



United States Department of Agriculture

Draft Environmental Impact Statement

Rulemaking for Alaska Roadless Areas



Forest Service Alaska Region

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October 2019

Rulemaking for Alaska Roadless Areas

Draft Environmental Impact Statement

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Lead Agency:	USDA Forest Service
Cooperating Agencies:	Angoon Community Association; Central Council Tlingit and Haida Indian Tribes of Alaska; Hoonah Indian Association; Hydaburg Cooperative Association; Organized Village of Kake; Organized Village of Kasaan; and State of Alaska.
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Abstract

Following receipt of a petition from the State of Alaska, submitted pursuant to the Administrative Procedure Act, the Secretary of Agriculture directed the Forest Service to begin working to develop an Alaska-specific roadless rule in June 2018. The proposed state-specific roadless rule would discontinue the existing regulation's prohibitions and instead rely upon existing statutory and management plan direction for managing roadless area characteristics on the Tongass National Forest.

This Draft Environmental Impact Statement (DEIS) responds to the Secretary's direction by analyzing six alternatives including the No Action Alternative. Three key issues are identified: 1) conservation of roadless area characteristics; 2) support local and regional socioeconomic well-being including community stability, Alaska Native culture, rural subsistence activities, and economic opportunity across multiple economic sectors; and 3) conservation of terrestrial habitat, aquatic habitat, and biological diversity. The six alternatives provide a range of options for addressing these key issues. Five Alaska Roadless Area management categories were developed that prohibit timber harvest, road construction, and road reconstruction with a range of exceptions, and are applied differentially across four of the alternatives. Other than expanding the suitable timber land base, none of the action alternatives propose to change the Tongass Land and Resource Management Plan, including the projected harvest level. Direct, indirect, and cumulative effects of the alternatives are compared and disclosed in Chapters 2 and 3.

The U.S. Department of Agriculture has identified Alternative 6 as the preferred alternative. The Forest Service is seeking public input on the DEIS and the preferred alternative. Comments should be provided prior to the close of the comment period and should clearly articulate the reviewer's concerns and contentions. Comments received in response to this solicitation, including names and addresses of those who comment, will be part of the public record for this proposed action.

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ACRONYMS AND ABBREVIATIONS

2001 Roadless Rule	Roadless Area Conservation Rule
ADED	Alaska Department of Economic Development
ADF&G	Alaska Department of Fish and Game
ADNR	Alaska Department of Natural Resources
ADOT&PF	Alaska Department of Transportation & Public Facilities
AFHA	Anadromous Fisheries Habitat Assessment
AKEPIC	Alaska Exotic Plants Information Clearinghouse
AKNHP	Alaska Natural Heritage Program
ARA	Alaska Roadless Area
ANCSA	Alaska Native Claims Settlement Act of 1971
ANILCA	Alaska National Interest Lands Conservation Act of 1980
AP&T	Alaska Power & Telephone
BA	biological assessment
BBER	Bureau of Business and Economic Research
BCR	Bird Conservation Region
BE	biological evaluation
BLM	U.S. Department of the Interior, Bureau of Land Management
BMP	Best Management Practice
CA	Census Area
CDP	Census Designated Places
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CMAI	culmination of mean annual increment
DEIS	Draft Environmental Impact Statement
DOL	Department of Labor
DPS	distinct population segment
EFH	essential fish habitat
EIS	Environmental Impact Statement
ESA	Endangered Species Act
ESI	Existing Scenic Integrity
ESU	evolutionarily significant unit
°F	degrees Fahrenheit
FCRPA	Federal Cave Resources Protection Act
FERC	Federal Energy Regulatory Commission
FHWA	Federal Highway Administration
FEIS	Final Environmental Impact Statement
Forest Plan	Tongass National Forest Land and Resource Management Plan
FPA	Federal Power Act
FRESH	Forest Resource Evaluation System for Habitat
FR	Federal Register
FSM	Forest Service Manual
GIS	geographic information system
GMU	Game Management Unit

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GNA	Good Neighbor Authority
IDT	Interdisciplinary Team
IRA	Inventoried Roadless Area
LTF	log transfer facility
LUD	Land Use Designation
LWD	large woody debris
MBTA	Migratory Bird Treaty Act
MBF	thousand board feet
MIS	Management Indicator Species
MMBF	million board feet
MMI	mass movement index
MMPA	Marine Mammal Protection Act
MOU	Memorandum of Understanding
MW	megawatt
NEPA	National Environmental Policy Act
NFMA	National Forest Management Act of 1976
NFS	National Forest System
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NOI	Notice of Intent
NPS	National Park Service
NRIS	Natural Resource Information System
NVUM	National Visitor Use Monitoring
OGR	old-growth reserve
P	Primitive
PNW	Pacific Northwest
POG	productive old growth
PTSQ	projected timber sale quantity
PWSQ	projected wood sale quantity
R	Rural
RARE	Roadless Area Review and Evaluation
RM	Roaded Modified
RMA	Riparian Management Area
RN	Roaded Natural
Roadless Rule	Roadless Area Conservation Rule
ROD	Record of Decision
ROS	Recreation Opportunity Spectrum
RV	Residual Value
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act - A Legacy for Users
SATP	Southeast Alaska Transportation Plan
SDM	Size-Density Model
SEIS	Supplemental Environmental Impact Statement
SIO	Scenic Integrity Objective
SMS	Scenery Management System
SNAP	Scenarios Network for Alaska & Arctic Planning

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SPM	Semi-Primitive Motorized
SPNM	Semi-Primitive Non-Motorized
T77	Tongass 77
TNC	The Nature Conservancy
TRUCS	Tongass Resource Use Cooperative Survey
TTRA	Tongass Timber Reform Act of 1990
TWYGS	Tongass-wide Young-Growth Studies
U	Urban
U.S.C.	United States Code
USDA	United States Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
VCU	Value Comparison Unit
VMS	Visual Management System
WAA	Wildlife Analysis Area

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EXECUTIVE SUMMARY

Executive Summary

The Forest Service has prepared an environmental impact statement (EIS) in compliance with the National Environmental Policy Act (NEPA) and other relevant federal laws and regulations. This Draft EIS (DEIS) discloses the potential environmental consequences that might result from the proposed actions and alternatives.

Background

Inventoried Roadless Areas

Inventoried Roadless Areas (IRAs) on the Tongass National Forest (Tongass) include 9.2 million acres (55 percent of the Tongass) across 110 IRAs. When these designated roadless areas are combined with Wilderness and National Monument areas, the Tongass is currently more than 90 percent undeveloped and unavailable for timber harvest and road building. Developed areas cover about 1.3 million acres, or about 8 percent, of the Tongass. Southeast Alaska residents (approximately 73,000) are, for the most part, surrounded by largely undeveloped land.

