

**MEMORANDUM**  
DEPARTMENT OF NATURAL RESOURCES

State of Alaska  
DIVISION OF FORESTRY  
Southeast Area

**TO:** McKenzie Johnson, OHA  
Greg Albrecht, ADF&G  
Lee Cole, SER, DMLW  
Preston Kroes, State Parks

**DATE:** June 4, 2018

**FILE:** 2018-2022 FYFMS

**PHONE:** 225-3070

**FROM:** Greg Staunton  
Area Forester

**SUBJECT:** Final FYFMS and Comments  
Haines Office

Attached is the Final Five-Year Forest Management Schedule for calendar years 2018 through 2022. This scoping document has been adopted. A response to comments has been incorporated (Attachment A).

This document is not appealable.

**CC:**

Crystal Koeneman, Representative Sam Kito, Staff  
Elsa Sebastian, NGO, Lynn Canal Conservation  
Jerry Kilanowski, University of Alaska  
Michael Mackowiak,  
Jessica Keyser  
Martha Mackowiak  
Jessie Badger  
Sylvia Heinz, Mud Bay Lumber Company  
Lee Heinmiller, Haines Borough Planning Commission  
Derek Poinsette, Takshanuk Watershed Council  
Liz Cornejo, Constantine Metals, Inc.  
Kate Palmer  
Gershon Cohen  
Tresham Gregg  
Tim McDonough, Fish and Game Advisory Council, Local  
Lyn Campbell  
Mike Bell  
Elaine Bell  
Ashley Sage  
Laurie Dadorian  
Erik Stevens  
Richmond Tolles  
Michele Cornelius  
Thom Ely  
Kathleen Menke  
Kim Rosado

2018 - 2022

# Five Year Forest Management Schedule



Alaska Division of Forestry

Haines State Forest

Department of Natural Resources

2018 - 2022

## **Purpose**

This Five-Year Forest Management Schedule (FYFMS) provides information to State agencies, commercial and non-commercial organizations, as well as the general public concerning planning and use of the forest resources on the Haines State Forest for the period January 2018 - December 2022. This FYFMS also meets the Alaska Statute (AS 38.05.113. Five-year sale schedule) requirements for periodic notification of planned activities, including timber sales, on the State Forest.

This FYFMS illustrates planning direction proposed by the Division of Forestry (DOF) in compliance with the Management Guidelines found in the Haines State Forest Management Plan (HSFMP rev. 2002).

This document will outline proposed timber sale activities, silviculture and reforestation activities, road construction and maintenance estimates, and proposed public recreation development on the forest for the next five years. The schedule is designed to solicit input on forest management activities which may then be addressed in more detail during project design and implementation. Listing a proposed activity in this schedule does not mean a decision has been made to proceed with that activity.

## **Introduction**

The Haines State Forest (HSF) was established along with the Chilkat Bald Eagle Preserve in landmark legislation on July 1, 1982. The law's central tenet was to utilize, perpetuate, conserve, and protect the renewable and nonrenewable resources through multiple-use management on the HSF. The Haines State Forest comprises some 286,208 acres of State managed lands and water including portions of the major river watersheds of the Lower Klehini, Chilkat, Chilkoot, and Ferebee Rivers as well as their tributary water systems with approximately 93,500 of those acres covered by forest.

According to the multiple-use management strategy outlined in legislation, the HSFMP defines management intent and guidelines across approximately 42,000 acres of land that has a primary management goal of Public Recreation, 52,000 acres of land managed to protect and enhance Wildlife Habitat (including fish) and 42,000 acres of land designated forested lands available for timber harvest.

### *Commercial Timber Harvest*

The process for preparing a timber sale for contracting and harvesting as described in Alaska Statute and Regulation requires the State to issue a finding concluding that the sale is in the State's best interest and prepare a detailed Forest Land Use Plan (FLUP). The FLUP describes the specific harvest location, estimated volume of timber, harvest methods, reforestation plan, access, and multiple use considerations for a sale area. The Division of Forestry may make changes to individual sales previously listed in the FYFMS based on fieldwork, agency comments, and public input. Any changes to the description of a timber sale found in this document will be incorporated into the FLUP for that sale.

It is the policy of the DOF to include all sales (except for salvage sales, emergency sales, personal use permits, and negotiated sales less than 500 MBF(thousand board feet) and less than

160 acres) in at least one FYFMS preceding the sale. This policy exceeds the requirements under AS 38.05.113.

If a sale has been through the FYFMS, and has been offered but not sold, it can be re-offered without rescheduling or reconstructing the sale information. That is to say, if a sale was offered but not purchased, or if a sale was purchased but not completely harvested, the remaining timber can be sold without reappearing in a FYFMS or in a new FLUP. If the sale changes significantly in design or condition from the initial offering, a new FLUP may be required prior to re-offering.

### *Fish Habitat*

A special management zone has been established around every anadromous fish stream and lake throughout the forest. These zones extend 300 feet on each side of anadromous streams, and 500 feet around anadromous fish bearing lakes. The HSFMP states that “the primary management objective for a special management zone will be to maintain or enhance anadromous fish habitat. Only activities which are or can be made compatible with this objective will be allowed in these zones.” DNR will consult with the Alaska Department of Fish and Game (ADFG), Division of Habitat on the planning, design, and maintenance of resource development projects inside a special management zone.

### *Wildlife and Recreation*

In the HSFMP planning process, area wide land use conflicts between primary resource use in a management unit and wildlife and recreation resources within that unit were identified and addressed. Specific guidelines for resolution to potential conflicts are described on a unit by unit basis in Chapter 3 of the HSFMP. This FYFMS was developed in accordance with the HSFMP and no significant adverse impacts to wildlife or recreational values are anticipated.

Further consideration of Wildlife and Recreation resources in the development of activities contained in this document will occur in the public planning process associated with that development. In the case of timber sale harvest activities, the FLUP will address specific wildlife and recreation concerns as they relate to developing road building, harvest, and reforestation plans for that sale area. Additionally, the Forest Resources and Practices Act and Regulations contain specific requirements for the protection of these resources during extraction of renewable and non-renewable resources.

### *Transportation*

Transportation goals and management guidelines for road construction on the HSF will follow the DOF Road Standards. These standards define methods and conditions related to road building; clearing, grading, drainage structures, and road location. Other guidelines that pertain to road development on the forest can also be found in the HSFMP. Please refer to that document for details.

All forest road construction activities must comply with the Alaska Forest Resources and Practices Act and Regulations to minimize impacts to fish and wildlife resources. DOF guidelines include regular maintenance on primary haul roads and with some exception most secondary haul roads. This maintenance will occur in association with active timber sales and in

the absence of active sales on these roads priority will be given to maintenance that protects fish and wildlife resources on a case by case basis.

Other State Agencies have management authority specific to transportation development and/or maintenance and they are;

1. The State Department of Transportation (DOT) conducts biennial inspections of bridges over twenty feet in length built to standards safe for highway vehicles in the Haines State Forest.
2. The ADF&G Division of Habitat will be consulted before any activity is proposed in fish bearing waters. Operators must acquire the appropriate permit from the Division of Habitat for any in-stream work.

These considerations, along with the goals and guidelines from the HSFMP, are reviewed during the timber sale FLUP process to ensure that road development meets the intent of managing the resources of the State Forest for multiple use.

### Local Timber Resource Supply and Demand

There are several small mobile dimensional lumber sawmills and at least two commercial log home building companies in the Haines area. These mills produce rough-cut green lumber for local consumption, round log and two and three side log homes for both local use and as an export product, and firewood products for sale throughout the communities of the upper Lynn Canal. They typically acquire approximately half of their timber needs from state timber sales.

This document lists possible available timber resources that could support the development of increased supply demands associated with a biomass market while maintaining supply for local markets. Planning for possible market demand changes remains conservative and is simply designed to represent practical limitations of supplying available resources without exceeding sustainable harvest levels set in the HSFMP (Rev. 2002).

