



WASHINGTON STATE DEPARTMENT OF
Natural Resources

Forest Practices Application/Notification
Office Checklist Page 1
Northwest Region

FPA/N #: 2815343
 Received Date: 8-12-16
 WDFW Concurrence Due Date: -
 WDFW Concurrence Review Completed: -
 Comments Due Date: 8-26-16
 Decision Due Date: 9-11-16
 FP Forester: SKY30
 Shutdown Zone: 458
 RMAP #: RA800010L

FPA/N CLASSIFICATION: [] II III [] IVG [] IVS RMAP Exempt: [] 80/20 [] No Forest Roads [] Ag [] LLO
 Landowner Name: DNR Project Name: Pathfinder Ctt
 WRIA: Snobomash WAU: Skykomish River
 WRIA: _____ WAU: _____
 Legal Description: Stns 13, 14-27-9E; 18-27-10E
 Activity Type: Harvest 134.7 ac Spray _____ ac Stream Crossing(s) _____
 Road Construction 7445 ft Road Abandonment 5024 ft Rock Pit 2 ac

ALTERNATIVE PRESCRIPTIONS
 Alternate Plan Habitat Conservation Plan
 Ten-Year Forest Management Plan Landowner Option Plan for Northern Spotted Owl
 Columbia River Gorge National Scenic Area Cooperative Habitat Enhancement Agreement
 Watershed Analysis: _____

RESOURCE REVIEW
 Unstable Slopes (Risk: Highway, Water; _____) Bull Trout Overlay
 Soils Map (Highly Erodible & Very Unstable) HCP Bull Trout Population
 SLPSTAB Bald Eagle nest or roost within 660 feet
 Landslide Hazard Zonation Group A or B Water Supply (TRAX code DM or MU)
 Landslide Polygon Hatchery (TRAX code S)(Name: _____)
 Rain-on-Snow and Outside Approved WA Even-Aged Harvest greater than 120 Acres
 Hydric Soils Ground-based Equipment on Slopes greater than 40%
 Wetland Forested, [] A, B Road Construction on Slopes greater than 65%
 In WMZ of [] A, or [] B Wetland Saltwater Islands (Name: _____)
 In RMZ/ELZ of Type S, F, [] N water
 Water Verification

ASSOCIATED NON-SCANNED DOCUMENTS – On file with the FPA/N at the region office.
 SEPA Checklist/Documents Large Landowner Road Maintenance and Abandonment Plan

ASSOCIATED SCANNED DOCUMENTS
 Conversion Option Harvest Plan Hardwood Conversion Form
 FPHP Plans & Specifications Wetland Mitigation Plan
 Qualified Expert Report Water Protocol Surveys [] Modification
 Natural Regeneration Plan Form# _____
 Shoreline Permit Water Classification Worksheet
 Marbled Murrelet Form Shade Documentation (Stream Shade Assessment Worksheet)
 FPBM Appendix(s) _____ Watershed Analysis Worksheet
 Small Landowner RMAP Checklist DFC Printout
 CMZ Assessment Form Slope Stability Informational Form

EARR Tax Credit Yes [] No Form completed by L.U.
ADDITIONAL COMMENTS:



Forest Practices Application/Notification Western Washington

For DNR Region Office Use Only	
FPA/N #:	2815343
Region:	NW
Received Date:	8-12-2016

Pathfinder CH #93900

PLEASE USE THE INSTRUCTIONS TO COMPLETE THIS APPLICATION. TYPE OR PRINT IN INK.

1. Landowner, Timber Owner and Operator

Legal Name of LANDOWNER	Legal Name of TIMBER OWNER (if different than Landowner)	Legal Name of OPERATOR (if different than Landowner)
Department of Natural Resources		
Mailing Address: 919 N. Township St.	Mailing Address:	Mailing Address:
City, State, Zip Sedro-Woolley, WA 98284	City, State, Zip	City, State, Zip
Phone (360)856-3500	Phone ()	Phone ()
Email:	Email:	Email:

2. Contact Person

Contact Person: Laurie Bergvall	Phone (360)856-3500 Email: laurie.bergvall@dnr.wa.gov
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3. Landownership information: See instructions

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a. No Yes Are you a small forest landowner per RCW 76.09.450?

AUG 12 2016

If yes, continue to b.

b. No Yes Is your entire proposed harvest area on a single contiguous ownership consisting of one or more parcel?

4. If you are harvesting timber, enter the Forest Tax Reporting Account Number of the Timber Owner:

For tax reporting information or to receive a tax number, call the Department of Revenue at 1-800-548-8829.

5. Are you substituting prescriptions from an approved state or federal conservation agreement or watershed analysis?

No Yes Write 'HCP' or 'Using Prescriptions' in tables that apply. Attach or reference prescriptions and/or crosswalks on file at the Region office. See attached HCP

6. What is the legal description of your forest practices?

Section	Township	Range	E/W	Tax Parcel Number	County
13	27	09	E	-----	Snohomish
14	27	09	E	-----	Snohomish
7	27	10	E	-----	Snohomish
18	27	10	E	-----	Snohomish

*Does not include legal description for pre-haul maintenance; it is not a Forest Practices activity.

7. When are you planning to begin work on the proposed activity? In 6+ months

8. Is the taxpayer eligible for the EARR Tax Credit?

No Yes

9. Have you reviewed this forest practices activity area to determine whether it may involve historic sites and/or Native American cultural resources? Read the instructions before answering this question.

No Yes See FPA narrative

10. Do you have a DNR approved Road Maintenance and Abandonment Plan (RMAP)?

a. No Yes List the RMAP number: R2800010L

If no, continue to b.

b. No Yes Is a Checklist RMAP required (see instructions)?

11. Are there potentially unstable slopes or landforms in the area of your forest practices activity?

No Yes – attach Slope Stability Informational Form. If applicable, attach geotechnical report, the SEPA Environmental Checklist, HCP, or Watershed Analysis prescriptions.

12. Are there potentially unstable slopes or landforms around the area of your forest practices activity?

No Yes – attach Slope Stability Informational Form. If applicable, attach geotechnical report, HCP, or Watershed Analysis prescriptions. See FPA narrative

13. Is this forest practice application/notification (answer every question):

a. No Yes Within city limits or inside an urban growth area? If yes, see instructions for additional required documents.

b. No Yes For road work that is included in an approved Road Maintenance and Abandonment Plan (RMAP)?

c. No Yes Within a public park? If yes, include SEPA Environmental Checklist or SEPA Determination - except for harvest/salvage of less than 5,000 board feet within a developed public park.

d. No Yes Within 500 feet of a public park? Park name: Forks of The Sky State Park

e. No Yes In an approved Conversion Option Harvest Plan (COHP) from the local government? If yes, include a copy. This only applies to proposals within urban growth areas.

f. No Yes Within 200' of the Ordinary High Water Mark (OHWM) or floodway of Type S water? If yes, check with the county or city to determine whether a substantial development permit is required under the local shorelines master plan.

g. No Yes A request for a multi-year permit? If yes, length requested: 4 years or 5 years. Not everyone qualifies for a multi-year permit. See instructions for details.

- h. No Yes An Alternate Plan? If yes, include a copy.
- i. No Yes Within 50 miles of saltwater and do you own more than 500 acres of forest land in Washington State? If yes, include Marbled Murrelet Form or attach/reference HCP prescriptions.
- j. No Yes In or directly adjacent to a potential Channel Migration Zone (CMZ)? If yes, include CMZ Assessment Form. Attach/reference applicable HCP and/or Watershed Analysis prescriptions.

***** **If not working in or over typed waters, skip to Question 18** *****

You are required to verify Type Np and Ns water types within 200 feet of your proposed forest practices activities prior to submitting a Forest Practices Application / Notification. Use the Additional Information section, additional pages, the Water Type Classification Worksheet, and/or a Water Type Modification form to explain how you verified water types. See Water Typing Requirements in the instructions.

Prior to answering Questions 14-17 in this section please refer to the Forest Practices Application Instructions and Forest Practices Board Manual Section 5.

14. Are you proposing any of the following projects NOT permitted by current HPAs from WDFW?

- a. No Yes Installing, replacing, or repairing a culvert at or below the bankfull width of Type S or F water(s) that exceeds a five percent gradient?
- b. No Yes Constructing, replacing, or repairing a bridge at or below the bankfull width of unconfined streams in Type S or F water(s)?
- c. No Yes Placing fill material within the 100-year flood level of unconfined streams in Type S or F water(s)?

15. Have you consulted with DNR and/or WDFW about the proposed hydraulic project(s) in or over Type S or F water? No Yes

16. If installing, replacing, removing, or maintaining structures in or over any typed water, complete the table below. Type S and F waters require detailed plan information. Provide plan details in Question 31 or attach plan to the FPA/N. Provide crossing locations and identifiers on your Activity Map. A detailed plan with profiles may also be required for more complex hydraulic projects in Type N Waters per WAC 222-24-042(2).

Crossing Identifier (letter and/or number)	Water Type (S, F, Np, Ns)	*Existing HPA Number (if applicable)	HPA Expiration Date (if applicable)	Planned Activity (install, replace, remove, temporary, structure maintenance)	Structure (culvert, bridge, ford**, punchon, arch, other)	Proposed Size (dimensions of structure)	Culvert Design Method (No-slope, Stream-sim, Hydraulic, Other) (F and S only)	Channel Bed Width (ft) (F and S only)	Stream Gradient (%) (F and S only)	RMAP Project (Y or N)	FFPP Project (Y or N)

*Existing HPAs issued by WDFW will be complied and enforced by WDFW until expiration. Plan details are not required for hydraulic projects permitted with an existing HPA (see instructions).

** Fords and equipment crossings on Type S and F Waters may result in an unauthorized incidental take of certain endangered or threatened fish species. For more information, see 'Background for the State's Incidental Take Permits for certain endangered and threatened fish species' following Question 24 of the FPA/N Instructions.

17. If conducting any of the following activities in or over typed water, complete the table below. Some activities will require identifiers on the Activity map and/or more information in Question 31. See instructions.

*Activity	Type S Water	Type F Water	Type Np Water	Type Ns Water
Equipment Crossing**				
Suspending Cables				
Cable Yarding				
LWD Placement/Removal				
Beaver Dam Removal				
Felling and Bucking				
Other (describe in Question 31)				

*Existing HPAs issued by WDFW will be complied and enforced by WDFW until expiration. Plan details are not required for hydraulic projects permitted with an existing HPA (see instructions).

** Fords and equipment crossings on Type S and F Waters may result in an unauthorized incidental take of certain endangered or threatened fish species. For more information, see 'Background for the State's Incidental Take Permits for certain endangered and threatened fish species' following Question 24 of the FPA/N Instructions.

18. If constructing or abandoning forest roads, complete the table below. Show the road locations and identifiers on the Activity Map. Include abandonment plans for temporary roads and abandonment projects.

