

Iyouktug Final EIS Summary

Chapter 1

Introduction

This summary describes the effects of proposed timber sale(s) and several alternatives in the Iyouktug project area. It describes the “No Action” alternative (Alternative 1), a “Proposed Action” (Alternative 2) and three other alternative strategies for timber harvest. The four action alternatives include road building and reconstruction as well as use of an existing marine access facility (MAF) at Long Island, near Hoonah. The details of the Iyouktug Timber Sales project are fully presented in the Iyouktug Final Environmental Impact Statement (FEIS). The FEIS discloses the environmental effects that are expected from the Proposed Action and each of the other alternatives, including the No-action Alternative.

The project area is located in the northeastern part of Chichagof Island and is within the Hoonah Ranger District, Tongass National Forest, Alaska Region (Region 10), of the Forest Service, U.S. Department of Agriculture. The Iyouktug project area contains 40,651 acres and is located on the northeastern part of Chichagof Island in the Iyouktug valley, northwest of the Iyoukeen Peninsula. The project area is located north of Freshwater Bay, west of False Bay and Chatham Strait, and south of Icy Strait, approximately 12 miles east-southeast of Hoonah, Alaska (see Figure 1-1). The project area lies within the Iyouktug and Suntaheen Creek valleys, along National Forest System Road 8530, and includes Whitestone Harbor.

The FEIS and Record of Decision (ROD) are available on line at <http://www.fs.fed.us/r10/tongass/projects/projects.shtml> or copies of the FEIS and ROD may be obtained from the USDA Forest Service offices at Hoonah or Sitka, Alaska.

Additional documentation, including more detailed analyses of project-area resources, may be found in the project record located at the Sitka Ranger District Office in Sitka, Alaska.

Purpose and Need

Forest Plan Goals and Objectives

The Iyouktug project is proposed at this time to respond to goals and objectives of the Tongass Forest Plan, to help move the project area towards desired conditions described in that plan, and to meet the needs of Southeast Alaska timber operators. The Forest Plan includes both forest-wide goals and objectives, and area-specific (land use designation-LUD) goals, objectives, and desired conditions. The purpose of the Iyouktug Timber Sales project is to:

- Maintain and promote wood production from suitable timber lands, providing a supply of wood to meet society's needs.
- Seek to provide a stable supply of timber from the Tongass National Forest, which meets the annual planning-cycle market demand, while managing these lands for sustained long-term yields, consistent with sound multiple-use and sustained-yield objectives.
- Seek to provide a long-term, stable supply of timber for local sawmills and timber operators.
- Provide a diversity of opportunities for resource uses that contribute to the local and regional economies of Southeast Alaska to support a wide range of natural resource employment opportunities within Southeast Alaska's communities.

Proposed Action

Alternative 2 represents the Proposed Action. Alternative 2 would provide up to 58.1 million board feet (MMBF) of timber from approximately 4,185 acres using shovel yarding, cable-logging, and helicopter yarding systems (see Figures 2-3a and 2-3b, Chapter 2). Approximately 1,253 acres would be clearcut, and 2,932 acres would be partial harvest. Alternative 2 would harvest approximately 1,871 acres in inventoried roadless areas.

Timber in Alternative 2 would be offered through various small sales and one or more large sales over an extended period of time following the Record of Decision (ROD).

This alternative would construct a total of about 13.4 miles of temporary roads and 4.2 miles of National Forest System (NFS) road. All new temporary roads would be decommissioned after timber harvest. All newly constructed NFS roads would remain open for future timber harvest and silvicultural needs. Alternative 2 would include reconstruction of about 6.9 miles of existing NFS roads that are currently closed; these roads would be closed and placed into storage after timber harvest. The existing Long Island marine access facility (MAF) would be used.

Alternative 2 would modify the project area old growth reserves (OGRs) to meet the interagency biologists recommendations to increase acres, improve connectivity and adjust boundaries to follow recognizable features (see Chapter 2, Alternative 2 description and Figures 2-3a, 2-3b, and Chapter 3, Figure 3-1).

Decisions to Be Made

The Responsible Official for this proposal is the Forest Supervisor for the Tongass National Forest. Based on the environmental analysis in this FEIS, the Tongass Forest Supervisor will decide whether and how to make timber available from the Iyouktug project area in accordance with Forest Plan goals, objectives and desired conditions. This decision will be documented in the ROD and will include:

- The estimated timber volume, if any, to make available from the project area;
- The location, design, and method of timber harvest, road construction and reconstruction, log transfer facilities, and silvicultural practices;
- The timeframe harvest may occur in;
- Road management objectives for roads constructed, reconstructed, or with bridge replacements;
- Any necessary project-specific design criteria, mitigation measures, and monitoring requirements;
- Whether there may be a significant restriction on subsistence uses; and
- Whether any changes in small old growth reserves should be made and approved as a non-significant amendment to the Forest Plan.

