# UNIT 3C LOWER KALIAKH RIVER AND TRIBUTARY DRAINAGES

## Background

Unit 3C follows the boundaries of the Yakataga Special Management Area created by the state legislature in SLA 1990, Chapter 143. The Yakataga Special Management Area was a temporary management unit that expired when the area plan was adopted.

#### **Physical features**

Unit 3C encompasses the lower eastern drainage of the Kaliakh River. The mainstem of the Kaliakh River is flanked by a one-quarter to one-mile-wide bottomland of willow, alder, and cottonwood. Approximately half the unit has commercial forest.

#### Access

An unauthorized airstrip provides access near the confluence of the Kulthieth and Kaliakh rivers, at the northern boundary of the unit. Planes also land on gravel bars. The Kaliakh River is navigable in this unit: boating provides access for hunting, fishing, and recreation. There are no roads.

#### Land status

All lands within Unit 3C are state-owned. The commissioner of DNR recommends through the area plan that part of Unit 3C, the former Special Management Area, be included in the Yakataga State Game Refuge.<sup>1</sup>

#### Adjoining lands

Unit 3C is bounded on all sides by state land. The western border is the Kaliakh River, which is in the Yakataga State Game Refuge. The southern edge of the unit parallels the Gulf coast, one mile inland from mean high water. The eastern edge follows the township line separating R16E and R17E (approximately <sup>1</sup>/<sub>4</sub> mile from the west bank of the Duktoth River). The northern edge of Unit 3C follows section lines across upper Hope Creek and the northern foothills of Kulthieth Mountain.



Fishing camp near mouth of Kaliakh River

1 See Chapter 4 - Yakataga State Game Refuge.

#### **Resources and uses**

The northwestern half of Subunit 3C is approximately 75 percent forested with mature hemlock and spruce forest. The southwestern half of the unit has approximately ten percent commercial forest in a strip along the flank of Kulthieth Mountain. The lower elevations are primarily covered with willow and muskeg meadows.

A band of riparian willow, cottonwood and alder up to one-and-one-half miles wide along the main stem of the Kaliakh River provides important moose habitat and eagle nesting sites. The number of eagle nests is high even by Alaska standards. The Kaliakh River system is one of the highest coho producing systems in the planning area, with a peak escapement of 37,500. The Kaliakh River corridor is an area of growing importance for guided and subsistence hunting and fishing and wildlife viewing.

#### Management considerations

The shorelands of the Kaliakh River are in the Yakataga State Game Refuge and are also subject to this area plan, in accordance with Chapter 143, Section 1, SLA 1990. These shorelands, which form the west boundary of Subunits 3C-1, -2, and -4, will be managed consistent with the purposes of the refuge.

Steep terrain east of the Kaliakh River presents potentially serious hazards from slope instability, particularly debris slides, debris avalanches, and snow avalanches. High geophysical relief, combined with heavy wet snowfall, cold temperatures, and erratic strong winds build potential for major avalanches. Avalanches and slope failures are highly localized, however, and can be mitigated by careful evaluation and avoidance of susceptible slopes.

DNR will not make state timber available for sale or harvest within this management unit until at least December 2014, except for harvest incidental to development of a cabin and trail system.<sup>2</sup> In addition, before future state timber offerings, DNR must revise the Yakataga Area Plan, including re-examination of land classifications and land use designations. The annual allowable cut for state land must also be re-calculated after the plan is revised.

## Unit 3C - Lower Kaliakh River resource allocation summary

#### Forestry

Availability. Approximately 90 percent of the commercial timber land in this unit was designated for Forestry. A band of timber along the south flank of Kaliakh Mountain is recommended for inclusion in the Yakataga State Game Refuge, which will probably remove it from the timber base. In the Sunshine Point and Odor Creek drainage, forestry will be secondary to fish and wildlife habitat and harvest, in part because of extensive mountain goat habitat.

Under the settlement agreement regarding the university timber litigation, there would be no state timber sales or harvests, except incidental to a cabin and trail system, until at least December 2014.

Access. The plan allows transportation improvements through the proposed addition to the refuge.

<sup>2</sup> See Appendix C for the history and terms of the December 1994 settlement agreement.

## Unit 3C - Lower Kaliakh River resource allocation summary, continued

#### Fish and wildlife harvest

- Availability. Opportunities for community and sport harvest along Kaliakh River are preserved by several harvest designations. Records do not show intensive hunting in the forested tributary drainages.
- Access. Road access to Hope Creek would allow easier hunting access. The area plan recommends road access via Hope Creek rather than Kaliakh River.
- **Character.** Logging and road access would change the character of hunting and fishing which is currently mostly by fly-in or float access.