Several portions of the Tongass constitute contiguous IRAs exceeding 1 million acres, and thus represent large, unfragmented wildlife habitats and opportunities for solitude. Many of the Tongass IRAs represent wildlife habitats, ecosystems, and visual characteristics, such as coastal islands facing the open Pacific, extensive beaches on inland saltwater, old-growth temperate rain forests, ice fields, and glaciers that exist nowhere else in the National Forest System (NFS). Many of these areas are remote and difficult to access for primitive recreation and contain other important resources, such as timber, minerals, renewable energy opportunities, and salmon-producing streams. While IRAs provide a large portion of the land base in Southeast Alaska, National Parks, National Monuments, and designated Wildernesses also contribute to the undeveloped nature of the region.

The Roadless Area Conservation Rule (2001 Roadless Rule) was originally codified at Title 36 of the Code of Federal Regulations (CFR) Part 294 (36 CFR 294), Subpart B (66 Federal Register [FR] 3244) in January 2001. The 2001 Roadless Rule applies nationwide (except Idaho and Colorado where state-specific rules have superseded the 2001 Rule and were completed in 2008 and 2012, respectively). The 2001 Rule remains applicable to 44.7 million acres of National Forests (approximately 24 percent of total NFS lands) and prohibits road construction/reconstruction and timber harvest, sale, or removal, with limited exceptions.

Since its promulgation, the 2001 Roadless Rule has been the subject of litigation. In 2001, the State of Alaska filed a complaint, challenging the U.S. Department of Agriculture's (USDA) promulgation of the 2001 Roadless Rule and its application in Alaska. The USDA and the State of Alaska reached a settlement in 2003, and the USDA subsequently issued a rule temporarily exempting the Tongass from the 2001 Roadless Rule. In 2011, a federal court (District of Alaska) set aside the Tongass's exemption and reinstated the 2001 Roadless Rule on the Tongass with special instructions. The Alaska District Court's ruling was initially reversed by a three-judge panel of the Ninth Circuit, but the District Court's ruling was ultimately upheld in a 6–5 en banc ruling of the Ninth Circuit in 2015. Consequently, the 2001 Roadless Rule remains in effect in Alaska and the Forest Service continues to apply the 2001 Roadless Rule within the Tongass and Chugach National Forests.

State of Alaska Petition

In January 2018, the State of Alaska submitted a petition requesting that the Secretary of Agriculture exempt the Tongass from the 2001 Roadless Rule (see Appendix A). In June 2018, the USDA Secretary directed the Forest Service to begin working with the State to consider an Alaska state-specific roadless rule. In August 2018, the Forest Service granted cooperating agency status to the State of Alaska. The

Executive Summary

Forest Service and the State of Alaska believe that the proposed action represents a unique opportunity to collaboratively resolve and provide certainty to the roadless issue in the State of Alaska. The Forest Service published a Notice of Intent (NOI) to prepare an EIS and initiated a public rulemaking process to address the management of IRAs on the Tongass on August 30, 2018 (83 FR 44252). As stated in that NOI, the USDA desires a durable and long-lasting regulation for the conservation and management of roadless areas on the Tongass. The proposed state-specific roadless rule would discontinue the existing regulation's prohibitions and instead rely upon existing statutory and management plan direction to manage roadless area characteristics on the Tongass.

Tongass Land and Resource Management Plan

The 16.7-million-acre Tongass was the first forest to complete a Land and Resource Management Plan (Forest Plan) under the National Forest Management Act (NFMA) in 1979. That Forest Plan was amended in 1986 and 1991 and revised in 1997. A final Supplemental Environmental Impact Statement (SEIS) was completed in 2003, which further evaluated roadless areas for their wilderness potential. The Forest Plan was amended in 2008 in response to a Ninth Circuit Court ruling and a 5-Year Plan Review completed in 2005. The Forest Plan was subsequently amended in 2016 to address the Secretary of Agriculture's direction to transition to a young growth-based timber program in 10 to 15 years. The 2016 Forest Plan anticipated production of an average of 46 million board feet (MMBF) per year while transitioning to predominantly young growth harvest after about 16 years. Additional objectives of the 2016 Forest Plan Final EIS (FEIS) include facilitation of the development of renewable energy projects and responding to findings of the 5-Year Review of the 2008 Forest Plan.

All discretionary Forest Service activities authorized on the Tongass must be consistent with the Forest Plan as well as existing laws and regulations. The proposed Alaska Roadless Rule would supersede direction in the Tongass Forest Plan. In addition, as with other roadless rulemakings, the Alaska roadless rulemaking process does not require an amendment or revision of any forest plan.

Purpose and Need

In response to the State of Alaska's petition for rulemaking, the Forest Service and State of Alaska agree the controversy surrounding the management of Tongass roadless areas may be resolved through state-specific rulemaking. A long-term, durable approach to roadless area management is desired that accommodates the unique biological, social, and economic situation found in and around the Tongass. The Tongass is unique from other national forests with respect to size, percentage of IRAs, amount of NFS lands and subsequent dependency of 32 communities on federal lands, and unique Alaska and Tongass-specific statutory considerations (e.g., Alaska National Interest Lands Conservation Act [ANILCA]), Tongass Timber Reform Act [TTRA]).

The USDA and Forest Service believe the 2001 Roadless Rule prohibitions on timber harvest and road construction/reconstruction can be adjusted for the Tongass in a manner that meaningfully addresses local economic and development concerns and roadless area conservation needs.

Key Issues

The following three key issues were identified for the Alaska state-specific roadless rulemaking effort and will be carried forward throughout the analysis.

Key Issue 1 – Roadless area conservation

The Tongass includes large undeveloped areas, with several portions of the Forest consisting of contiguous roadless areas that exceed one million acres and represent large blocks of unfragmented wildlife habitats, undeveloped or natural areas, and opportunities for primitive recreation and/or solitude. This large scale of roadless area, including wildernesses and national monuments, does not exist anywhere else in the NFS outside of Alaska. The Tongass is the largest national forest in the United States, and the majority of the Tongass is in a natural condition, unlike most other national forests. It represents one of the largest, relatively intact temperate rainforests in the world.

Roadless areas are important because of their wildlife and fish habitat, recreation values, importance to multiple economic sectors, traditional properties and sacred sites for local indigenous people, inherent passive use values, and ecosystem services values they provide. Passive use values represent the value that individuals assign to a resource independent of their use of that resource and typically include existence, option, and bequest values. These values represent the value that individuals obtain from knowing that expansive roadless areas exist, knowing that they are available to visit in the future should they choose to do so, and knowing that they are available for future generations to inherit. Ecosystem services represent the services provided to society by healthy ecosystems. These services and benefits include what some consider to be long-term life support benefits to society as a whole. Examples of ecosystem services include watershed services, soil stabilization and erosion control, improved air quality, climate regulation, carbon sequestration, and biological diversity.