Because current local markets do not have the capacity to utilize the entire annual allowable cut volume, and due to market conditions here in Alaska and on world markets, there is the potential for round log export of timber purchased on the Haines State Forest. It is the policy of DOF to encourage local processing of raw resource materials.

## **HARVEST ACTIVITIES**

### **Sustainable Harvest Calculations**

The annual allowable harvest of 5.88 million board feet was computed applying the area method to the average volume of commercial timber present on an acre of forest land and the land base that is available for timber harvest. These calculations, described in Chapter 2 of the HSFMP,

are based on available land base acreage figures determined using GIS data in 2002 along with the 1985 State Forest Inventory identifying the average volume per acre of commercial timber available on State Forest lands. The fieldwork for a new forest inventory was completed in 2012. The data from this inventory has been evaluated and preparation for additional inventory work specifically collecting growth data on second rotation timber is underway. This additional data in combination with the 2012 inventory data will produce an accurate growth and yield model for the HSF. This model will then be available for use in annual allowable harvest calculations on the HSF.

The current sustainable harvest calculation for the HSF has determined 58.8 million board feet of timber may be harvested on a ten year basis.

### **Proposed Five-year Harvest Activities**

The dates listed in this five-year Forest Management Schedule refer to calendar years.

#### **2018**

Baby Brown - This sale consists of eleven units between Porcupine and Jarvis Creeks south of the Klehini River approximately 38 miles North of Haines. The sale will harvest approximately 20 million board feet from 855 acres.

West Herman V - This sale will be approximately 20 acres in size and is located between the Porcupine road and the Sunshine Mountain road adjacent to the West Herman I unit. This harvest unit is designed for ground skidding systems.

Walker 1 - This sale will be approximately 17 acres in size and is located one-mile northwest of Walker Lake and is designed for ground and cable swing yarding systems. Proposed new road construction associated with this sale will improve access to the lake.

Miscellaneous Sales - An additional 10 to 20 small sales will be laid out and sold. Total volume is estimated to be 500 thousand board feet.

#### **2019**

Top Shelf – This sale area is located above the 210 Road off the Kelsall road system and totals approximately 150 acres containing approximately 2.5 million board feet of timber.

Canyon Creek – This sale area is located along the Kelsall 100 Road approximately 8.5 miles from the Mosquito Lake junction. Designed for cable logging systems this harvest area is estimated to be 175 acres in size and approximately 1.6 million board feet of timber.

Miscellaneous Sales - An additional 10 to 20 small sales will be laid out and sold. Total volume is estimated to be 500 thousand board feet.

## **2020**

Chilkat Lake 1 – Approximately 10 million board feet of timber will be harvest with the installation of a bridge across the Tsirku River and 4.5 miles of new road construction along the east side of Chilkat Lake.

Single Fifteen – This sale consists of a 90 acre unit, located on the south side of the Kelsall River. The harvest will require high-lead cable yarding and the construction of approximately one mile of new road.

Nataga Stretch – Off the end of the Kelsall 200 Road this sale will harvest approximately 800 thousand board of timber from 40 - 60 acres of forest.

Miscellaneous Sales - An additional 10 to 20 small sales will be laid out and sold. Total volume is estimated to be 500 thousand board feet.

## **2021**

Turn Around – This sale is located in the Kelsall system off the 300 Road. It will consist of approximately 4.0 million board feet of timber.

K100CW – Along the Kelsall 100 Road and existing spur roads this sale will harvest approximately 1 million of cottonwood.

Miscellaneous Sales - An additional 10 to 20 small sales will be laid out and sold. Total volume is estimated to be 500 thousand board feet.

## **2022**

Chilkat Lake 2 – 5.7 million board feet of timber will be offered on approximately 300 acres of forest with 3 miles of new mainline road constructed to the east of Chilkat Lake.

Miscellaneous Sales - An additional 10 to 20 small sales will be laid out and sold. Total volume for these sales is estimated to be 500 thousand board feet.

Haines State Forest  
Five-Year Forest Management Schedule  
Calander Years 2018 - 2022

Harvest Activities Schedule  
Submitted by: Greg Palmieri

Year	Map locator	Timber Sale Name	Volume (MBF)	Total (MBF)
2018	1	Baby Brown	20,000	
	2	West Herman V	400	
	3	Walker 1	400	
		Miscellaneous Small Sales	500	21,300
2019	1	210 Top Shelf	2,500	
	2	Canyou Creek	1,600	
		Miscellaneous Small Sales	500	4,600
2020	1	Chilkat Lake 1	10,000	
	2	Single 15	2,000	
	3	Nataga Stretch	800	
		Miscellaneous Small Sales	500	13,300
2021	1	Turn Around	4,000	
	2	K100CW	1,000	
		Miscellaneous Small Sales	500	5,500
2022	1	Chilkat Lake 2	5,700	
		Miscellaneous Small Sales	500	<u>6,200</u>
Total Volume 2014-2018				50,900



# **TRANSPORTATION**

## **State Forest Roads**

Forest Roads on the Haines State Forest have been developed to fulfill the management intent as directed for the sustainable harvest, regeneration and protection of the timber resource found within its boundaries. There are presently two main forest road systems located in the Klehini, Little Salmon, Kelsall, and Chilkat River drainages. Most of the logging access roads are typically constructed by overlaying rock on top of the existing organic mat that has been modified by excavation to support the overlay. Construction specifications are defined in the DOF “Road Standards” and road design will adhere to this policy document.

The standards use practical road location techniques such as the utilization of existing benches to avoid unstable areas and full bench construction as required on sloped areas. Additionally, frequent cross drains, periodic ditch and culvert maintenance, and the use of grass seeding on exposed soil banks will be used to minimize sediment movement through the road development and maintenance periods. Close adherence to the Forest Resources and Practices Regulations on all road construction design and implementation will be utilized to protect and enhance, when possible, wildlife and fisheries resources.

Logging roads may be used by the public with varied interest such as miners, hunters, anglers, woodcutters, berry pickers, photographers, hikers, etc. During the winter, skiers, snowmobile riders, trappers and dog musher’s may use State Forest roads for access and recreation. Also, importantly, these roads provide access for wildland fire protection during months of forest fire danger to protect the many resources of the State Forest.

## **Maintenance**

State timber sale contract stipulations require safe driving and log hauling conditions while an operator is working under contract to the State. This includes not just grading and ditching but culvert maintenance and road side brushing as well. Road use and maintenance agreements between two operators using the same road may be required. However, once the sale contract has expired, the contractor has no further legal obligation to provide road maintenance. The state is then responsible for maintaining any roads which are to be kept open for continued resource access. Typical maintenance expenses might include road grading, ditching, brushing, culvert maintenance, surface rock replacement, and bridge replacement.

## **Forest Resource Access**

Roads proposed for development in this plan are primarily designed for access to the Forest timber base for extraction of that resource. Other resources that may benefit from this development or be impacted by road development are considered and described in the FLUP associated with that activity. Additional access to State Forest land may include the development and maintenance of trails independent of access development associated with timber harvest. Alternatives to road construction such as the use of helicopters and winter road harvest methods during resource extraction will be considered during project development.

