior	2,208	0
Takotna	Bering Sea-Western Interior	0	33
Upper Kalskag	Bering Sea-Western Interior	0	50,518
Ekuk	Bay	211	160
Pope-Vannoy Landing	Bay	1,931	1,178
Crown Point	Ring of Fire	0	191
Fox River	Ring of Fire	581	6
Halibut Cove	Ring of Fire	270	1
Happy Valley	Ring of Fire	581	10,706
Moose Pass	Ring of Fire	0	444
Petersville	Ring of Fire	1,416	0
Point MacKenzie	Ring of Fire	3,103	1,982
Point Possession	Ring of Fire	392	1,982
Sunrise	Ring of Fire	2,565	1,982
Susitna North	Ring of Fire	1,964	0
Willow	Ring of Fire	4,497	1,982
Cordova	East Alaska	504	2,986
Delta Junction	East Alaska	0	0
Eureka Roadhouse	East Alaska	13,697	73
Silver Springs	East Alaska	53,589	14,651

**Table C-12. Loss of Federal Subsistence Priority within Game Management Unit 13 by Community, Alternative D**

Analysis Community	Planning Area	C&T Use - Caribou	C&T Use - Moose	Acres of Federal Subsistence Priority	Federal Acres Losing Federal Subsistence Priority Under Alternative D	
					No.	%
Cantwell	East Alaska	13 ALL	13 ALL	1,981,876	215,515	10.87%
Chase	Ring of Fire	13 ALL	13 ALL	1,981,876	215,515	10.87%
Chickaloon	Ring of Fire	13 ALL	13 ALL	1,981,876	215,515	10.87%
Chistochina	East Alaska	13 ALL	13 ALL	1,981,876	215,515	10.87%
Chitina	East Alaska	13 ALL	13 ALL	1,981,876	215,515	10.87%
Copper Center	East Alaska	13 ALL	13 ALL	1,981,876	215,515	10.87%
Delta Junction	East Alaska	13B	13B	454,962	27,690	6.09%
Denali Park	East Alaska	13E	13E	964,306	121,535	39.69%
Dot Lake	East Alaska	13B	13B	454,962	27,690	6.09%
Dry Creek	East Alaska	13B	13B	454,962	27,690	6.09%
Eureka Roadhouse	East Alaska	13 ALL	13 ALL	1,981,876	215,515	10.87%
Gakona	East Alaska	13 ALL	13 ALL	1,981,876	215,515	10.87%
Glacier View	East Alaska	13 ALL	13 ALL	1,981,876	215,515	10.87%
Glennallen	East Alaska	13 ALL	13 ALL	1,981,876	215,515	10.87%
Gulkana	East Alaska	13 ALL	13 ALL	1,981,876	215,515	10.87%
Healy Lake	East Alaska	13C	13C	49,919	48,579	97.32%
Kenny Lake	East Alaska	13 ALL	13 ALL	1,981,876	215,515	10.87%
Lake Louise	East Alaska	13 ALL	13 ALL	1,981,876	215,515	10.87%
McCarthy	East Alaska	13C	None	49,919	48,579	97.31%
Mendeltna	East Alaska	13 ALL	13 ALL	1,981,876	215,515	10.87%
Mentasta Lake	East Alaska	13 ALL	13 ALL	1,981,876	215,515	10.87%
Nabesna	East Alaska	13 ALL	13C	1,981,876	215,515	10.87%
Nelchina	East Alaska	13 ALL	13 ALL	1,981,876	215,515	10.87%
Northway	East Alaska	None	13 ALL	1,981,876	215,515	10.87%
Paxson	East Alaska	13 ALL	13 ALL	1,981,876	215,515	10.87%
Silver Springs	East Alaska	13 ALL	13 ALL	1,981,876	215,515	10.87%
Slana	East Alaska	13 ALL	13 ALL	1,981,876	215,515	10.87%
Tanacross	East Alaska	None	13 ALL	1,981,876	215,515	10.87%
Tazlina	East Alaska	13 ALL	13 ALL	1,981,876	215,515	10.87%
Tetlin	East Alaska	None	13 ALL	1,981,876	215,515	10.87%
Tok	East Alaska	None	13 ALL	1,981,876	215,515	10.87%
Tolsona	East Alaska	13 ALL	13 ALL	1,981,876	215,515	10.87%
Tonsina	East Alaska	13 ALL	13 ALL	1,981,876	215,515	10.87%
Willow Creek	East Alaska	13 ALL	13 ALL	1,981,876	215,515	10.87%

**Table C-13. Overall Community Impact Ranking, ANCSA 17(d)(1) Withdrawals Final EIS, Alternative D**

Analysis Community	Planning Area	Lands More Likely to Be Developed		Lands Losing Federal Subsistence Priority*		Impact Ranking
		Distance from Community	Acreage (use areas or within 50 miles)	Distance from Community	Acreage (use areas or within 50 miles)	
Glennallen	East Alaska	Adjacent	56,094	Adjacent	59,419	12
Slana	East Alaska	Adjacent	14,603	Adjacent	69,112	12
Mentasta Lake	East Alaska	Central	30,965	Adjacent	87,808	11
Cantwell	East Alaska	Adjacent	6,328	Central	138,520	10
Chistochina	East Alaska	Adjacent	11,701	Central	3,482	10
Copper Center	East Alaska	Central	62,439	Central	39,075	10
Gakona	East Alaska	Central	24,645	Central	18,728	10
Gulkana	East Alaska	Central	52,468	Central	28,352	10
Mendeltna	East Alaska	Adjacent	49,971	Peripheral	22,722	10
Paxson	East Alaska	Central	6,889	Adjacent	26,875	10
Silver Springs	East Alaska	Central	53,554	Central	14,651	10
Talkeetna	Ring of Fire	Adjacent	14,960	Peripheral	74,605	10
Tonsina	East Alaska	Central	57,613	Central	19,018	10
Denali Park	East Alaska	Central	6,306	Central	21,479	9
Kenny Lake	East Alaska	Central	16,519	Central	7,265	9
King Salmon	Bay	Adjacent	0.3	Adjacent	3,858	9
Nelchina	East Alaska	Central	49,971	Peripheral	22,722	9
Nome	Kobuk-Seward	Central	27,896	Peripheral	42,067	9
Tazlina	East Alaska	Adjacent	5,999	Central	9,600	9
Trapper Creek	Ring of Fire	Adjacent	5,703	Peripheral	107,875	9
Aleknagik	Bay	Adjacent	189	Central	4,000	8
Brevig Mission	Kobuk-Seward	Peripheral	14,683	Peripheral	15,786	8
Chitina	East Alaska	Central	7,032	Central	2,165	8
Healy	East Alaska	Peripheral	6,175	Central	139,159	8
Nabesna	East Alaska	Peripheral	7,627	Central	57,314	8
Point MacKenzie	Ring of Fire	Central	3,052	Central	1,982	8
Teller	Kobuk-Seward	Peripheral	22,180	Peripheral	42,067	8
Tok	East Alaska	Peripheral	26,746	Peripheral	76,865	8
Tolsona	East Alaska	Central	1,100	Central	2,771	8
Ambler	Kobuk-Seward	Central	5,606	Peripheral	2,865	7
Anderson	East Alaska	Peripheral	4,079	Peripheral	19,175	7
Aniak	Bering Sea-Western Interior	Peripheral	994	Adjacent	3,502	7
Chase	Ring of Fire	Central	5,082	Peripheral	2,164	7
Crooked Creek	Bering Sea-Western Interior	Central	1,632	Peripheral	1,920	7