Road Identifier (name, number)	Road Construction		Road Abandonment	
	Length (feet)	Steepest Side-slope (%)	Length (feet)	Abandonment Date
See FPA Narrative				

19. If depositing spoils and/or expanding or developing a rock pit for forestry use, complete the table below. Show locations and identifiers on the Activity Map.

Spoil Area Identifier (letter, number)	Amount of Spoils Deposited (cubic yards)	Rock Pit Identifier (name, number or letter)	Acres of New Rock Pit Developed	Acres of Existing Rock Pit Expanded
See FPA Narrative				

20. If operating in or within 200 feet of a wetland, complete the table below. Show the boundaries of each wetland, along with its identifier, and WMZ on the Activity Map. See instructions for information.

Wetland Identifier (number, letter)	Wetland Type (A, B, or Forested)	Planned Activities in Wetland	Planned Activities in Maximum Width WMZ	Total Wetland Area (acres)	How many acres will be drained?	How many acres will be filled?
See Aquatics Addendum						

***** **If not harvesting or salvaging timber, skip to Question 29** *****

21. If harvesting or salvaging timber, complete the table below. Show all harvest areas and unit numbers on the Activity Map. For even-aged harvest units, also show surrounding stand information on the Activity Map.

Unit Number	Harvest Type (Even-aged, Uneven-aged, Salvage, Right-of-Way)	Biomass Harvest (Y/N)	Harvest Method (Rubber Tired Skidder, Tracked Skidder, Dozer, Shovel, Full Suspension Cable, Lead-end Suspension Cable, Helicopter, Animal, Chipper-forwarder, Slash Bundler)	Acres to be Harvested	Volume to be Harvested (mbf)	Volume to be Harvested (biomass tonnage)	Volume to be Harvested (%)	Steepest Slope in Harvest Unit (%)
1	Even-aged	N	Ground-Based	56.9	2,000	--	95	45
2*	Even-aged	N	Ground-Based	77.8	3,000	--	95	35
			TOTAL	134.7	5,000			

*Includes 0.6 acres of right-of-way.

22. Reforestation. Check the appropriate box(es).

Planting. Tree Species: Douglas-fir, western redcedar

Natural. Include a Natural Regeneration Plan

Not required because of one or more of the following:

I am converting some or all of this land to non-forest land in the next 3 years or lands are exempted under WAC 222-34-050.

Individual dead, dying, down, or wind-thrown trees will be salvaged.

Trees are removed under a thinning program reasonably expected to maximize the long-term productivity of commercial timber.

I am leaving at least 100 vigorous, undamaged, and well-distributed saplings or merchantable trees per acre.

An average of 190 tree seedlings per acre are established on the harvest area and my harvest will not damage it.

Road right-of-way or rock pit development harvest only.

**** If you own MORE than 80 forested acres in Washington, skip to Question 27 ****

23. Are you using the exempt 20-acre parcel riparian management zone (RMZ) rule on type S, F, or Np waters?

No If no, continue to Question 27.

Yes If yes, continue to Question 24. See instructions for qualifications and information.

24. Choose the answer below that best fits your situation. Show all RMZs on the Activity Map.

a. ALL of the following apply to me and my land: (If no, answer b.)

- Between June 5, 2006 and today's date I have always owned less than 80 acres of forestland in Washington.

- Between June 5, 2006 and today's date this parcel has always been 20 acres or less of contiguous ownership. See RCW 76.09.020 for definition of 'contiguous'.

- Between June 5, 2006 and today's date this parcel has always been owned by me or someone else that has owned less than 80 acres of forestland in Washington.

b. ONE OR MORE of the following apply to me and/or my land (check all that apply):

- I currently own more than 80 acres of forestland in Washington.
- Between June 5, 2006 and today's date I have owned more than 80 acres of forestland in Washington.
- Between June 5, 2006 and today's date this parcel has been a part of more than 20 acres of contiguous ownership. See RCW 76.09.020 for definition of 'contiguous'.
- Between June 5, 2006 and today's date this parcel has been owned by someone that has owned more than 80 forested acres in Washington.

If any of the statements in (b) above apply AND you use the 20-acre exempt RMZ rule, you are NOT authorized under the State's Incidental Take Permits (see explanation in FPA instructions under Questions 24).

25. If harvesting within 115 feet of a Type S or F water on an exempt 20-acre parcel, complete the table below. Show RMZs and stream segment identifiers on the Activity Map. If you are harvesting within 75 feet or within the maximum RMZ (whichever is less), stream shade must be assessed and met following harvest. Describe how stream shade was determined to be met, using the 'Stream Shade Assessment Worksheet' if necessary.

Stream Segment Identifier (letter)	Water Type (S, F)	Segment Length (feet)	Bankfull Width (feet)	Maximum RMZ Width (feet)	Are you harvesting within the maximum RMZ? (Y or N)

26. Are you harvesting within 29 feet of a Type Np water on a 20-acre exempt parcel?

- No Continue to Question 29.
- Yes See instructions and describe leave tree strategy in Question 31. Then continue to Question 29.

27. If harvesting within 200 feet of any of Type S or F water, complete the table below. Include DFC for all inner zone harvests unless you have an HCP prescription. Show RMZs, CMZs, and stream segment identifiers on the Activity Map. If you are harvesting within 75 feet or within the maximum RMZ (whichever is less), stream shade must be assessed and met following harvest. Describe how stream shade was determined to be met, using the 'Stream Shade Assessment Worksheet' if necessary.

Stream Segment Identifier (letter)	Water Type (S or F)	Site Class (I - V)	Stream Width (feet)	Is there a CMZ? (Y/N)	RMZ Harvest Code(s) (see instructions)	DFC Run Number	Total width of RMZ (feet)
See Aquatics Addendum							

28. If harvesting within 50 feet of Type Np water, complete the table(s) below. Show RMZs and stream segment identifiers on the Activity Map.

Stream Segment Identifier (letter)	Total Stream Length in Harvest Unit (feet)	Length of No-Harvest, 50-foot Buffers in Harvest Unit (feet)

Stream Segment Identifier (letter)	Total Stream Length in Harvest Unit (feet)	Length of No-Harvest, 50-foot Buffers in Harvest Unit (feet)

29. How are the following marked on the ground? (Flagging, paint, road, fence, etc.)

Harvest Boundaries: White "Timber Sale Boundary" tags, adjacent young stands, DF-ML road
 Clumped Wildlife Reserve Trees/Green Recruitment Trees: Blue paint and yellow "Leave Tree Area" tags
 Right-of-way limits/road centerlines: Centerlines marked with pink and black striped flagging
 Stream Crossing Work: N/A
 Riparian Management Zone Boundaries and Leave/Take Trees: N/A
 Channel Migration Zone: N/A
 Wetland Management Zone Boundaries and Leave/Take Trees: N/A

30. Are you converting the land to non-forestry use within 3 years of harvest?

No Yes If yes, include your SEPA Determination and/or SEPA checklist.

31. Additional Information (attach additional pages if necessary): For hydraulic projects in or over Type S, F, or complex N water(s) see instructions for required plan information.

See Attached FPA Narrative

32. We acknowledge the following:

- The information on this application/notification is true.
- We understand this proposed forest practice is subject to:
 - The Forest Practices Act and Rules AND
 - All other federal, state or local regulations.
- Compliance with the Forest Practices Act and Rules does not ensure compliance with the Endangered Species Act or other federal, state or local laws.
- If we said that we would not convert the land to non-forestry use, the county or city may deny development permits on this parcel for the next 6 years.
- The following may result in an unauthorized incidental take of certain endangered or threatened fish species:
 - Conversion of land to non-forestry use.
 - Harvesting within the maximum RMZ on a 20-acre exempt parcel that was acquired after June 5, 2006.
 - Equipment Crossings/Fords in or over Type S and F Waters.
- Inadvertent Discovery – Chapters 27.44, 27.53, 68.50 and 68.60 RCW
 - If you find or suspect you have found an archaeological object or Native American cairn, grave, or glyptic record, immediately cease disturbance activity, protect the area and promptly contact the Department of Archaeology and Historic Preservation at 360 586-3077.
 - If you find or suspect you have found human skeletal remains, immediately cease disturbance activity, protect the area, and contact the County Coroner or Medical Examiner and local law enforcement as soon as possible. Failure to report human remains is a misdemeanor.

The landowner understands that by signing and submitting this FPA, he/she is authorizing the Department of Natural Resources to enter the property in order to review the proposal, inspect harvest operations, and monitor compliance for up to three years after its expiration date. RCW 76.09.150

Signature of LANDOWNER  Print Name: John VanHollebeke Date:	Signature of TIMBER OWNER* (If different than landowner) Print Name: Date:	Signature of OPERATOR (If different than landowner) Print Name: Date:
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* NOTE: If you are a "Perpetual Timber Rights Owner," and are submitting this without the Landowner's Signature, provide written evidence the landowner has been notified.

Please make a copy of this FPA/N for your records. If this FPA/N contains a hydraulic project requiring WDFW concurrence review, it will not be available online for public review until after the WDFW concurrence review period.

FPA Narrative

This proposed activity is being conducted on lands covered by the Department's multi-species HCP. These planned activities are consistent with our approved HCP dated September 1997 and associated Incidental Take Permits. See the attached HCP checklist for habitats and species both covered by our HCP agreement and specifically addressed with this proposal. Additionally, attached are DNR proprietary HCP/FPA substitute Addendums for Aquatic Resources, Northern Spotted Owl and Marbled Murrelets. This proposal also complies with the letter of agreement dated February 23, 2007 between DNR state lands and the US Fish and Wildlife Service.

Question #9:

A field and office review was conducted by a State Lands cultural resource technician and no cultural or historic resources were identified within the proposal area. The Tulalip Tribes, Stillaguamish Tribe of Indians, and Snoqualmie Indian Tribe were contacted on June 9, 2016. A response has yet to be received from the tribes.

If any cultural resources are discovered during forest activity operations, a DNR archaeologist will be notified and will follow the department's "Cultural Resources Inadvertent Discovery Guidelines" procedure.

Question #12:

A State Lands Licensed Engineering Geologist, a Forest Practices Qualified Expert, reviewed the proposed Pathfinder timber sale and found no Rule Identified Landforms in or around the harvest area.

The Forest Practices Landslide Inventory GIS layer shows polygon #16836 approximately 1,400 feet to the south-southeast of Unit 1 of the Pathfinder timber sale. This polygon and its associated geologic features were evaluated as part of the field review for the Deer Wrap timber sale (FPA #2814443). A State Lands Licensed Engineering Geologist, a Forest Practices Qualified Expert, prepared a Geologic Letter Report dated February 6, 2015. This letter was submitted to Forest Practices with the Deer Wrap timber sale FPA (#2814443, see also Informal Conference Note #135421).

Question #18:

Any roads to be built then abandoned (also known as temporary road) that are listed in the table for Question #18, are “optional construction roads”. Of the length listed in the table, zero feet up to the entire length listed may be built. For further information please see the road plan associated with the timber sale, on file at the Northwest Region Office.

