State of Alaska Department of Natural Resources Division of Forestry *Southeast Office*



Draft Forest Land Use Plan Edna Bay Parlay One Timber Sale SSE 1342-K

August, 2019

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I. Introduction

Project File Number: SSE-1342-K

Division of Forestry Office: Southeast Area Forester: Greg Staunton Forest Practices Geographic Region (AS 41.17.950): Region I

This Draft Forest Land Use Plan (FLUP) covers forest operations on approximately 168 acres of land from Southeast State Forest lands on Kosciusko Island, approximately 1.5 miles southwest of the Community of Edna Bay. It is intended to provide the best available information regarding the proposed harvest of timber, and management of other non-timber uses in compliance with AS 38.05.112 and AS 41.17.060.

[X] This Draft Forest Land Use Plan is for timber sale(s) which have been determined to be in the best interest of the state pursuant to AS 38.05.035 (e) and 38.05.945. This FLUP does not determine whether or not to access and sell timber within the timber sale area, nor the method of sale. Those decisions have been made previously in the March 9, 2017 Best Interest Finding and are not appealable under this FLUP.

The Final Best Interest Finding (BIF) and decision for the Edna Bay Parlay Timber Sale may be found at: <u>https://aws.state.ak.us/OnlinePublicNotices/Notices/View.aspx?id=184901</u>.

[] This Draft Forest Land Use Plan is for timber sale(s) for which a Preliminary Best Interest Finding is currently out for review. A final best interest finding must be completed prior to adoptions of a final FLUP pursuant to AS 38.05.035 (e) and 38.05.945;

[] This Draft Forest Land Use Plan is for timber to be harvested that does not require a final finding pursuant to 38.05.035 (e) and notification under 38.05.945.

This Draft Forest Land Use Plan is for the old growth timber in Sections 33 and 34 on SESF. Some incidental young growth timber will also be included in Section 34. Sale layout and planning were performed by DOF staff. The young growth proposed for harvest in the BIF will be covered by a separate FLUP to be issued at a later date. A draft of this plan was distributed to the Department of Fish & Game (ADF&G) and the Department of Environmental Conservation (DEC) for their review and comments relevant to the consistency of this proposed project with the statutes governing forest land use plans (AS 38.05.112) and the requirements of the Alaska Forest Resources & Practices Act (AS 41.17) and its Regulations (11 AAC 95).

The public and agencies are invited to comment on specific requirements for harvest, access, and reforestation operations in this draft FLUP. The decision on whether or not to offer timber for sale is made through the best interest finding process and is not subject to review under the FLUP. Objections or comments pertaining to the draft FLUP must be received in writing to the DOF Southeast Area Forester's Office by **September 17, 2019** in order to ensure consideration for review. Comments should be mailed to the State of Alaska, Division of Forestry, 2417 Tongass Avenue, Suite 213, Ketchikan, AK 99901 or by email to greg.staunton@alaska.gov. For more information, you may contact Greg Staunton, Southeast Area Forester, 907-225-3070. To be eligible to appeal the final decision, a person must have provided written comment by **September 17, 2019**.

[X] Other documents are referenced in this FLUP. This timber sale is designed to be consistent with the management intent of the following documents:

Alaska Forest Resources & Practices Act

Southeast State Forest Management Plan

Prince of Wales Island Area Plan

The administrative record for this sale is maintained at the Division of Forestry Southeast Office filed as SSE-1346-K.

A. Legal description:

The timber sale area is found within Sections 33 and 34 of Township 68 South, Range 76 East, Copper River Meridian. (see attached maps titled Appendix A1 and A2, SSE-1342-K Edna Bay Parlay Timber Sale One Maps)

B. Operational Period:

Fall 2019 through Fall 2024

C. Timber Disposal

[X] Timber will be sold and will have a contract administrated by the State

- [] Timber will be available to the public; permits obtained by the public will be issued by the State.
- [] Other

D. Objectives and Summary

- 1. To follow the Division of Natural Resources' (DNR or Division) constitutional mandate to encourage the development of the State's renewable resources, making them available for maximum use consistent with the public interest,
- 2. To help the State's economy by providing royalties to the State in the form of Stumpage receipts, an infusion to the State's economy through wages, purchases, jobs, and business and
- 3. To help the local economy of the communities within southern Southeast Alaska by creating additional jobs in Southeast Alaska due to the combination of road building, logging, trucking and potentially milling.