Analysis Community	Planning Area	Lands More Likely to Be Developed		Lands Losing Federal Subsistence Priority*		Impact Ranking
		Distance from Community	Acreage (use areas or within 50 miles)	Distance from Community	Acreage (use areas or within 50 miles)	
Iliamna	Bay	Central	178	Central	4,529	7
Naknek	Bay	Central	0.3	Central	3,858	7
Napaimute	Bering Sea-Western Interior	Peripheral	1,632	Central	3,502	7
Pope-Vannoy Landing	Bay	Central	72	Adjacent	517	7
Red Devil	Bering Sea-Western Interior	Adjacent	1,632	Peripheral	111	7
Sunrise	Ring of Fire	Peripheral	2,526	Central	1,982	7
Willow	Ring of Fire	Central	4,446	Peripheral	1,982	7
Clark's Point	Bay	Central	189	Peripheral	4,000	6
Dillingham	Bay	Central	189	Peripheral	4,001	6
Ferry	East Alaska	Peripheral	410	Peripheral	13,759	6
Georgetown	Bering Sea-Western Interior	Central	1,632	Peripheral	640	6
Happy Valley	Ring of Fire	Central	581	Central	6	6
Kokhanok	Bay	Peripheral	72	Central	4,357	6
Kotzebue	Kobuk-Seward	Peripheral	3,697	Peripheral	2,865	6
Lake Louise	East Alaska	Central	13,599	Peripheral	0	6
Newhalen	Bay	Central	1	Central	551	6
Ninilchik	Ring of Fire	Central	159	Central	1	6
Noorvik	Kobuk-Seward	Peripheral	2,693	Peripheral	2,865	6
Pedro Bay	Bay	Central	72	Central	420	6
Point Possession	Ring of Fire	Central	392	Peripheral	1,982	6
Port Alsworth	Bay	Central	1	Peripheral	4,342	6
Skwentna	Ring of Fire	Peripheral	1	Peripheral	19,563	6
South Naknek	Bay	Central	0.3	Central	18	6
Tanacross	East Alaska	Peripheral	13,525	Peripheral	844	6
Willow Creek	East Alaska	Central	54	Central	291	6
Chickaloon	Ring of Fire	Central	2,328	Peripheral	0	5
Cordova	East Alaska	Peripheral	504	Peripheral	2,986	5
Eureka Roadhouse	East Alaska	Central	13,642	None	0	5
Glacier View	East Alaska	Central	60	Peripheral	1	5
Kiana	Kobuk-Seward	Peripheral	30	Peripheral	2,865	5
Levelock	Bay	Peripheral	0	Central	3,840	5
Manokotak	Bay	Central	189	Peripheral	160	5
Nondalton	Bay	Central	1	Peripheral	517	5
Northway	East Alaska	Peripheral	3,798	Peripheral	190	5
Portage Creek	Bay	Peripheral	12	Peripheral	2,143	5
Russian Mission	Bering Sea-Western Interior	None	0	Central	67,998	5

Analysis Community	Planning Area	Lands More Likely to Be Developed		Lands Losing Federal Subsistence Priority*		Impact Ranking
		Distance from Community	Acreage (use areas or within 50 miles)	Distance from Community	Acreage (use areas or within 50 miles)	
Saint Michael	Bering Sea-Western Interior	None	0	Central	223,723	5
Seldovia	Ring of Fire	Peripheral	815	Peripheral	1,004	5
Stebbins	Bering Sea-Western Interior	None	0	Central	223,723	5
Susitna	Ring of Fire	Adjacent	1	Peripheral	0	5
Susitna North	Ring of Fire	Adjacent	1,952	None	0	5
Tyonek	Ring of Fire	Central	0.24	Peripheral	0.04	5
Unalakleet	Bering Sea-Western Interior	None	0	Central	59,807	5
Upper Kalskag	Bering Sea-Western Interior	None	0	Central	12,762	5
Whittier	Ring of Fire	Peripheral	4,822	Peripheral	1	5
Akiachak	Bering Sea-Western Interior	Peripheral	994	Peripheral	732	4
Anvik	Bering Sea-Western Interior	None	0	Peripheral	26,756	4
Beluga	Ring of Fire	Central	0.5	Peripheral	0	4
Buckland	Kobuk-Seward	Central	3,874	None	0	4
Chuathbaluk	Bering Sea-Western Interior	None	0	Central	3,502	4
Cooper Landing	Ring of Fire	Peripheral	581	Peripheral	6	4
Dot Lake	East Alaska	Peripheral	795	Peripheral	190	4
Ekuk	Bay	Peripheral	189	Peripheral	160	4
Ekwok	Bay	Peripheral	0.3	Peripheral	18	4
Elim	Kobuk-Seward	Central	4,027	None	0	4
Fox River	Ring of Fire	Peripheral	581	Peripheral	6	4
Grayling	Bering Sea-Western Interior	None	0	Peripheral	139,034	4
Halibut Cove	Ring of Fire	Peripheral	270	Peripheral	1	4
Holy Cross	Bering Sea-Western Interior	None	0	Peripheral	10,510	4
Hope	Ring of Fire	Peripheral	83	Central	0	4
Igiugig	Bay	None	0	Central	3,840	4
Koyuk	Kobuk-Seward	Central	1,275	None	0	4
Lower Kalskag	Bering Sea-Western Interior	None	0	Central	12,667	4
Marshall	Bering Sea-Western Interior	None	0	Central	2,210	4
Nanwalek	Ring of Fire	Peripheral	272	Peripheral	1.0	4
New Stuyahok	Bay	Peripheral	0	Peripheral	3,840	4
Nikolaevsk	Ring of Fire	Peripheral	5	Peripheral	0.4	4
Petersville	Ring of Fire	Central	1,403	None	0	4
Platinum	Bay	Peripheral	189	Peripheral	160	4
Sleetmute	Bering Sea-Western Interior	Central	1,632	None	0	4
Togiak	Bay	Peripheral	189	Peripheral	160	4
Tuluksak	Bering Sea-Western Interior	Peripheral	994	Peripheral	726	4



