# UNIT 3D DUKTOTH RIVER CORRIDOR

## **Background**

This unit corresponds roughly to the Duktoth River drainage, encompassing most of the lower-elevation, forested lands.

## Physical features

The bottomlands of the Duktoth valley are generally less than one mile wide, flanked by steep mountain walls rising over 3,000 feet. The long, enclosed valley profile creates a visual gateway to the inland glaciers and massifs, unique within the planning area. Near the coast, the valley opens onto a four-mile-wide plain with muskeg, grasslands, and riparian shrubs.

Mature hemlock/spruce stands cover the steep slopes of the valley and the lowlands at the Leeper River confluence. Approximately 40 percent of the total acreage of the unit is forested. Duktoth Mountain in the eastern part of the unit has alpine tundra, rock peaks, and glaciers.

#### Access

There are landing areas at the confluence of the Leeper and Duktoth rivers, and the lower Duktoth valley. The Duktoth is navigable below its confluence with Leeper River<sup>1</sup>, and boat access offers potential for recreation, fishing and hunting. Alpinists reportedly gain access to the inland peaks from the Leeper Glacier.

A gravel road leads one mile from the Yakataga airstrip to the Duktoth River and bridge. The road and bridge do not receive regular maintenance and may pose a safety hazard and liability. Beyond the bridge, an abandoned roadbed heads west across the lowlands from Duktoth River to Kaliakh River.

#### Land status

Most of the land in this unit is state owned.

The university owns one-time timber harvest rights on certain lands east of Duktoth River within this unit as a result of the December 1994 settlement agreement. These lands are refered to as the substitute tract.

The university owns approximately 500 acres in sections 18 and 20, T21S R17E on the coast.

## Adjoining lands

Unit 3D is bounded to the north by BLM lands, to the east and west by state lands, and to the south by the Gulf of Alaska. Chugach Alaska owns a tract that surrounds the Cape Yakataga airstrip, on the southeastern corner of Unit 3D.

<sup>1</sup> DNR has not assessed the navigability of Duktoth River upstream from its confluence with Leeper River.

#### Resources and uses

This unit has extensive areas of mature timber and diverse habitat, including moose and mountain goat winter habitat, bear feeding concentration areas, and furbearer habitat. Human use of this drainage appears light. Outfitters and guides use the southern half of the unit. The scenery and river accessibility give Unit 3D potential for recreation and tourism.

## Management considerations

The narrow valley profile may create challenges in integrating competing uses.

The steep terrain in the Duktoth River drainage 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 west of the Duktoth River until at least December 2014<sup>2</sup>, except for harvest incidental to development of a cabin and trail system. In addition, before future state timber offerings, DNR must revise the Yakataga Area Plan, including reexamination 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 3D - Duktoth River Corridor resource allocation summary

## Forestry

The area plan designates over 95 percent of the commercial timber stands in this unit for forestry.

Under the settlement agreement regarding the university timber litigation, the university has one-time harvest rights to most of the commercial timber in this unit. Map 3.10 at the end of Unit 3E shows the extent of the university timber rights. The university is likely to harvest extensively along the east side of the Duktoth River valley in the next twenty years. There will be no state timber sales or harvests other than those initiated by the university until at least December 2014.

### Fish and wildlife harvest

There are no designations or specific management unit guidelines for fish and wildlife harvest.

**Access.** Hunting and fishing use appeared to be relatively low when this plan was adopted. There is some guided hunting along the river. The plan directs DNR to reserve public access points in the river corridor. Road construction for the harvest of university timber will greatly increase accessibility for hunting and fishing.

**Availability.** Road access is likely to increase hunting competition, and possibly disperse it. The number of sport hunters is likely to increase significantly, particularly hunters from the logging camp(s).

**Character.** Visual and noise impacts from roads and logging within the relatively narrow valley may diminish the value of trips to those seeking a primitive hunting or fishing experience. DNR will consider natural aesthetics when it reserves public recreation sites along the river.

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

## Unit 3D - Duktoth River Corridor resource allocation summary, continued

#### Fish and wildlife habitat

**Riparian habitat.** The cottonwood forest in the valley bottom is designated for habitat. This area has high value habitat for numerous species: swans, eagles, moose, bears, anadromous fish, and furbearers. Because of the narrow profile of the valley, roads in the valley bottom and timber harvest on the bordering mountain-sides may affect sensitive species. The plan has guidelines to keep roads away from certain types of sensitive riparian habitat where feasible and prudent.

## Minerals development

DNR has adopted a mineral leasehold location order that applies to the state-owned shorelands and tidelands (lagoons) of the Duktoth River and its anadromous tributaries. There are no recorded mineral prospects or known mineralized areas in this unit.

#### Recreation and tourism

The valley bottomlands along the middle Duktoth River are designated for dispersed recreation. Along the coast, the plan's areawide guidelines for the coastal fringe of timber will preserve the natural setting.