Road Identifier (Name, Number)	Road Construction		Abandonment Plan	
	Length (feet)	Steepest Side-slope (%)	Length (feet)	Abandonment Date
DF-0601*	1872	40	--	--
DF-04	549	25	--	--
DF-05* ² , * ³	1367	20	1367	03/31/2019
DF-0501* ³	321	20	321	03/31/2019
DF-33* ² , * ³	1562		1562	03/31/2019
DF-33* ³	467	30	467	03/31/2019
DF-3301* ² , * ³	987		987	03/31/2019
DF-3301* ³	320	30	320	03/31/2019

*Reconstruction work is located on an unimproved orphaned grade.

*² Reconstruction work is located on an orphaned road grade that has been improved for use as a recreation trail. These roads shall be left in a condition that permits continued use as a recreational trail.

*³LIGHT ABANDONMENT FOR TRAIL CONVERSION - Abandoned roads are to be closed for forest practices activities but will continue to be used as recreational trails and for trail construction and maintenance.

- Culverts are not removed, will be maintained as recreation trails.
- Remove berms except as designed.
- Clear any impediments from road work or harvest activity located on existing trails.
- Block the road by constructing Trailhead Riprap Barricades and Speed Control Riprap Barricades. Use Oversized Rip Rap in locations so that four wheel highway vehicles cannot pass the point of abandonment. In particular, on the following DF-05 and DF-0501 (Do not block the existing trail), riprap will be placed to completely block the entire width of the road prism.
- As needed, a vehicular turn-around near the point of abandonment will be constructed.
- Apply grass seed to all exposed soils resulting from the abandonment work

Question #19:

Spoil Area Identifier <i>(Number, Letter)</i>	Spoils Deposited <i>(Cubic Yards)</i>	Rock Pit Identifier* <i>(Name, Number, Letter)</i>	Acres of New Rock Pit Developed	Acres of Existing Rock Pit Expanded
		DF-21 Gravel Pit		0.1
		DF-3002-0101 Hard Rock Pit		0.1

Additional pit(s) may be developed/utilized along haul route or constructed roads. These will be less than 0.5 acre, and located outside RMZs or sensitive areas.

Question #31:

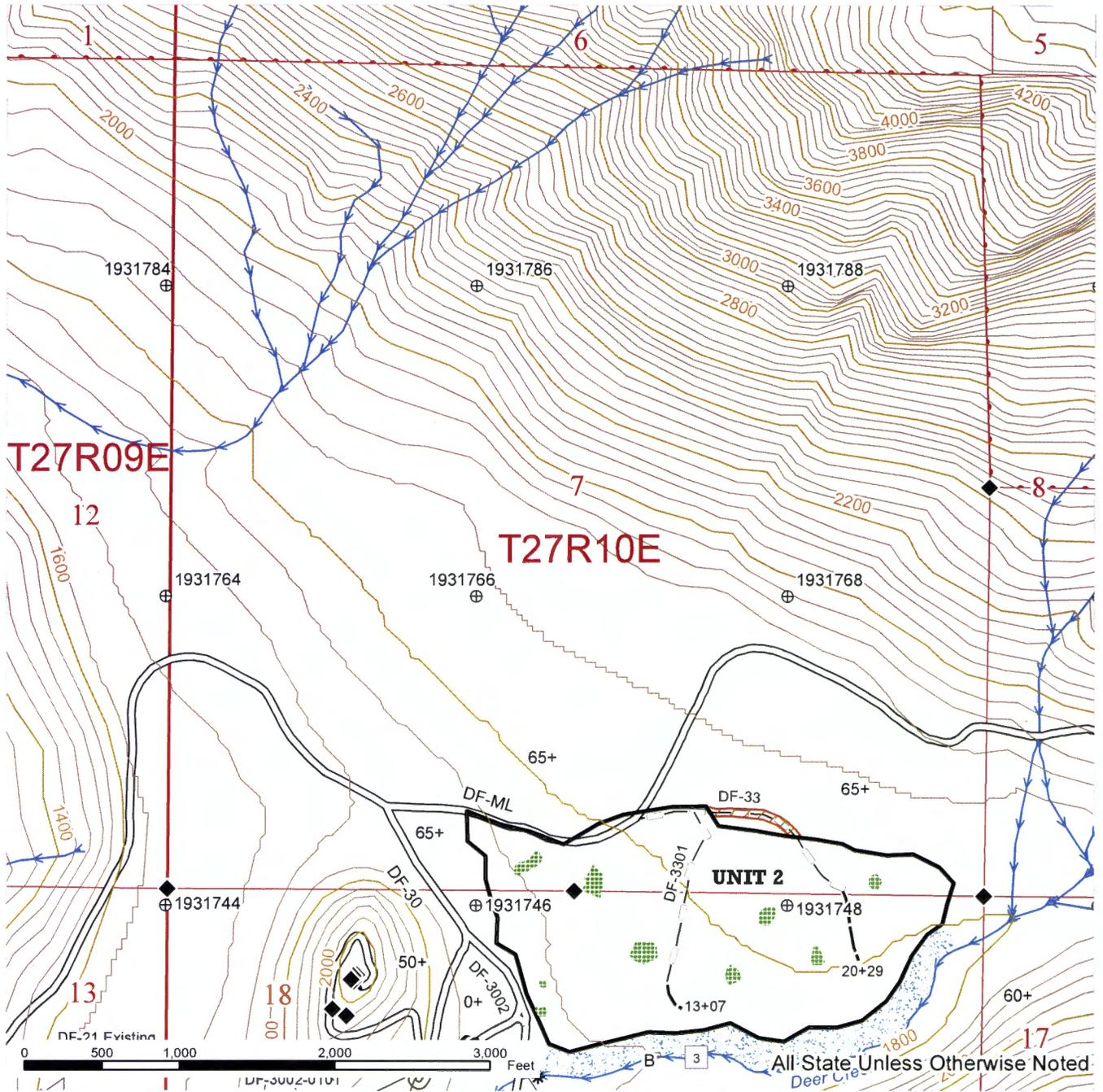
Activity Map – Leave Tree locations depicted are approximate. Leave trees may be exchanged or traded to locations other than mapped on the Activity Maps to facilitate operational feasibility. Non-tradeable leave trees are marked with two blue bands around the bole.

During a site visit to Unit 2 of the proposed Pathfinder timber sale on June 28, 2016, the TFW Program manager from the Tulalip Tribes and a DNR State Lands Forester evaluated a topographic feature, adjacent the Unit, resembling a stream drainage to determine if it was an active stream channel. After evaluation of the feature, it was determined that it was likely a relic stream channel formed by glacial runoff. Upon further investigation, evaluators identified upland vegetation and an organic soil layer within the channel, and an absence of riparian vegetation. The feature also contained sandy gravel deposits on top of the organic soils layer and upland vegetation. It was determined that the sandy gravel deposits were placed in the relic stream channel when the Deer Creek Mainline forest road was washed out by a flooding event. This event temporarily diverted water from the main course of Deer Creek down the ditch-line of the road and eventually into the relic stream channel. Since then, the ditch-line of the road has been rehabilitated and water has returned to the natural course of Deer Creek, therefore the topographic feature in question does not require any protection. See also ICN #135489.

FOREST PRACTICES ACTIVITY MAP

SALE NAME: PATHFINDER CH
 APPLICATION #: None

COUNTY(S): SNOHOMISH
 TOWNSHIP(S): T27R09E, T27R10E

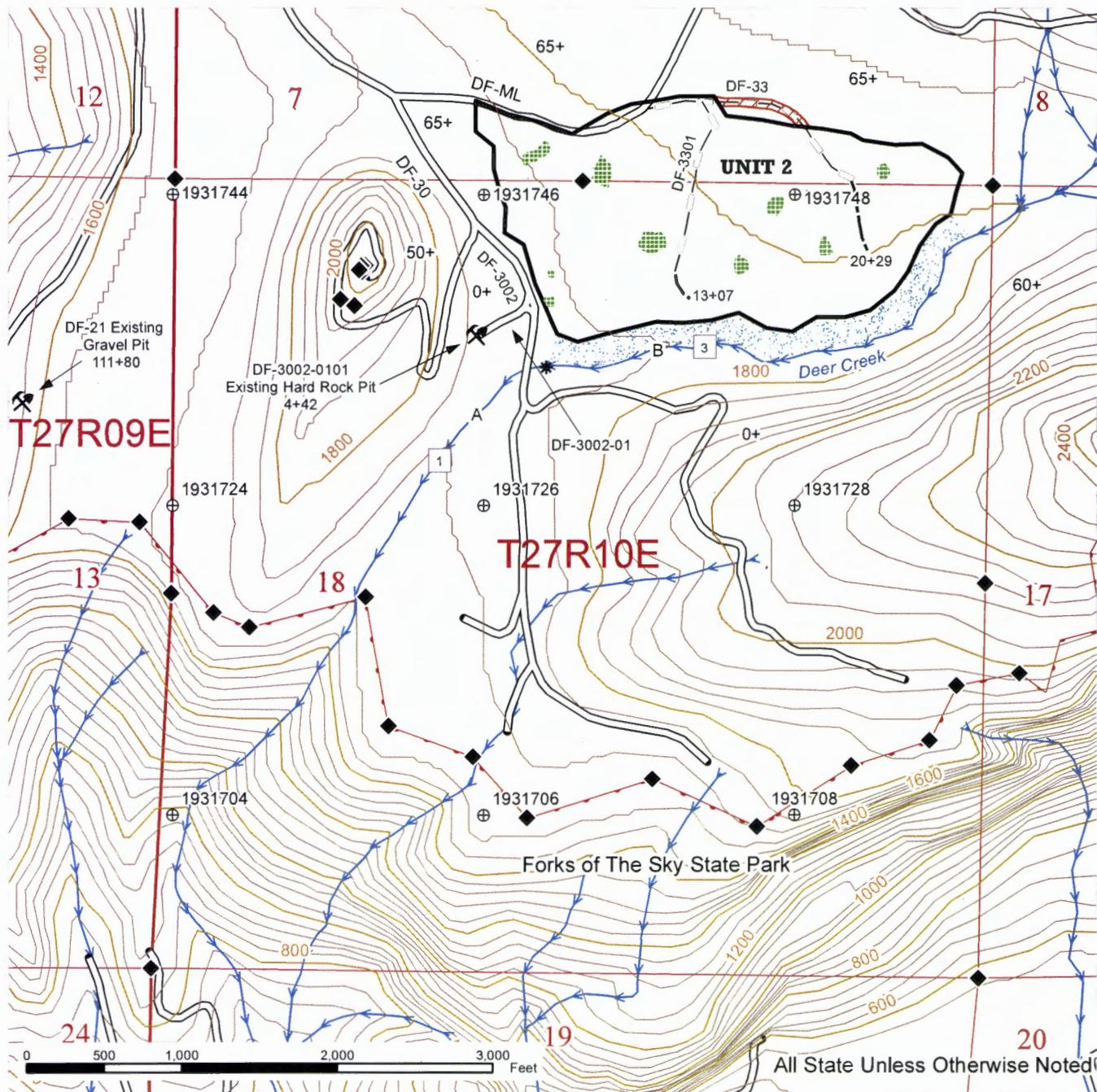


Timber Sale Unit	Highway	Streams
Right-of-Way	Optional Reconstruction = Construction	Stream Type
Wetland Mgt Zone	Required Reconstruction = Construction	Stream Type Break
Open Wetland	Existing Roads	Gate
Riparian Mgt Zone	Temporary Construction (see FPA Narrative)	Existing Rock Pit
Leave Tree Area	Public Land Survey Sections	Tics - 2000' Interval
A, B, C... Stream Identifier	Public Land Survey Townships	Monumented Corners
	DNR Managed Lands	