Key Issue 2 – Support local and regional socioeconomic well-being, Alaska Native culture, rural subsistence activities, and economic opportunity across multiple economic sectors

The Tongass comprises approximately 80 percent of Southeast Alaska and therefore plays a critical role in supporting local and regional economies, promoting economic diversification, and also enhancing rural community well-being. The visitor industry, seafood industry, and resource extraction industries contribute to local jobs and income alongside public sector employment in federal, state, and local government. While the visitor and seafood industries are the largest private-sector employers across Southeast Alaska, resource extraction remains important in some rural communities where job opportunities are limited and unemployment rates are often high.

The Forest Service manages land for the multiple-use and sustained yield of all renewable resources. There is, however, disagreement among the public regarding the best management of federal lands for economic development purposes and the overall economic vitality of Tongass communities. Many believe the visitor industry and seafood industries have become the mainstay of Southeast Alaska's economy and, therefore, should have prominence in Forest Service land management decision-making. Others note that resource extraction, including forest products and the minerals industry, continue to provide jobs and income sources in Southeast Alaskan communities. Furthermore, Southeast Alaska residents, communities, and Alaska Native individuals and tribes rely extensively on the Tongass for subsistence uses, recreational hunting and fishing, and outdoor pursuits, and these activities yield economic value as well.

Key Issue 3 – Conserve terrestrial habitat, aquatic habitat, and biological diversity

The Tongass includes large, undeveloped, and natural land areas that represent expansive unfragmented blocks of wildlife habitat. This scale and size of contiguous habitat is not available elsewhere in the NFS outside of Alaska. Although wildlife species on the Tongass are associated with more than one habitat type, many inhabit old-growth forests or prey on species that inhabit old-growth forests. The Old-growth Habitat Conservation Strategy was developed to maintain the integrity of the old-growth forest ecosystem, and thereby conserve biological diversity across the Forest by retaining intact, largely undisturbed habitat. In addition, because of its predominantly undeveloped nature, a number of wide-ranging species find optimal habitat in the more remote areas of the Forest.

Fish and the aquatic resources on the Tongass support subsistence, commercial, and sport fisheries, as well as traditional and cultural values. The Tongass includes high-value, intact watersheds that were designated to be managed for intact ecological values and aquatic habitat productivity, and many commenters believe these areas should be protected so that they can continue to provide the clean water and fish habitats that are essential to the ecological and economic health of the Southeast Alaska communities and residents who rely on them.

Features Common to Multiple Alternatives

2016 Tongass Land and Resource Management

Except for the timber land suitability determinations described below, none of the alternatives would make any changes to the Forest Plan including the following:

- Goals and Objectives;
- Land Use Designations or Management Prescriptions;
- Forest-wide Standards and Guidelines;
- Plan Components developed under the 2012 Planning Rule; and/or
- Projected Timber Sale Quantity (PTSQ), Projected Wood Sale Quantity (PWSQ), and the Young-growth Transition.

None of the alternatives authorize any site-specific projects or other ground-disturbing activities. Specific projects that include timber harvest, road construction, and/or road reconstruction must undergo site-specific environmental analysis when they are proposed to comply with NEPA. None of the alternatives considered in this DEIS waive any applicable requirements regarding site-specific environmental analysis, public involvement, consultation with Alaska Native tribes, Alaska Native corporations, and other agencies, or compliance with other applicable laws.

Activities that are not otherwise prohibited are permissible in roadless areas under all alternatives, including the no-action alternative (2001 Roadless Rule), if not restricted by other law, regulations, and/or policies.

Timber Suitability

Alternatives 2, 3, 4, 5, and 6 would result in an administrative change to the timber land suitability determinations made in the 2016 Forest Plan. Specifically, lands identified as suitable for timber production that were deemed unsuitable solely due to roadless designation in the Plan would be designated as suitable for timber production. This administrative change would apply to lands removed from the roadless inventory and to lands identified as “Community Priority” or “Timber Priority” in Alternatives 3 and 4, respectively. This change to the Tongass suitability determinations does not preclude future suitability determinations as part of Forest Plan amendment or revision processes.

2001 Inventoried Roadless Area Mapping Updates

Administrative corrections are made to IRA boundaries based on ownership changes and mapping corrections. Corrections to IRAs that apply to all alternatives entail:

- Removing about 136,000 acres from the roadless inventory that were either misidentified in 2001, (i.e., designated Wilderness identified as IRA), had ownership changes since 2001 due to land adjustments, or resulted from corrections due to mapping alignment errors.
- Adding about 3,000 acres to roadless areas due to changes in ownership or boundary alignment errors.

Proposed Alaska Roadless Boundary Correction and Modification Provisions

Alternatives 2, 3, 4, and 5 include administrative correction and modification provisions for inclusion in the proposed Alaska Roadless Rule to provide for future boundary and classification changes. Administrative corrections would be limited to adjustments that remedy clerical errors, typographical errors, mapping errors, improvements in mapping technology, conformance to statutory changes, or incorporation of changes due to land adjustments. This provision would apply to both the Tongass National Forest as well as the Chugach National Forest. The Regional Forester may issue administrative corrections after a 30-day public notice and opportunity to comment period.

Modifications would be changes to Alaska Roadless Area (ARA) boundaries and classifications not considered to be an administrative correction. The Regional Forester would provide at least a 45-day public notice and opportunity to comment period for all modifications.

This same provision is included in Alternative 6, but only for the Chugach National Forest.

Alaska Roadless Area Land Management Categories

Alternatives 2, 3, 4, and 5 provide for a variety of management approaches within roadless areas through ARA land management categories which include Land Use Designation (LUD) II Priority, Watershed Priority, Roadless Priority, Community Priority, and Timber Priority. The management categories prohibit timber harvest, road construction, and road reconstruction with a range of exceptions that are applied differentially across the alternatives. A brief description of each management category follows.

LUD II Priority (Alternatives 2, 4, and 5)

To eliminate overlapping direction, LUD II Priority ARAs would be managed exclusively in accordance with statutory direction. These lands will be managed in a roadless state to retain their wildland character as defined in the Tongass Timber Reform Act (TTRA; Title II, Section 201) and the National Defense Authorization Act for Fiscal Year 2015 (Public Law 113-291, 128 Stat. 3729, Section 3720(f)).

Approximately 870,000 acres of the Tongass are congressionally designated as LUD II (826,000 acres currently designated as IRA under the 2001 Roadless Rule and 44,000 acres currently not designated as IRA). Alternatives 2 and 4 propose to designate all of the congressionally designated LUD II acres as LUD II Priority ARA. Alternative 5 proposes to apply the LUD II Priority ARA only to LUD II areas that are currently designated as IRA.

Notably, Alternative 3 proposes to remove all LUD II areas from roadless designation rather than designating LUD II lands into an ARA. LUD II areas under Alternative 3 would continue to be managed as directed by their congressional designations.