**Access.** Road-based recreation will become possible with the development of forestry roads. However, recreational use of the road system will be limited by the expense and logistics of hauling vehicles to the area, and possibly by the need to coordinate recreational use of roads with timber and mining operations. Extension of roads may create new opportunities to float the rivers. There may be an increase in local recreation use from people associated with the log-ging operation. The plan directs DNR to reserve public use sites along the river that have aesthetic and practical qualities for recreation and tourism.

**Character.** Because of the narrow profile of the valley, roads and logging may be visible or audible from the river and may therefore diminish the wild and primitive setting along the middle reaches of the Duktoth River. This will diminish existing commercial recreation values and wildlife viewing opportunities.

#### 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 area plan directs DNR to identify and reserve access points, including boat launches and potential airstrips, along the Duktoth River.

For timber harvest, the area plan identifies a preferred access route to the Hope Creek drainage along Duktoth River rather than Kaliakh River.

## Waterfront development

There is no likely waterfront development site along this exposed outer coast. The primary value of the waterfront in Unit 3D is fish and wildlife habitat and harvest.

## Subunit 3d-1 - lower Duktoth River corridor

#### **■** Designation

Habitat and dispersed recreation (H1, RD1)

#### ■ Management intent

Protect or enhance fish and wildlife habitat, particularly for mountain goats, anadromous fish, eagles, swan, bears, moose, and marten. Protect or enhance conditions for dispersed recreation, particularly for boating and camping. All activities will, to the extent feasible and prudent, avoid significant adverse impacts to these habitat and recreation resources and uses.

Access will be allowed through this subunit and across the Duktoth River to facilitate resource use.

#### **■** Guidelines:

#### Access

Before issuing authorizations in the Duktoth River corridor, DNR will identify and reserve access points for boat launches and airstrips in order to ensure public access to the river for recreation. The reserved sites will be noted on DNR's status plats. A plan amendment is not required for DNR to designate these sites. The intent is to reserve a series of high-quality public recreation sites, so that public floating and camping opportunities remain excellent.

Eventually, these public sites will be spaced at intervals of approximately two to four miles along the Duktoth River to ensure resting and camping opportunities for recreationists. Sites will be selected and managed to maintain firewood and fresh water sources for camping, shelter from prevailing winds, scenic qualities, natural vegetation, and opportunities for seclusion and privacy. These sites will be retained in public ownership and DNR will reserve access to and along the river.

# 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 alternative 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 purpose of the Refuge.

#### Timber harvest

Timber harvest may occur if DFG determines during the FLUP that mapped habitat does not exist and if timber harvest does not significantly impact recreation resources or uses. Also refer to Guideline B in the Fish and Wildlife Habitat Section in Chapter 2.

#### No-harvest riparian buffer on certain anadromous streams

Within this subunit, timber harvest is prohibited within 300 feet of each bank of Duktoth River pursuant to the December 1994 settlement agreement, in order to protect important bear or anadromous fish habitat. (See Map 3.12 at the end of Unit 3E.)

# Habitat & recreation

Specific guidelines to maintain or enhance fish and wildlife habitat and harvest and recreation opportunities for the Duktoth River corridor will be determined during the FLUP process or during the adjudication of applications for other resource development proposals.

# Mineral leasehold location

In the bed of the lower Duktoth River and its tributaries 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 productivity of the Yakataga area's commercial, sport, and community harvest fisheries. See Appendix B for a map of the leasehold location areas.

#### ■ General Information

See the table at the end of this unit.

## 3d-1a - timber tracts adjacent to middle Duktoth River

#### ■ Destination

Forestry (F1)<sup>3</sup>

#### ■ Management intent

Promote forest management for sustained yield of timber. All activities will, to the extent feasible and prudent, avoid significant adverse impacts to timber resources.

#### ■ Guidelines:

<b>Conditional harvest</b>
within 100-300 feet
of mapped anadro-
mous streams

On mapped anadromous streams within the substitute tract<sup>4</sup>, DNR, with due deference to DFG, will identify acreage within 100 to 300 feet of the streams where timber harvest does not jeopardize the maintenance of important fish and wildlife habitat. University timber harvest will be allowed on that acreage. DNR, with due deference to DFG, will limit buffers and special management areas on anadromous streams in the substitute tract to a maximum of 300 feet from each bank.

#### No-harvest riparian buffers on yet-to-be identified anadromous streams

On yet-to-be identified anadromous streams within the substitute tract, DNR, with due deference to DFG, will limit no-harvest buffers to 100 feet from each bank.

#### Timber harvest within mapped moose and bear habitat

Throughout the substitute tract, DNR, with due deference to DFG, will identify acreage within mapped moose and bear habitat (mapped in the Yakataga Area Plan Fish and Wildlife Resource Atlas) on which timber harvest does not jeopardize the maintenance of important habitat. University timber harvest will be allowed on that acreage.