Analysis Community	Planning Area	Lands More Likely to Be Developed		Lands Losing Federal Subsistence Priority*		Impact Ranking
		Distance from Community	Acreage (use areas or within 50 miles)	Distance from Community	Acreage (use areas or within 50 miles)	
Twin Hills	Bay	Peripheral	189	Peripheral	160	4
White Mountain	Kobuk-Seward	Central	6,758	None	0	4
Deering	Kobuk-Seward	Peripheral	3,667	None	0	3
Golovin	Kobuk-Seward	Central	813	None	0	3
Kobuk	Kobuk-Seward	Peripheral	1,909	None	0	3
Lake Minchumina	Bering Sea-Western Interior	None	0	Adjacent	0	3
Pilot Station	Bering Sea-Western Interior	None	0	Peripheral	6,690	3
Pitka's Point	Bering Sea-Western Interior	None	0	Peripheral	2,320	3
Saint Mary's	Bering Sea-Western Interior	None	0	Peripheral	4,455	3
Selawik	Kobuk-Seward	Peripheral	3,667	None	0	3
Shungnak	Kobuk-Seward	Peripheral	5,576	None	0	3
Stony River	Bering Sea-Western Interior	Central	994	None	0	3
Tatitlek	East Alaska	Central	0	Peripheral	0	3
Tetlin	East Alaska	Central	0	Peripheral	0	3
Crown Point	Ring of Fire	None	0	Peripheral	191	2
Egegik	Ring of Fire	Peripheral	0	Peripheral	0	2
Haines	Ring of Fire	None	0	Central	0	2
Klukwan	Ring of Fire	None	0	Central	0	2
Moose Pass	Ring of Fire	None	0	Peripheral	444	2
Koliganek	Bay	None	0	Peripheral	0	1
Noatak	Kobuk-Seward	None	0	Peripheral	0	1
Telida	Bering Sea-Western Interior	None	0	Peripheral	0	1
Akiak	Bering Sea-Western Interior	None	0	None	0	0
Delta Junction	East Alaska	None	0	None	0	0
Dry Creek	East Alaska	None	0	None	0	0
Galena	Bering Sea-Western Interior	None	0	None	0	0
Huslia	Bering Sea-Western Interior	None	0	None	0	0
Kivalina	Kobuk-Seward	None	0	None	0	0
McGrath	Bering Sea-Western Interior	None	0	None	0	0
Nikolai	Bering Sea-Western Interior	None	0	None	0	0
Shaktolik	Kobuk-Seward	None	0	None	0	0
Takotna	Bering Sea-Western Interior	None	0	None	0	0

Notes:

Distance from Community categorized as follows:

None (no color) = No subsistence use area overlap where 17(d)(1) withdrawals would be revoked, or (if use area data not available), community more than 50 miles from where 17(d)(1) withdrawals would be revoked.

Peripheral (yellow) = Community more than 25 miles from where 17(d)(1) withdrawals would be revoked.

Central (orange) = Community between 5 and 25 miles from where 17(d)(1) withdrawals would be revoked.

Adjacent (red) = Community within 5 miles of where 17(d)(1) withdrawals would be revoked.

Acreage categorized as follows:

0 = None

Yes (gray) = Assumed overlap based on 50-mile radius from community.

Low (yellow) = < 1,000 acres overlapping areas losing Federal subsistence priority or areas more likely to be developed.

Medium (orange) = between 1,000 and 10,000 acres overlapping areas losing Federal subsistence priority or areas more likely to be developed.

High (red) = > 10,000 acres overlapping areas losing Federal subsistence priority or areas more likely to be developed.

Impact ranking (calculated by summing the values for each community) categorized as follows:

None (no color) = zero

Peripheral/fewer than 1,000 acres (yellow) = 1

Central/between 1,000 and 10,000 acres/"yes" (orange) = 2

Adjacent/more than 10,000 acres (red) = 3

\* Areas losing Federal subsistence use priority following revocation of 17(d)(1) withdrawals are State top filings that are not otherwise encumbered that would immediately become effective selections.

## ***Evaluation of the Availability of Other Lands***

ANCSA 17(d)(1) withdrawals were originally established in 1972–1973. The purpose for the project is to review the revocation of 17(d)(1) withdrawals as indicated in PLOs 7899 through 7903, and to provide for the orderly management of the public lands in the decision area in a way that is consistent with the purposes of the 17(d)(1) withdrawals to ensure “the public interest in these lands is properly protected.” The BLM has designed Alternative D specifically to evaluate revocation of the ANCSA 17(d)(1) withdrawals consistent with the action described in PLOs 7899, 7900, 7901, 7902, and 7903. Because Alternative D revokes all 17(d)(1) withdrawals within the decision area, there are no additional lands available to consider. Under Alternative D, all lands within the decision area would be opened to public land laws, including State selection, and would be managed by the BLM under the applicable RMPs.

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

Alternative D revokes in full all 17(d)(1) withdrawals in the decision area. The amount of land the State can receive is defined by the Alaska Statehood Act, and no actions taken by the Secretary can reduce or eliminate that disposition of the public lands, but this action would shift those conveyances into the decision area. The other alternatives considered in the final EIS are to not revoke the 17(d)(1) withdrawals (Alternative A), to revoke in part State Priority 1 and 2 top filed lands only where selection and conveyance would not conflict with important public land resources (Alternative B), and to revoke State Priority 1 and 2 top filed lands and lands with a high development potential (Alternative C).

The use and occupancy of lands that remain in Federal management would be managed consistent with the BLM RMP applicable to the area; the primary change in use and occupancy of these lands would be allowance of mineral entry and non-discretionary public land laws, such as the existing and future selections of Native allotments by Alaska Native veterans pursuant to the John D. Dingell Jr. Conservation, Management, and Recreation Act, and the conveyance of State -selected lands assuming no restrictions other than the revoked 17(d)(1) withdrawals. With the 17(d)(1) withdrawals revoked, the land would also be open to mineral leasing where not already allowable and where allowable under the applicable RMP.

## ***Findings***

This evaluation concludes that Alternative D may result in significant restriction to subsistence uses affecting user access for 135 rural communities that overlap or are adjacent to areas subject to the 17(d)(1) withdrawals that would be revoked under Alternative D. Subsistence user access for those

communities would be affected due to a loss of Federal subsistence priority, resulting in an increase in competition for subsistence resources from non-rural, non-Federally-qualified hunters. See Table C-14 for a list of the analyzed communities where this action may significantly restrict subsistence uses and where it would not significantly restrict subsistence uses due to loss of Federal subsistence priority.

In addition, revocation of withdrawals under Alternative D may result in unselected Federal lands becoming open to mineral entry and leasing causing an increase potential for resource development that may result in significant restriction to subsistence uses affecting user access and resource abundance and availability for 108 rural communities that overlap or are adjacent to the 17(d)(1) withdrawals that would be revoked. This evaluation assumes that the potential for ROWs, mineral exploration and development, and other development projects would increase when the lands are conveyed to the State, especially in areas identified as more likely to be developed. See Table C-14 for a list of the communities in the analysis area where this action may significantly restrict subsistence uses and where it would not significantly restrict subsistence uses due to opening lands to mineral extraction in areas more likely to be developed.