Watershed Priority (Alternatives 2 and 3)

The Watershed Priority ARA is more protective than the 2001 Roadless Rule as it offers fewer exceptions for timber harvest, road construction/reconstruction. It also provides for activities specific to aquatic habitat improvement. Approximately 3,214,000 acres in Alternative 2 would be managed under this ARA. The Watershed Priority ARA is applied to areas identified in the 2016 Forest Plan as Tongass 77 (T77) Watersheds and The Nature Conservancy (TNC)/Audubon Conservation Priority Areas.

Additionally, for Alternative 3, commercial old-growth timber harvest would be prohibited on NFS lands in T77 and TNC/Audubon Conservation Areas including those that extend beyond ARA boundaries.

Roadless Priority (Alternatives 2, 3, 4, and 5)

The Roadless Priority ARA is similar to the 2001 Roadless Rule but is less restrictive and addresses Alaska-specific concerns. Specifically, it provides for infrastructure development to connect and support local communities, and road construction/reconstruction for access to renewable energy and leasable minerals. The leasable minerals exception provides for geothermal, oil, gas, and/or coal development. In addition, the Roadless Priority ARA includes specific exceptions that, while they are allowed under the 2001 Roadless Rule, are included to improve overall clarity.

Community Priority (Alternative 3)

The Community Priority ARA allows for small-scale timber harvest and associated road construction/reconstruction. In addition, it allows for infrastructure development to connect and support local communities and traditional Alaska Native cultural uses. In all cases, activities within Community Priority ARAs would have to be consistent with the underlying Forest Plan LUD requirements. This is to say that even if a timber harvest, road building, or other activity would be permissible under the Alaska Roadless Rule, it may not be allowable because of Forest Plan requirements specific to the LUD that applies to the area. This ARA applies to approximately 241,000 acres and is only proposed in Alternative 3 adjacent to five communities: Sitka, Wrangell, Juneau, Ketchikan, and Yakutat. However, based on

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cooperating agency input, the Community Priority ARA should have also been applied around the communities of Hydaburg and Kake and will be accommodated in the FEIS

This ARA was developed to address specific desires of some communities to retain roadless designations while allowing for small timber operators in the community, infrastructure development to support the communities, and provide for traditional Alaska Native cultural uses. The Forest Service is seeking public input on this ARA, specifically with respect to whether this designation should be applied to other communities/areas. The Forest Service could consider applying the Community Priority ARA either adjacent to communities or within community areas as requested by non-profit community associations organized under State of Alaska law (Alaska Statute 10.20.005), municipal governments, or tribal governments.

Timber Priority (Alternative 4)

The Timber Priority ARA allows timber harvest, road construction, and road reconstruction to facilitate timber management and provide economic opportunity. This ARA applies to approximately 856,000 acres and is only considered in Alternative 4.

**Table ES-1
Alaska Roadless Areas (ARA) by Alternative and Management Category**

ARA Management Categories	Alternative					
	1	2	3	4	5	6
	No Action	Roaded Roadless	Logical Extension	Partial Dev. LUDs ¹	All Dev. LUDs	Full Exemption
LUD II Priority	N/A	√		√	√	N/A
Watershed Priority	N/A	√	√			N/A
Roadless Priority	N/A	√	√	√	√	N/A
Community Priority	N/A		√			N/A
Timber Priority	N/A			√		N/A

N/A = not applicable

¹ Includes Timber Production and Modified Landscape LUDs, but not Scenic Viewshed.

T77 Watersheds and TNC/Audubon Conservation Priority Areas – Additional Regulatory Protections (Alternative 3)

Watershed protection is a key element of roadless management. Watersheds are highly valued sources of municipal drinking water, support fisheries and wildlife habitat, and can act as keystones for economic activities. In Alternative 3, areas identified in the 2016 Forest Plan as T77 watersheds and TNC/Audubon Conservation Priority Areas (high-priority watershed areas) that are outside of designated roadless areas would be afforded added protection through the Alaska Roadless Rule regulation. Specifically, old-growth timber harvest would be prohibited. A prohibition on old-growth harvesting currently exists through the Forest Plan. But Alternative 3 examines establishing regulatory continuity between these roadless and watershed management systems given how extensively they overlap (the listed watersheds comprise over half of the Tongass' roadless areas, and approximately 90 percent of the watershed areas are within roadless area boundaries). Thus, the old-growth harvest prohibition would be extended beyond the designated roadless area boundaries in order to maintain the balance and integrity of the watershed protection system. As with all roadless rule provisions, the new prohibition would supersede the current and future forest plans, with the plan continuing to provide management direction in other regards. In this manner, Alternative 3 affords high-priority watershed areas greater regulatory protection than under the 2001 Roadless Rule. Young-growth timber harvest outside of ARAs within these high-priority watershed areas is not prohibited. This would apply to about 377,000 acres outside of roadless areas. Table ES-1 displays the ARAs by alternative and ARA.

Alternative 1 (No Action)

Alternative 1 is the no action alternative as required by NEPA and reflects a continuation of current land management pursuant to the 2001 Roadless Rule (see Map 1 in map packet or on thumb drive). This alternative continues general prohibitions on tree harvest (and sale), road construction, and road reconstruction within IRAs with limited exceptions (Table 2-2).

Under Alternative 1, roadless areas consist of 110 IRAs identified in the 2001 Roadless Rule. These IRAs were originally mapped in 1996 for the Tongass Forest Plan Revision and the provisions of the 2001 Roadless Rule (as provided for by the Court's reinstatement Order) would apply to those IRAs (summarized below). As a result of ownership changes and boundary alignment corrections these IRAs currently encompass 9.2 million acres¹ of NFS land. Provisions of the 2001 Roadless Rule remain intact across the 110 IRAs, encompassing approximately 55 percent of the Tongass.

Under Alternative 1, IRA boundary modifications would continue to require rulemaking except for minor administrative corrections.

Alternative 2

Alternative 2 provides limited additional timber harvest opportunity while maximizing roadless area designations. It removes approximately 113,000 acres from roadless designation that have been substantially altered as identified by known prior road construction or timber harvest including both development and non-development LUDs. These areas are generally known as "roaded roadless" areas but include additional areas considered to be substantially altered. Alternative 2 also maximizes the geographic scope of roadless area designation by adding 133,000 acres as ARAs.

The 133,000 acres of added roadless areas include portions of congressionally-designated LUD II areas not included as IRAs under the 2001 Roadless Rule, currently unroaded small islands, and unroaded areas greater than 5,000 acres as identified by prior forest planning efforts. Adding additional roadless designations to unroaded islands provides for long-term, continued recreational and outfitter and guide opportunities on these islands.

After removals and additions, Alternative 2 consists of 9.22 million inventoried roadless acres or about 20,000 more roadless acres than under Alternative 1. The 9.22 million acres are designated to three ARA land management categories including LUD II Priority, Watershed Priority, and Roadless Priority (see Map 2 in map packet or on thumb drive).

Alternative 2 applies the most protective ARA, Watershed Priority, to 3.25 million acres, primarily identified as T77 Watersheds and TNC/Audubon Conservation Priority Areas. The Watershed Priority ARA is considered most protective because it includes fewer exceptions than the 2001 Roadless Rule, while still allowing activities needed for fisheries protection, maintenance, or improvement.