Haines State Forest  
 Five Year Forest Management Schedule  
 January 1, 2018 to December 31, 2022

Transportation Schedule  
 Submitted by: Greg Palmieri

Project ID	Year	Sale Access	Type	New Activity	Maint. Unit Miles of Road
<u>2018</u>					
Baby Brown		Porcupine/Glacier/Jarvis Creek Rds	Mainline Road	10.2	23.0
West Herman V		Porcupine or Sunshine Mtn. Roads	Mainline Road	0.3	6.0
Walker 1		Sunshine Mtn. Road	Mainline Road	0.9	6.0
<u>2019</u>					
210 Top Shelf		Kelsall 210 Road	Secondary Road	1.5	9.5
Canyon Creek		Kelsall 100 Road	Spur Road	0.5	9.0
<u>2020</u>					
Chilkat Lake 1		Chilkat Lake Road	Mainline Road	8.5	4.5
Single 15		Kelsall 100/300 Roads	Mainline Road	1.0	14.0
Nataga Stretch		Kelsall 100/200 Roads	Secondary Road	0.7	9.5
<u>2021</u>					
Turn Around		Kelsall 100/300 Roads	Mainline Road	2.0	15.0
K100CW		Kelsall 100 Road	Mainline Road	0.0	6.0
<u>2022</u>					
Chilkat Lake 2		Chilkat Lake Road	Mainline Road	3.0	7.5

# SILVICULTURE ACTIVITIES

## Objective

A primary objective and policy of State Forest Management is to provide for the regeneration of all timber harvest lands within the Haines State Forest to maintain the sustainable extraction of timber resources for generations to follow. On these lands managed by DOF stand improvement practices such as thinning and pruning of second growth timber will be accomplished to provide for the enhancement of this valuable resource, and associated resources, over time.

## Policies and Practices

Site preparation is best accomplished either during or immediately following harvest, and will be accomplished for all units in this plan. Site preparation includes burning, and/or mechanical scarification. Mechanical scarification might be as simple as requiring ground yarding methods where log skidding will develop the required soil disturbance. Burning has been used successfully on the Haines State Forest and is best accomplished in the first three years following harvest. After three years, the fine fuels (twigs, small branches, etc.), which carry the fire, decompose and make fire a less practical consideration.

Sitka spruce and western hemlock are the two predominant commercial species within the Haines State Forest. Replanting of Sitka Spruce trees has occurred on the forest since the late 1970's. The DOF may replant harvest areas as part of a harvest contract or contract to replant independently of the harvest. If planting is required, Sitka Spruce will be the species selected for planting on harvest areas in order to meet regeneration goals in the Alaska Forest Practices Act for this region. Sitka Spruce, in contrast to the relatively shade tolerant Western Hemlock, struggles to regenerate under cover of other vegetation and on predominant Western Hemlock sites. The DOF has proven that harvested areas planted with plug-1 Sitka spruce seedlings provide the best result of diverse stand structure development balancing the presence of both species throughout the harvest area. Sitka spruce and Western hemlock are good seed producers typically having some seed production each year and a good crop every five to seven years.

Additionally, the State has collected 135 bushels of Sitka spruce cones since 1996, which is sufficient seed to plant all of the units in this five-year Forest Management Schedule. Additional seed should be collected from genetically superior Sitka spruce trees in areas identified in this schedule as possible harvest sites. Such trees should exhibit good form, size, and resistance to disease and defects. Identifying the location of such trees will be an ongoing activity of the Division of Forestry, as will cone collections during good cone crop years.

Natural reforestation depends on the preparation of a good seedbed, adequate moisture, and lack of competition from brush species. Cable yarded units on hillsides naturally reseed well and these units may also be planted at intervals from 10 to 16 feet to ensure regional Forest Practice Regulation goals are met. A more intense planting effort will be concentrated on the flat sites logged in the winter, and on dry hillsides. In general, seedlings will be planted at a rate of approximately 400 trees per acre or at 10-foot spacing.

Prescribed burning will be used on selected sites to remove higher than normal amounts of slash, to remove or reduce a brush component and/or to reduce the potential spread of insects or diseases that may limit the normal productivity of Forest stands. Reforestation, to the extent practical, will be accomplished the year immediately following harvest or burning. Planting will be conducted primarily in the spring due to better survival rates. Reforestation surveys will normally be conducted in the fourth year after completion of logging in each unit, or be conducted in the fourth year following planting.

The DOF is continually studying and evaluating areas with regeneration problems to ensure reforestation in a timely manner. Results that improve seedling survival will be incorporated into future planting and timber sale contracts.

### **Thinning Activities**

DOF applies pre-commercial thinning strategies to young regenerating stands on some of the more productive sites to increase the value of timber at rotation age as well as enhance the wildlife habitat during stand development. A total of 1960 acres have been thinned since 1993 when the thinning program was first initiated on the Haines State Forest. These overstocked units benefit greatly from a thinning release. Tree spacing following thinning treatment has ranged from 12' X 12' to 20' X 20'. According to measured results found by periodic sampling of permanent research areas within the forest, those areas previously thinned have shown an increase in average volume per tree and vigorous growth while creating diversity in stand structure.

### **Pruning Activities**

Stand improvement can be derived from the practice of pruning designated trees which will promote the production of clear grain wood volume to the bole of a tree receiving treatment. This practice may also provide some protection from insect and disease impacts. Permanent study plots have been established to measure the results of implementing this program with two measurements occurring to date. Although it is too early in the study to draw conclusions on the success of the practice there is evidence supporting the continuation of the stand treatment in this five year period. A total of 360 acres have been pruned since 2000 when the pruning program was first initiated on the Haines State Forest.

### **Summary of Five-Year Schedule Activities**

#### **2018**

Inventory field work of approximately 9,000 acres of regenerating forest stands to determine growth and yield.

20 to 30 acres of the second growth forest are scheduled for pre-commercial thinning and/or pruning.

Consider collecting cones based on crop conditions.

## **2019**

Inventory analysis and growth model preparation.

20 to 30 acres of the second growth forest may be scheduled for pre-commercial thinning and or pruning.

Consider collecting cones based on crop conditions.

## **2020**

One or both of the Glacier side 2 units are scheduled for a prescribed burn depending on the completion date of harvest activities.

20 to 30 acres of the second growth forest may be scheduled for pre-commercial thinning and or pruning.

Consider collecting cones based on crop conditions.

## **2021**

DOF may conduct a prescribed burn of logging slash in one or more units in the Baby Brown sale after harvest is completed.

20 to 30 acres of the second growth forest are scheduled for pre-commercial thinning and or pruning.

Consider collecting cones based on crop conditions.

## **2022**

20 to 50 acres of the second growth forest are scheduled for pre-commercial thinning and or pruning.

Consider collecting cones based on crop conditions.

# **RECREATION DEVELOPMENT**

## **Forest Recreation**

Public Recreation activities across the Haines State Forest range from subsistence gathering to hiking, boating, and camping. Public Recreation takes two basic forms that can be described simply as commercial and non-commercial (or private). These user groups take advantage of both the developed access routes, including roads and trails, as well as the remote undeveloped areas of the forest.

Some commercial activities currently occurring within the HSF are lake/river boat tours, guided hunting, guided hiking tours, guided wildlife viewing tours, snow-cat skiing, helicopter-skiing, ATV site-seeing tours, film/photography/television, and guided backcountry excursion trips. Private recreation activities are similar including many subsistence related uses such as hunting, fishing, berry/mushroom/herb picking, but also include boating, wildlife viewing, hiking, snow shoe/skiing, camping, mountain climbing, ice climbing, ATV riding, photography/filming, and prospecting/gold panning.

The DOF will work to provide for the development of recreation opportunities under a multiple use designation consistent with the management guidelines described in the Haines State Forest Management Plan.

Some development over the last 10 years includes;

- A trail located into Davidson Lake.
- Ripinski Trail has been surveyed and assessed for high impact areas.
- Walker Lake multiple use trail location.
- New trail/road signage has been purchased.
- Cooperation with State Division of Parks developments includes the access trail to Chilkat Lake.

## **Proposed Developments**

The DOF looks for opportunities to enhance or develop recreation access during all project work planning on the HSF in an effort to meet the multiple use goals as efficiently as possible. Conceptual discussion between the Division of Parks and Recreation (DPOR) and Haines DOF for the development of cabins on both DPOR and DOF managed lands in our area under a cooperative management program may lead to the facilitation of a long term strategy to promote mutual agency goals in regard to recreation management in the Haines area. In the previous FYFMS DPOR proposed the initial development of “high use” public cabin sites on DPOR managed lands and the DOF agreed in support of that program. Additionally, DOF has identified potential cabin sites on the HSF in previous HSFMP’s in response to local requests for recreation shelter development which included Chilkat Lake, Davidson Lake, Walker Lake, Chilkat Valley, and Little Salmon Lake. Recent interest also exists for the development of a public cabin near Tukgahgo.