**Table C-14. Summary of Findings, Alternative D**

Analysis Community	Loss of Federal Subsistence Priority		Increased Potential for Development	
	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use
Akiak		X		X
Akiachak	X		X	
Aleknagik	X		X	
Ambler	X		X	
Anderson	X		X	
Aniak	X		X	
Anvik	X			X
Beluga	X		X	
Brevig Mission	X		X	
Buckland	X		X	
Cantwell	X		X	
Chase	X		X	
Chickaloon	X		X	
Chistochina	X		X	
Chitina	X		X	
Chuathbaluk	X			X
Clark's Point	X		X	
Cooper Landing	X		X	
Copper Center	X		X	
Cordova	X		X	
Crooked Creek	X		X	
Crown Point	X			X

Analysis Community	Loss of Federal Subsistence Priority		Increased Potential for Development	
	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use
Deering	X		X	
Delta Junction	X			X
Denali Park	X		X	
Dillingham	X		X	
Dot Lake	X		X	
Dry Creek	X			X
Egegik	X		X	
Ekuk	X		X	
Ekwok	X		X	
Elim	X		X	
Eureka Roadhouse	X		X	
Ferry	X		X	
Fox River	X		X	
Gakona	X		X	
Galena	X			X
Georgetown	X		X	
Glacier View	X		X	
Glennallen	X		X	
Golovin	X		X	
Grayling	X			X
Gulkana	X		X	
Haines	X			X
Halibut Cove	X		X	
Happy Valley	X		X	
Healy	X		X	
Healy Lake*	X			X
Holy Cross	X			X
Hope	X		X	
Huslia	X			X
Igiugig	X			X
Iliamna	X		X	
Kenny Lake	X		X	
Kiana	X		X	
King Salmon	X		X	
Kivalina	X		X	
Klukwan	X			X
Kobuk	X		X	

Analysis Community	Loss of Federal Subsistence Priority		Increased Potential for Development	
	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use
Kokhanok	X		X	
Koliganek	X			X
Kotzebue	X		X	
Koyuk	X		X	
Lake Louise	X		X	
Lake Minchumina	X			X
Levelock	X		X	
Lower Kalskag	X			X
Manokotak	X		X	
Marshall	X			X
McCarthy*	X			X
McGrath	X			X
Mendeltna	X		X	
Mentasta Lake	X		X	
Moose Pass	X			X
Nabesna	X		X	
Naknek	X		X	
Nanwalek	X		X	
Napaimute	X		X	
Nelchina	X		X	
New Stuyahok	X		X	
Newhalen	X		X	
Nikolaevsk	X		X	
Nikolai	X			X
Ninilchik	X		X	
Noatak	X		X	
Nome	X		X	
Nondalton	X		X	
Noorvik	X		X	
Northway	X		X	
Paxson	X		X	
Pedro Bay	X		X	
Petersville		X	X	
Pilot Station	X			X
Pitka's Point	X			X
Platinum	X		X	
Point MacKenzie	X		X	

Analysis Community	Loss of Federal Subsistence Priority		Increased Potential for Development	
	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use
Point Possession	X		X	
Pope-Vannoy Landing	X		X	
Port Alsworth	X		X	
Portage Creek	X		X	
Red Devil	X		X	
Russian Mission	X			X
Saint Mary's	X			X
Saint Michael	X			X
Selawik	X		X	
Seldovia	X		X	
Shaktoolik	X		X	
Shungnak	X		X	
Silver Springs	X		X	
Skwentna	X		X	
Slana	X		X	
Sleetmute		X	X	
South Naknek	X		X	
Stebbins	X			X
Stony River		X	X	
Sunrise	X		X	
Susitna	X		X	
Susitna North		X	X	
Takotna	X			X
Talkeetna	X		X	
Tanacross	X		X	
Tatitlek	X		X	
Tazlina	X		X	
Telida	X			X
Teller	X		X	
Tetlin	X		X	
Togiak	X		X	
Tok	X		X	
Tolsona	X		X	
Tonsina	X		X	
Trapper Creek	X		X	
Tuluksak	X		X	
Twin Hills	X		X	

Analysis Community	Loss of Federal Subsistence Priority		Increased Potential for Development	
	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use
Tyonek	X		X	
Unalakleet	X			X
Upper Kalskag	X			X
White Mountain	X		X	
Whittier	X		X	
Willow	X		X	
Willow Creek	X		X	

\* The communities of Healy Lake and McCarthy were not included as analysis communities because they did not meet the original criteria for analysis community selection. The addition of harvest ticket data for GMU13 identified potential effects for these communities and therefore they are included in the final significance findings.

## Evaluation and Findings for the Cumulative Case

As discussed in final EIS Section 3.14.1.2.7, any revocation of 17(d)(1) withdrawals, in combination with past, present, and reasonably foreseeable future activities, would increase the potential for impacts on subsistence user access, resource abundance, and resource availability. Existing impacts on subsistence from past and present actions are discussed in final EIS Sections 3.14.1.1.4, 3.14.2.1.2, and 3.14.3.1.1. Past and existing impact sources include subsistence management; prior land selections and land conveyances out of Federal ownership; development infrastructure, activities, and security restrictions; and climate change. Reasonably foreseeable future projects within the five planning areas include infrastructure, power, and transportation projects; mining and oil and gas development; recreation; and changes to land and resource management.

### ***Evaluation of the Effect of Use, Occupancy, or Disposition on Subsistence Use and Need***

Any revocation of 17(d)(1) withdrawals, in combination with past, present, and reasonably foreseeable future activities, would increase the potential for impacts on subsistence user access, resource abundance, and resource availability. Revocation of withdrawals and associated changes in land management and development opportunities would likely result in impacts to resource abundance, resource availability, and subsistence user access for communities who use lands subject to 17(d)(1) withdrawals or who harvest resources that migrate through such land. Communities near to or with subsistence use areas overlapping lands more likely to be developed or where there may be a loss of Federal subsistence priority following revocation of 17(d)(1) withdrawals are most likely to experience cumulative impacts on subsistence.

Revocation of withdrawals could result in more lands becoming available for development infrastructure and activities. In general, future development of the planning areas would further expand the total developed area, increasing the frequency and likelihood of impacts to subsistence uses. Reasonably foreseeable mining and oil and gas development projects would contribute to impacts associated with noise, traffic, human activity, infrastructure, and contamination. Noise, traffic, and human activity could affect resource availability by diverting resources from their expected migratory routes or causing a shift in resource distribution. Infrastructure such as roads and pipelines could also deflect or delay resource movements, or cause shifts in habitat use. These changes could make certain resources less available to

subsistence users in traditional places at traditional times. Development can also contribute to impacts on subsistence user access by causing physical obstructions to overland travel or by introducing restrictions on subsistence uses near development infrastructure.