Alternative 2 converts a net of 18,000 old-growth acres and 10,000 young-growth acres, previously identified as unsuitable timber lands, to suitable timber lands.

Alternative 3

Alternative 3 provides moderate additional timber harvest opportunities. Alternative 3 maintains roadless designations for T77 Watersheds and TNC/Audubon Conservation Priority Areas inside roadless areas and also prohibits old-growth harvest in these areas outside of roadless areas (similar to the Forest Plan). Additional timber harvest opportunity is provided by removing substantially-altered roadless areas (including roaded roadless, similar to Alternative 2) and extending the bounds of these areas to logical end points of existing road and timber harvest systems (about 212,000 acres), generally defined as the nearest watershed boundary (i.e., ridgeline of 14th-field hydrologic unit) from an existing road system. Removing these areas from the roadless inventory represents the logical extensions of substantially

¹ The original acreage of inventoried roadless areas on the Tongass was approximately 9.34 million acres. As a result of ownership changes and boundary alignment corrections, including shoreline mapping adjustments, the current acreage is 9.2 million acres.

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altered acres from existing infrastructure and likely encompasses the more economically feasible locations for future timber harvest with the least impact to roadless characteristics. Additional timber harvest opportunity is provided by the designation of Community Priority² ARA: Yakutat, Juneau, Sitka, Ketchikan, and Wrangell.³ However, based on cooperating agency input, the Community Priority should have also been applied around the communities of Hydaburg and Kake. Application of the Community Priority to Hydaburg and Kake will occur in the FEIS, contingent on additional public comments during the DEIS comment period.

Alternative 3 removes approximately 1.2 million acres from roadless designation including both development and non-development LUD acres. Alternative 3 adds 105,000 acres to ARAs as Roadless Priority including unroaded small islands and unroaded areas greater than 5,000 acres as identified by prior forest planning efforts. Adding additional roadless designations to unroaded islands provides for long-term, continued recreational and outfitter and guide opportunities on these islands.

Alternative 3 applies the most protective ARA, Watershed Priority, to 3.21 million acres primarily identified as T77 Watersheds and TNC/Audubon Conservation Priority Areas. The Watershed Priority ARA is considered most protective because it includes fewer exceptions than the 2001 Roadless Rule, while still allowing activities needed for fisheries protection, maintenance, or improvement. Additionally, for Alternative 3, commercial old-growth timber harvest would be prohibited on NFS lands in T77 and TNC/Audubon Conservation Areas including those that extend beyond ARA boundaries. The remaining roadless areas include 4.65 million acres in Roadless Priority and 0.24 million acres in Community Priority (see Map 3 in map packet or on thumb drive).

Alternative 3 proposes a net decrease of 1.1 million roadless acres, as compared to the no action alternative, and includes both development and non-development LUDs. Roadless area designation would be removed from the 826,000 congressionally-designated LUD II acres that are currently within an IRA. The removal of roadless designation from congressionally-designated LUD II acres represents the majority of the decrease in designated roadless acres proposed under Alternative 3. Removing roadless designation from LUD II acres affirms original congressional intent that LUD II areas be managed “in a roadless state to retain their wildland character” (USDA Forest Service 2016a).

Alternative 3 would convert a net of 76,000 old-growth acres and 14,000 young-growth acres, previously identified as unsuitable timber lands, to suitable timber lands.

Alternative 4

Alternative 4 provides significant additional timber harvest opportunity while maintaining roadless designations for Scenic Viewsheds and T77/TNC-Audubon Conservation Priority Areas that are in roadless areas. Approximately 375,000 acres are removed from roadless designation, including substantially-altered areas and logical extensions of substantially-altered acres (similar to Alternatives 2 and 3), along with selected additional locations for economic timber sales. These acres are also converted from unsuitable to suitable timber lands, resulting in significant additional timber harvest opportunity. Protection is maintained for Scenic Viewsheds, and most T77 Watersheds and TNC/Audubon Conservation Priority Areas by designating them as Roadless Priority ARAs.

Additionally, Alternative 4 adds 32,000 acres as LUD II Priority ARA. These added roadless acres are LUD II areas that were not designated as IRA under the 2001 Roadless Rule. No additional lands would be added to ARAs.

The net result of removals and additions under Alternative 4 is 8.86 million roadless acres, which are designated into three categories of ARAs: LUD II Priority, Roadless Priority, and Timber Priority (see Map 4 in map packet or on thumb drive). This alternative was developed to provide for a high level of timber management opportunities thus, timber management is permitted in the Timber Priority ARA, which consists of the Timber Production and Modified Landscape LUDs, as identified in the Forest Plan.

² Timber harvest in Community Priority ARAs would be limited to micro sales, salvage sales, and small commercial sales less than one MMBF in size.

³ The Forest Service is seeking public input on this management category, specifically with respect to whether this designation should be applied to other communities/areas.

Alternative 4 proposes a net decrease of 343,000 roadless acres as compared to the no action alternative. However, the total net decrease is substantially higher when also including Timber Priority ARA acres, yielding a combined decrease of 1.09 million total acres.

Alternative 4 converts a net of 158,000 old-growth acres and 15,000 young-growth acres previously identified as unsuitable timber lands to suitable timber lands.

Alternative 5

Alternative 5 provides maximum additional timber harvest opportunity by removing all Timber Development, Modified Landscape, and Scenic Viewshed LUDs identified by the Forest Plan from roadless designation, including T77 Watersheds and TNC/Audubon Conservation Priority Areas within aforementioned development LUDs. Areas with mineral potential, as identified by the Forest Plan's minerals overlay, are also removed from roadless designation (see Map 5 in map packet or on thumb drive).

In total, 2.30 million acres would be removed from roadless area designation including mineral overlay acres and the majority of development LUDs including conservation-designated acres. The remaining 6.91 million roadless acres are designated to two ARAs: LUD II Priority and Roadless Priority (see Map 5 in map packet or on thumb drive). Alternative 5 also converts a net 165,000 old-growth acres and 17,000 young-growth acres previously identified as unsuitable timber lands to suitable timber lands.

Alternative 6 (Preferred Alternative)

Alternative 6 is the preferred alternative and provides maximum additional timber harvest opportunity as the full exemption alternative, which was requested by the State of Alaska's petition (Appendix A). It removes all 9.2 million inventoried roadless acres on the Tongass from roadless designation. Acres removed from roadless designation would continue to be managed by the Forest Plan (see Map 6 in map packet or on thumb drive).

Alternative 6 would exempt the Tongass from the 2001 Roadless Rule with the following provision

- (a) The 2001 Roadless Area Conservation Rule as published in the Federal Register on January 12, 2001 (66 FR 3244) shall not apply to the Tongass National Forest.