Currently no public interest in new trail development has been identified, but past interest included reestablishing the Nugget Creek to Porcupine Creek Trail and portions of Dalton's Trail.

### **Summary of Five-Year Schedule Activities**

This summary is intended to identify possible and proposed actions relating to recreation development during this schedule period. Some of these actions are progressive over the entire period and some may be accomplished in one season. This information does not depict deadlines for accomplishment of any task, but should be used to provide for discussion and suggestion from the public and commercial recreation interests within our management area.

### **2018-2022**

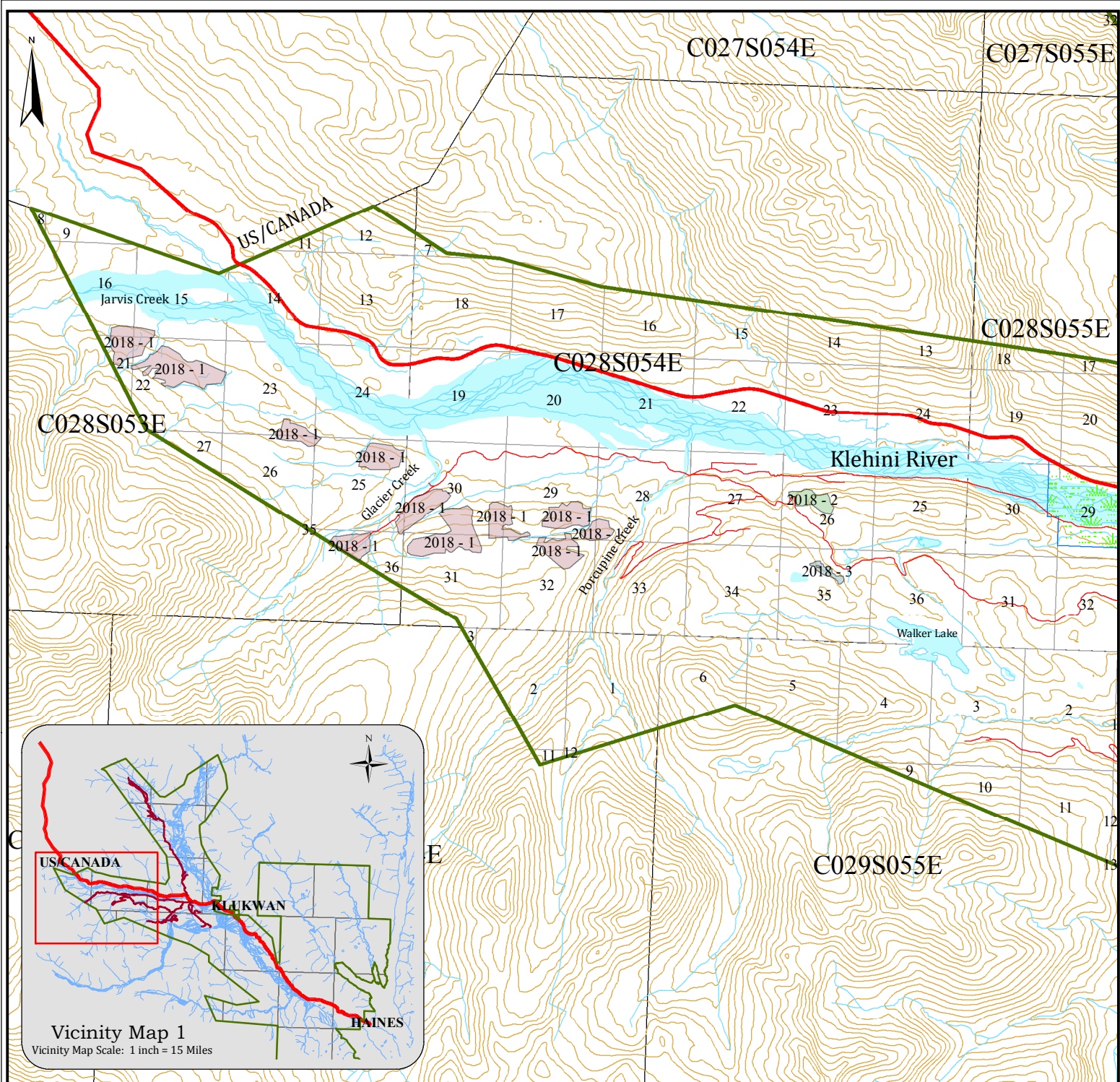
Install new road and trail signage.

Perform a site survey of existing public recreation land at Chilkat Lake for the construction of a cabin at the site and the development of a recreation plan for the site.

Perform recreation development reconnaissance for projects connected to the Kelsall Road system.

<b>Recreation Activities Schedule</b>		
Haines State Forest		
January 1, 2018 to December 31, 2022	Submitted by: Greg Palmieri	
<b>Activity Year</b>	<b>Description</b>	<b>Miles/Acres</b>
<b>2018</b>	Chilkat Lake Cabin Survey	5 acres
	Little Salmon/Porcupine Rd Trail Recon.	6.2 miles
	Area Trail repairs	
<b>2019</b>	Walker Lake shelter survey and design.	
	Area Trail Repairs	
	Reconnaissance survey Chilkat Valley site	
<b>2020</b>	Little Salmon Lake Cabin/trail reconnaissance.	2.5mi/5 acres
	Area Trail Repairs	
<b>2021</b>	Davidson Lake Trail Cabin Survey	1mi/3 acres
	Area Trail Repairs	
<b>2022</b>	Walker Lake Shelter construction.	
	Area Trail Repairs	





Map Projection: State Plane NAD83  
2011 Alaska Zone 1  
Contour Interval - 200 feet  
Map Scale: 1 inch = 1.5 Miles

#### Legend

- Haines State Forest Bdry
- Chilkat Bald Eagle Preserve
- Proposed Harvest Areas**
- Harvest Area**
- 2018 - 1
- 2018 - 2
- 2018 - 3
- Haines Highway
- HSF Roads
- Rivers/Streams