There are reasonably foreseeable mining projects in all five planning areas, with the Kobuk-Seward Peninsula planning area having the greatest potential for future mining projects. If revocation of 17(d)(1) withdrawals results in the opening of more lands to mining development, then there would be cumulative impacts to subsistence users, particularly in the Kobuk-Seward Peninsula planning area, resulting from development activities and infrastructure. Mine pits, roads, pipelines, and associated buildings would contribute to habitat fragmentation, loss of subsistence use areas, and changes in subsistence user access for rural communities. Traffic associated with transport of mine ore and mine workers, including ground and air traffic, would contribute to disturbances of subsistence resources and subsistence hunters, potentially reducing the availability of resources such as caribou and moose to local hunters. Restrictions on firearm discharge around mine facilities as well as security restrictions around development areas would contribute to impacts to subsistence user access. Although less common within the five planning areas, oil and gas development would similarly contribute to impacts related to infrastructure, noise and traffic, human activity, and security restrictions. Reasonably foreseeable oil and gas activities are most common in the Ring of Fire and East Alaska planning areas and include the Beluga River Unit Gas Well (Ring of Fire), Donlin Mine Gas Pipeline (Ring of Fire and Bering Sea-Western Interior), Alaska LNG pipeline (East Alaska, Ring of Fire), and continued maintenance of the Trans-Alaska Pipeline System (East Alaska).

Cumulative impacts of development following revocation of 17(d)(1) withdrawals would be particularly likely in regions that already have high numbers of lands open to mineral entry, leasing, or sales. The Bering Sea-Western Interior and Kobuk-Seward planning area have the most acres currently open to mineral entry, leasing, or sales (final EIS Table 1.2-1), and therefore these planning areas, and the communities within these planning areas (final EIS Table 3.14-2), may be particularly likely to experience cumulative impacts of development resulting from revocation of withdrawals.

Communication infrastructure, ROW access, power, and transportation projects in four of the five planning areas (Kobuk-Seward Peninsula, Bering Sea-Western Interior, Bay, and East Alaska) would contribute to 1) increased development in the planning areas through an increase in construction noise, traffic, and human activity during infrastructure installation and 2) the creation of ROWs, which could increase access by non-local hunters into previously difficult to access areas. Increased roads and associated traffic would also contribute to changes in resource availability and abundance. ROWs associated with development of the planning areas, in combination with loss of Federal subsistence priority following revocation of 17(d)(1) withdrawals, could increase competition and decrease hunting success for rural subsistence users. Changes to waterways resulting from road, bridge, and culvert construction as well as increased sedimentation could contribute to impacts on fish availability. In the East Alaska planning area, the Susitna Watana Dam could contribute to changes in fish availability through impacts on access to spawning grounds. Reasonably foreseeable transportation projects are most common in the Kobuk-Seward Peninsula planning area and include the Ambler Road, which, if approved, would facilitate mining access in the planning area, affect subsistence user access, and potentially increase outsider access into the planning area through the creation of ROWs. In the Ring of Fire planning area, the West Susitna Access road would connect the highway system to State recreation lands west of the Susitna River via a 100 mile road and construct a boat launch facility on the Susitna River. Rural residents in this area would likely see a dramatic increase in nonlocal hunters and fishers and resulting competition.

Construction of additional roads and infrastructure in the future would contribute to fragmentation of habitat for such resources as caribou, moose, furbearers, and waterfowl. Infrastructure would remove



usable habitat for these resources and, in the case of caribou, could cause substantial changes in range distribution. Impacts on migrating caribou increase with density of roads and infrastructure; thus, increased development of the planning areas resulting from reasonably foreseeable development activities and any development likely to follow revocation of 17(d)(1) withdrawals would contribute to changes in caribou migration, distribution, and abundance, with resulting cumulative impacts on subsistence resource availability to communities that use these resources.

If mining, oil and gas, infrastructure, and transportation projects reduce resource availability for subsistence analysis communities or if they decrease access to traditional use areas, then residents may have to spend greater amounts of time, effort, and money to locate and procure these resources. Residents may also have to travel farther to less familiar areas to find resources, with greater risks to health and safety, which may be compounded by similar impacts related to climate change. Although some hunters respond to changes in resource availability or subsistence user access by taking more trips and increasing costs to harvest what they need, others may choose to take fewer trips because of lack of funds or reduced success.

The overall area available for subsistence use may shrink over time due to the increasing presence of infrastructure and human activity in traditional use areas. Although subsistence users would adapt, to varying extents, to the changes occurring around them and may continue to harvest resources at adequate levels, their connection to certain traditional areas may decrease over time. Such changes have been documented on the North Slope of Alaska because of oil and gas development, particularly for the community of Nuiqsut, which has experienced a gradual shift in subsistence use areas away from the Prudhoe Bay area (SRB&A 2018). An increase in road corridors in traditional use areas could also shift how residents access subsistence harvesting areas, such as via roads, but could also affect resource availability, particularly for those who choose not to use roads. Such changes, including increased use of roads, combined with changes in harvesting patterns and resource availability, have been documented in Alaska (SRB&A 2007, 2023). Roads, if available for use by local subsistence users, could have a positive impact of increased access for residents into areas previously inaccessible during certain times of year. If roads are closed to use by local residents, then the impacts of the roads on resource availability and subsistence user access would be greater.

The above reasonably foreseeable mining, oil and gas, transportation, and infrastructure projects could contribute to contamination of waterways, air, and foraging habitat through oil spills, mine tailings, fugitive dust from roads and construction, and emissions from equipment. In combination with increased lands open to development because of revocation of 17(d)(1) withdrawals, cumulative impacts from spills could reduce the abundance of certain subsistence resources including salmon, non-salmon fish, waterfowl, and vegetation.

Increased recreation throughout the five planning areas, including increased opportunities for commercial big game hunting and other recreational activities, could contribute to increased competition for rural users resulting from changes in land management and a loss of Federal subsistence priority. Increased competition and decreased resource availability may result in residents having to travel farther and spend more time, money, and effort to harvest such resources as moose and caribou.

Revocation of 17(d)(1) withdrawals considered in this analysis, in combination with past and reasonably foreseeable future land conveyances and changes in landownership, could contribute to cumulative impacts on subsistence user access and resource availability across the state. Access to Federal lands varies by community and region. On Federal public lands, rural residents typically have a subsistence priority (unless those lands are State or ANC selected under ANCSA) and, under ANILCA, reasonable subsistence access is guaranteed (see final EIS Section 3.14.1.1.1). Conveyance of lands out of Federal ownership results in a loss of Federal subsistence priority, which can result in a decrease in access for

rural subsistence users, an increase in competition with non-rural users, and reduced harvest success and opportunities to conduct traditional subsistence activities. Ongoing land conveyances have already led to some communities losing Federal subsistence priority on lands used for subsistence harvesting. Communities in the Kobuk-Seward Peninsula planning area have the current greatest amount of subsistence use areas overlapping Federal lands with Federal subsistence priority (see final EIS Table 3.14-7). Communities in the East Alaska planning area would lose the greatest number of acres of Federal Subsistence Priority under the action alternatives (see Tables C-1, C-5, and C-10).

Alternatives that revoke the 17(d)(1) withdrawals across the greatest acreage are most likely to contribute to cumulative effects on subsistence uses and resources. This is because they would be most likely to cause an immediate loss of Federal subsistence priority for rural residents, and because they would be most likely to open new lands to development. Thus, Alternative D would have the largest potential contribution to cumulative effects on subsistence uses and resources, followed by Alternative C and Alternative B. However, another action affecting the amount of Federal subsistence priority lands would be the relinquishing of State and ANC selections due to overselection, and the return of those lands to Federal management. Thus, following a temporary loss of Federal subsistence priority on some subsistence lands, many Priority 3 and 4 lands would return to Federal ownership and thus gain Federal subsistence priority status. This would happen, eventually, under all alternatives.