#### Fish and wildlife habitat

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The recommendation to add Kulthieth Mountain to Yakataga State Game Refuge would fulfill the legislative intent to protect mountain goat winter habitat within the Refuge. Moose winter habitat and rutting areas, swan and bald eagle concentration areas, and spring bear feeding areas would also be protected.

Tidelands and submerged lands near the Tsiu and Kiklukh river mouths are designated H1 HV1 for protection of anadromous fishes, and other species that congregate because of the fishery. Other tidelands and submerged lands within the three-mile limit are designated H2 HV2.

#### Minerals development

There are no recorded mineral prospects or mineralized reas. DNR will adopt a mineral leasehold location order that applies to the state-owned shorelands and tidelands (lagoons) of the Kaliakh River and its anadromous tributaries.

#### Recreation and tourism

The area plan encourages management of the Kiklukh River corridor for recreation as well as habitat and harvest. Specific guidelines to protect or enhance dispersed recreation will be developed through Forest Land Use Plans. These guidelines will be considered for applicability to uses other than forestry.

#### Settlement

The area plan did not designate settlement lands in this area. There is a public interest in retaining these lands in state ownership as directed by AS 38.04.015, based on their forestry, habitat, and recreation values, as well as their remoteness from essential services.

#### Transportation.

The plan expresses the intent that transportation improvements will be allowed through the lands to be added to the refuge. For access to timber in the Hope Creek drainage, the plan expresses DNR's preference for a road extension over Hope Pass rather than along Kulthieth Mountain.

## Subunit 3c-1 - Sunshine Point and Odor Creek

#### Designation

Habitat, harvest, and forestry (H1, HV1, F2)

#### Management intent

Protect or enhance fish and wildlife habitat and harvest, particularly for mountain goats. All activities will, to the extent feasible and prudent, avoid significant adverse impacts to mountain goat habitat and harvest.

Maintain opportunities for forest management for sustained yield of timber consistent with the management intent to protect mountain goat habitat and harvest. All activities will minimize significant adverse impacts to opportunities for forest management.

This subunit is not recommended for addition to the Yakataga State Game Refuge. Retaining DNR management allows DOF to include this timber in the timber base when determining sustained yield. Adding this subunit to the refuge would reduce the timber base, and consequently, reduce the annual allowable cut under sustained yield principles. DNR intends to maintain a large enough timber base in the Yakataga area to yield 15-20 million board feet annually, to ensure commercial profitability and management flexibility for harvest design and scheduling.

The segment of the main branch of the Kaliakh River that forms the west boundary of this subunit (but is not in this subunit) is part of the Yakataga State Game Refuge under SLA 1990, Ch 143, Section 1, and its shorelands will be managed as such.

#### ■ Guidelines:

- **Timber harvest** Timber harvest may occur if DFG determines during the Forest Land Use Plan that mapped goat habitat does not exist.
- Mineral leasehold location In the beds of the eastern tributaries of the lower Kaliakh River that support anadromous fish (including Odor and Hope creeks), new mineral entry will be allowed only under leasehold location in order to protect high quality anadromous fish habitat and to avoid impacts to water quality that is essential for sustaining the productivity of the Yakataga area's commercial, sport, and community harvest fisheries. A recommended mineral leasehold location order for the main bed of the Kaliakh River is described in Chapter 4 under *Mineral Closures*. See Appendix B for a map of the leasehold location areas.

#### General information

See the table at the end of this unit.

## Subunit 3c-2 - middle Kaliakh River lowlands

#### Designation

Forestry, habitat, and dispersed recreation (F2, H2, RD2)

#### Management intent

Maintain opportunities for forest management for timber production, conditions for fish and wildlife habitat, and conditions for dispersed recreation. All activities will minimize significant adverse impacts to these activities and resources.

This subunit is not recommended for addition to Yakataga State Game Refuge. DNR prefers to retain management and to consider adding the timber to the timber base. Most of the timber in this unit is one mile from the river. Therefore, forest management can be conducted with minimal adverse impacts to habitat and recreation along the river.

The segment of the main branch of the Kaliakh River that forms the west boundary of this subunit (but is not in this subunit) is part of the Yakataga State Game Refuge under SLA 1990, Ch 143, Section 1, and its shorelands will be managed as such.