Alternative 6 converts a net total of 165,000 old-growth acres and 20,000 young-growth acres previously identified as unsuitable timber lands to suitable timber lands and includes an administrative correction and modification provision for the Chugach National Forest only. Table 2-8 summarizes the key elements of Alternative 6.

Preferred Alternative

The U.S. Department of Agriculture has identified Alternative 6 as the preferred alternative. The Forest Service is seeking public input on the DEIS and the preferred alternative.

Comparison of the Alternatives

This section briefly compares the environmental consequences of the six alternatives with respect to the significant issues described in Chapter 1. This comparison is based on the effects analyses presented in Chapter 3. For reference, Table ES-2 summarizes the acres by ARA, the acres removed or added from roadless, and the total old-growth acres that are suitable for timber production under Alternative 1 and the five action alternatives. Figure ES-1 displays the ARAs by alternative and management category.

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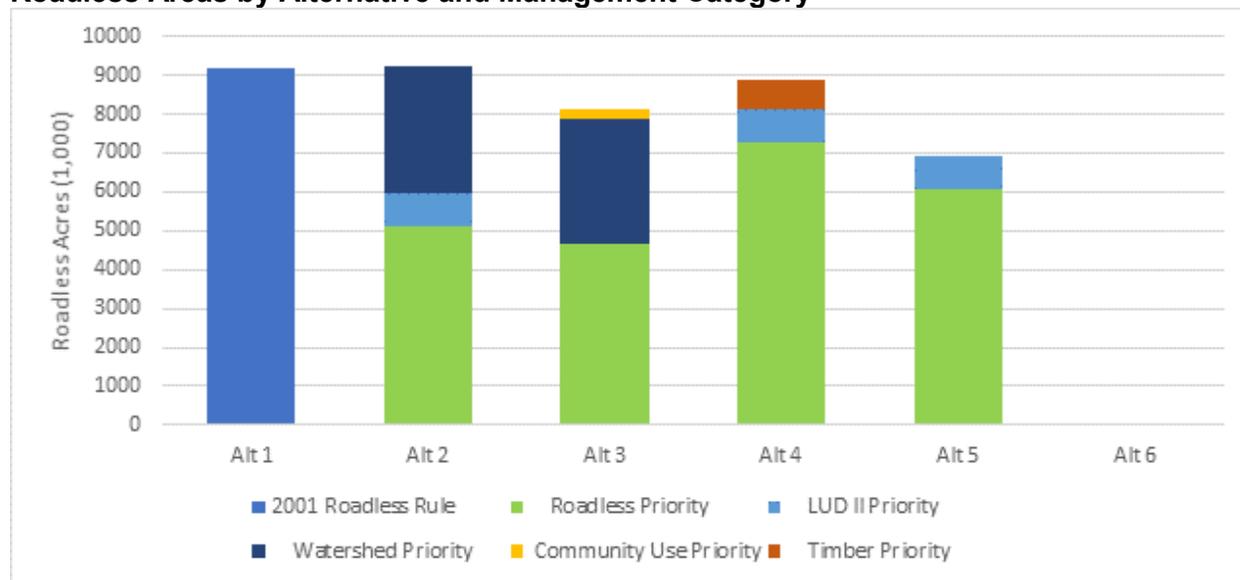
**Table ES-2
Roadless Areas by Alternative and Management Category**

Roadless Category (acres)	Alternative					
	1	2	3	4	5	6
	No Action	Roaded Roadless	Logical Extension	Partial Dev. LUDs ¹	All Dev. LUDs	Full Exemption
Total Roadless Area	9,200,000	9,220,000	8,103,000	8,857,000	6,905,000	0
ARA Management Categories						
LUD II Priority	N/A	856,000	0	856,000	828,000	0
Watershed Priority	N/A	3,250,000	3,208,000	0	0	0
Roadless Priority	N/A	5,114,000	4,653,000	7,252,000	6,078,000	0
Community Priority	N/A	0	241,000	0	0	0
Timber Priority	N/A	0	0	749,000	0	0
Change in Roadless Area Acres						
Roadless Area Removed	0	113,000	1,202,000	375,000	2,298,000	9,200,000
Roadless Area Added	0	133,000	105,000	32,000	3,000	0
Net Change	0	20,000	-1,098,000	-343,000	-2,295,000	-9,200,000
Old-Growth Acres Suitable for Harvest						
Total Acres	230,000	247,000	305,000	388,000	395,000	395,000
Net Change	0	18,000	76,000	158,000	165,000	165,000
T77 & TNC/ Audubon Conservation Priority Areas Outside of Roadless given Long-term Regulatory Protection						
Total Acres	0	0	377,000	0	0	0

N/A = not applicable

¹ Includes Timber Production and Modified Landscape LUDs, but not Scenic Viewshed.

**Figure ES-1
Roadless Areas by Alternative and Management Category**



Key Issue 1 – Roadless area conservation

Roadless area protection is defined in terms of both the acres designated as roadless and the degree of protection provided by each alternative. In terms of acres designated, Alternatives 1 and 2 provide the highest degree of regulatory protection with 9.2 million acres or more designated as roadless and Alternative 6 provides the lowest with zero acres of designated roadless given regulatory prohibitions.

Alternative 5 removes all regulatory roadless designations within development LUDs⁴ and has the second lowest number of acres designated roadless with 6.9 million acres.

Alternatives 3 and 4 are intermediate in terms of the acres designated as roadless. However, the roadless designations provided in development LUDs by Alternative 4 is lower than for Alternative 3 because all Timber Priority ARA lands under Alternative 4 are in development LUDs and Alternative 3 would designate T77 Watersheds and TNC/Audubon Conservation Priority Areas as Watershed Priority ARAs. In addition, the removal of roadless designation from LUD II acres accounts for a large share of the reduction in designated roadless area acres under Alternative 3. These acres would retain their congressional protections and be managed to preserve roadless area characteristics (Table 2-10). Therefore, protection of roadless characteristics is much greater under Alternative 3 compared with Alternative 4.

The roadless rule language under Alternative 1 would be unchanged from the 2001 Roadless Rule (as reinstated by the District Court). The rule language would be modified under Alternatives 2, 3, 4, and 5; under Alternative 6, the 2001 Roadless Rule would fully exempt the Tongass. The Roadless Priority and LUD II Priority management categories would be very slightly more permissive in terms of road construction, salvage timber harvest, and mineral development, and would be slightly more permissive in terms of energy and transportation project development. The Watershed Priority ARA would be slightly less permissive relative to all of the development types and the Community Priority and Timber Priority categories under Alternatives 3⁵ and 4, respectively, would be substantially more permissive of development types, especially timber harvest and road construction.