As shown in the final EIS Table 3.14-15, despite near term impacts from the proposed revocation action, most communities would experience a net gain in lands with Federal subsistence priority within their harvesting area once State Priority 3 and 4 lands are relinquished by the State. Additional lands may return to Federal management once the ANC conveyances have been completed and remaining selections are relinquished. Under Alternative B, three communities (Dot Lake, Nabesna, and Northway) would have a net loss in Federal subsistence priority once Priority 3 and 4 lands return to Federal ownership. Under Alternatives C and D, 18 and 21 communities, respectively, would have a net loss in Federal subsistence priority lands, primarily those in the East Alaska region but also in the Ring of Fire planning area. Communities experiencing the greatest net loss of Federal Subsistence Priority under Alternatives C and D are Trapper Creek, Mentasta Lake, Tok, Slana, Nabesna, Glennallen, Gulkana, Skwentna, Paxson, Mendeltna, Nelchina, Tazlina, and Tolsona (see final EIS Table 3.14-15). Despite the eventual return of many lands to Federal management, the short-term loss of Federal subsistence priority could still have long-term impacts on user access, resource abundance, and resource availability. Local subsistence users may quickly alter use patterns in response to changes in land management. On the North Slope, for example, access to industrial roads led to documentable changes in subsistence land patterns within several years of road construction (SRB&A 2023). Thus, the temporary loss of Federal subsistence priority on some lands could result in a permanent shift in that community's harvesting patterns, reduce opportunities to pass on knowledge about those lands, and ultimately affect a community's connection to traditional land.

As shown in the final EIS Table 3.14-16, 28 communities in four of the five planning areas (Ring of Fire, East Alaska, Kobuk-Seward Peninsula, and Bering Sea-Western Interior) could further lose areas of Federal subsistence if the Secretary revokes withdrawals in the Central Yukon planning area.<sup>2</sup> Talkeetna in the Ring of Fire planning area would experience the greatest loss of Federal subsistence priority in terms of acreage (239,696 acres), followed by three communities in the East Alaska planning area (Anderson, Tok, and Healy), four communities in the Kobuk-Seward Peninsula planning area (Selawik, Ambler, Shungnak, and Kobuk), and two communities in the Bering Sea-Western Interior planning area (Huslia and Galena). Ten communities would lose Federal subsistence priority on more than 10,000 acres.

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<sup>2</sup> Revocation or retention of withdrawals in the Central Yukon planning area would occur under a different Secretarial decision than may be issued from the EIS. For the purposes of this analysis, the EIS assumes all 17(d)(1) withdrawals in the Central Yukon planning area would be revoked so that the EIS analyzes the largest potential amount of change. However, withdrawal decisions are reserved for the Secretary and not the BLM.

Ultimately, cumulative impacts on subsistence could alter subsistence user access, resource abundance, and resource availability for subsistence users, leading to impacts on cultural identity and traditions; social and kinship ties; and physical, spiritual, and mental health. When subsistence users' opportunities to engage in subsistence activities are limited, then their opportunities to transmit knowledge about those activities, which are learned through participation, are also limited. If residents stop using portions of the planning area for subsistence purposes, either due to avoidance of development activities or reduced availability of subsistence resources, the opportunity to transmit traditional knowledge to younger generations about those traditional use areas would be diminished. Although communities would likely maintain a cultural connection to these areas and acknowledge them as part of their traditional land use area, the loss of direct use of the land could lead to reduced knowledge for the younger generation of place names, stories, and traditional ecological knowledge associated with those areas. There would also be fewer opportunities for residents to participate in the distribution and consumption of subsistence resources, ultimately affecting the social cohesion of the community. Sharing is a key value in many regions of rural Alaska, which is central to subsistence and which strengthens social and kinship ties across communities and regions. Decreased harvests among analysis communities could disrupt sharing networks both within planning areas and extending outside planning areas to other regions of Alaska (Kofinas et al. 2016).

Any changes to residents' ability to participate in subsistence activities, to harvest subsistence resources in traditional places at the appropriate times, and to consume subsistence foods could have long-term or permanent effects on the spiritual, cultural, economic, and physical wellbeing of the analysis communities. This would come about by diminishing social ties that are strengthened through harvesting, processing, and distributing subsistence resources and by weakening overall community wellbeing. Reduced harvests would also have economic impacts on residents who rely on subsistence harvests to offset the high cost of living (including groceries and heating oil) in rural communities, and nutritional impacts on residents who must increase consumption of less healthy store-bought foods.

Current subsistence use patterns, as described in final EIS Section 3.14.1.1, Affected Environment, and EIS Appendix G, Subsistence Technical Appendix, are a result of the adaptation of communities to various changes over time. A number of studies document the resilience of subsistence communities in the face of change (Martin 2015; Ready 2019; Kofinas et al. 2016). Resilience allows communities and households to adjust to changes, such as changes brought about by climate change, development activities, and hunting regulations, while maintaining access to key cultural resources and activities. However, this is not to say communities have not experienced negative impacts on subsistence hunting activities, loss of subsistence use areas, and social effects. There could be a point in the future wherein communities can no longer keep up with the pace of the changes occurring around them and experience a decrease in communities' ability to maintain subsistence harvests and activities. Larger disruptions to subsistence harvests, particularly in combination with changes in subsistence management and ongoing impacts of climate change, could affect the social, cultural, and economic wellbeing of the analysis communities, especially to the more vulnerable low-income, unconnected, and low-harvest households who rely on strong sharing networks for their food security (Kofinas et al. 2016). The continued maintenance of subsistence traditions would depend on the continued availability of subsistence resources and the continued ability of subsistence users to access traditional lands and resources, particularly if there are changes in resource abundance, distribution, or migration.

### ***Evaluation of the Availability of Other Lands***

The evaluation of the availability of other lands is identical to that provided above under Alternative D.

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

The evaluation of other alternatives is identical to that provided above under Alternative D.

### ***Findings***

Revocation of the 17(d)(1) withdrawals, in combination with past, present, and reasonably foreseeable future activities, would increase the potential for impacts on subsistence user access, resource abundance, and resource availability. Past and existing impact sources include subsistence management; prior land selections and land conveyances out of Federal ownership; development infrastructure, activities, and security restrictions; and climate change. Reasonably foreseeable development within the five planning areas includes communication infrastructure, ROW access, infrastructure, power generation, and transportation projects; mining and oil and gas development; recreation; and changes to land and resource management. Possible reasonably foreseeable actions are summarized in final EIS Table 3.1-6. All five planning areas in this analysis have reasonably foreseeable planned actions that may contribute to the cumulative impacts to subsistence user access and availability and abundance of subsistence resources following revocation of the 17(d)(1) withdrawals.