## HAINES STATE FOREST

### Five Year Forest Management Schedule 2018-2022

-----Timber Sale-----

### Proposed Harvest Areas - Map 1

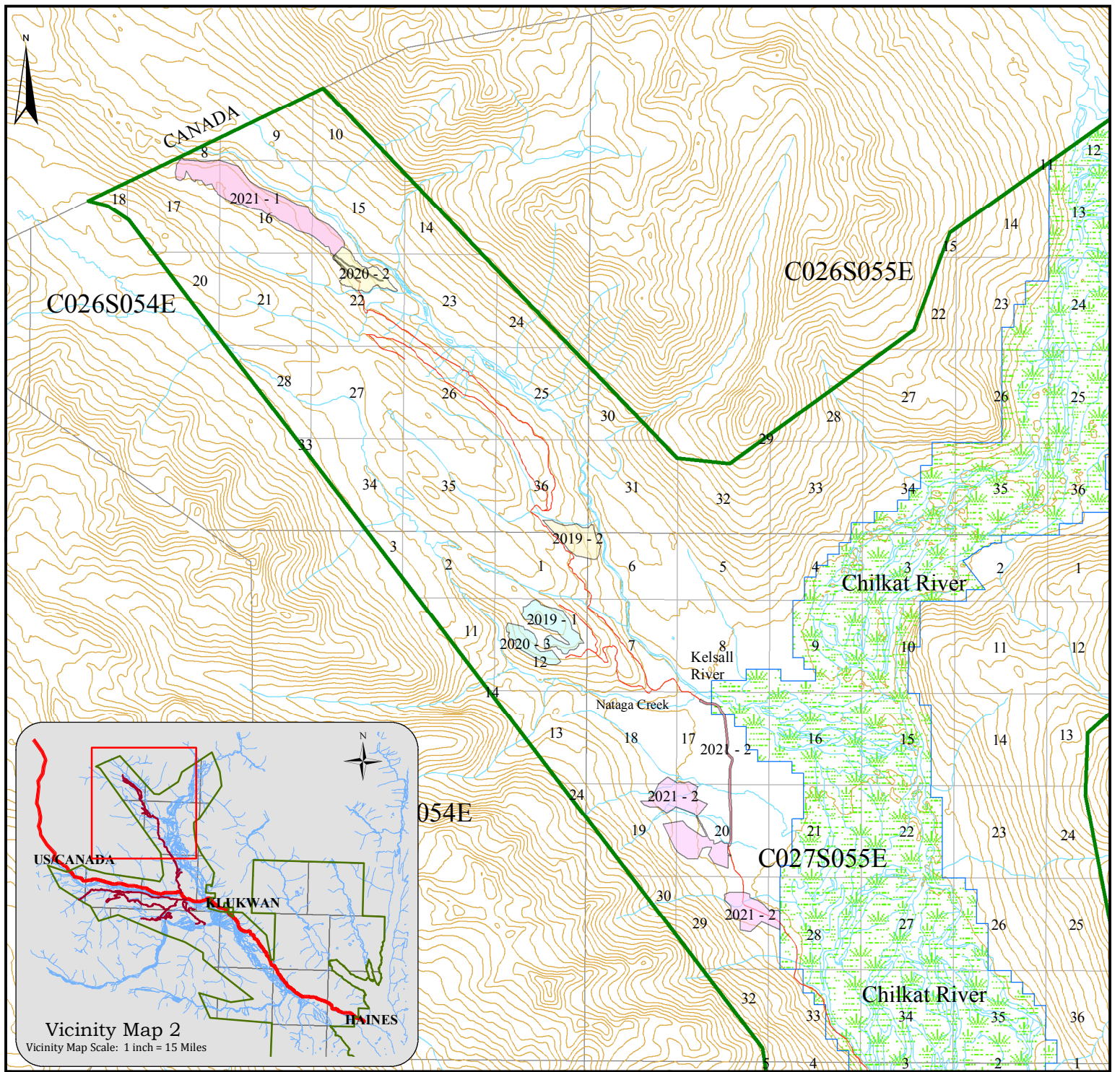
State of Alaska  
Division of Forestry  
Haines Office

Prepared by: HNS/DOF/GJP - 012018

*"Develop, conserve, enhance, and manage  
the state's forests to provide a sustainable  
yield of forest resources for Alaska..."*

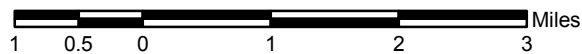






#### Legend

- Haines State Forest Bdry
- Chilkat Bald Eagle Preserve
- Proposed Harvest Areas
- Harvest Area
- 2019 - 1
- 2019 - 2
- 2020 - 2
- 2020 - 3
- 2021 - 1
- 2021 - 2
- HSF Roads
- Rivers/Streams



Map Projection: State Plane NAD83  
2011 Alaska Zone 1  
Contour Interval - 200 feet  
Map Scale: 1 inch = 1.5 Miles

## HAINES STATE FOREST

### Five Year Forest Management Schedule 2018-2022

-----Timber Sale-----

### Proposed Harvest Areas - Map 2

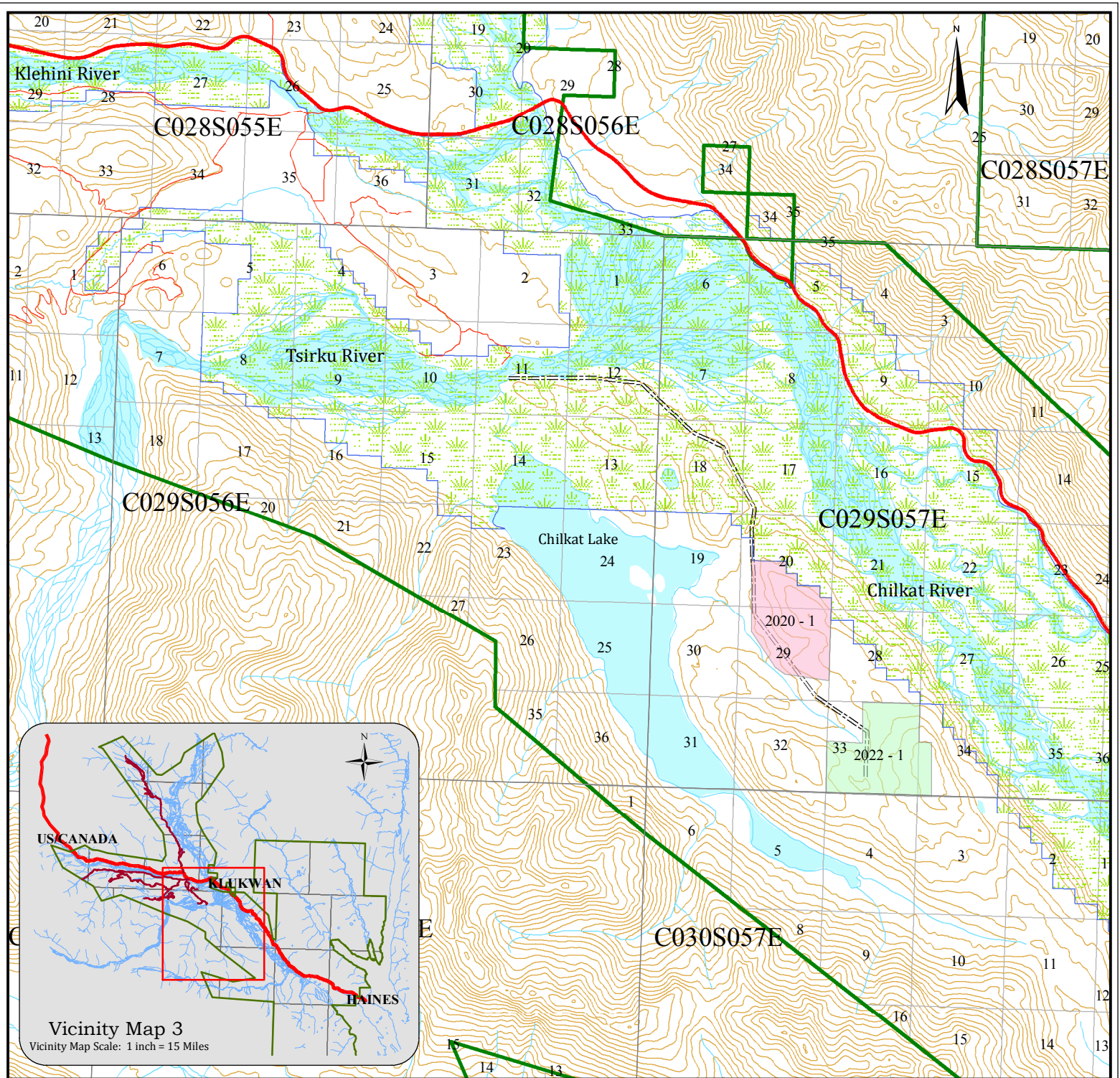
State of Alaska  
Division of Forestry  
Haines Office

Prepared by: HNS/DOF/GJP - 012018

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the state's forests to provide a sustainable  
yield of forest resources for Alaska..."*







Map Projection: State Plane NAD83  
2011 Alaska Zone 1  
Contour Interval - 200 feet  
Map Scale: 1 inch = 1.5 Miles

#### Legend

- Haines State Forest Bdry
- Chilkat Bald Eagle Preserve
- Proposed Harvest Areas
- Harvest Area
- 2020 - 1
- 2022 - 1
- Haines Highway
- HSF Roads
- Rivers/Streams