II. Affected Land Owners/Jurisdiction	15		
Activity on ownership:	Access Easement	Harvest	Representative Approval
A. State			
 [X] Southeast State Forest [X] Other state land managed by DNR (GU [] University of Alaska [] Mental Health Trust [] School Trust 	[] [J] [X] [] [] []	[X] [] [] []	[X] [] [] [] []
B. Other Land Ownership	[]	[]	[]
Land Owner:			
Land Owner Representative:			

III. Harvest Methods, Silvicultural Actions, and Management of Non-Timber Resources

Forest operations will be designed to:

- Protect fish habitat and water quality in compliance with the best management practices in 11 AAC 95.260-.370,
- Manage for the other land uses and activities identified in AS 41.17.060 and the Best Interest Finding for this timber sale, and
- Ensure prompt reforestation and maintenance of site productivity in compliance with AS 41.17.060(c) and 11 AAC 95 .375-.390.

Harvest and Silvicultural Methods:

[X] The silvicultural actions are described in this document, and no prescription was written or is necessary

[] A silvicultural prescription has been written and is attached to this document in Appendix B

A. Timber Stand Description and History

Harvest units are comprised of mature old growth timber composed of western hemlock, Sitka spruce, and western red cedar. Approximately 70-year-old second growth patches of timber exists in the east side of the harvest area that where originally beech logged. In 2016, the mainline road (1520354) was constructed through the Southeast State Forest to provide access to the log transfer facility (LTF) from University of Alaska Lands as well as connect the islands existing road system to the LTF.

B. Timber Harvest Activities

Timber Harvest Activities are displayed in Table 1.

Unit ID	Acres	Topography	Silvicultural Action	Logging Method
Unit 1	130	Irregular Complex Slopes	Clearcut	Short Span Cable and Ground Based
Unit 2	38	Irregular Complex Slopes	Clearcut	Ground Based

Table 1. Timber Harvest Activities

Note: Cable systems will be used on slopes >40% unless topography facilitates shovel access within 132ft of timber.

C. Site Preparation

[X] Site preparation will not be necessary. There is either sufficient residual stocking, or because there will be sufficient soil disturbance by logging to forego scarification.

[] Site preparation will be implemented and described in Table 2:

Unit Acres		Site Preparation Method	Date of Completion

D. Reforestation:

[X] Clearcut

[] Partial Harvest:

[] Region I: leaving more than 50% live basal area (11 AAC 95(b)(3))

[] Region II/III: Relying on residual trees to result in a stocking level that meets standards of 11 AAC 95.375 (b 4). Stocking levels will be calculated subject to the methods below:

Average DBH	Residual	Minimum Stocking	Percent					
(Diameter at	Trees (Trees/	Standard (Trees/ acre)	Stocking					
breast height)	acre)							
> 9"		120	%					
<u> </u>		120	70					
6" to 8"		170	%					
1" to 5"		200	%					
	Total Residual St	ocking	%					

Table 3. Stocking Level Requirements

Seedlings Required:

Percentage Under stocked = 100 - Total Residual Stocking %Percentage Under stocked = $100 - \frac{\%}{2} = \frac{\%}{2}$

Seedlings/ Acre Required = Percentage Understocked/100 x 450 Seedlings/ Acre Required = $\frac{\%}{100} \times 450 =$

[X] Natural regeneration

List species: western hemlock, Sitka spruce, western red cedar.

[] Coppice

List species:

[] Artificial regeneration

[] Seeding-source of seed (general vicinity location of seed source)

[] Planting: Date of proposed planting:

Source of seedlings (location of seed source):

E. Slash Abatement

- [] Potential for insect infestations caused by slash accumulations exists. Slash abatement for controlling infestations will be implemented as required by 11AAC 95.370.
- [] Lop and scatter slash; accumulations will be kept to less than 2 feet in height.
- [X] Slash will be scattered by the operator. [] Slash will be disposed of by the State.
- [] Other method of slash disposal: [] removal off site [] crushing or grinding [] burning
- [] Burn permits necessary from DOF and DEC to be acquired.
- [] The operator will contact the Division of Forestry local area office prior to ignition of debris.