As a result, Alternatives 1, 2, and 3 would provide the greatest protection of roadless characteristics. Alternative 1 would protect the most acres and existing management direction would provide the highest degree of protection, with the existing general prohibitions remaining in place for all areas. Alternative 2 would offer similar levels of protection, with a small net gain in total designated roadless acres. The roadless and other substantially altered areas that would be removed under Alternative 2 have limited roadless characteristics, and increased regulatory protection would be added for the Watershed Priority ARA. Alternative 3 would offer the next most protection of roadless area characteristics. Roadless and other substantially altered areas along with logical extension areas would be removed under Alternative 3 (as well as LUD II areas), and most ARAs would be managed as Roadless Priority or Watershed Priority ARAs. Additionally, T77 Watersheds and TNC/Audubon areas outside of roadless would be given regulatory protection from old-growth harvest. About 3 percent of ARAs under Alternative 3 would be designated as Community Priority, which allows limited timber harvest opportunity. Alternatives 4 through 6 would provide the least amount of roadless designations, with Alternative 6 removing all acres from regulatory roadless designation.

Key Issue 2 – Support local and regional socioeconomic well-being, Alaska Native culture, rural subsistence activities, and economic opportunity across multiple economic sectors.

Support for Southeast Alaska resource-based industries and local/regional socioeconomic well-being is compared among the alternatives by industry/category in the following subsections.

Forest Products Industry

The 2016 Forest Plan established an average annual PTSQ of 46 MMBF prior to the young-growth transition. The old-growth contribution to the PTSQ is expected to start out high and decrease over time as more young growth becomes economic to harvest. During the first decade, an average of about 12 MMBF of young growth and 34 MMBF of old growth was expected to be sold annually. From Year 11

⁴ Note that, with the exception of the Timber Priority management category, roadless designation on development LUDs provides the highest degree of protection, because these are areas that are mostly likely to be developed if they were not designated roadless. Most non-development LUDs have Forest Plan restrictions which limit their potential for development.

⁵ Timber harvest in Community Priority ARAs would be limited to micro sales, salvage sales, and small commercial sales less than one MMBF in size.

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through Year 15 an average of about 28 MMBF of young growth and 18 MMBF of old growth were expected to be sold annually. Old-growth volume offered was projected to decrease until it reaches 5 MMBF per year (expected to occur about Year 16), at which point it is to be stabilized at 5 MMBF per year to support small operators and specialty products such as wood for musical instruments. Young growth sales are expected to continue to increase at a rapid rate after Year 16 and are expected to reach an upper limit of 98 MMBF about Year 18. If less than the average annual PTSQ figure of 46 MMBF is sold in the early years of a decade, the Forest Plan allows the difference to be added to the sale quantity for the remainder of the decade. During the initial two years of implementing the 2016 Forest Plan, the total volumes sold were 30.7 MMBF (fiscal year 2017) and 9.0 MMBF (fiscal year 2018).

None of the action alternatives would result in changes to the PTSQ and the timber objectives of the Forest Plan would continue to require transitioning to primarily young-growth harvest. Therefore, harvest levels are not expected to vary significantly among the alternatives. However, the alternatives do vary in terms of the amount and location of acres suitable for timber production. Greater acreage of suitable land would provide greater flexibility in the selection of future timber sale areas, as well as the potential for more flexibility in sale design, depending on the planning areas selected. This improved flexibility could, in turn, improve the Forest Service's ability to offer economic sales that meet the needs of industry. This greater flexibility could be beneficial during the first two decades of the 2016 Forest Plan (the transition period), when most old-growth harvest would take place.

Under Alternative 1, about 230,000 acres of old growth and 334,000 acres of young growth are currently suitable for timber production. The young-growth suitable acres would increase slightly (3 through 6 percent) under the action alternatives. For old growth, however, the suitable acreage increase would range from 7 percent for Alternative 2 to 72 percent for Alternatives 5 and 6. For Alternatives 3 and 4 the increase would be 33 percent and 69 percent, respectively. Suitable old-growth acres would be added in three broad categories or areas: roadless and other substantially altered areas (Alternatives 2 through 6); logical extension areas and areas adjacent to roads (Alternatives 3 to 6); and areas more distant from roads (Alternatives 4 through 6). In addition, suitable old-growth acres would be added in Community Priority ARAs, which are associated with five communities (Alternative 3).⁶ The substantially altered areas removed, the areas immediately adjacent (logical extensions), and the Community Priority ARAs are assumed to be more economical to harvest due to their proximity to existing infrastructure. The additional acres added under Alternatives 4 through 6 are farther from existing infrastructure and thus less likely to be economic to harvest.

Recreation and Tourism

Changes in land management have the potential to affect outfitter/guide operations which provide commercial recreation opportunities on the Forest. Impacts to existing outfitter/guide use are likely to be greatest where changes in roadless designations allow development in areas that are used for outfitter/guide activities dependent on high scenic integrity and undisturbed landscapes. Changes in roadless area designations could also affect outfitter/guide use in other adjacent or nearby areas as outfitter/guides displaced from one location seek other places to take clients. Some use areas are presently at capacity, which could exacerbate potential displacement effects. Changes in roadless area management could affect the Forest's ability to meet outfitter/guide demand, especially for operators seeking more remote areas.

The outfitter/guide analysis prepared for this DEIS used changes in suitable old-growth acres in conjunction with information on existing outfitter/guide use to focus on potentially affected areas. The resulting analysis identified 15 outfitter/guide use areas where potential conflicts between existing outfitter/guide use and future management activities could occur. In most of these areas, existing outfitter/guide use occurs near areas where development has occurred in the past, either near or along shorelines and/or Forest road systems. Similarly, in most cases, timber harvest that could already occur in these areas (under Alternative 1) have the potential to conflict with existing outfitter/guide use.

Viewed in terms of increases in acres suitable for harvest, impacts under Alternatives 2 and 3 would be nonexistent to very minimal in all areas, with increases in designated roadless acres and reductions in

⁶ Timber harvest in Community Priority ARAs would be limited to micro sales, salvage sales, and small commercial sales less than one MMBF in size.

suitable acres occurring in some areas under these alternatives. In most of these areas, by expanding the acres available for harvest, Alternatives 4, 5, and 6 could add to these potential impacts by increasing the geographic extent of the acres affected. These potential impacts caused by an increase in geographic extent due to possible increase in road miles needed.

Salmon Harvesting and Processing

None of the alternatives are expected to have a significant change to the commercial fishing or fish-processing industries. Riparian Management standards and guidelines established in the 2016 Forest Plan would remain in place under all of the alternatives. While there would be some variation in the level of protection, these variations are not expected to affect the fishing industry. The future of the fishing industry in Southeast Alaska is more likely to depend upon occurrences outside of the Tongass National Forest such as hatchery production, offshore harvest levels, and changes in ocean conditions.

Mining and Mineral Development

Locatable minerals development is possible within designated roadless areas under all alternatives. The General Mining Act of 1872 authorizes and governs prospecting and mining for economic minerals on federal public lands, including designated roadless areas. Changes in roadless management are, therefore, not expected to affect existing or future locatable mineral exploration or mining activities on the Forest.