#### No-harvest riparian buffer on certain anadromous streams

Within this subunit, timber harvest is prohibited within 300 feet of each bank of Duktoth River and the banks of specified tributaries as mapped in the December 1994 settlement agreement in order to protect important bear or anadromous fish habitat. (See Map 3.12 at the end of Unit 3E.)

<sup>3</sup> In accordance with December 1994 settlement agreement, DNR has classified this subunit for Forestry.

The substitute tract refers to land in Management Units 3D and 3E where DNR conveyed timber to the university as a substitute for timber at Cape Suckling. A map at the end of Management Unit 3E shows the substitute tract.

# Mineral leasehold location

In the bed of the lower Duktoth River and its tributaries 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 are essential for sustaining the productivity of the Yakataga area's commercial, sport, and community harvest fisheries. See Appendix B for a map of the leasehold location areas.

#### ■ General information

These subunits were withdrawn from subunit 3d-1 and designated for Forestry (F1) in accordance with the December 1994 settlement agreement.

## Subunit 3d-2 - western slopes of middle Duktoth River valley

#### ■ Designation

Forestry (F1)

#### ■ Management intent

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

#### ■ Guidelines:

Access to goat habitat

DNR will consider limiting public access along roads in this subunit if road access contributes to unmanageable disturbance of goats or illegal hunting.

Alternative road corridors

See guidelines addressing this issue under the guidelines section for subunits 3c-4 and 3d-1.

#### ■ General information

Mature timber and mountain goat winter habitat overlap in much of this unit. The road would create easy access to goat habitat because of the steep and narrow topography of the Duktoth Valley.

## Subunit 3d-3 - eastern slopes of middle Duktoth River valley

#### Designation

Forestry (F1)

#### Management intent

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

#### **■** Guidelines:

Conditional harvest within 100-300 feet of mapped anadromous streams On mapped anadromous streams in the substitute tract, DNR, with due deference to DFG, will identify acreage within 100 to 300 feet of the streams where timber harvest does not jeopardize the maintenance of important fish and wildlife habitat. University timber harvest will be allowed on that acreage. DNR, with due deference to DFG, will limit buffers and special management areas on anadromous streams in the substitute tract to a maximum of 300 feet from each bank.

No-harvest riparian buffers on yet-to-be identified anadromous streams

On yet-to-be identified anadromous streams within the substitute tract, DNR, with due deference to DFG, will limit no-harvest buffers to 100 feet from each bank.

Timber harvest within mapped moose and bear habitat Throughout the substitute tract, DNR, with due deference to DFG, will identify acreage within mapped moose and bear habitat (mapped in the Yakataga Area Plan Fish and Wildlife Resource Atlas) on which timber harvest does not jeopardize the maintenance of important habitat. University timber harvest will be allowed on that acreage.

Mineral leasehold location

In the tributaries of the Duktoth River that support anadromous fish (including Cottonwood 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 is essential for sustaining the productivity of the Yakataga area's commercial, sport, and community harvest fisheries. See Appendix B for a map of the leasehold location areas.

#### ■ General information

See the table at the end of this unit.

## Subunit 3d-4 - Leeper River

#### Designation

General uses (G)

#### **■** Management intent

Allow general multiple uses. DNR will make timber in this unit available for university timber harvest in accordance with the December 1994 settlement agreement.

#### ■ Guidelines:

Application for easement The Division of Land should seek an easement from BLM to allow overland access along the Leeper River valley to state-owned land in T19S R18E.

Conditional harvest within 100-300 feet of mapped anadromous streams On mapped anadromous streams in the substitute tract, DNR, with due deference to DFG, will identify acreage within 100 to 300 feet of the streams where timber harvest does not jeopardize the maintenance of important fish and wildlife habitat. University timber harvest will be allowed on that acreage. DNR, with due deference to DFG will limit no-harvest buffers and special management areas on anadromous streams in the substitute tract to a maximum of 300 feet from each bank.

No-harvest riparian buffers on yet-to-be identified anadromous streams On yet-to-be identified anadromous streams within the substitute tract, DNR, with due deference to DFG, will limit no-harvest buffers to 100 feet from each bank. Where additional anadromous streams are documented, any important mapped habitat will be considered under Forestry Guideline K of the Yakataga Area plan.

Timber harvest within mapped moose and bear habitat Throughout the substitute tract, DNR, with due deference to DFG, will identify acreage within mapped moose and bear habitat (mapped in the Yakataga Area Plan Fish and Wildlife Resource Atlas) on which timber harvest does not jeopardize the maintenance of important habitat. University timber harvest will be allowed on that acreage.

#### ■ General information

See the table at the end of this unit.