F. Timber Harvest—Surface Water Protection:

- [] There are no streams or lakes abutting or within a harvest unit.
- [X] Known surface waters and protection measures are described in Table 4 below.

Locations are included in the operational map in the Appendices

Unit	Waterbody Name	AS 41.17.950 Classification	ADF&G AWC #	Required Riparian Protection	Site-specific actions to minimize impacts on waters.
Unit 1&2	Unnamed	Type I-A	103-90- 10550	100ft Timber Retention	Implement FRPA and Reg., Retain timber to break to promote wind firmness and drainage pattern.
Unit 2	Unnamed	Туре І-С	N/A	No in stream or crossing activity w/o prior approval of DOF	Implement FRPA and Reg./ Maintain bank integrity.
Unit 1	North Tributaries	Type I-C	N/A	No in stream or crossing activity w/o prior approval of DOF	Implement FRPA and Reg./ Maintain bank integrity.

Table 4. Protection for Known Surface Waters

Unit 1	South Unnamed Tributaries	Surface/Water Quality	N/A	No in stream or crossing activity w/o prior approval of DOF	Implement FRPA and Reg./ Maintain bank integrity.
Unit 1	South Unnamed Tributaries	Non- Anadromous Resident Fish	N/A	No in stream or crossing activity w/o prior approval of DOF	Implement FRPA and Reg./ Maintain bank integrity.

Surface waters listed above were reviewed by the Department of Fish and Game:

[X] During the timber sale planning process

[X] During the agency review conducted for the Best Interest Finding for this sale

[X] During the drafting of this Forest Land Use Plan

[] Stream Crossings (Title 16) Permits are needed per ADF&G Division of Habitat

Surface waters listed above were reviewed by the Department of Environmental Conservation:

[X] During the timber sale planning process

[X] During the agency review conducted for the Best Interest Finding for this sale

[X] During the drafting of this Forest Land Use Plan

Non-classified surface waters are subject to applicable Best Management Practices in 11 AAC 95.

G. Wildlife Habitat:

- [X] Wildlife species and allowances for their important habitats were addressed in writing by the Department of Fish & Game during the Best Interest Finding review.
- [] Wildlife species and allowances for their important habitats were addressed in writing by the Department of Fish & Game during the drafting of this Forest Land Use Plan.

Silvicultural practices to be applied to minimize impacts to wildlife habitat or wildlife management:

- [X] Timber retention concentrations of timber surrounding harvest units, or interspersed within harvest units to provide cover.
- Note: The retention area on 103-90-10550 was set at the break (an average distance of 300ft.) to provide wildlife corridor from tide water to north side of peninsula.
- [] Snag Retention- snags or isolated trees left for cavity nesting species.
- [X] Large Woody Debris concentrations of downed timber or logging debris interspersed within harvest units to provide cover left on site.
- [X] Other actions- A 132ft. no-harvest area was retained around an ADF&G documented bear den site.

H. Cultural and Historical Resource Protection:

- [X] This project was reviewed by the State Historic and Preservation Office (SHPO).
- [X] No artifacts have been reported within the project area(s).
- [] Known or likely sites have been identified and a mitigation plan is in place. (Describe the mitigation actions.)

I. Other Resources Affected by Timber Harvest and Management

[X] There are other resources and areas of concern besides surface water, fish habitat, and wildlife habitat that may be affected. Mitigations actions were addressed in the Best Interest Finding.

	Table 5. Other Anteeted Resources/ Areas of Concern.									
Impacted Resource	Reviewing Agency	Impact/ Mitigation Actions								
Visual	DOF/ DMLW	Change in vegetation, no mitigation								
Geological-Karst	DOF	Change in sediment loading, site specific								
		protection.								

Table 5. Other Affected Resources/ Areas of Concern

Note: Karst Features-

- 1. The entire timber sale area exhibited topography that can be described as Karst. Karst are areas of bedrock limestone that have been eroded by dissolution forming ridges, fissures, and underground drainage systems with caves and sinkholes.
- 2. In general, bedrock limestone was visible in most areas of the proposed harvest; notably visible under overturned stumps in areas of wind throw and topographic breaks. Soils are generally shallow, and the stands of timber have significant evidence of wind throw dispersed throughout the area indicating shallow but well drained soils. Timber consequently is varied in age, size, and quality due to the relatively high natural turnover rate.
- 3. Two notable karst sink holes were identified within the proposed harvest Unit 1. Logging activities will avoid disturbing karst features. Trees will be felled away from and care will be taken to not allow slash and debris from entering karst features. Soil disturbance sounding karst features will be minimized through retaining stumps and existing debris in place within 66ft of these areas to minimize erosion of fines into the karst features.