The cumulative impacts following revocation of the 17(d)(1) withdrawals, in combination with past, present, and reasonably foreseeable future activities, as presented in this analysis may result in significant restriction to subsistence uses affecting user access and availability and abundance of subsistence resources for the same communities listed in Alternative B (74 communities), C (131 communities), and D (139 communities). Alternatives that revoke the 17(d)(1) withdrawals across the greatest acreage have the greatest potential for cumulative effects to subsistence uses and resources, because those alternatives would be more likely to cause the greatest immediate loss of Federal subsistence priority and because those alternatives would be more likely to open new lands to development. Therefore, Alternative D would have the greatest cumulative impacts on subsistence uses and resources, followed by Alternative C, and Alternative B, because the greatest amount of land would lose its Federal subsistence priority for users and become open to potential development. See Table C-15 for a list of the analyzed communities where this action may significantly restrict subsistence uses and where it would not significantly restrict subsistence uses for each alternative, considered as cumulative effects.

**Table C-15. Summary of Findings**

Analysis Community	Alternative B		Alternative C		Alternative D		Cumulative	
	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use
Akiak		X		X		X		X
Akiachak		X	X		X		X	
Aleknagik		X	X		X		X	
Ambler	X		X		X		X	
Anderson	X		X		X		X	
Aniak		X	X		X		X	
Anvik		X	X		X		X	
Beluga		X	X		X		X	
Brevig Mission		X	X		X		X	
Buckland		X	X		X		X	
Cantwell	X		X		X		X	
Chase	X		X		X		X	
Chickaloon	X		X		X		X	
Chistochina	X		X		X		X	
Chitina	X		X		X		X	
Chuathbaluk		X	X		X		X	
Clark's Point		X	X		X		X	
Cooper Landing	X		X		X		X	
Copper Center	X		X		X		X	
Cordova		X	X		X		X	
Crooked Creek		X	X		X		X	
Crown Point	X		X		X		X	
Deering		X	X		X		X	

Analysis Community	Alternative B		Alternative C		Alternative D		Cumulative	
	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use
Delta Junction	X		X		X		X	
Denali Park	X		X		X		X	
Dillingham	X		X		X		X	
Dot Lake	X		X		X		X	
Dry Creek	X			X	X		X	
Egegik	X		X		X		X	
Ekuk		X	X		X		X	
Ekwok	X		X		X		X	
Elim		X	X		X		X	
Eureka Roadhouse	X		X		X		X	
Ferry	X		X		X		X	
Fox River	X		X		X		X	
Gakona	X		X		X		X	
Galena		X		X	X		X	
Georgetown		X	X		X		X	
Glacier View	X		X		X		X	
Glennallen	X		X		X		X	
Golovin		X	X		X		X	
Grayling		X	X		X		X	
Gulkana	X		X		X		X	
Haines	X		X		X		X	
Halibut Cove	X		X		X		X	
Happy Valley	X		X		X		X	
Healy	X		X		X		X	

Analysis Community	Alternative B		Alternative C		Alternative D		Cumulative	
	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use
Healy Lake*	X		X		X		X	
Holy Cross		X	X		X		X	
Hope	X		X		X		X	
Huslia		X		X	X		X	
Igiugig		X	X		X		X	
Iliamna	X		X		X		X	
Kenny Lake	X		X		X		X	
Kiana	X		X		X		X	
King Salmon	X		X		X		X	
Kivalina		X		X	X		X	
Klukwan	X		X		X		X	
Kobuk		X	X		X		X	
Kokhanok		X	X		X		X	
Koliganek		X	X		X		X	
Kotzebue	X		X		X		X	
Koyuk		X	X		X		X	
Lake Louise	X		X		X		X	
Lake Minchumina	X		X		X		X	
Levelock	X		X		X		X	
Lower Kalskag		X	X		X		X	
Manokotak		X	X		X		X	
Marshall		X	X		X		X	
McCarthy	X		X		X		X	
McGrath		X		X	X		X	

Analysis Community	Alternative B		Alternative C		Alternative D		Cumulative	
	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use
Mendeltna	X		X		X		X	
Mentasta Lake	X		X		X		X	
Moose Pass	X		X		X		X	
Nabesna	X		X		X		X	
Naknek	X		X		X		X	
Nanwalek	X		X		X		X	
Napaimute		X	X		X		X	
Nelchina	X		X		X		X	
New Stuyahok		X	X		X		X	
Newhalen		X	X		X		X	
Nikolaevsk	X		X		X		X	
Nikolai		X		X	X		X	
Ninilchik	X		X		X		X	
Noatak	X		X		X		X	
Nome		X	X		X		X	
Nondalton		X	X		X		X	
Noorvik	X		X		X		X	
Northway	X		X		X		X	
Paxson	X		X		X		X	
Pedro Bay		X	X		X		X	
Petersville		X	X		X		X	
Pilot Station		X	X		X		X	
Pitka's Point		X	X		X		X	
Platinum		X	X		X		X	



Analysis Community	Alternative B		Alternative C		Alternative D		Cumulative	
	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use
Point MacKenzie	X		X		X		X	
Point Possession	X		X		X		X	
Pope-Vannoy Landing		X	X		X		X	
Port Alsworth		X	X		X		X	
Portage Creek	X		X		X		X	
Red Devil		X	X		X		X	
Russian Mission		X	X		X		X	
Saint Mary's		X	X		X		X	
Saint Michael		X	X		X		X	
Selawik		X	X		X		X	
Seldovia	X		X		X		X	
Shaktolik		X		X	X		X	
Shungnak		X	X		X		X	
Silver Springs	X		X		X		X	
Skwentna		X	X		X		X	
Slana	X		X		X		X	
Sleetmute		X	X		X		X	
South Naknek	X		X		X		X	
Stebbins		X	X		X		X	
Stony River		X	X		X		X	
Sunrise	X		X		X		X	
Susitna	X		X		X		X	
Susitna North		X	X		X		X	
Takotna		X		X	X		X	

Analysis Community	Alternative B		Alternative C		Alternative D		Cumulative	
	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use	May Result in Significant Restriction to Subsistence Use	Would Not Result in Significant Restriction to Subsistence Use
Talkeetna		X	X		X		X	
Tanacross	X		X		X		X	
Tatitlek		X	X		X		X	
Tazlina	X		X		X		X	
Telida	X		X		X		X	
Teller		X	X		X		X	
Tetlin	X		X		X		X	
Togiak		X	X		X		X	
Tok	X		X		X		X	
Tolsona	X		X		X		X	
Tonsina	X		X		X		X	
Trapper Creek	X		X		X		X	
Tuluksak		X	X		X		X	
Twin Hills		X	X		X		X	
Tyonek	X		X		X		X	
Unalakleet		X	X		X		X	
Upper Kalskag		X	X		X		X	
White Mountain		X	X		X		X	
Whittier	X		X		X		X	
Willow	X		X		X		X	
Willow Creek	X		X		X		X	

\* The communities of Healy Lake and McCarthy were not included as subsistence analysis communities because they did not meet the original criteria for Analysis Community selection. The addition of harvest ticket data for GMU 13 identified potential effects for these communities and therefore they are included in the final significance findings.