The Iyouktug project area includes three land use designations, Timber Production, Scenic Viewshed, and Old-growth Habitat, as well as approximately 265 acres of non-Forest Service System land (Figure 1-2).

Significant Issues

Issues for the Iyouktug project were identified through public and internal scoping. Each comment received during scoping was considered a potential issue and each comment was evaluated to determine how to address the comment. Similar issues were combined into one statement where appropriate. The following three issues were determined to be significant and within the scope of the project decision. The IDT developed alternatives to the Proposed Action to address these issues; Chapter 2 of the FEIS discusses and compares the alternatives. Additional concerns were considered but did not form the basis for an alternative; they are discussed as Other Issues in the FEIS.

Issue 1

Issue 1: Proposed harvest and associated road construction would reduce habitat connectivity for Sitka black-tailed deer by removing additional low elevation forest and travel corridors connecting low and high elevation habitat

Previous timber harvest in the Iyouktug area has removed several areas of low-elevation productive old growth forest. Deer use old growth forest corridors to move between low elevation winter habitat and high elevation summer habitat; these corridors have been affected by previous harvest. Proposed harvest and associated road construction would reduce habitat connectivity for Sitka black-tailed deer by removing additional low elevation forest and travel corridors connecting low and high elevation habitat.

Issue 2

Issue 2: Timber harvest and road construction may affect the roadless character of Iyouktug's three inventoried roadless areas

Harvesting trees and building and maintaining a road system for current and future harvest may affect the roadless character of the three inventoried roadless areas in the Iyouktug project area: Whitestone, Point Augusta, and Freshwater Bay. Additionally, several comments expressed the desire to avoid roads and avoid harvest in Tongass inventoried roadless areas because of the potential to affect wildlife and fish and their habitat as well as to affect ecological, cultural, and geological values in inventoried roadless areas.

Issue 3

Issue 3: Proposed helicopter yarding and road-building may reduce the economic viability of timber sales

If proposed timber harvest is not designed to be economically viable across fluctuating market conditions, there is a concern that the forest products industry in Southeast Alaska and in the local area may not remain viable.

The amount of timber available for sale from national forests and a stable supply affects local employment and revenues. Small operators need local, economical timber to stay in business and loss of those operators would negatively impact the local economy. Proposed helicopter yarding and road-building may reduce the economic viability of timber sales.

Chapter 2

This chapter describes and compares the alternatives considered by the Forest Service for the Iyouktug project. It includes a discussion of how alternatives were developed, an overview of mitigation measures, monitoring and other features common to all alternatives, a description and map of each alternative considered in detail, and a comparison of these alternatives focusing on the significant issues. Alternative 3 is identified as the preferred alternative.

Alternatives Considered in Detail

Alternative 1 as well as the Proposed Action (Alternative 2) and three other action alternatives are considered in detail. Alternative 1 is the No-action Alternative, under which the project area would have no timber harvest or road construction at this time, and would remain subject to natural or ongoing changes only. The other action alternatives represent different options of satisfying the Purpose and Need than does the Proposed Action by responding with different emphases to the significant issues discussed in Chapter 1. Maps of all alternatives considered in detail are provided at the end of Chapter 2. A full description of the alternatives is found in Chapter 2 of the FEIS.

Alternative 1 (No Action)

Alternative 1 proposes no new timber harvest or road construction from the Iyouktug project area at this time. It does not preclude timber harvest from other areas or from the Iyouktug project area at some time in the future. The Council on Environmental Quality (CEQ) regulations (40 CFR 1502.14d) requires that a "No Action" alternative be analyzed in every EIS. This alternative represents the existing condition against which the other alternatives are compared. The map for Alternative 1 shows Forest Plan LUDs along with streams, existing roads, previously harvested areas, and the location of inventoried roadless areas.

This alternative would address concerns about effects to deer habitat and roadless character (Issues 1 and 2), by having no effects on deer winter habitat or habitat connectivity and no effects on wildlife and fish and their habitat or ecological, cultural, and geological values in inventoried roadless areas. Alternative 1 would not provide for an economic timber supply (Issue 3, see Chapter 1). This alternative would not change Old growth Reserves (OGRs).