FOREST PRACTICES ACTIVITY MAP

SALE NAME: PATHFINDER CH
 APPLICATION #: None

COUNTY(S): SNOHOMISH
 TOWNSHIP(S): T27R09E, T27R10E



Timber Sale Unit	Highway	Streams
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Prepared By: jvan490 07/13/2016

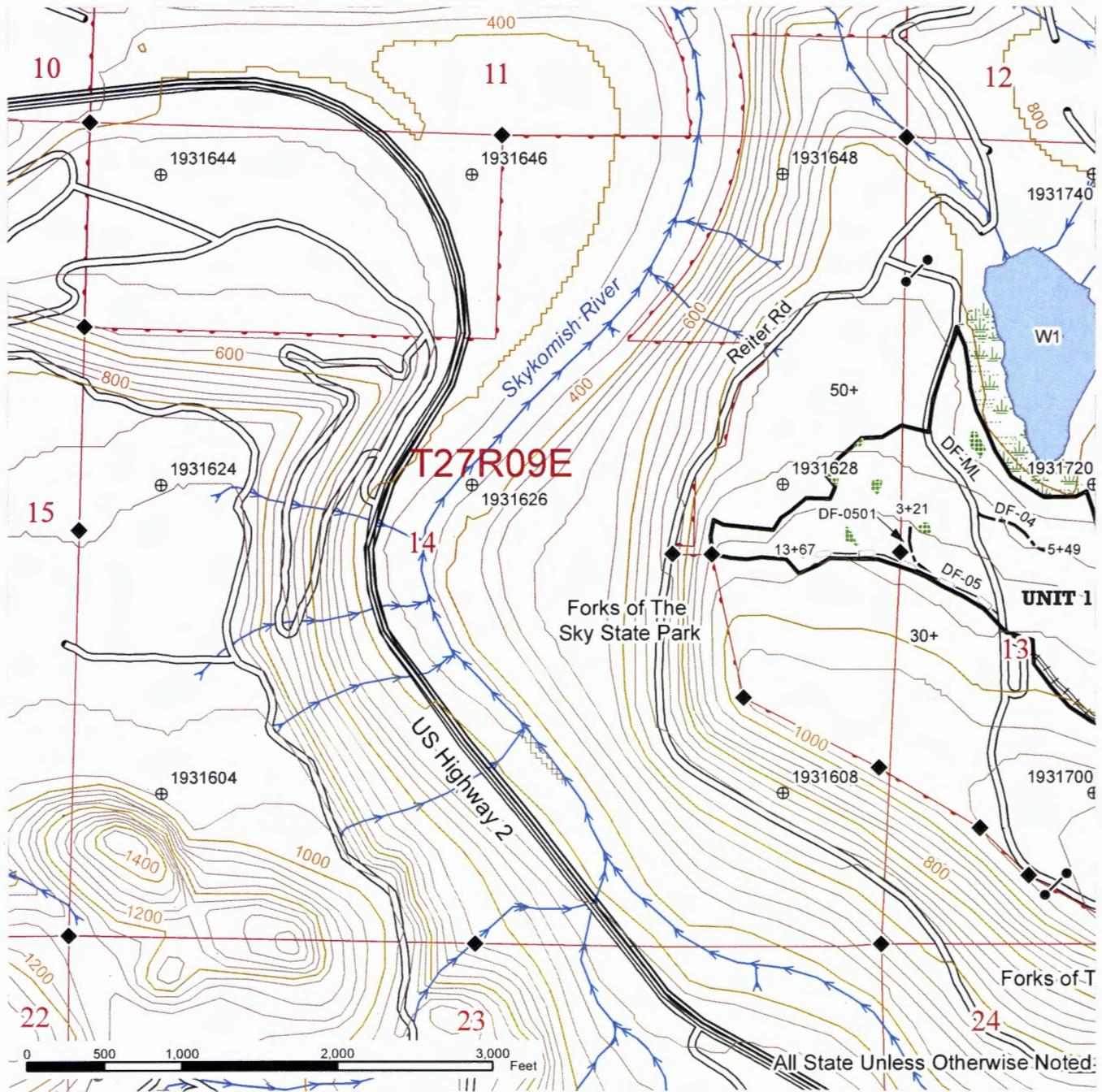
Modification Date: 7/20/2016

2815343

FOREST PRACTICES ACTIVITY MAP

SALE NAME: PATHFINDER CH
 APPLICATION #: None

COUNTY(S): SNOHOMISH
 TOWNSHIP(S): T27R09E, T27R10E

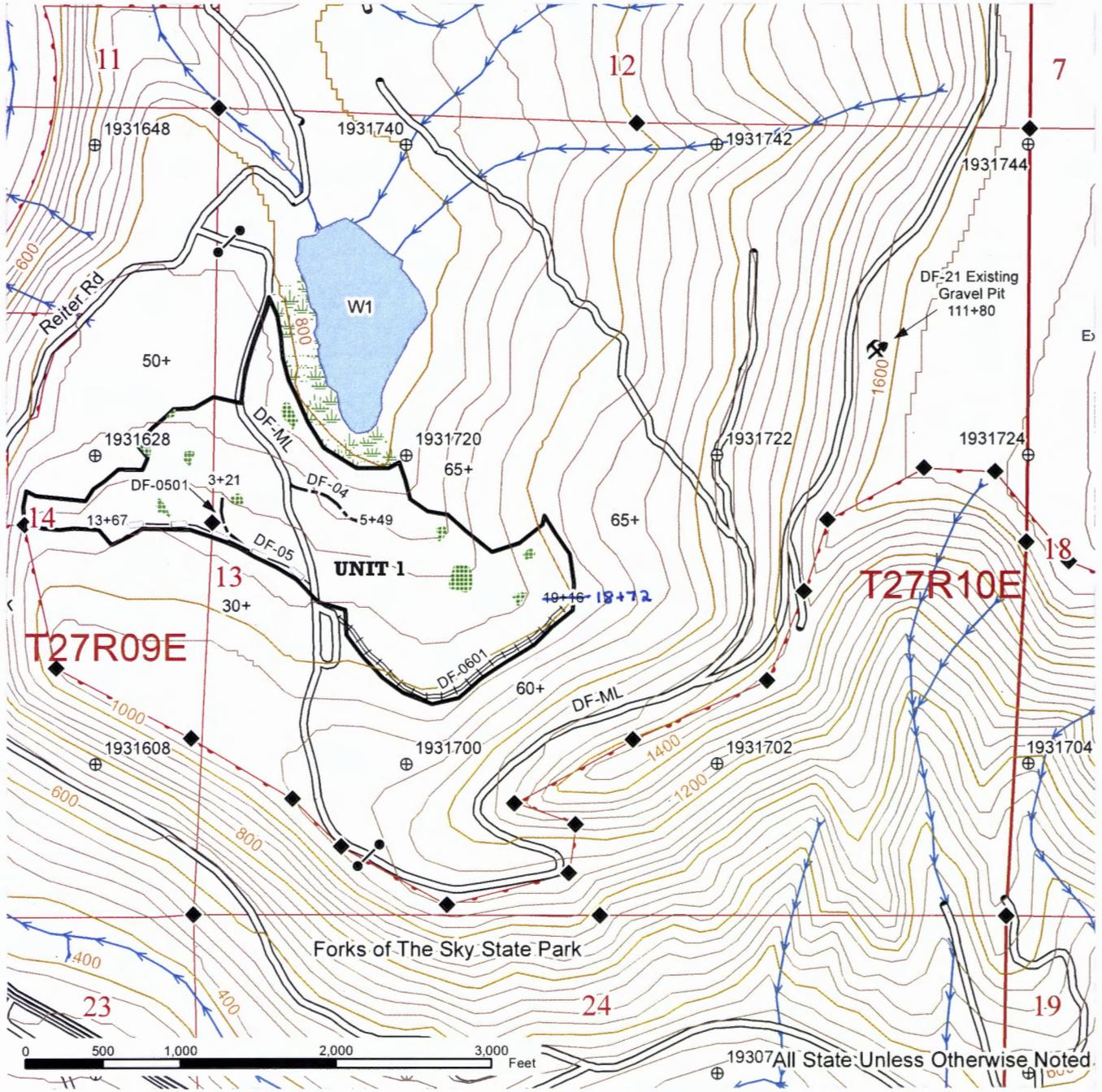


Timber Sale Unit	Highway	Streams
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A, B, C... Stream Identifier	Public Land Survey Townships	Monumented Corners
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FOREST PRACTICES ACTIVITY MAP

SALE NAME: PATHFINDER CH
 APPLICATION #: None

COUNTY(S): SNOHOMISH
 TOWNSHIP(S): T27R09E, T27R10E



Timber Sale Unit	Highway	Streams
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Leave Tree Area	Public Land Survey Sections	Tics - 2000' Interval
A, B, C... Stream Identifier	Public Land Survey Townships	Monumented Corners
	DNR Managed Lands	



ICN No. 135489	Legal Subdivision NE 1/4	Section 14	TWP 27	RGE EW 9E	Application / Notification #	Class
Landowner WADNR NW - John Van Hollebeke		Timber Owner same as landowner		Operator same as landowner		
Mailing Address 919 N Township St		Mailing Address		Mailing Address		
City, State (Province), Zip (Postal Code) Sedro-Woolley, WA 98284		City, State (Province), Zip (Postal Code)		City, State (Province), Zip (Postal Code)		
Meeting Location on site		Telephone Conference <input checked="" type="checkbox"/>	Date July 6, 2016	Time 0900	Region NW	

Subjects Discussed:

Landowner representative requested an on-site pre-application review of the proposed 2 unit "Pathfinder" timber sale. Both units are planned for ground based harvest. Unit 1 is approximately 57 acres with steepest slope at around 45%. Unit 2 is approximately 77 acres, with steepest slope around 35%. There are no streams within the proposed harvest units.

Unit 1 is generally flat with DF-ML running through the middle. A type A or type F wetland is located along the NE side of the proposed unit. A site index buffer has been applied around it.