## HAINES STATE FOREST

### Five Year Forest Management Schedule 2018-2022

-----Timber Sale-----

### Proposed Harvest Areas - Map 3

State of Alaska  
Division of Forestry  
Haines Office

Prepared by: HNS/DOF/GJP - 012018

*"Develop, conserve, enhance, and manage  
the state's forests to provide a sustainable  
yield of forest resources for Alaska..."*



Attachment A:  
**State of Alaska, DNR – Division of Forestry, Haines Office**

2018-2022 Five-year Forest Management Schedule Review

List of Commenters:

<b>Organization</b>	<b>Author</b>	<b>Location</b>
<i>Alaska Department of Fish and Game, Division of Habitat</i>	<i>Greg Albrecht</i>	<i>Juneau</i>
<i>NGO, Lynn Canal Conservation</i>	<i>Elsa Sebastian</i>	<i>Haines</i>
<i>University of Alaska</i>	<i>Jerry Kilanowski</i>	<i>Anchorage</i>
<i>Public</i>	<i>Michael Mackowiak</i>	<i>Haines</i>
<i>Public</i>	<i>Jessica Keyser</i>	<i>Haines</i>
<i>Public</i>	<i>Martha Mackowiak</i>	<i>Haines</i>
<i>Public</i>	<i>Jessie Badger</i>	<i>Haines</i>
<i>Mud Bay Lumber Company</i>	<i>Sylvia Heinz</i>	<i>Haines</i>
<i>Haines Borough Planning Commission</i>	<i>Lee Heinmiller</i>	<i>Haines</i>
<i>NGO, Takshanuk Watershed Council</i>	<i>Derek Poinsette</i>	<i>Haines</i>
<i>Constantine Metals, Inc.</i>	<i>Liz Cornejo</i>	<i>British Columbia, CA</i>
<i>Public</i>	<i>Kate Palmer</i>	<i>Haines</i>
<i>Public</i>	<i>Gershon Cohen</i>	<i>Haines</i>
<i>Public</i>	<i>Tresham Gregg</i>	<i>Haines</i>
<i>Fish and Game Advisory Council, Local</i>	<i>Tim McDonough</i>	<i>Haines</i>
<i>Public</i>	<i>Lyn Campbell</i>	<i>Haines</i>
<i>Public</i>	<i>Mike Bell</i>	<i>Haines</i>
<i>Public</i>	<i>Elaine Bell</i>	<i>Haines</i>
<i>Public</i>	<i>Ashley Sage</i>	<i>Haines</i>

<i>Public</i>	<i>Laurie Dadorian</i>	<i>Haines</i>
<i>Public</i>	<i>Erik Stevens</i>	<i>Haines</i>
<i>Public</i>	<i>Richmond Tolles</i>	<i>Haines</i>
<i>Public</i>	<i>Michele Cornelius</i>	<i>Haines</i>
<i>Public</i>	<i>Thom Ely</i>	<i>Haines</i>
<i>Public</i>	<i>Kathleen Menke</i>	<i>Haines</i>
<i>Public</i>	<i>Kim Rosado</i>	<i>Haines</i>

## Response to Comments

### March 2018

The following is the DOF summary of comments received during the recent review period for the 2018-2022 schedule. The DOF had 26 commenters on the proposed schedule from individuals, agencies, companies, and non-government organizations as listed above. The comments were reviewed and arranged by common statements and topics. The DOF has grouped similar or repeated comments and statements made by more than one commenter at the front of this response document. Comments made singly are quoted as submitted and replied to towards the end of the document.

### Repeated Comments:

#### Harvest Activities

- The large timber sales are for export markets and do not support the local economy.
- The proposed harvest schedule will benefit the local economy.
- All large sale proposals should be stopped and only a small local timber sale schedule should be developed.

#### Scenic

- The proposed harvest will have a negative impact on the scenic quality of the area.

#### Wildlife

- Impacts to wildlife of the forest will occur to a greater degree with the scale of the harvest activity, i.e. larger timber sales will have a more significant impact on wildlife.
- Impacts to bear and goat habitat could occur with proposed timber harvest.

## Fish

- Chinook salmon are designated a species of concern and habitat must be protected with no timber harvest occurring near habitat or near stream systems that may impact chinook habitat.

## Recreation

- New access to the State Forest through timber sale development will provide opportunities for public and commercial recreation benefiting local subsistence users and the economy for the community.
- Recreation and tourism contribute to the economy of the community more significantly than large commercial timber sales that are exported, and large sales may negatively impact the recreation and tourism industries.

## FYFMS

- An update to the HSFMP is needed to represent current conditions in the local community.
- The schedule outlines responsible management by DOF.
- The cumulative impacts of proposed harvest activities have not been addressed.

## DOF response to General Comments:

### Harvest Activities

The existing public process for development of proposed timber sales listed in the schedule will include the adoption of a Best Interest Finding and a Forest Land Use Plan specific to each sale before timber may be harvested. These two decisions steps provide further project details for public and agency review of harvest proposals. This process provides an opportunity to progressively create a harvest plan that will be successful in accomplishing the goals for resource management on the Haines State Forest (HSF) while incorporating local factors related to forest resources and their use.

Larger timber sales that may not currently have a local or regional market provide economic growth opportunity that can lead to increased local and regional use of timber resources. Local resource use is recognized as important function of HSF management and will be incorporated into future planning. The larger sales also facilitate the development of infrastructure that in turn can support the local access and use of resources. The DOF created the schedule considering the potential for development of large timber sales with a productive contribution to the small timber sale program and the benefits to future forest management with this balanced approach.

### Scenic

The DOF recognizes the scenic concerns of the public in regard to clear cut harvest units and other associated activities. The DOF will continue to address the issue in timber sale Forest Land Use Plans.

### Fish and Wildlife

The DOF coordinates timber sale development (large and small) with the Alaska Department of Fish and Game (ADF&G) biologists throughout the sale design. The proposed harvest activities in this schedule have been reviewed by ADF&G. The DOF provides due deference to ADFG for this subject matter as defined in AS 41.17.098(d). "Due deference means that is appropriate in the context of the agency's expertise and area of responsibility and all the evidence available to support the assertion."

### Recreation

Balancing the benefits of access and development with the impacts of that development is an important consideration in projects planned on the HSF for reasons ranging from available funding support, compatibility, and the ability to support the development after construction. Historically recreation development, trails and cabins, have been a small part of activities proposed on the forest. Most recreation access development has been in association with timber sale planning development efforts. The DOF recognizes the significance of the existing resource use and the need to accommodate growth in this subject.

### Five-year Forest Management Schedule (FYFMS)

In preparing this schedule the DOF considered applicable State statute and regulation, the HSFMP plan and goals, previous HSF FYFMS content and comment, economic conditions (current and projected), applied forest management principles, professional knowledge of the HSF, and local, regional and global resource related markets/conditions.

The DOF revised the HSFMP in 2002 to address the lack of commercial recreation policy present in the original planning document. At that time, the entire plan was reviewed for additional revision needs. After going through a 2-year public review and document revision process, the Commissioner adopted the new plan. Consideration of the relevance of the existing plan occurs frequently as part of the regular management of the forest. Programmatically the plan is examined for currency on a periodic basis through the development and review of the Five-year Forest Management Schedule.

Cumulative impacts resulting from the adoption of the proposed schedule are considered. As specific timber sale plans are developed in the planning process, impacts from each sale are considered and addressed by agency professionals. This process of review and recommendation is consistent with responsible resource management practice and has occurred on the Haines State Forest for the past 25 years. The DOF through this collaboration, will continue to develop Forest Land Use Plans for specific timber sale offerings with the consideration of near and long-term impacts.

### Specific Comments:

#### Harvest Activities

*-Tim McDonough, Upper Lynn Canal Fish and Game Advisory Committee, Chair*



"We, members of the Upper Lynn Canal Fish and Game Advisory Committee request that all logging sales scheduled in the Haines Five year Forest Management Schedule (FYFMS) that occur within the Kelsall watershed, which is critical habitat for spawning and rearing Chilkat Chinook salmon, be removed from the sale at this time."