Summary

Alternative 2 (Proposed Action)

Alternative 2 is the Proposed Action. Alternative 2 is essentially what was presented to the public in August 2006 scoping with further refinements based on field verification to meet the needs of the resources and correct inaccuracies in early data.

The emphasis of Alternative 2 is to maximize the timber harvest in the Iyouktug project area while meeting Forest Plan direction. The development and design of Alternative 2 is described in Chapter 2 under Alternative Development Process, Proposed Action. See also Table S-1.

Alternative 2 would modify the project area OGRs to implement the interagency biologists' recommendations.

Alternative 3

Alternative 3 was developed to minimize impacts to deer habitat and connectivity while providing for an economic timber supply. This Alternative includes ground-based units found in Alternative 5 and proposes most of the helicopter-yarded timber volume in Alternative 2. Some units proposed in Alternatives 2 and 5 were modified in Alternative 3 to maintain deer winter habitat and habitat connectivity. All new roads would be closed in Alternative 3 to help minimize the effects of this alternative on deer habitat capability. Alternative 3 was developed in response to public concerns about the effects of harvest on deer habitat (Issue 1) as well as some concerns about economics (Issue 3). By closing all roads in inventoried roadless areas, Alternative 3 also minimizes effects to roadless characteristics (Issue 2). See also Table S-1.

Alternative 3 would modify the project area OGRs to implement the interagency biologists' recommendations as described in Alternative 2 (see Alternative 2 description, in Chapter 2).

Alternative 4

Alternative 4 was developed to minimize impacts to the roadless character of Iyouktug's three inventoried roadless areas (IRAs) by avoiding timber harvest and road construction in Whitestone, Point Augusta, and Freshwater Bay Inventoried Roadless Areas. This alternative is based primarily on Alternative 2 with all units in inventoried roadless area removed. Alternative 4 was developed in response to public concerns about the impacts of harvest and road building on roadless area characteristics (Issue 2), but it also partially responds to concerns about economic viability (Issue 3). See also Table S-1.

Alternative 4 would modify the project area OGRs to implement the interagency biologists' recommendations as described in Alternative 2 (see Alternative 2 description, in Chapter 2).

Alternative 5

Alternative 5 was developed to maximize the economic return of timber harvest in the Iyouktug project area by accessing the most productive sites with a small amount of road construction, and proposing only ground-based yarding methods. This alternative is based primarily on Alternative 2 with modification for economics; it concentrates on areas with few resource concerns. Alternative 5 was developed in response to public concerns about

the economic viability of timber sales (Issue 3), but also partially addresses concerns about effects on roadless area characteristics (Issue 2). See also Table S-1.

Alternative 5 would modify the project area OGRs to implement the interagency biologists' recommendations as described in Alternative 2 (see Alternative 2 description, in Chapter 2).

Activities and Design Elements Common to All Action Alternatives

All action alternatives (Alternatives 2, 3, 4, and 5) including the Proposed Action are consistent with the 1997 Forest Plan, as amended. All applicable Forest-wide and land use designation standards and guidelines have been incorporated. The Forest Service uses many mitigation and preventive measures in the planning and implementation of land management activities. The application of these measures begins during the planning and design phases of a project. Additional direction comes from applicable Forest Service manuals and handbooks. Items were listed to highlight some of the key direction from the Forest Plan (primarily from Chapter 4, "Forest-wide Standards and Guidelines"). In addition, several elements of the project design and connected activities that are common to all the action alternatives are described in this section of Chapter 2. They apply to Alternatives 2, 3, 4, and 5.

Some connected activities fairly common to timber sales on the Tongass National Forest will not be necessary for the Iyouktug Timber Sales. No camp will be necessary because the town of Hoonah is in close proximity to the sale and facilities in Hoonah could fulfill those needs. Existing rock pits will be expanded for road building; since there are many existing rock pits, no new rock pits are expected to be developed. The Forest Service has a cooperative agreement to use an existing, permitted marine access facility (MAF) on private land in Hoonah, so no new MAFs would be necessary.

Comparison of Alternatives

This section compares outputs, objectives and effects of the alternatives in terms of the significant issues for the Iyouktug Timber Sales project. The discussions of effects are summarized from Chapter 3, which should be consulted for a full understanding of these and other environmental consequences. The tables below provide an overview comparison of information from the alternative descriptions and Chapter 3 relevant to the issues.