Under the 2001 Roadless Rule roadbuilding is prohibited for any new leasable mineral projects, including geothermal projects, within IRAs. Changes in management under Alternatives 2 to 6 would allow road development to differing degrees. Within Roadless and Timber Priority ARAs, roads would be permissible for leasable projects. The Tongass has no recent or current leasable mineral activity and the anticipated demand for leasable minerals is expected to remain low. As a result, changes in designated roadless management are expected to have limited impacts on mineral development.

Infrastructure Development

With some exceptions, federal and state road development is limited in IRAs. Exceptions include roads with reserved or outstanding rights, roads provided for by statute or treaty, or road development related to a Federal Aid Highway. Roadless designation would be removed to various degrees under the action alternatives with corresponding implications for regional highway development. In most cases, changes in roadless management, as well as changes in the number of acres managed as roadless, would be more permissive with respect to regional road systems.

Tree Harvest for Alaska Native Cultural Purposes

Alternative 1 does not provide specific exceptions for timber cutting associated with Alaska Native cultural uses. However, Alternatives 2, 3, 4, and 5 do support Alaska Native culture through explicit rule language that allows increased access to cutting, customary trade, and removal of trees for the purposes of Alaska Native customary and traditional uses. This increased access is provided in the Roadless, Watershed, and Community Priority ARAs. Alternative 2 would rank the highest for providing access among the action alternatives containing roadless lands, followed by Alternatives 3, 4, and 5, in that order. Alternative 6 would rank the highest overall, because it would have no restrictions related to roadless designations; but it would provide no protections for designated roadless characteristics, which are important for Alaska Native cultural purposes. Alternative 1 would rank the lowest in terms of providing direct support for Alaska Native tree harvest for cultural purposes.

Rural Subsistence Activities

The action alternatives are expected to have minimal effects on rural subsistence activities. Timber harvest levels are expected to remain the same for all alternatives, with similar or only slightly different miles of road construction/reconstruction also anticipated. While there would be some new road access under all alternatives in the long run, nearly all new roads constructed under the alternatives would be closed following harvest. These roads would, therefore, not be available for use by highway vehicles or

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high-clearance vehicles. They may, however, be available for access by other methods and could, as a result, have the potential to affect existing subsistence patterns. Although overall road miles would be similar, based on the relative distribution of acres suitable for harvest, road miles are expected to be slightly higher for Alternatives 4, 5, and 6. The effects on particular groups of subsistence users or resources are difficult to predict at the programmatic level, but the slight difference in road miles is expected to result in little to no difference to rural subsistence activities between alternatives.

Community Effects

Effects on communities are not expected to be affected in a major way under the action alternatives relative to Alternative 1. The largest effect is expected to be under Alternatives 4, 5, and 6 because these alternatives would result in larger increases in suitable timber within many community areas, especially in those that are more remote (see Appendix E). Of particular concern in this regard are those communities with economies that are dominated by the visitor industry (see Table E-2 in Appendix E). Based on an evaluation of employment and business licenses by community, along with the amount of suitable timber within community areas, the following observations can be made:

- Alternatives 1 and 2 are expected to generally result in no effect on communities. However, because of the nature of this EIS, the effects on any community cannot be identified until specific projects are proposed.
- Alternative 3 is expected to have very minimal effects, both adverse and beneficial. Community Priority ARAs in this alternative may be beneficial to communities by adding more flexibility and control by the communities of adjacent designated roadless areas.
- Alternatives 4, 5, and 6 (especially Alternatives 5 and 6) are expected to result in an increased potential for effects on communities, especially in those communities where the visitor industry sector is the most important. This is primarily because of potential effects on the natural environment within the community areas, which in turn may affect visitor use. The smaller and less diversified communities may have a greater risk of effects. Because of the nature of this EIS, the effects on any community cannot be identified until specific projects are proposed, but it is expected that they would range from no effect to a minimal effect for these alternatives.

Key Issue 3 – Conserve terrestrial habitat, aquatic habitat, and biological diversity

Old-Growth Habitat

Relative to old-growth habitat conservation, all of the alternatives would have old-growth harvest levels similar to the level authorized by the 2016 Forest Plan. There may be slightly more high-volume and large-tree productive old growth (POG) harvested under the action alternatives than was predicted for the Forest Plan because of the increased options for creating economic timber sales. However, this is speculative and depends on harvest levels reaching predicted decadal levels, as well as on being able to economically access these stands. In addition, the proportion of high-volume and large-tree POG in the added suitable acres under the action alternatives is lower than the proportion in the Alternative 1 suitable acres.

The transition to young-growth management would continue to slow the long-term decrease in deer habitat capability due to the reduction in POG harvest, under all of the alternatives. Because long-term POG harvest and road densities are not expected to differ significantly among alternatives, effects on old-growth-dependent wildlife species are expected to be almost identical to those predicted under the 2016 Forest Plan FEIS.

Young Growth in Special Habitats

Young growth suitable for timber harvest occurs in a number of special habitats under the Forest Plan, including Riparian Management Areas, Beach and Estuary Fringe, and the Old-growth Habitat LUD. Young growth on specific portions of these areas may be harvested under required silvicultural prescriptions following specific guidelines. The suitable acres of young growth on these special habitats would increase

slightly under the action alternatives, but only slightly because the majority of existing young-growth stands are not in designated roadless areas. Therefore, little to no difference among the alternatives is expected.

Road Density

Although slightly more road miles may be developed under the action alternatives, the average road densities on NFS lands and the percent of Wildlife Analysis Areas with road density less than 0.7 miles per square mile are expected to be similar to that predicted under the Forest Plan. Although it is impossible to precisely predict future road miles under the alternatives, it is likely that Alternatives 1 and 2 would be virtually the same, Alternative 3 may have slightly more road miles, and Alternatives 4, 5, and 6 would have the most road miles because they add more remote suitable timber acres, which may require the development of new road systems. This assumes that more distant areas would be harvested under Alternatives 4, 5, and 6. Harvest in these areas is generally considered less likely to be economic due to the need to build more roads.

Fish Habitat

Overall effects to fish habitat are expected to be negligible under all alternatives, because of the strong protections to fish habitats provided by Forest Plan LUDs, Forest-wide standards and guidelines including the riparian management strategy, and the lack of old-growth harvest or associated road construction allowed in the T77 watersheds and TNC /Audubon Conservation Priority Areas. Alternative 3 provides additional long-term regulatory protection for T77 watersheds and TNC/Audubon Conservation Priority Areas by prohibiting old-growth harvest by regulation. Localized effects on fish habitat may occur, but these are expected to be minimal overall.

Species-Specific Effects

The transition to young-growth management would continue to slow the long-term decrease in deer habitat capability due to the reduction in POG harvest, under all of the alternatives. Because long-term POG harvest and road densities are expected to be similar to those under the Forest Plan, effects on old-growth dependent wildlife species are expected to be almost identical to those predicted by the 2016 Forest Plan FEIS.

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