[] There are no affected resources or areas of concern other than surface water, fish habitat, and wildlife habitat, which are addressed in this Forest Land Use Plan.

IV. Roads and Crossing Structures

A. Road Design, Construction, and Maintenance:

Roads will be designed, constructed, and maintained to prevent significant adverse impacts on water quality and fish habitat (AS 41.17.060(b) (5)), and site productivity (AS 41.17.060(c) (5)). Roads will comply with the best management practices in the Forest Resources and Practices Regulations (11 AAC 95.285 – 95.335)

Roads or other means required for the access and removal of this timber from the harvest area(s) or unit(s) are listed in Table 6.

Table 6. Road Construction and Osc							
	Harvest		Road	Max.	Constructed		
Road ID	Unit	Stations	Туре	Grade	by:	Maintained by:	
1520354	Unit 1&2	35+43	Mainline	NA	Existing	Purchaser	
15203544	Unit 1	57+97	Spur	15%	Purchaser	Purchaser	
152035441	Unit 1	5+95	Spur	15%	Purchaser	Purchaser	
152035442	Unit 1	2+90	Spur	15%	Purchaser	Purchaser	
152035443	Unit 1	3+94	Spur	15%	Purchaser	Purchaser	
15203547	Unit 2	13+39	Spur	15%	Purchaser	Purchaser	

 Table 6. Road Construction and Use

*Note: Roads must be less than 20% grade per 8 AAC 61.1060 Additional Logging Standards

B. Side Slopes / Mass Wasting:

For slopes over 50%, identify indicators of unstable areas (landslide scars, jack-strawed trees, gullied or dissected slopes, high density of streams or zero-order basins, or evidence of soil creep). Attach location specific road design that potentially mitigates identified areas of unstable soils.

Maximum percent side slopes: 45% (With short steeper pitches.)

[] There are no slopes >45%.

[X] There are no indicators of unstable areas where roads will be constructed.

[] Indicators of unstable areas were identified and will be mitigated by actions indicated below:

- [] Full benching will be constructed to help ensure slope stability.
- [] Full benching is not required for roads in this project.
- [] End hauling will be implemented to help ensure slope stability.
- [] End hauling is not necessary for roads in this project.

General Erosion Control:

[X] grass seeding [] erosion control mats

[] wattle [X]

[X] Other: <u>Waterbars</u>

[] not applicable

C. Crossing Structures:

[] No crossing structures are needed within the project area.

[X] No existing drainage structures will be replaced.

[X] Crossing structures will be placed along access roads as described in the table below:

Table 7. Required Drainage and Crossing Structures on Known Surface Waters									
			Bridge Type:			Duration of			
			-Log Stringer	AS 41.17.950		crossing			
	Mile /	Diameter	-Fabricated	Stream	Fish & Game AWC	structure in			
Road	Station	Culvert	-Ice	Classification	Number	place			
15203544	P1014	18" CPP		Non-classified	None	Road life			
			N/A	surface waters	INOILE	Koad IIIe			
15203544	P1015	18" CPP	N/A	Non-classified	None	Road life			
			11/71	surface waters	TADIIC	Road IIIc			

Note: Additional relief drainage structures may be added to proposed road to minimize erosion potential if ground water or surface waters accumulate near the road.

CPP= High Density Polyethylene Corrugated Plastic Pipe or equivalent.

D. Road Closure:

Roads constructed for the timber sale that are left open will be subject to maintenance standards under 11 AAC 95. 315. Otherwise, roads constructed for the timber sale will be closed, subject to standards under 11 AAC 95.320.

I able 8. Koad Closures						
Road ID	Unit	All	Estimated	Projected Road Use after Timber		
		Season/Winter	Closure	Harvest		
			Date			
15203544	Unit 1	All Season	End of	Silviculture		
15205544	Onit I	All Season	Harvest.	Shviculture		
			That vest.			
152035441	Unit 1	All Season	End of	Silviculture		
			Harvest.			
152035442	Unit 1	All Season	End of	Silviculture		
			harvest.			
152025442	TT.: 4 1	A 11 C	E. 1.f	Silviculture		
152035443	Unit 1	All Season	End of	Silviculture		
			harvest.			
15203547	Unit 1	All Season	End of	Silviculture		
			Harvest.			