Summary

Table S-1: Comparison of Alternatives - Harvest and Road Activities¹

Proposed Activity	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
Acres of Timber Harvest by Yarding System (Harvest Treatment²)					
Shovel (ST50)	0	247	169	194	169
Shovel (ST25)	0	68	33	68	68
Cable (Clearcut)	0	1,253	574	636	646
Helicopter (ST40)	0	1,392	1,331	627	0
Helicopter (ST25)	0	1,225	1,225	1,059	0
Total Unit Acres	0	4,185	3,332	2,584	883
Timber Harvest Volume (MMBF)³	0	58.1	41.7	33.8	16.5
Road Activities					
Miles of new temporary road construction ⁴	0	13.4	3.9	7.8	4.4
Miles of new National Forest System (NFS) road construction ⁴	0	4.2	2.8	1.4	2.8
Miles of existing NFS road to be reconstructed	0	6.9	6.3	7.0	1.4
Miles of open NFS road after timber sale completion ⁵	36.2	40.4	36.6	37.7	39.0

¹Definitions of terms used in this table are explained in Chapter 4 under the Glossary section. Numbers in this table may not sum to totals shown elsewhere in the EIS due to rounding.

²ST25, ST40, or ST50 = partial cut through single tree selection harvesting up to 25%, 40%, or 50% of the basal area in the stand, respectively.

³Volume includes utility and sawlog volume.

⁴All temporary roads will be decommissioned; NFS roads may be left open or may be closed and put into storage. NFS road construction includes reclassifying 0.4 mile of existing, unauthorized open roads to NFS road.

⁵Ongoing road closure/storage activities will cumulatively reduce these open road miles to 34.9, 36.2, 32.4, 33.5, 34.8 for Alternatives 1 through 5, respectively in the project area after implementation of the 2002 Access Travel Management (USDA Forest Service 2002b) decision. An additional 0.4 miles of open, unauthorized road would remain unauthorized in Alternative 1.

Table S-2: Comparison of Alternatives by Significant Issue

	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
Issue 1: Deer Habitat Connectivity					
Percent reduction in productive old growth below 800 feet elevation in the Wildlife Analysis Area (WAA)	0	6.1	3.8	4.2	2.7
Acres of productive old growth (POG) remaining in the WAA ¹	31,768	28,657	29,467	30,144	30,928
Degree of influence on deer habitat connectivity ²	Negligible	Moderate	Moderate	Moderate	Moderate
Acres of Small Old Growth Reserve (OGR)/Acres of POG in OGR	2,691/ 1,740	3,436/ 2,232	3,436/ 2,232	3,436/ 2,232	3,436/ 2,232
Issue 2: Inventoried Roadless Areas					
Acres of timber harvest proposed in inventoried roadless areas	0	1,871	1,416	0	229
Miles of new road construction proposed in inventoried roadless areas (includes temporary and NFS road)	0	8.1	2.2	0	2.1
Acres of inventoried roadless area retaining roadless characteristics in the project area ³	25,591	20,378	21,592	24,211	24,688
Whitestone Inventoried Roadless Area					
Degree of influence on high value fish and wildlife habitat ²	Negligible	Negligible to Minor	Negligible to Minor	Negligible to Minor	Negligible to Minor
Degree of influence on ecological, cultural, and geological special values ²	Negligible	Minor	Minor	Minor	Minor
Point Augusta Inventoried Roadless Area					
Degree of influence on high value fish and wildlife habitat ²	Negligible	Moderate	Minor to Moderate	Negligible to Minor	Minor to Moderate
Degree of influence on ecological, cultural, and geological special values ²	Negligible	Moderate	Moderate	Minor	Moderate
Freshwater Bay Inventoried Roadless Area					
Degree of influence on high value fish and wildlife habitat ²	Negligible	Minor	Minor	Negligible	Negligible
Degree of influence on ecological, cultural, and geological special values ²	Negligible	Minor	Moderate	Negligible	Minor
Issue 3: Timber Sale Economics					
Total volume in million board feet (MMBF)	0	58.1	41.7	33.8	16.5
Logging costs per thousand board feet (MBF)	0	\$377	\$385	\$380	\$333
Indicated bid - dollars per MBF; () indicates negative value	0	\$(177.75)	\$(151.28)	\$(175.07)	\$(176.79)
Employment in number of total job years	0	199-282	144-204	116-165	56-79
Direct income based on projected employment (in millions)	0	\$7.7 - 10.6	\$5.6 - 7.7	\$4.5 - 6.2	\$2.2 - 3.0

¹ Acres of Helicopter ST25 were not included because it was assumed that this harvest method will not result in a change to the classification of productive old growth forest.