Unit 2 is also generally flat with DF-ML along portion of the north unit boundary and Deer creek along the entire length of the south boundary. Again, a site index buffer is applied along the creek. There is a stream channel adjacent to the unit that appeared to meet the physicals of a type 3 stream, but is completely dry and appears to be the result from the somewhat recent blowout that occurred on the Deer Flats mainline where it intersects Deer Creek. The stream in question is a tributary of Deer Creek (a fish bearing water). Landowner representative has contacted the TFW program manager from the Tulalip Tribes to assess this channel.

Both units have several recreation trails running through them. Some of the trails, especially those within unit 2 are planned to be improved and used as forest road for the planned timber harvest. Those roads will be abandoned as forest roads and returned back to recreation trails at the end of timber harvest activities.

Decisions Made:

A site visit was conducted on June 28, 2016 by the TFW Program manager from the Tulalip Tribes and a DNR State Lands Forester to evaluate the stream channel adjacent to Unit 2 to determine if it was an active stream channel. After evaluation of the feature, it was determined that it was likely a relic stream channel formed by glacial runoff. Upon further investigation, evaluators identified upland vegetation and an organic soil layer within the channel, and an absence of riparian vegetation. The feature also contained sandy gravel deposits on top of the organic soils layer and upland vegetation. It was determined that the sandy gravel deposits were placed in the relic stream channel when the Deer Creek Mainline forest road was washed out by a flooding event, temporarily diverting water down the ditch-line of the road and eventually into the relic stream channel. Since then, the ditch-line of the road has been rehabilitated and water has been redirected back into the natural course of Deer Creek, therefore the topographic feature in question does not require any protection.

All recreation trails used for forestry use will need to be abandoned for forestry use and returned to recreational use.

PRINT Participants' Names		*SIGNATURES of Participants		Representing	Copies Mailed
John Van Hollebeke Derek Marks Amy Halgren		<i>Steven Huang</i>		landowner Tulalip Tribes landowner	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Position No. 2925	Signature & Title of DNR Representative Steven Huang Forest Practice Forester	Date July 19, 2016	Work Phone (360)8563500		

*** (Participant signature means Note is correct for subjects discussed and decisions made at the meeting.)**

Did not attend -- mail copies to: FPARM, FPDM, FPCOORD, SKY30, USFWS
 Timber Owner Landowner Others: SNOCO, ECV, EFW, DOR, TULALIP



ICN No. 135421	Legal Subdivision N 1/2	Section 13	TWP 28 21	RGE EW 7E 9E	Application / Notification # 2814443	Class 3
Landowner WA DNR NW Region		Timber Owner same as landowner		Operator same as landowner		
Mailing Address 919 N Township St		Mailing Address		Mailing Address		
City, State (Province), Zip (Postal Code) Sedro-Woolley, WA 98284		City, State (Province), Zip (Postal Code)		City, State (Province), Zip (Postal Code)		
Meeting Location on site		Telephone Conference <input type="checkbox"/>	Date March 13, 2015	Time 0900	Region NW	

Subjects Discussed:

On-site review of DNR "Deer Wrap" timber sale.- (previously withdrawn FPA 2814344).

Field review the mapped Landslide Inventory Polygon adjacent to unit 1 of the proposal; Determine the accuracy or extent of the mapped polygon. Review geotechnical analysis prepared by landowner geologist (submitted with the FPA) for this proposal.

Additional discussion regarding request from the City of Index to identify the watershed that feeds the City's water source.

Decisions Made:

The group generally concurs with the geotechnical analysis prepared by State Lands Geologist - John McKenzie. There were no signs of instability in the sites of interest from his analysis. There was no field evidence of the landslide polygon identified in the Landslide Inventory on the GIS system. If there was indeed a deep seated landslide, it would not be affected by the proposal. The group also did not see any risk to water quality from the proposal.

The watershed question/request from the City of Index is not a Forest Practice issue. The question/request should be directed to Washington State Department of Health.

Garth Anderson and Neil Shea will provide additional written comments regarding the site visit.

The FPA will be approved.

**John McKenzie - Landowner
Al McGuire - Landowner
Jason Teller - Landowner
John Moon - Landowner**

PRINT Participants' Names	*SIGNATURES of Participants	Representing	Copies Mailed
Garth Anderson		DNR - Forest Practices	<input type="checkbox"/>
Rich Dodd		DNR - Forest Practices	<input type="checkbox"/>
Bob Penhale		DOE	<input type="checkbox"/>
Derek Marks		Tulalip Tribes	<input type="checkbox"/>
Brett Shattuck		Tulalip Tribes	<input type="checkbox"/>
Neil Shea		Tulalip Tribes	<input type="checkbox"/>

Position No. 2925	Signature & Title of DNR Representative Steven Huang Forest Practice Forester <i>Steven Huang by L. Utgard</i>	Date March 16, 2015	Work Phone (360)8563500
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*** (Participant signature means Note is correct for subjects discussed and decisions made at the meeting.)**

Did not attend -- mail copies to: RPARM, FPDM, FPCOORD, SKY30

Timber Owner Landowner Others: SNOCO, DOE, DOFW, DOR, TULALIP, USFS

E-MAILED 3-18-15

135421

Appendix D. Slope Stability Informational Form

Complete and attach this form to your FPA if you answered 'Yes' to FPA Question 11 or 12. Refer to WAC 222-16-050(1)(d) and Forest Practices Board Manual Section 16—*Guidelines for Evaluating Potentially Unstable Slopes* for definitions and descriptions of potentially unstable slopes or landforms.

1. What screening tools were used? Aerial Photo, LiDAR, Landslide Inventory, Landslide Hazard Zone Polygon, GIS/Other (describe):

2. What potentially unstable slopes were identified in the area of your forest practices activity? Check all that apply:

<input type="checkbox"/> Inner Gorge	<input type="checkbox"/> Groundwater recharge areas for glacial deep-seated landslides
<input type="checkbox"/> Bedrock Hollow	<input type="checkbox"/> Convergent Headwall
<input type="checkbox"/> Outer edges of meander bends	<input type="checkbox"/> Toe of deep-seated landslide
	<input type="checkbox"/> Deep-seated landslides
	<input type="checkbox"/> Other (describe):

3. What potentially unstable slopes were identified around the area of your forest practices activity? Check all that apply:

<input type="checkbox"/> Inner Gorge	<input type="checkbox"/> Groundwater recharge areas for glacial deep-seated landslides
<input type="checkbox"/> Bedrock Hollow	<input type="checkbox"/> Convergent Headwall
<input type="checkbox"/> Outer edges of meander bends	<input type="checkbox"/> Toe of deep-seated landslide
	<input type="checkbox"/> Deep-seated landslides
	<input type="checkbox"/> Other (describe):

4. What activities may occur in or around potentially unstable slopes or landforms? Check all that apply:

<input checked="" type="checkbox"/> Timber harvest	<input checked="" type="checkbox"/> Road construction	<input type="checkbox"/> Suspending cables	<input type="checkbox"/> Yarding	<input type="checkbox"/> Tailholds
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5. If any features identified in #2 and /or #3 were bounded out, describe the manner in which the boundary was determined:

The landslide inventory polygon lies approximately 1,400 feet from the nearest edge of Unit 1 of the Pathfinder CH timber sale. The 1, 400 foot distance was measured using GIS.

6. Could public safety be impacted by the proposed forest practices activity?

No.

7. What is the proximity? 1,400 feet. See also attached Deer Wrap field-reviewed map.

8. Date of field review: Office Review 6/9/16;

Person(s) that conducted field review:	John Mckenzie	Licensed Engineering Geologist
	Name	Title/position
	Greg Morrow	Engineering Geologist
	Name	Title/position

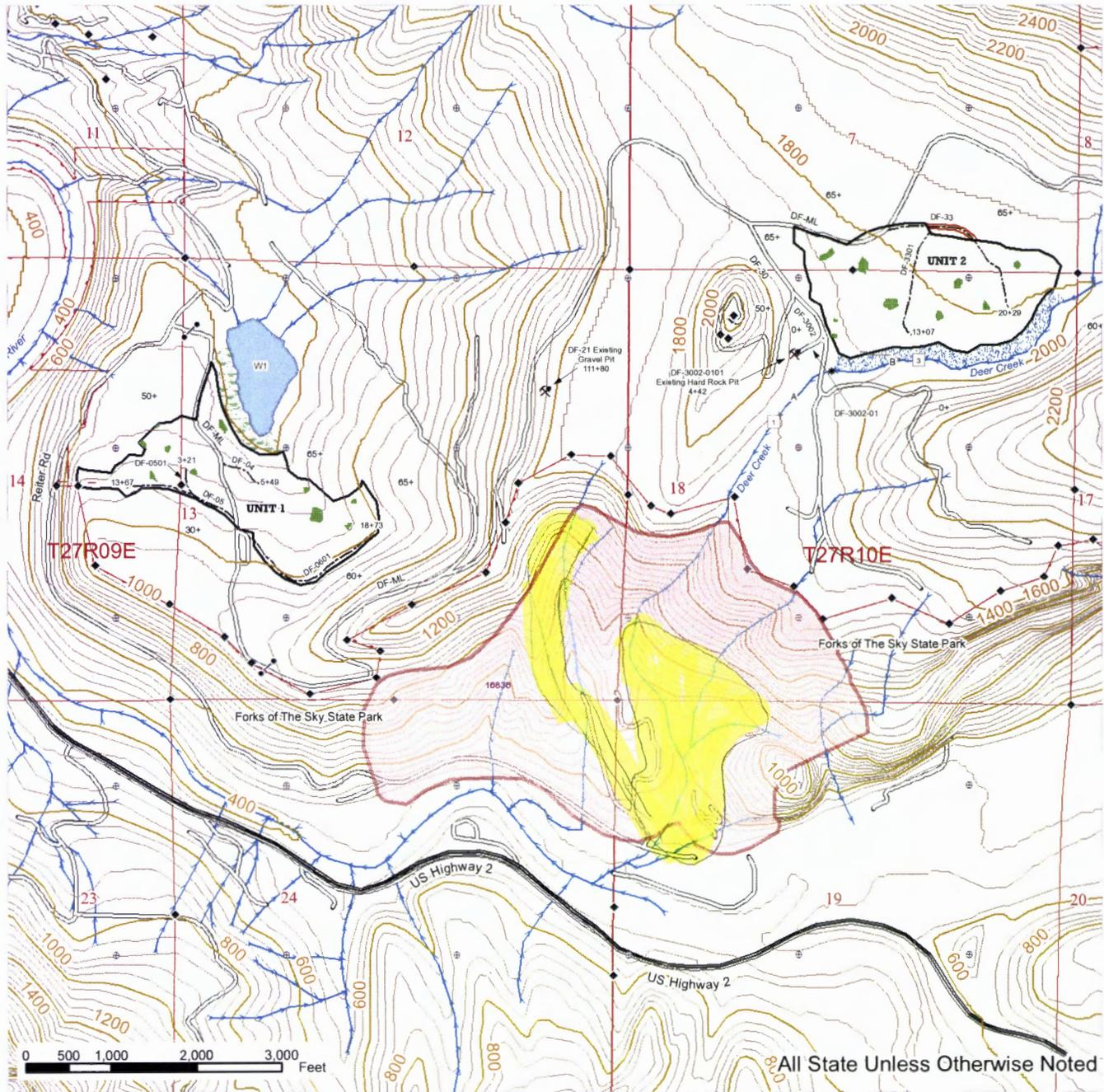
9. Show all field reviewed areas for potentially unstable slopes or landforms on a map (may use a forest practices activity map, harvest map or GIS map – See example below). Show locations where public safety could be impacted by the proposed forest practices activity. **This map is intended to be developed by the field practitioner.**