 Table 8. Road Closures

E. Material Extraction:

[] There will be no material extraction sites in the project area.

[] Material extraction and associated overburden disposal will be located outside of riparian areas and muskegs. Material extraction and disposal will be located as shown on the operation map, in a manner that prevents runoff from entering surface waters.

[X] Other: Material extraction and associated overburden disposal will be located outside of riparian areas (NA) and muskegs. Material extraction and disposal locations will be selected by the purchaser and approval will be required by the Division of Forestry. Material sites will generally be on or adjacent to the identified roads.

F. Other Resources Affected by-Roads or Material Extraction:

List resources other than water, habitat or cultural resources potentially impacted by road construction, and indicate how impacts will be mitigated. Other affected resources could be, but are not limited to mining claims, scenic areas, recreational trails, etc.

Table 7. Other Anceted Resources						
Impacted Resource	Reviewing Agency	Impact/ Mitigation Actions				
Karst	DOF	Drainage Pattern/ Pronounced features				
		have been avoided, minimize road surface				
		drainage concentrations and length of				
		time the road is open to traffic. Roads will				
		be promptly closed at the end of harvest				
		activity.				

Table 9. Other Affected Resources

V. Approvals

This Draft Forest Land Use Plan has been reviewed by the Division of Forestry and provides the information necessary for public and by agency review of the project described in this document as required by AS 38.05.112.

Gregory D. Staunton Area Forester

Date

If you have any questions, please contact the Southeast Area Office at (907) 225-3070 or e-mail <u>greg.staunton@alaska.gov</u>.

V. Approvals

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This Draft Forest Land Use Plan has been reviewed by the Division of Forestry and provides the information necessary for public and by agency review of the project described in this document as required by AS 38.05.112.

