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

<u>Baby Brown</u> - 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.

<u>West Herman V</u> - 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.

<u>Walker 1</u> - 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.

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

2019

<u>Top Shelf</u> – 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.

<u>Canyon Creek</u> – 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.

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

2020

<u>Chilkat Lake 1</u> – 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.

<u>Single Fifteen</u> – 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.

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

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

2021

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

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

<u>Miscellaneous Sales</u> - 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.

<u>Miscellaneous Sales</u> - 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 2018	Map locator 1 2	Timber Sale Name Baby Brown West Herman V	Volume (MBF) 20,000 400	Total (MBF)
	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	6,200
Total V	olume 2014-20	018		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

				New	Maint. Unit
Project ID	Year	Sale Access	Type	Activity	Miles of Road
	<u>2018</u>	<u>.</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
	2019				
210 Top Shelf		Kelsall 210 Road	Secondary Road	1.5	9.5
Canyon Creek		Kelsall 100 Road	Spur Road	0.5	9.0
	2020	<u>.</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
	2021				
Turn Around		Kelsall 100/300 Roads	Mainline Road	2.0	15.0
K100CW		Kelsall 100 Road	Mainline Road	0.0	6.0
	2022	4			
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

<u>2018</u>

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.

<u>2019</u>

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.

<u>2021</u>

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.

<u>2022</u>

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.

<u>2018-2022</u>

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.

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