Area field reviewed by geologist in 2015 with the Deer Wrap Timber Sale
(FPA# 281 4443)

FOREST PRACTICES ACTIVITY MAP

SALE NAME: PATHFINDER
APPLICATION #: 93900

COUNTY(S): SNOHOMISH
TOWNSHIP(S): T27R09E, T27R10E



Timber Sale Unit	Highway	Streams
Right-of-Way	Existing Roads	Stream Type
Wetland Mgt Zone	Temporary Construction	Stream Type Break
Open Wetland	Public Land Survey Sections	Gate
Riparian Mgt Zone	Public Land Survey Townships	Existing Rock Pit
Leave Tree Area	DNR Managed Lands	Tics - 2000' Interval
Forest Practices - Landslide Inventory		Monumented Corners

Prepared By: jvan490 07/13/2016

Modification Date: 7/14/2016



3 1 5 3 4 3



TO: Al McGuire, District Manager
Cascade District
Northwest Region

FROM: John M. McKenzie
Licensed Engineering Geologist
Forest Resources Division
Northwest Region

SUBJECT: GEOLOGIC LETTER REPORT
Discussion
Deep-Seated Landslide and Surrounding Terrain
West of Index
Snohomish County

DATE: February 6, 2015

The following discussion presents my field observations and opinions based on the field data and office review regarding a possible deep-seated landslide located about one mile west of the Town of Index, on the north side of the Skykomish River, in Sections 18 and 19, T27N, R10E, and about one-quarter mile southwest of the proposed Dear Wrap Timber Sale. Included in this letter report is also a discussion and my opinions regarding the immediate surrounding geologic setting. The area of the possible deep-seated landslide is bounded by State Park lands (Forest of the Sky State Park) to the north; state park and private property to the east; right-of-ways for Reiter Road and Burlington Northern-Santa Fe Railroad, and Skykomish River, and a private residences to the south of the slide; and non-DNR state lands and a small patch of private property to the west. Much of the area of the possible landslide in question appears to be within Forks of the Sky State Park. A power-line transmission corridor crosses the mid- and lower area of the possible landslide in question from the northwest to the southeast.

The possible deep-seated landslide in question is not identified on any layer of the DNR electronic database. It is within a relatively large landslide polygon on the DNR Forest Practices (FP) landslide inventory database. The landslide polygon in the FP inventory is many times larger than the possible deep-seated landslide in question. It appears that the FP landslide (polygon) was taken from the *Geologic Map of the Skykomish River 30- by 60-Minute Quadrangle, Washington* (Tabor and others, 1993, U.S. Geological Survey Miscellaneous Investigations Series Map I-1963, scale 1:100,000) during compilation of the Forest Practices landslide inventory. Apparently Tabor and others took the landslide from *Surficial geology of the west half of the Skykomish River quadrangle, Snohomish and Kings Counties, Washington*; (Booth, D.B., 1984, U.S. Geological Survey Open-File Report 84-213, scale 1:50,000). The FP

landslide inventory polygon encompasses topography and geology that argues conclusively that the landslide defined by the FP polygon is just not there.

Over the last 2¾ years I have undertaken six field traverses of the area within the FP inventory polygon, or nearby areas to the north, during field work for timber sales or aerial evaluation of a municipal aquifer. Within the FP polygon the areas traversed include the long north-south draw located in about the center of the FP polygon and the area of the currently recognized possible deep-seated landslide. The timber sale areas reviewed included the hilly terrain of the Dear Wrap Timber Sale.

During reconnaissance of the north-south draw, my traverse included slopes on the northwest side of the draw, the slopes at the head of the draw, slopes on the west side of the draw, lower slopes on the northeast side of the draw, the western ridge of the draw, and on through the bottom along an access road to the area of the mouth of the draw. (Please refer to the attached index map for locations of the features noted in this paragraph and following paragraphs.) I observed a healthy stand of undisturbed trees and stumps on steep slopes. Evidence for localized landslide processes was not observed though the areas traversed. Granitic bedrock was observed along the mid- and lower slopes in the northeast area of the head of the swale. The out crops were large and the rock showed no evidence of being involved in landslide processes. The granitic rock was judged to be "in place". Near the top of the western ridge, about half way down the ridge to Reiter Road, essentially flat-lying, soft, "varved-like", interbedded blue-gray silts and clays were observed. These sediments were interpreted as glacial lake deposits and judged to be in-place and not to have been involved in landslide processes.

Identification of the possible deep-seated landslide is somewhat problematic, the scarp is not as well defined as one would like, and neither are portions of the western lateral-margin, contributing to an argument against the presence of the possible deep-seated landslide in question. On the other hand the subdued hummocky topography in the lower areas of the possible deep-seated landslide in question suggest landslide processes. In addition, the relatively broad, benchy topography in the head area of the possible deep-seated landslide can be interpreted as having developed in response to landslide processes related to the possible deep-seated landslide, or do to other geomorphic processes not connected with deep-seated landslide processes, such as fluvial processes. In this discussion my approach to this question is to take a more conservative position that it is possible that a deep-seated landslide is present.

Both of the field reconnaissances (my initial reconnaissance on 1/8/15 and later the pre-application field review on 2/4/15) of the currently recognized possible deep-seated landslide (from here further referred to as the possible landslide) included a traverse of the western margin, the head and scarp of the slide, the upper area of the eastern margin, and across the lower central area of the possible landslide. This possible landslide is about 1,800-feet long and about 250- to 900-feet wide. Vertical relief from toe to head of the possible landslide is about 240 feet. It is probably best characterized a translational-earthflow. The possible landslide is characterized by very subdued hummocky topography on the gentle slopes in the lower areas to broad benches at the head of the possible landslide, and very localized steep topography. The overall slope of the

possible landslide is (depending on how it is measured) between about 12 to 15 percent. However, within the possible landslide, long stretches (many hundreds of feet long) in the lower about two-thirds, exhibit slopes that vary from 4 to 7 percent. Slopes to about 10 percent in the head area of the possible landslide were observed. The drainage on the possible landslide is well established. Deer Creek (the headwaters of which are 2½, or so, miles to the northeast, above the far side of Deer Flat) follows the western margin or crosses the possible landslide from north to south. During traverse of the scarp area several streams were observed flowing across the granitic rock of the scarp. Several relatively minor tributaries flow across the possible landslide from the head of the possible landslide to Deer Creek. All of these creeks and streams are well established and some locally exhibit inner-gorge-like topography. A road system to access the steel power-line towers meanders across the lower area of the possible landslide, and a road system to access the power-line towers on the ridge to the west of the possible landslide crosses portions of the ridge to the west of the possible landslide. The possible landslide is well vegetated save for the cleared swath of the power line corridor. Likewise the slopes all around the possible landslide are well vegetated. The toe of the possible landslide is about 250 to 850 feet from the present channel of the Skykomish River. The intervening ground between the toe of the possible landslide and the Skykomish River is characterized by alluvial terrace topography. Review of aerial photographs in the files at Northwest Region and orthophotographs in the DNR electronic data base did not reveal evidence for slope instability with respect to the possible landslide during the period of time encompassed by the photography: 1978 to 2013.

In small exposures in cut slopes along Reiter Road and along the access road to the west of the possible landslide, fine-grained, locally poorly-bedded, sediments were observed overlain by very coarse cobble- to boulder-size deposits. The underlying fine-grained sediments appear to be undisturbed. The contacts between the fine-grained sediments and the overlying coarse gravel deposits are sharp, appear to be relative horizontal, and also undisturbed. Traverse of the scarp of the possible landslide revealed granitic rock exposed at many locations along the entire scarp. The joint-spacing could be characterized as medium to wide and the joints tight. That the joint pattern was not disrupted (joints could be followed across other joints) strongly argues that the granitic rock exposed is in-place, and has not been involved in landslide processes. Accumulations of talus blanket the base of the scarp. Only gravel float was observed in high stream bank exposures in the lower central area of the possible landslide.

Using Table 2 (Guidelines for estimating landslide activity based on vegetation and morphology in Rocky Mountain climates) on page 16-48 in the Board Manual (11/2014) Interim Unstable Slopes guidelines, the possible landslide would best be characterized as a dormant-old or relic landslide. Several lines of evidence suggest the possible landslide is relatively stable. These lines of evidence include the low slope inclinations of the possible landslide body, lack of observed ground cracks, undisturbed trees and stumps, the lack of apparent disturbance of the road and railroad at the toe and the power lines and power-line roads traversing the landslide, and the apparent lack of disturbance of the fluvial terraces at the toe of the possible landslide. The well-established drainage system and subdued topography reinforces this characterization. In addition, the undisturbed condition of the current stand of timber and the undisturbed old

essentially smooth and uniform. This was confirmed during field reconnaissance. Review of the aerial photography and field reconnaissance suggests some small-scale, very localized, instability in the vicinity of the Index wells. The eastern slopes of the western draw are characterized by some "fluted" topography suggesting localized instability. The western draw is not adjacent to the Dear Wrap Timber Sale. The middle draw contains Deer Creek. The slopes of this draw are portrayed as relatively smooth and uniform. Review of aerial photography did not reveal evidence for recent or on-going instability in the middle draw, the light tones observed on the aerial photographs were interpreted to be exposed granitic bedrock. Likewise, the slopes in eastern draw are portrayed on the LiDAR model as being smooth and uniform. However, review of aerial photography showed a linear shadow, or break, in the forest canopy in the center line of the draw that could be interpreted as a relatively small debris slide. It appears to have originated about 100 feet below the top edge of Deer Flat. Based on the break/shadow of the vegetation cover it appears that the debris slide (if that is the reason for the vegetation break/shadow) traveled about a few hundred feet down slope, but not as far as the glacial deposits-granitic bedrock contact. In summary, interpretation of the LiDAR imagery suggests some evidence for instability on the eastern slopes of the western draw. In the other two draws the topography and hill-shade models, and aerial photography do not suggest a recent or ongoing history of slope instability, save for the one possible event noted above. The intervening slopes between the draws are essentially planar to slightly divergent and do not show evidence for recent or on-going slope instability.