² Impacts increase from negligible (which includes no effect) to minor to moderate to major; definitions of effects are located in Chapter 3 in the Habitat Connectivity and Old Growth and Roadless Resources sections

³ Includes direct and indirect effects

Summary

Table S-3: Comparison of Alternatives by Resource

	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
<u>Botany</u>					
Determination of impacts on sensitive plants	No impact	MIIH ¹	MIIH ¹	MIIH ¹	MIIH ¹
Likelihood of adverse effects to rare plants	None	Low	Low	Low	Low
Consequences to rare plants	None	Moderate	Low	Low	Low
<u>Geology and Karst</u>					
Proposed harvest of high and low vulnerability karst (acres)	0	0	0	0	0
Proposed harvest of moderate vulnerability karst (acres)	0	325	316	142	0
<u>Heritage</u>					
Effects to heritage resources	None	None	None	None	None
<u>Management Indicator Species and Other Wildlife</u>					
Effects to MIS and other species ²	None	Minor to Moderate	Minor to Moderate	Minor to Moderate	Minor to Moderate
<u>Recreation</u>					
Effects to ROS ²	No Effect	Moderate	Moderate	Moderate	Moderate
<u>Scenery</u>					
Effects to scenery	No Effect	Meets FP S & Gs	Meets FP S & Gs	Meets FP S & Gs	Meets FP S & Gs
<u>Silviculture and Vegetation</u>					
Proposed harvest in high and moderate-high wind risk areas (acres)	0	2,115	1,392	1,110	647
<u>Percent Species by volume harvested</u>					
Yellow-cedar	3.4% ³	4.7%	4.9%	4.7%	3.7%
Spruce	36% ³	58%	64%	61%	46%
Hemlock	61% ³	37%	31%	34%	50%
<u>Soil</u>					
Harvest in areas over 72% slope (acres)	0	121	114	87	3
Cumulative detrimental soil disturbance (acres)	271	495	405	405	337
<u>Subsistence</u>					
Effects to subsistence	Following the Forest Plan predictions we expect a significant possibility of a significant restriction on subsistence deer resources; there will not be a restriction on other subsistence resources				
Hunter demand as a percentage of deer habitat capability	22.6	23.7	23.4	23.3	23.0
<u>Threatened, Endangered, and Sensitive Species</u>					
Determination of impacts on humpback whale, Steller sea lion, and salmonids	Negligible	NLAA ¹	NLAA ¹	NLAA ¹	NLAA ¹
Determination of impacts on goshawk	Negligible	MIIH ¹	MIIH ¹	MIIH ¹	MIIH ¹
Impacts to other TES species	Negligible	Negligible	Negligible	Negligible	Negligible

¹ MIIH = May impact individuals or habitat but not likely to cause a trend to Federal listing or loss of viability, NLAA = Not likely to adversely affect individuals.

² Impacts increase from negligible (which includes no effect) to minor to moderate to major; definitions of effects are located in Chapter 3 in the Habitat Connectivity and Management Indicator Species sections

³ Existing species mix

Source: Chapter 3 of this FEIS

Table S-3: Comparison of Alternatives by Resource (cont.)

Transportation (see Table 2-1)					
Watershed					
Cumulative percent canopy removal by watershed within 30 years⁴					
Alpha Spasski Creek	10%	15%	15%	13%	12%
Iyouktug Creek	9%	19%	15%	13%	13%
Suntaheen Creek	14%	20%	19%	19%	15%
Whitestone Head Creek	9%	13%	11%	13%	10%
Fish					
Number of new fish stream crossings in the project area	0	4	1	3	1
Cumulative number of stream crossings in affected watersheds	243	319	269	265	271
Effects to Fish ²	Negligible	Minor	Minor	Minor	Minor
Wetlands					
Effects to wetlands ²	Negligible	Minor	Minor	Minor	Minor
Proposed harvest on forested wetlands (acres)	0	1,097	822	586	371
Proposed road construction on wetlands (acres)	0	86	31	44	34

¹ MIIH = May impact individuals or habitat but not likely to cause a trend to Federal listing or loss of viability, NLAA = Not likely to adversely affect individuals.

² Impacts increase from negligible (which includes no effect) to minor to moderate to major; definitions of effects are located in Chapter 3 in the Habitat Connectivity, Management Indicator Species Recreation, Watershed and Fish, and Wetlands sections

³ Existing species mix

⁴ Water yield in the project area may be affected where over 20% of the canopy is removed from a watershed in less than 30 years. Cumulative canopy removal has been normalized to reflect partial harvest prescriptions in many units.

Source: Chapter 3 of this FEIS

Summary



Sonyakay Ridge along the southwestern boundary of the project area