DOF response:

The DOF recognizes the designation of a "species of concern" by ADF&G and that protection of the Chinook salmon resource is important during all proposed State resource development management activities. The ADF&G has reviewed this schedule (see attached comments) and DOF will work with agency staff to resolve issues and address concerns.

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*-Derek Poinsette, Takshanuk Watershed Council, Interim Executive Director*

"In 1991 ADF&G also documented landslides which originated from recent clearcuts and entered the Kelsall, eliminating the entire buffer intended to protect the Kelsall River."

"The planned new road building and clearcut logging on steep slopes adjacent to the Kelsall River (2019-2 Canyon Creek, 2020-2 Single 15, and 2021-1 Turn Around) on Map 2 of the 2018-2022 FMS pose a significant erosion runoff threat to important king salmon spawning habitat in this reach of the Kelsall River."

DOF response:

The comment on the landslide was originally made in the late 1990's by the ADF&G Habitat Biologist working in the Haines Area. The DOF responded to this statement on more than one occasion providing aerial photo documentation of the site illustrating this conclusion was incorrect and the area in question was a naturally occurring event that predated the timber harvest. This information was again recently provided to Takshanuk Watershed Council representatives and they have since acknowledged that the "slide" was naturally occurring and not the result of the adjacent timber harvest activity.

A special management zone exists alongside the anadromous habitat of the Kelsall River. The DOF has not proposed sales in this zone in the schedule which will maintain the integrity of the forest component providing protection of the habitat. Additionally, a significant slope break follows the west side of the Kelsall River at distances of more than 300' near units proposed in this schedule, physically making an even larger timber retention area. No road building or harvest units are proposed in the schedule on known slopes steeper than 67%. If slopes greater than 67% are encountered and unavoidable, the DOF will require site specific mitigation activities to eliminate possible impacts or remove the area from the timber sale to meet the intent of the Forest Practices Act and Regulations.

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*-Katey Palmer, Public*

"..., a bridge to span the Tsirku River and 4.5 miles of logging roads, will result in habitat loss in the old-growth forest there and likely result in more future sales in the area."

DOF response:

The proposed harvest activities east of Chilkat Lake reside in the HSF management subunit 4b. The HSFMP allocated this area for commercial forest management while reserving other areas. The DOF intends to manage this area similarly to other areas of the State Forest designated for a primary use. Regardless, significant fish and wildlife habitat will be managed according to all



applicable policy and procedures by agency professionals responsible for these resources during the planning process.

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*-Jerry Kilanowski, University of Alaska, Forester*

“We request the Baby Brown Timber Sale (20 MMBF) be put on hold and that that (sic) 20 MMBF be added to the Chilkat 1 timber sale for a total of 30 MMBF for sale in 2019.”

“Division of Forestry should allow for cottonwood volume, in addition to annual allowable cut.”

“Best Interest Finding & Forest Land Use Plan be noticed simultaneously, per HSFMP.”

“Annual allowable cut be acres not volume, i.e, 347 acres (Chapter 2, Page 17 of HSFMP, revision 2002).”

DOF response:

Adjustments to sale timing and allocation will be considered.

Cottonwood has not been considered a commercial species in the HSFMP; it is a small component of the volume available on the HSF. Most of the cottonwood volume in the area is found within the Chilkat Bald Eagle Preserve or on other lands not part of the HSF. The HSFMP does not prohibit the commercial harvest of cottonwood and the DOF is monitoring the market demand for this species.

The DOF has chosen to manage its workload by separating the two documents. In many instances, this has provided flexibility to adapt as additional information has developed. Where resource information and plans are complete, the DOF will combine the two processes.

The area control method applies the volume per acre estimate from the inventory to the area available for harvest and divides it by the rotation age estimated for the forest. This provides a conservative estimate that is appropriate for HSFMP goals.

### Transportation

*-Sylvia Heinz, Mud Bay Lumber Company, Owner*

“Options for interagency collaboration and outside funding for access roads should be investigated in order to decrease dependency on export and outside market conditions. Can the management schedule include investigating funding options for road construction? Are there grant opportunities? Is there the possibility to combine funding efforts with the private sector, tourism, the Haines Borough, the Federal Government, or non-profits?”

DOF response:

The schedule document could accommodate proposals developed from alternative funding options that may be available. The DOF cultivates collaborative management efforts with interested agencies and organizations and has worked most recently to create forest access through this relationship in the vicinity of Glacier Creek. The DOF is willing to continue these efforts and to expand the discussion as suggested.

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*-Micheal Mackowiak, Public*

“The alders are encroaching on many of the roads in the Kelsall, Sunshine, Porcupine/Klehini, and Tsirku R. areas. I would hope to see funding made available to re-open and maintain these roads as they provide great access for berry picking, hunting, fishing and adventuring.”

DOF response:

Timber sale contracts have traditionally been the main mechanism which has provided regular road maintenance on forest roads. In the absence of timber sales in an area, the Haines office has been inspecting road systems annually and providing minor maintenance to maintain safety and compliance with the FRPA. A maintenance contract to address issues has recently been awarded that includes brushing and grading a portion of the Kelsall Road System.

### Recreation

*-Jessica Kayser Forster, HATS – Backcountry Cabin Steering Committee Member*

“-identify funding opportunities – in and outside of the agency – that support recreation and development of backcountry cabins on HSF

-look to partner with local nonprofits and groups, commercial endeavors, Haines Borough Parks and Recreation Advisory Board, and local Tribal governments to be more effective in securing funding for recreational pursuits on HSF

-support local groups who are working with DNR-DMW to permit and/or lease recreation activities on Haines State Forest.

-support the efforts of local groups working to lease and permit a backcountry public use cabin in HSF area 8D”

DOF response:

The DOF encourages interested individuals and organizations to pursue, collaborate, and support development activities. A central purpose of the schedule is to propose activity options that will then generate public dialog to further management discussion and direct efforts for successful projects supported by the community and the State.

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*-Lyn Campbell, Public*

“Especially appealing to me is the residual effect of these sales to open up recreational opportunities. Haines is a desirable destination for tourists; more access to beautiful

remote areas may attract tourists that boost our economy.”

DOF response:  
Comment noted.

### FYFMS

*-Elsa M. Sebastian, Lynn Canal Conservation, Inc., Executive Director*

“the Schedule requires revision because it is based on a Plan, an Inventory and an annual allowable cut that all are outdated”

“The Schedule violates AS 38.05.113 by not providing [“sufficient information to provide the public ... with a basis for comment on proposed sale offerings.”]

“The present Schedule development process violates AS 41.15.310 because required consultations with the Upper Lynn Canal Advisory Committee and the Alaska Chilkat Bald Eagle Persevere Advisory Council was not made, among other deficiencies.”

DOF Response:

The HSFMP is currently adequate for the level of activity on the forest and accommodates the proposed activities. The FYFMS is a scoping document and is meant to be referenced until it is replaced by the next published schedule.

The DOF completed the most recent timber stand inventory field work in 2012. The second phase of the field work has been scheduled for this season that will develop a more refined growth model for the reproduction class of timber. In lieu of the reproduction set of data, the DOF has used a conservative a growth model to set the annual allowable harvest on the HSF. The DOF will provide the inventory information to the public when complete. The updated inventory will likely produce a change to the allowable harvest; however the conservative estimate used in the 2002 HSFMP is neither faulty or unsustainable.

“The Schedule violates AS 38.05.113 by not providing "sufficient information to provide the public ... with a basis for comment on proposed sale offerings."

DOF response:

The information provided in the schedule in the form of maps and activity descriptions has provided adequate information for comment in the past. The schedule provides geographic references and parameters that allowed numerous specific comments to be made from the public, agencies, organizations, and industry representatives that will be used to scope future development issues and proposals.