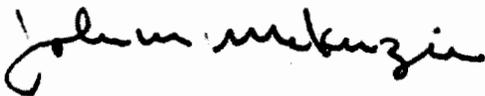
The origin of these three draws does require an explanation. If it will be remembered, it has been recognized (Booth, referenced above) that the area in question was (at one time, for some uncertain amount time) at the eastern margin of the Puget ice lobe. The lobe dammed the ancestral Skykomish River valley, resulting in deposition of the glacial lake deposits that crop out at lower (and higher) elevations along the Skykomish River, and the recessional deposits that underlie Deer Flat and blanket the granitic bedrock. The west-facing slope that defines the western edge of Deer Flat likely denotes the edge of the ice lobe at the time the glacial deposits of Deer Flat were laid down. Review of the LiDAR imagery shows what could be interpreted as broad, shallow, generally north-south oriented channels that would have directed melt water from the margin of the glacier toward the location of the three draws. Booths mapping (referenced above) also supports this interpretation. This suggests that the origins of the three draws could be explained as being due to erosion processes as channelized stream-water flowed over the southern ancestral edge of Deer Flat, creating erosion gullies that are now recognized as the draws discussed above. It would not be unreasonable to assume that these erosion gullies could have been and likely were later modified by landslide processes following further retreat of the ice sheet. However, save for the aforementioned apparent landslide topography on the western-facing slopes in the western draw, and the debris slide noted in the eastern draw, the smooth, uniform nature of the slopes in the draws suggest that it has been some time since landslide processes were an important process on the slopes of the draws.

It should also be noted that the granitic bedrock that underlies Deer Flat acts as a hydrologic groundwater-barrier between the glacial deposits of Deer Flat and the possible landslide. Water that percolates down through the glacial deposits, once encountering the granitic bedrock cannot

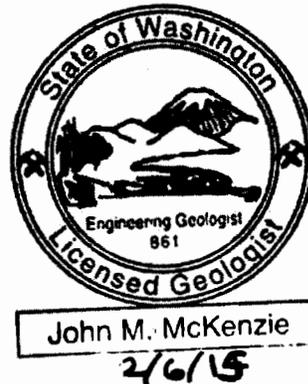
percolate through the granitic bedrock, save along the joint/fracture system (which likely cannot move much water), and more likely flows along the buried granitic surface to Deer Creek. Some of the subsurface water in the glacial deposits must also surface to the south of Deer Flat, at or above the glacial sediments-granitic bedrock contact, to feed the several streams that were observed flowing over the granitic bedrock of the scarp of the possible landslide. These streams then flow across the surface of the possible landslide into Deer Creek. There is, for all practical purposes, essentially little subsurface groundwater-flow connection between Deer Flat and the possible landslide. The creeks that flow across the possible landslide also act, in part, as a dewatering system for the possible landslide, helping to control the groundwater levels in the possible landslide.

If you have any questions, please feel free to contact me.

Respectfully submitted,

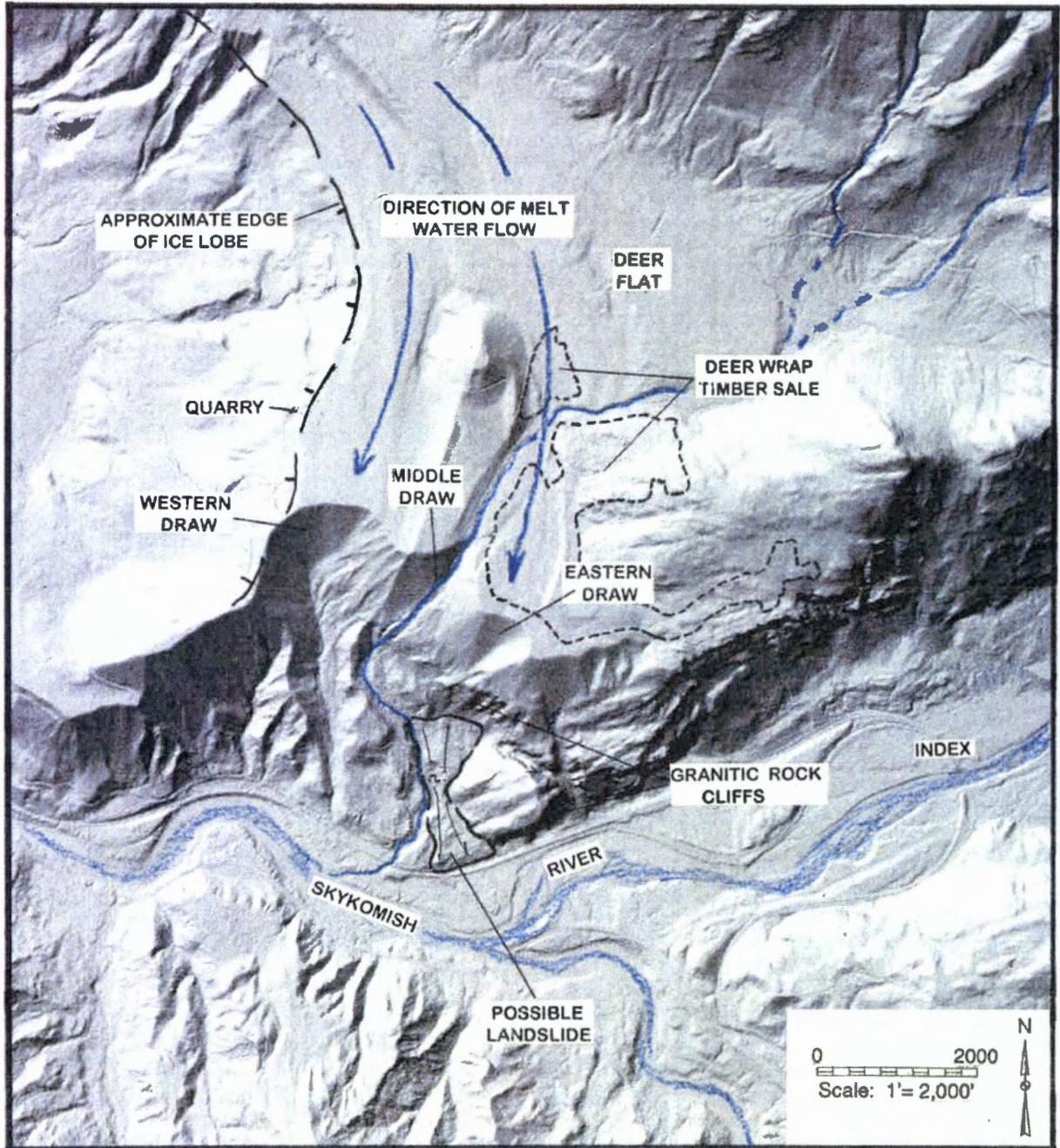


John M. McKenzie
Northwest Region Engineering Geologist
LEG #861



Attachment: Index Map of Area Around the Possible Landslide

It should be noted that based on additional research, analysis of the information obtained during later office and field review of the possible landslide, and based on discussions between three licensed engineering geologists, each of whom is a Qualified Experts, and has been on the ground at the possible landslide, it was determined that there is not a ground-water recharge question in this case. This is, in part, contradictory to some of the points of information, maps, and opinions presented and discussed in my earlier emails regarding this possible landslide and the Deer Wrap Timber Sale. Those earlier opinions did not benefit from the additional information obtained and analysis undertaken following those emails and the pre-application field review. This additional information is included in the discussions presented above.



INDEX MAP OF AREA AROUND THE POSSIBLE LANDSLIDE

Geologic Letter Report
 West of Index, Snohomish County

**Forest Practices Application/Notification Addendum
DNR Proprietary HCP, WAC Replacement Summary for Aquatic Resources, 2008
Five West-side Planning Units, Excluding the OESF**

Please refer to the DNR Proprietary HCP Substitution Agreement for Aquatic Resources, 2008. Please check all HCP prescriptions and/or activities, which are relevant to this proposal and describe the management prescriptions and final stand composition at the end of this checklist.

NOTE: When assessing hydrologic maturity for each sub-basin inside the rain-on-snow zone, DNR staff will use the most updated data layer delineating Watershed Administrative Units as designated by Forest Practices.

- Assessing Hydrologic Maturity in the Rain-On-Snow (ROS) Zone (Refer to item A in the Agreement Memo). If the activity lies within the ROS zone and subbasin will be managed for ROS, fill out the following table. If within ROS zone, but subbasin will not be managed for ROS, describe why in additional information section below.

1. SUB-BASIN NAME	2. TOTAL ROS ACRES (DNR) WITHIN SUB-BASIN	3. HYDRO MATURE TARGET ACRES (2/3 of Column 2)	4. CURRENT DNR SUB-BASIN ACRES IN HYDRO MATURE FOREST IN ROS	5. ACRES OF HYDRO MATURE FOREST TO BE REMOVED	6. SUPRLUS (+) OR DEFICIT (-) ACRES AFTER ACTIVITY
Skykomish River Sub-basin 1	1069	713	951	65	+173
Skykomish River Sub-basin 2*					

- Wetlands Protection, road construction within wetlands or wetland buffers, requires mitigation. (Refer to item B in the Agreement Memo). If this activity will include road construction within a wetland or WMZ, describe the type of wetland, potential loss of wetland function and how and where the loss of function will be mitigated.
- Harvesting within Forested Wetlands. (Refer to items C & E in the Agreement Memo). Describe the remaining stand characteristics within the wetland and map any forested wetlands greater than 3 acres.
- Wetland Management Zones. (Refer to item D in the Agreement Memo). Describe the site index and WMZ width. If harvesting within the WMZ, describe the remaining stand characteristics within the WMZ.
- Riparian Management Zones for Type 1, 2 and 3 Waters (Refer to item F and Appendix 1 in the Agreement Memo). Describe the site index, RMZ width and if a wind buffer was applied. Describe if the RMZ begins from the outer edge of a CMZ or 100-year floodplain and how they were typed.
- Riparian Management Zones for Type 4 and 5 Waters (Refer to item G and Appendix 1 in the Agreement Memo). Describe any special protection for Type 5 waters.
- Harvesting or Salvaging within Type 1, 2, 3 and 4 Riparian Management Zones. (Refer to item F-J and Appendix 3 in the Agreement Memo). If harvesting, describe the general

HCP Riparian Forest Restoration Strategy management scenario under which the proposal's riparian stand will be managed. Describe stand treatment including removals, down wood and snag recruitment and type of activities. Describe post-harvest stand; how it meets the management parameters of the general management scenario, what species composition and diameter classes will remain, trees per acre, basal area, relative density. If salvaging, describe how you will be meeting the RDFC conditions, what you will retain and removals and other salvage/restoration conditions described within the Ecosystem Services Section approved site specific restoration plan (and/or attach plan).

Please provide any requested additional information below. If varying from standard HCP guidance, attach concurrence/variance approval from Land Management Division and/or Federal Services and discuss below (e.g. research).