#### Guidelines:

River corridor management	Specific guidelines to protect fish and wildlife habitat and harvest and recreation opportunities within the Kaliakh River corridor will be developed through a Forest Land Use Plan that will precede state timber harvest. However, if other major development is proposed before state timber harvest, DNR will use the ACMP process to apply detailed guidelines to maintain habitat and recreation values as intended by this area plan.
Commercial recreation leasing	DNR may consider commercial recreation leasing by competitive bid under AS 38.05.073. DNR will identify locations and conditions for commercial recreation leasing under .073 or .070 that minimize disturance to wildlife concentrations or migrations in the riparian corridor.
Alternate road corridors	See guideline addressing this issue under Subunits 3c-4 and 3d-1.
Mineral leasehold location	In the beds of the eastern tributaries of the lower Kaliakh River that support anadromous fish (including Hope Creek), new mineral entry will be allowed only under leasehold location in order to protect high quality anadromous fish habitat and to avoid impacts to water quality that are essential for sus- taining the productivity of the Yakataga area's commercial, sport, and com- munity harvest fisheries. The recommended mineral leaseold location for the main bed of the Kaliakh River is described in Chapter 4 under <i>Mineral Clo-</i> <i>sures and Leaseholds</i> . See Appendix B for a map of the leasehold location areas.

#### General information

This Kaliakh River is an established boat access corridor for recreation, fishing, and hunting. There is a mile-wide expanse of riparian willow, alder and cottonwood along the east side of the river; with scattered timber stands against the lower mountain slopes.

### Subunit 3c-3 - Hope Creek

#### Designation

Forestry (F1)

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#### Management intent

Promote forest management for sustained yield of timber. All activities will avoid significant adverse impacts to timber resources and production.

This subunit is not recommended for addition to the Yakataga State Game Refuge. Retaining DNR management allows DOF to include this timber in the timber base when determining sustained yield. Adding this subunit to the refuge would reduce the timber base, and consequently, reduce the annual allowable cut under sustained yield principles. DNR intends to maintain a large enough timber base in the Yakataga area to yield 15-20 million board feet annually, to ensure commercial profitability and management flexibility for harvest design and scheduling.

The segment of the main branch of the Kaliakh River that forms the west boundary of this subunit (but is not in this subunit) is part of the Yakataga State Game Refuge under SLA 1990, Ch 143, Section 1, and its shorelands will be managed as such.

#### ■ Guidelines:

Alternate See guidelines addressing this issue under Subunits 3c-4 and 3d-1. road corridors

Mineral leasehold location In the beds of the eastern tributaries of the lower Kaliakh River that support anadromous fish (including Hope Creek), new mineral entry will be allowed only under leasehold location in order to protect high quality anadromous fish habitat and to avoid impacts to water quality that are essential for sustaining the productivity of the Yakataga area's commercial, sport, and community harvest fisheries. A recommended mineral leasehold location order for the main bed of the Kaliakh River is described in Chapter 4 under *Mineral Closures*. See Appendix B for a map of the leasehold location areas.

#### General information

There are two possible road corridors for access to timber in Hope Creek. One would pass through the upper Hope Creek drainage from the Duktoth River. The other would pass through the lower Hope Creek drainage from the Kaliakh River. DNR prefers the Hope Pass route because it avoids areas with sensitive goat habitat that DNR proposes to add to the Refuge.

## Subunit 3c-4 - Kulthieth Mountain and lower Kaliakh River

#### Designation

Habitat and harvest (H1, HV1)

#### Management intent

Subunit 3c-4 is recommended for addition to the Yakataga State Game Refuge upon adoption of this plan. This subunit contains mountain goat winter habitat, which the current refuge lacks, even though the legislature listed protection of goat winter habitat as one of the express purposes of the refuge (Chapter 143, Section (1)(b)(1), SLA 1990). This subunit also contains bear spring feeding concentration areas and moose winter habitat and rutting areas. This subunit contains little commercial timber.

Until the subunit becomes part of the refuge, DNR will manage the subunit to protect or enhance conditions for fish and wildlife habitat and harvest, particularly mountain goat habitat and harvest, and habitat for bears, moose, and anadromous fish. All activities will, to the extent feasible and prudent, avoid significant impacts to these resources and uses.

The segment of the main branch of the Kaliakh River that forms the west boundary of this subunit (but is not in this subunit) is part of the Yakataga State Game Refuge under SLA 1990, Ch 143, Section 1, and its shorelands will be managed as such.