## Subunit 3d-5 - upper elevations east of Duktoth River

#### ■ Designation

General uses (G)

#### ■ Management intent

Allow general multiple uses. DNR will make timber in this unit available for university timber harvest in accordance with the December 1994 settlement agreement.

■ **Guidelines:** None. There are no guidelines specific to this subunit.

#### ■ General information

Most of this subunit is above 2,000 feet in elevation. Duktoth Mountain is 4,030 feet. Approximately half the subunit is glaciated.

## Subunit 3d-6 - Duktoth River coastal lowlands

#### ■ Designation

Forestry (F2)

#### ■ Management intent

Maintain opportunities for forest management for sustained yield of timber. All activities will minimize significant adverse impacts to timber resources and production.

#### ■ Guidelines:

#### Access

Before issuing leases for commercial uses in the Duktoth River corridor, DNR will assess the recreation values along the river within one mile of the proposed lease, and select and reserve a public recreation site(s). The reserved site(s) will be noted on DNR's status plats. A plan amendment is not required for DNR to designate these sites. The intent is to reserve a series of high-quality public recreation sites along the river equal to any lease sites, so that public floating and camping opportunities remain excellent. DNR should identify and reserve access points, boat launches, airstrips, and commercial and sport fishing sites in order to ensure access to the river for recreation and fish and wildlife harvest.

# Mineral leasehold location

In the bed of the lower Duktoth River, 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. See Appendix B for a map of the leasehold location areas.

#### ■ General information

See the table at the end of this unit.

Subunit 3D - Duktoth River Corridor					
Area # & name	Desig- nation	Resource or Use (See the resource reports and maps for more complete information)	Background		
3d-1 lower Duktoth River corridor	H1 RD1	<ul> <li>primarily immature cottonwood; some mature spruce and hemlock along slopes on western edge of unit</li> <li>mountain goat winter habitat on some spurs on western edge of unit</li> <li>high anadromous fish production</li> <li>eagle nest sites in southern section</li> <li>trumpeter swan nesting and brood rearing in southern section</li> <li>bear summer/fall feeding concentration along river</li> <li>marten habitat in dense timber</li> <li>beaver concentration area east of Kulthieth Mountain</li> <li>extensive winter moose habitat in southwestern unit</li> <li>guided bear hunting in southern unit</li> <li>boating on river</li> <li>2 airstrips</li> </ul>			
3d-1a timber tracts adjacent to the middle Duktoth River	F1	<ul> <li>mature spruce in northern units; mostly mature cottonwood in southern unit</li> <li>beaver concentration areas - middle two tracts</li> <li>high quality marten habitat</li> </ul>	■The university has one-time timber harvest rights within this subunit <sup>5</sup>		
3d-2 western slopes of middle Duktoth River valley	F1	<ul> <li>mature hemlock and spruce large on mostly-steep slopes</li> <li>mountain goat winter habitat on east-facing slopes</li> <li>bear spring feeding concentration areas in northern part of unit</li> <li>marten habitat throughout dense timber</li> </ul>			
3d-3 eastern slopes of middle Duktoth River valley	F1	<ul> <li>mature hemlock and spruce on slopes</li> <li>mountain goat winter habitat areas on south and east facing slopes</li> <li>bear spring feeding concentration areas in section 28 in southern unit</li> <li>moose winter habitat in lower timber adjoining cottonwood areas</li> <li>marten habitat throughout</li> <li>land otter</li> </ul>	■The university has one-time timber harvest rights within this subunit <sup>5</sup>		

<sup>5</sup> See Appendix C for history and terms of university timber rights under ADL 223456.

Subunit 3D - Duktoth River corridor, continued				
Area # & name	Desig- nation	Resource or Use (See the resource reports and maps for more complete information)	Background	
3d-4 Leeper River	G	<ul> <li>mature cottonwood</li> <li>anadromous fish stream</li> <li>land otter</li> <li>bear summer/fall feeding area along stream</li> <li>recreation: climbers use Leeper Glacier as a route to mountains</li> </ul>	■The university has one-time timber harvest rights within this subunit. 6	
3d-5 upper elevations east of Duktoth River	G	■alpine area; fifty percent glaciated		
3d-6 Duktoth River coastal lowlands	F2	<ul> <li>mature and immature spruce cover approx. half the acreage in this unit</li> <li>bear spring feeding concentration areas, primarily along several small lakes</li> <li>bear summer/fall concentrations within 1 mile of coast and along river</li> <li>high anadromous fish productivity</li> <li>guided hunting along river</li> <li>harbor seal haulout concentration area</li> <li>trumpeter swan nesting and brood rearing</li> <li>eagle nest sites</li> <li>trail access along coast</li> </ul>	■University owns approximately 500 acres in sections 18 and 20, T21S R17E on the coast.	

<sup>6</sup> See Appendix C for history and terms of university timber rights under ADL 223456.