## NOTICE AND HEARINGS

Section 810(a) of ANILCA 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 810(a)(1) and (2). The BLM provided notice in the *Federal Register* that it made positive findings pursuant to ANILCA 810 that Alternatives B, C, and D presented in the draft EIS, met the “may significantly restrict” threshold. As a result, 14 public hearings were held in the vicinity of potentially affected communities. Because of the large number of communities impacted, the hearings were held in hub communities associated with each affected community to provide the most opportunity for individuals to participate. Additionally, the BLM held 5 virtual meetings for those who could not be physically present. Notice of these hearings were provided in the *Federal Register*, through the local media, as well as posted to the BLM’s project website at: <https://eplanning.blm.gov/eplanning-ui/admin/project/2018002/510>. Hearing details and locations are in EIS Appendix H.

Communities that may experience significant restrictions to subsistence use are listed in Tables C-4, C-9, C-14, and C-15.

## SUBSISTENCE DETERMINATIONS UNDER ANILCA SECTIONS 810(A)(3)(A), (B), AND (C)

Section 810(a) of ANILCA provides that no withdrawal, reservation, lease, permit, or other use, occupancy, or disposition of the public lands that would significantly restrict subsistence uses shall be effected until the Federal agency gives the required notice and holds a hearing in accordance with ANILCA 810(a)(1) and (2), and makes the three determinations required by ANILCA 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 United States Code 3120(a)(3)(A), (B), and (C)).

The BLM found in the preliminary ANILCA 810 evaluation that Alternatives B, C, and D considered in the draft EIS may significantly restrict subsistence uses. Therefore, the BLM undertook the notice and hearing procedures required by ANILCA 810(a)(1) and (2) in conjunction with the release of the draft EIS to solicit public comment from the potentially affected communities.

This final evaluation integrates input voiced during the hearings by residents of potentially affected communities. Because the proposed action has a positive finding, the determination that the requirements of ANILCA 810(a)(A), (B), and (C) have been met are analyzed in this ANILCA 810 evaluation.

## LITERATURE CITED

- ABR, Inc., and Stephen R. Braund & Associates (SRB&A). 2014. *Assessment of the Potential Effects of an Elevated Pipeline Along the Red Dog Mine Haul Road on Caribou Distribution, Movements, and Crossing Success. Part One: Review of Literature and Expert Opinion*. Prepared for Red Dog Operations, Anchorage, Alaska. Fairbanks, Alaska: ABR, Inc., Environmental Research & Services, and Anchorage, Alaska: Stephen R. Braund & Associates. Available at: [https://srbak.squarespace.com/s/Caribou-and-Linear-Structures\\_Final\\_April-2014\\_new\\_SRBA.pdf](https://srbak.squarespace.com/s/Caribou-and-Linear-Structures_Final_April-2014_new_SRBA.pdf). Accessed September 12, 2023.
- Alaska Department of Fish and Game. 2022. 2022-2023 Alaska Hunting Regulations. Juneau: Alaska Department of Fish and Game.
- Bureau of Land Management (BLM). 2023. Federal Caribou and Moose Subsistence Permit Data, 2010-2022.
- Federal Subsistence Management Program. 2020. Federal Subsistence Management Regulations for the Harvest of Wildlife on Federal Public Lands in Alaska. Anchorage, Alaska: Federal Subsistence Management Program.
- . 2022. Changes in Federal Moose and Caribou Hunting Regulations in Units 23 and 26A. April 6. Available at: <https://www.doi.gov/subsistence/news/general/changes-federal-moose-and-caribou-hunting-regulations-units-23-and-26a>. Accessed September 12, 2023.
- Georgette, S., and H. Loon. 1988. *The Noatak River: Fall Caribou Hunting and Airplane Use*. Technical Paper No. 162. Kotzebue: Division of Subsistence, Alaska Department of Fish and Game.
- Guettabi, M., J. Greenberg, J. Little, and K. Joly. 2016. *Evaluating Differences in Household Subsistence Harvest Patterns between the Ambler Project and Non-Project Zones*. Natural Resource Report NPS/GAAR/NRR—2016/1280. Fort Collins, Colorado: National Park Service Natural Resource Stewardship and Science.
- Kofinas, G., S. B. BurnSilver, J. Magdanz, R. Stotts, and M. Okada. 2016. *Subsistence Sharing Networks and Cooperation: Kaktovik, Wainwright, and Venetie, Alaska*. BOEM Report 2015-023 DOI; AFES Report MP 2015-02. University of Alaska Fairbanks, School of Natural Resources and Extension
- Magdanz, J. S., J. Greenberg, J. Little, and D. Koster. 2016. The Persistence of Subsistence: Wild Food Harvests in Rural Alaska, 1983-2013. *Social Science Research Network* 2779464. <http://dx.doi.org/10.2139/ssrn.2779464>
- Martin, S. 2015. Indigenous social and economic adaptations in northern Alaska as measures of resilience. *Ecology and Society* 20(4):8. Available at: [dx.doi.org/10.5751/ES-07586-200408](https://doi.org/10.5751/ES-07586-200408).
- Ready, E. 2019. Why subsistence matters. *Hunter Gatherer Research* 3(4):635–349.
- Stephen R. Braund & Associates (SRB&A). 2007. *Subsistence Use Areas and Traditional Knowledge Study for Tyonek and Beluga, Alaska*. Prepared for Drven Corporation. Anchorage, Alaska.
- . 2009. *Impacts and Benefits of Oil and Gas Development to Barrow, Nuiqsut, Wainwright, and Atkasuk Harvesters*. Prepared for the North Slope Borough Department of Wildlife Management, Barrow, Alaska. Anchorage, Alaska: Stephen R. Braund & Associates.

- . 2014. *Assessment of the Potential Effects of an Elevated Pipeline Along the Red Dog Mine Haul Road on Caribou Distribution, Movements, and Crossing Success. Part Two: Report of Traditional Knowledge Workshops, Kivalina and Noatak*. Prepared for Teck Alaska Incorporated, Anchorage, Alaska. Available at: [https://srbak.squarespace.com/s/Caribou-and-Linear-Strucures\\_Vol-2\\_Traditional-Knowledge\\_Sept-2014.pdf](https://srbak.squarespace.com/s/Caribou-and-Linear-Strucures_Vol-2_Traditional-Knowledge_Sept-2014.pdf). Anchorage, Alaska: Stephen R. Braund & Associates.
- . 2018. *Nuiqsut Paisanich: A 2018 Addendum*. Prepared for the City of Nuiqsut. Anchorage, Alaska: Stephen R. Braund & Associates.
- . 2023. *Nuiqsut Caribou Subsistence Monitoring Project: 2021 (Year 14) Report*. Submitted to ConocoPhillips, Alaska, Inc., and North Slope Borough Department of Wildlife Management. May 17, 2023. Anchorage, Alaska: Stephen R. Braund & Associates.
- Sullender, B. 2017. *Ecological Impacts of Road- and Aircraft-Based Access to Oil Infrastructure*. Edited by Audubon Alaska.

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