- Guidelines:
  - Access Transportation improvements will be allowed in the proposed addition to the refuge to provide access to resources north of the refuge. If there is a need to subsidize the cost of road construction across the refuge addition, the feasibility of timber harvest along the route (within the refuge addition) will be evaluated at the time the road is proposed.<sup>3</sup>

Alternate road corridors	There are two possible road corridors to access timber in the Hope Creek drainage. One route would parallel the Duktoth River and access the Hope Creek drainage via Hope pass. This route would cross subunits 3b-10, 3c-2, 3c-3, and 3d-2. DNR prefers this Hope Pass route because it avoids areas with sensitive goat habitat that DNR proposes to add to the Refuge.
	An alternate route is located south of Kulthieth Mountain through subunits 3d-1 and 3c-4. This Kulthieth Mountain route passes near sensitive goat habitat and may result in greater disturbance and overhunting.DNR will authorize a road south of Kulthieth Mountain if the applicant demonstrates to the satisfaction of the department that it is not feasible and prudent to use the Hope Pass route. If this route is used, DNR may authorize timber harvest adjacent to the road to help fund the road construction, if the timber harvest is consistent with the purposes of the Refuge.
	Additional information on fish and wildlife, recreation, and tourism may be needed to design the road corridor to have the greatest public benefit.
Mineral leasehold location	In the beds of the eastern tributaries of the lower Kaliakh River that support anadromous fish, new mineral entry will be allowed only under leasehold location in order to protect high quality anadromous fish habitat and to avoid impacts to water quality that is essential for sustaining the produc- tivity of the Yakataga area's commercial, sport, and community harvest fisheries. A recommended mineral leasehold location order for the main bed of the Kaliakh River is described in Chapter 4 under <i>Mineral Closures</i> . See Appendix B for a map of the leasehold location areas.

#### General information

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The southern half of this subunit is covered by muskeg meadows, alders, and grasslands and contains no operable commercial timber. Kulthieth Mountain, in the northern half of the subunit, is mostly alpine with a band of mature spruce on the southern flank. This southern flank provides mountain goat winter habitat and hunting, and bear spring feeding concentration areas.

<sup>3</sup> Under AS 16.20.033(c), DFG shall permit timber harvest activities in the portion of the refuge east of the Kaliakh River when the activities are not inconsistent with protection of fish and wilflife habitat and populations.

## Unit 3C - lower Kaliakh River and tributary drainages<sup>4</sup>

Area # & name	Desig- nation	<b>Resource or Use</b> (See the resource reports and maps for more complete information)	Background
3c-1 Sunshine Point & Odor Creek	H1 HV1 F2	<ul> <li>mature hemlock and some mature spruce on steep slopes</li> <li>extensive areas of mountain goat winter habitat and harvest</li> <li>bear spring feeding concentrationareas north of Hope Creek</li> <li>bear summer/fall feeding concentration areas on lower Odor Creek</li> <li>marten habitat throughout</li> <li>land otter on Odor Creek</li> </ul>	This subunit has extensive con- flicts between high timber values with goat winter habitat.
3c-2 middle Kaliakh River Iowlands	H2 F2 RD2	<ul> <li>scattered stands of timber; mostly riparian and lowland willow, except for lower mountain slopes</li> <li>brown and black bear summer/fall feeding areas along Hope Creek</li> <li>moose winter habitat throughout unit</li> <li>eagle feeding concentration area and nest sites along river</li> <li>trumpeter swan nesting and brood rearing</li> <li>anadromous fish production: second highest coho escapement in planning area (37,500)</li> <li>guided bear &amp; moose hunting</li> <li>community harvest: waterfowl, bear, moose</li> <li>recreational and guided float trips on Kaliakh River</li> <li>Kaliakh River provides boat access for hunting</li> </ul>	Eagle nesting density is high even by Alaska standards, according to U.S. Fish and Wildlife Service.
3c-3 Hope Creek	F1	<ul> <li>extensive areas of mature hemlock</li> <li>extensive mountain goat winter habitat on south facing slopes and along southern tributary to Hope Creek</li> <li>bear summer/fall feeding concentration (small area in southern unit)</li> <li>extensive otter and marten habitat in forested lower elevations</li> </ul>	

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<sup>4</sup> This unit was formerly the Yakataga Special Management Area (SMA) which the Alaska Legislature established as a temporary management area under Chapter 143, SLA 1990. DNR was directed to analyze the resources in the SMA through this area plan and consider whether to add it to the Yakataga State Game Refuge through this area plan. The SMA expired when DNR adopted the area plan.

# Unit 3C - lower Kaliakh River and tributary drainages, continued

Area # & name	Desig- nation	Resource or Use (See the resource reports and maps for more complete information)	Background
3c-4 Kulthieth Mountain & lower Kaliakh River	H1 HV1	<ul> <li>mature spruce on south and east slopes cover approximately ten percent of unit</li> <li>mountain goat winter habitat on south and east slopes</li> <li>bear spring concentration areas on south slopes and on grasslands in southern unit</li> <li>marten habitat in dense timber</li> <li>guided goat hunting</li> <li>community harvest; goats</li> <li>moose winter habitat</li> <li>moose rutting</li> </ul>	

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