“The present Schedule development process violates AS 41.15.310 because required consultations with the Upper Lynn Canal Advisory Committee and the Alaska Chilkat Bald Eagle Persevere Advisory Council was not made, among other deficiencies.”

DOF response:

The DOF gave notice to the agencies and organizations listed in statute. The Division of Parks and Outdoor Recreation, charged with the responsibility to Chair the Alaska Chilkat Bald Eagle Preserve Council, was given notice through email contact. The Upper Lynn Canal Advisory Committee was given notice through the local public notice; the Chair of that organization received that notice and did comment in a timely manner.

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Additional Comments not referenced in the FYFMS:

*-Micheal Mackowiak, Public*

"I am concerned that some organizations who were party to the historic 1982 Legislation creating the Chilkat Bald Eagle Preserve, and who signed the agreements so paramount in the formation of that legislation, are now striving to block resource extraction and working against the fundamental agreement of multiple land use for the Haines State Forest. I hope that their actions, contrary to their organizations signatures, which bear witness to the agreement, does not jeopardize the entire Chilkat Bald Eagle Preserve and bring about the unraveling of this great compromise of interest groups.

DOF response:

Noted.


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ADF&G comments on the FYFMS

*(complete text inserted following 3 pages)*

# MEMORANDUM

State of Alaska  
Department of Fish and Game  
Division of Habitat

TO:	Greg Palmieri, Forester Division of Forestry Department of Natural Resources	DATE:	March 15, 2018
THRU:	Jackie Timothy Southeast Regional Supervisor	FILE NO:	59.2360 N, 135.4600 W
FROM:	Greg Albrecht  Habitat Biologist	SUBJECT:	Northern Southeast Area 5-Year Schedule Comments
		PHONE NO:	465-6384

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I reviewed the Division of Forestry's 2018-2022 Preliminary Five-Year Forest Management Schedule (FYFMS) for the Northern Southeast Area and coordinated my review with Alaska Department of Fish and Game (ADF&G) Divisions of Wildlife Conservation, Sport Fish, and Commercial Fisheries biologists. The FYFMS outlines potential sale areas where about 50 MMBF of timber could be sold and harvested over the next five years in the Klehini, Kelsall, and Chilkat River watersheds, with the potential to construct up to 28.6 miles of new road. The FYFMS also includes thinning, pruning, seeding, prescribed burning, and recreational infrastructure development and maintenance. Having submitted comments and stream survey information for the Forest Land Use Plan on the Baby Brown Timber Sale in 2017 (attached), the following comments focus on the remaining timber harvest activities proposed in the FYFMS.

## Wildlife

Though clearcut logging can potentially benefit moose through regeneration of browse until the stem exclusion phase, an ADF&G study (Hundertmark et al. 1990) found moose select for mature spruce forests in years when snow depth exceeds 32 inches. To mitigate potential impacts to winter moose habitat in the upper Chilkat Valley where snow fall can exceed 32 inches, we recommend limiting forest opening size and considering selective harvest where practicable. We recommend conducting pre-commercial thinning as proposed in the FYFMS to improve habitat in second-growth areas. Division of Conservation biologists are interested in working collaboratively with Forestry staff to study the effects of timber harvest on moose in the Haines area.

Marten are an old-growth forest obligate species dependent on coarse woody debris such as logs, downed snags and root wads. To mitigate impacts to marten habitat, consider leaving stands of low-value old growth in sale areas intact, as well as logs, snags, and rootwads.

The potential sale areas southwest of the Kelsall River drainage shown on Map 2 are near modeled mountain goat overwintering habitat and brown bear denning habitat. Recent collar data shows goats present within the modeled habitat and near potential sale areas. Similarly, Division of Wildlife Conservation biologists have observed brown bear dens within the modeled denning habitat, one of which was within 1 km of unit 2021-2. Additionally, potential sale areas 2018-2

and 2018-3 south of the Klehini River occur near modeled brown bear denning habitat. We recommend you limit operations in these areas from November–April to avoid disturbing animals during sensitive life stages.

### **Fish**

We recommend implementing 300 foot special management zones (SMZ) along the Kelsall River to provide riparian function and wood recruitment into the river, which is prone to bank erosion and avulsion. If topography and evidence of previous river channels suggest there is a risk of the river avulsing outside the 300 foot buffer, we recommend implementing a wider SMZ of partial retention as provided for in the Haines State Forest Management Plan.<sup>a</sup> Habitat staff will be available to assist with assessing this risk on a future field site visit. Though little harvest has occurred within 50 feet of the Kelsall River,<sup>b</sup> maintaining a constant supply of large wood to the system through the provisions of the Forest Resources and Practices Act and the Haines State Forest Management Plan is important for the continued protection<sup>c</sup> of Kelsall River fish species, particularly Chinook salmon.<sup>d,e</sup>

Proposed sale areas on Map 2, west of the Kelsall and Chilkat Rivers, may contain anadromous fish habitat. Habitat staff, in consultation Forestry staff, will survey these areas in the summer 2018.

Road construction to access potential sale areas 2020-1 and 2022-1 will require construction and maintenance of a road and bridge across the Tsirku River, which will require a Fish Habitat Permit. Habitat staff, in consultation with DOF, will plan to survey the area south of the Tsirku River in 2018 for fish habitat where the road alignment is proposed, and are available to discuss design and location of crossing structures.

Thank you for the opportunity to comment.

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<sup>a</sup> Chapter 2: Forest Resources, Section 3: Harvesting, F: Special Management Zone (SMZ) adjacent to Anadromous Fish Streams and Lakes.

<sup>b</sup> Historic and current imagery, as well as DOF records, confirm areas west of the Kelsall River and upstream of the Nataga Creek confluence were harvested between the 1984 and 1995 with 250–550 foot buffers. Harvest on the East side of the river upstream of the confluence occurred in 1972 and 1973 with no-cut buffers ranging 100–500 feet. Harvest on both sides of the river downstream of the confluence occurred in 1972 and 1973 with 50–100 foot no-cut and selective harvest buffers.

<sup>c</sup> Between 1961 and 2014, habitat in the Kelsall River fluctuated somewhat, as expected, in the lower delta but remained stable in the upper reaches. Despite fluctuations, the habitat remains productive and is not a factor in the decline in the number of returning Chinook salmon to the Kelsall River (TWC 2015).

<sup>d</sup> 52% of adult Chinook salmon tagged in the Chilkat River in 2005 spawned in the Kelsall River (Erickson and Chapell 2006).

<sup>e</sup> Chilkat River Chinook salmon were listed as a Stock of Concern, along with the King Salmon River and Unuk River stocks amid a trend of the lowest returns documented throughout Southeast Alaska.

**Literature Cited**

Erickson R. P. and R. S. Chapell. 2006. Production and spawning distribution of Chilkat River Chinook salmon in 2005. Alaska Department of Fish and Game, Fishery Data Series No. 06-76, Anchorage.

Hundertmark, K. J., W. L. Eberhardt, and R.E. Ball. 1990. Winter habitat use by moose in southeastern Alaska: implications for forest management. *Alces* 26:108-114.

Takshanuk Watershed Council. 2015. Kelsall River Salmon Habitat Assessment: Using a combination of on-the-ground fluvial habitat surveys and remote-sensed classification/delineation. Prepared for the Pacific Salmon Commission. Haines, AK.

**Attachment:**

Habitat Biologist Greg Albrecht, to Area Forester Greg Palmieri, Alaska Department of Natural Resources. Memorandum: Baby Brown Timber Sale FLUP Comments; dated November 30, 2017.

**Email cc:**

Al Ott, ADF&G Habitat, Fairbanks  
ADF&G Habitat Staff, Douglas  
Rich Chapell, ADF&G SF, Haines  
Wyatt Rheafournier, ADF&G CF, Haines  
Carl Koch, ADF&G WC, Douglas  
Steve Brockmann, USFWS, Juneau