8/14/19 Gregory D. Staunton

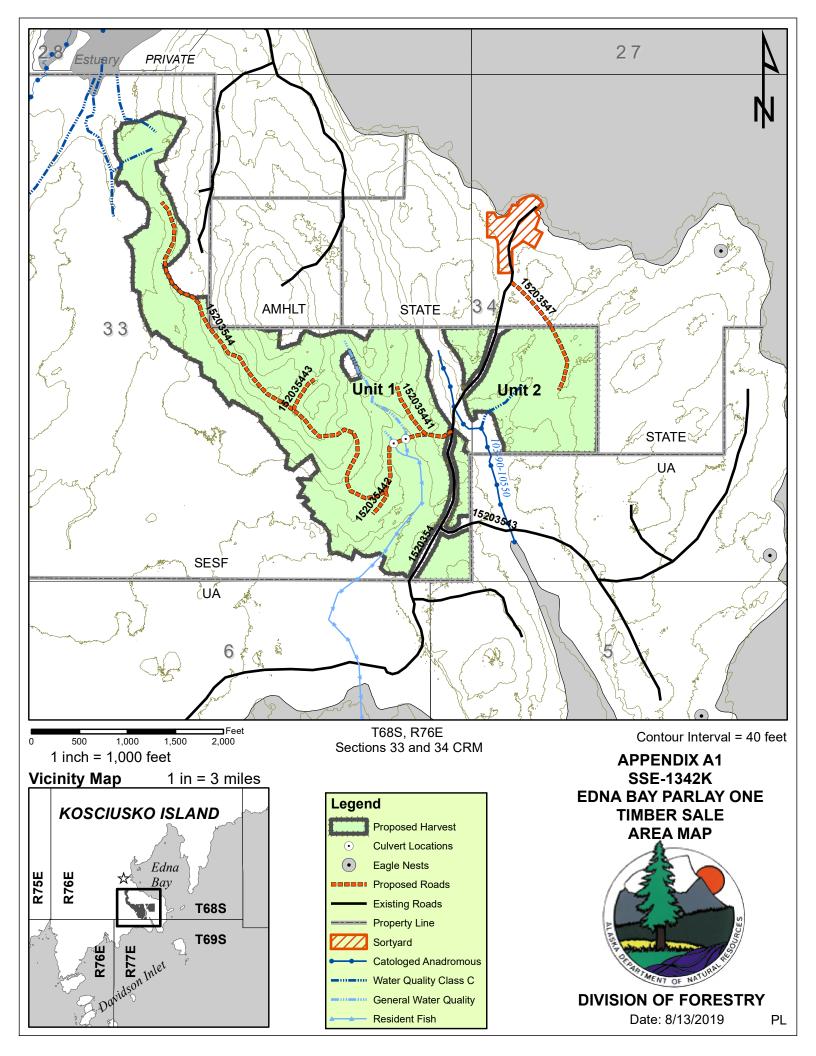
Area Forester

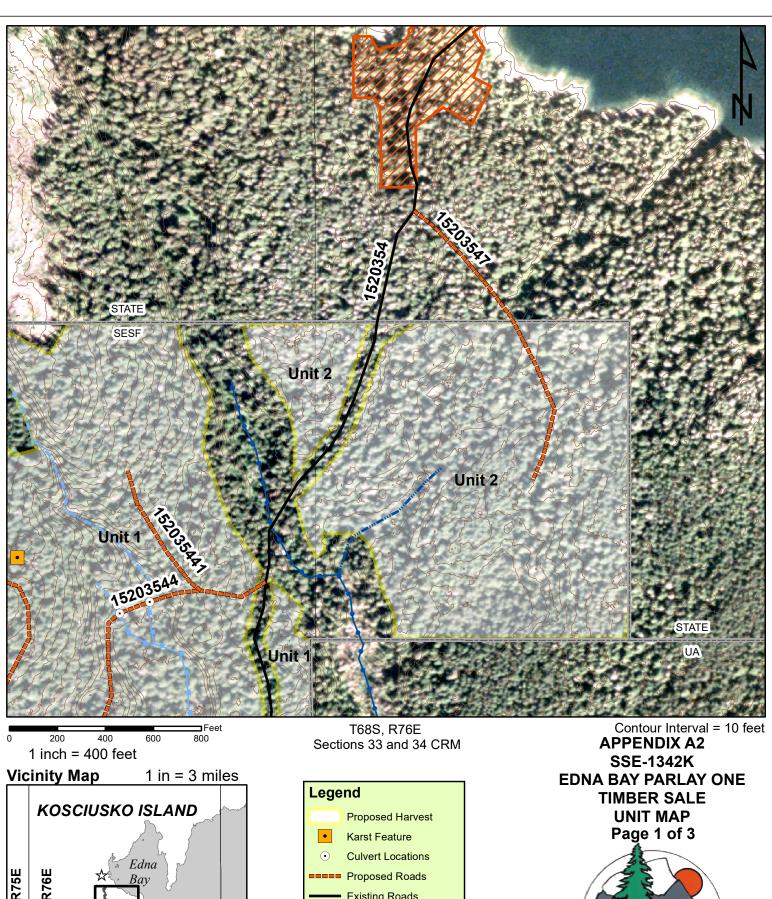
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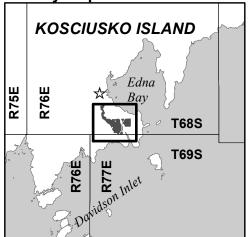
If you have any questions, please contact the Southeast Area Office at (907) 225-3070 or e-mail greg.staunton@alaska.gov.

Appendix A: Edna Bay Parlay Timber Sale Maps

Appendix A1 Edna Bay Parlay One Area Map (1 page) Appendix A2 Edna Bay Parlay One Unit Maps (3 pages)

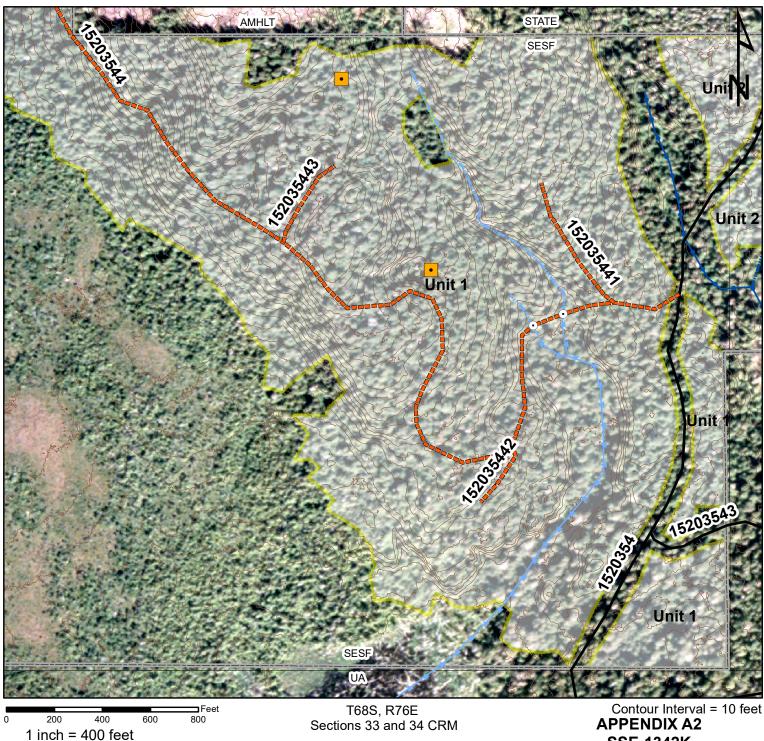


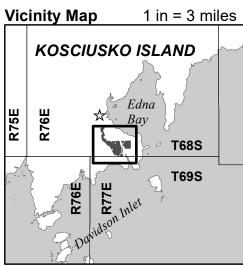






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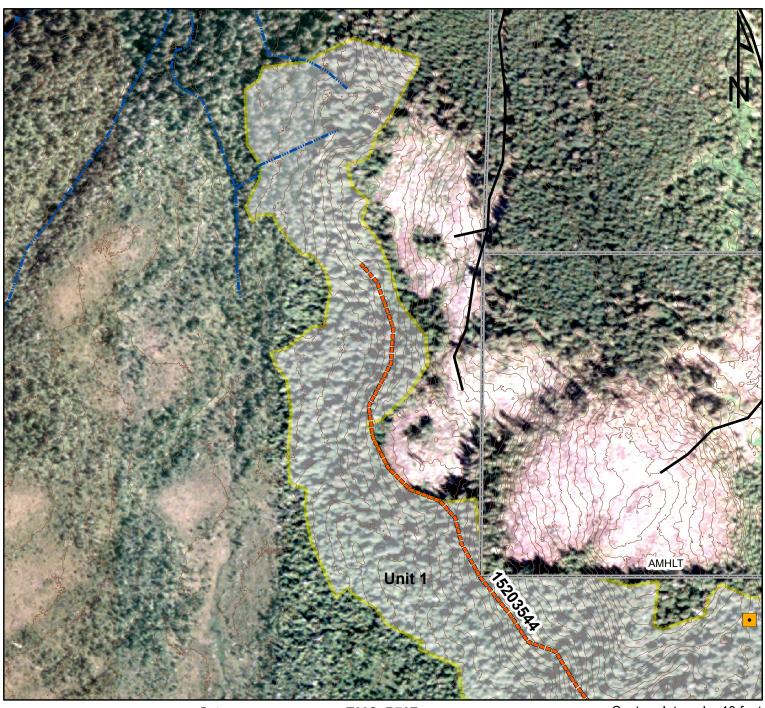


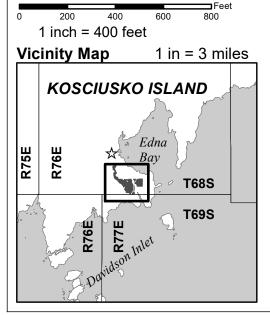
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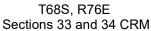


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Appendix B: Supporting Information

Note: Silvicultural and stand information has been described in the previously published BIF.

Alaska Forest Practices and Regulations. http://forestry.alaska.gov/forestpractices

Forest Road and Bridge Standards.

http://forestry.alaska.gov/Assets/uploads/DNRPublic/forestry/pdfs/resources/forest_road_st andard_design_20151231.pdf

http://forestry.alaska.gov/Assets/uploads/DNRPublic/forestry/pdfs/resources/forest_bridge_standard_design_20150128.pdf

No ADFG fish way permits are required.

Appendix C: Appeal Statutes and Regulations

(Reserved)

Appendix D: DRAFT FLUP Public Comment

(Reserved)