Hydrologic Maturity in the ROS zone

*Sub-basin 2 of the Skykomish River WAU has less than one-third of its area in the significant ROS zone; therefore it will not be managed for hydrologic maturity.

Total Sykomish River Sub2 acres: 4,628

Total Skykomish River Sub2 ROS acres: 1,423 (30.75%)

Wetland Mangement Zones

See attached table

Riparian Management Zones for Type 1, 2, and 3 Waters

See attached table

**Forest Practices Application/Notification Addendum
DNR Proprietary HCP, WAC Replacement Summary for Aquatic Resources, 2008
Five West-side Planning Units, Excluding the OESF**

Stream Segment Identifier or Wetland Identifier	Water Type or Wetland "forested or open water"	Site Class FP Base Map / Other source	Stream Width (feet) or Wetland Size	Is there a CMZ? Yes or No	Thinning RMZ/WMZ? Yes or No	Total Width of RMZ/WMZ FP width / Actual width (feet)	Wind Buffer? Yes, No (for T-3, 2, 1) or N/A
A (Deer Creek)	1	III	>15 feet	No	No	140 / 152	No
B (Deer Creek)	3	III	>10 feet	No	No	140 / 152	No
W1	Open Wetland	III	>1 acre	No	No	50-100 / 200	N/A

The type break on Deer Creek was determined by reviewing information provided by Snohomish County, and the Department of Ecology.

DNR Trust Forestland HCP Water Typing Key

ADDENDUM TO INSTRUCTIONS FOR COMPLETING THE FOREST PRACTICE APPLICATION

STREAM(S) ID B (Deer Creek)

DATE 7/12/16

Within your road construction and harvest area, you need to physically review these streams on the ground to determine if they meet the criteria of Type 3 water. Refer to DNR Trust Forestland HCP Water Typing System to determine Type 1 and 2 waters.

1. Were any fish observed in the stream segment, or are fish known to use this stream segment?

- Yes. Type 3 stream.
 No. Go to question # 2.

2. Has the stream been surveyed?

- Yes. Attach the survey data to the Application/Notification.
 Fish found. Type 3 stream.
 No fish. Is the average width of the stream segment two feet (2') or wider between the ordinary high water marks?
 Yes. Type 4 stream.
 No. Type 5 stream.
 No. Go to question # 3.

3. Is the average width of the stream segment two feet (2') or wider between the ordinary high water marks?

- Yes. Go to question # 4.
 No. Type 5 Stream.

4. Is the gradient of the stream segment 16% or less?

(Example: 16' fall in elevation over 100 feet of stream = $16/100 = .16$ or 16%).

- Yes. Type 3 stream.
 No. Go to question # 5.

5. Is the average gradient of the stream segment greater than 16% and less than or equal to 20%?

- Yes. Go to question # 6.
 No.. Type 4 stream.

6. Is the contributing basin (watershed) size to the stream segment greater than 50 acres?

- Yes. Type 3 stream.
 No. . Type 4 stream.

Definitions:

Stream Width: To determine the Ordinary High Water Mark (OHWM) of the stream(s), observe the break between the water influence zone and upland vegetation on the stream bank; this is usually the spring high water mark. Then measure stream width between the OHWMs on either side of the stream at 50 foot intervals along the stream bank for a minimum distance of 500 feet. This determines the average width of the stream. For further information see page M-11 of the board manual.

Stream Gradient: The gradient of a stream is defined as the inclination or rate of fall of a stream bed, expressed as a percentage. The average gradient of a stream is determined by calculating the inclination of individual sub-reaches over a minimum distance of 500 feet along a stream or to a point where distinct gradient changes occur. For further information see page M-14 of the board manual (only use the method for field measurements; do not use the mapping method).

Note: Streams with widths of twenty feet (20') or greater or lakes, ponds, or impoundments having a surface area of 1 acre or greater at seasonal low water, may be type 2 waters.

1-14-08

Forest Practices Application/Notification Addendum
DNR Trust Lands HCP Implementation Checklist for the Marbled Murrelet, 2014
North Puget Planning Unit Only

Refer to the DNR Trust Lands HCP Implementation Summary for the Marbled Murrelet, 2014 and North Puget Planning Unit (NPPU) memos dated 02/23/2007 and 06/12/2009. Marbled Murrelet GIS habitat and occupied site delineation is available at on the Quick Data Loader and State Uplands Viewing Tool titled "State Lands – Marbled Murrelet – HCP Policy".

1. Is the proposed Forest Practices activity within potential habitat, occupied site, Criteria 3 newly identified habitat or suitable habitat not available for release¹?
 - Yes, proposal is **inconsistent** with current HCP strategy. **Stop Proposed Activity** or document in Question #6 specifics of proposal and Forest Resources Division approval if intending to proceed.
 - No, not within suitable habitat not available for release, potential, occupied, or Criteria 3 newly identified habitat. Go to Question #2.

2. Is the proposed activity within releasable¹ suitable habitat according to the NPPU memo (dated 6/12/2009)?
 - Yes, document in Question #6 the WAU name, **total** suitable MM habitat acres allowed to be harvested within the WAU and the **total** acres to date of suitable MM habitat harvested within the WAU after this proposed harvest. Go to Question #3.
 - No, proposal is not within releasable suitable habitat. Go to Question #3.

3. Is the proposed activity located within unsurveyed Criteria 1 newly identified habitat that is within 0.25 miles of an occupied site, or unsurveyed Criteria 2 newly identified habitat?
 - Yes, proposal is **inconsistent** with the current HCP strategy. **Stop Proposed Activity** or document in Question #6 specifics of proposal and Forest Resources Division approval if intending to proceed.
 - No, go to Question #4.

¹ Some suitable habitat may be available for harvest (releasable) if 50% of the habitat will remain within the WAU and it is greater than 0.5 miles from an occupied site and identified per NPPU memo dated 6/12/2009. Criteria 1 habitat is: Habitat \geq 5 acres but \leq 10 acres with \leq 10 platforms per acre OR Habitat $>$ 10 acres but \leq 20 acres with \leq 5 platforms per acre. Criteria 2 habitat is: Habitat \geq 5 acres but \leq 10 acres with $>$ 10 platforms per acre OR Habitat $>$ 10 acres but \leq 20 acres with $>$ 5 platforms per acre OR Habitat $>$ 20 acres with \leq 15 platforms per acre. Criteria 3 is: Habitat \geq 20 acres with $>$ 15 platforms per acre.

4. Is the proposed activity located within surveyed and unoccupied Criteria 1 or 2 newly identified habitat, or unsurveyed Criteria 1 that is greater than 0.25 miles from an occupied site and is the activity only for operational access (roads or yarding corridors) through this habitat type?
- Yes, proposal is consistent with the current HCP. Timing restrictions are applied when operating within this habitat and remaining habitat is deferred from harvest. Consult with Region biologist/specialist for recommendations on minimizing platform tree removal. Document in Question #6 the type of operational access, but first go to Question #5.
 - No, go to Question #5.
5. Is the proposed harvest activity within ¼ mile of any marbled murrelet occupied site(s), Criteria 3 newly identified habitat or unsurveyed suitable MM habitat²?
- Yes, consult with Region biologist/specialist for recommendations on buffers and timing restrictions. Go to Question #6 and document type of buffer of occupied site or suitable habitat.
 - No, proceed with activity; go to Question #6 if any documentation is required.
6. This question or section is for additional information the checklist suggested you provide in previous questions or any additional information you think is relevant to the proposal. If you were able to answer the previous questions without a "Stop Proposed Activity" notification then your proposal is consistent with the HCP and may proceed. Otherwise, more documentation is required here. If varying from current HCP guidance, attach consultation agreement from Forest Resources Division and/or USFWS and discuss below.

Does not apply

² "Unsurveyed suitable habitat" refers to potential habitat identified per the NPPU 2007 memo that has been field verified as suitable, but not yet surveyed.

Forest Practices Application/Notification Addendum
DNR Proprietary HCP Implementation Checklist for the
Northern Spotted Owl, 2008 (all HCP planning units & OESF)

Refer to the DNR Proprietary HCP Implementation Agreement for the NSO, 2008.

1. Is the Forest Practice activity within a NRF Management Area?
 Yes, Go to #2.
 No, Go to #6.
2. Is the Forest Practice activity within a designated 500-acre Nest Patch?
 Yes, No timber harvest allowed, harvest deferment of Nest Patches, refer to Substitution Agreement, Section I.A. **End Checklist.** Maintenance of existing roads is permitted. Describe road maintenance activity in Question #13.
 No, Go to #3.
3. Is the Forest Practice activity within 0.7 miles of a spotted owl nest site (status 1 or 2)?
 Yes, Apply timing restrictions; refer to Substitution Agreement, Section I. Go to #4.
 No, Go to #4.
4. Is the SOMU where the Forest Practice activity is located, above the threshold of NRF habitat?
 Yes, Proceed with the activity, ensuring that habitat within the SOMU will not fall below the target amount. Please describe in Question #13; if the activity will be harvesting habitat or non-habitat, whether it is an enhancement activity or even-age harvest and how many acres or percentage of NRF habitat will remain within the SOMU after harvest. Go to #13.
 No, Go to #5.
5. Is the Forest Practice activity within suitable submature habitat or better or "next best"?
 Yes, Ensure NRF habitat remains after completion of the harvest activity or that the activity will not increase the length of time for the target amount to reach a suitable habitat condition. Please describe in Question #13, type of activity, how habitat will be maintained or next best stands enhanced and what the final stand condition will be. Go to #13.
 No, Ensure that target amount of habitat within the SOMU will not take longer to achieve after activity. Please describe in Question #13 how management activity will maintain and/or achieve the NRF target amount. Go to #13.
6. Is the Forest Practice activity within a Dispersal or DFC Management Area?
 Yes, Go to #7.
 No, Go to #10.
7. Is the Forest Practice activity within 0.7 miles of a spotted owl nest site (status 1 or 2)?
 Yes, Apply timing restrictions; refer to Substitution Agreement, Section I. Go to #8.
 No, Go to #8.
8. Is the SOMU where the Forest Practice activity is located, above the threshold of dispersal habitat?
 Yes, Proceed with the activity, ensuring that habitat within the SOMU will not fall below the target amount. Please describe in Question #13; if the activity will be harvesting habitat or non-habitat, whether it is an enhancement activity or even-age harvest and how many acres or percentage of dispersal habitat will remain within the SOMU after harvest. Go to #13.

- No, Go to #9.
9. Is the Forest Practice activity within suitable dispersal habitat or better or “next best”?
- Yes, Ensure dispersal habitat remains after completion of the harvest activity or that the activity will not increase the length of time for the target amount to reach a suitable habitat condition. Please describe in Question #13, type of activity, how habitat will be maintained or next best stands enhanced and what the final stand condition will be. Go to #13.
- No, Ensure that target amount of habitat within the SOMU will not take longer to achieve after activity. Please describe in Question #13 how management activity will maintain and/or achieve the dispersal target amount. Go to #13.
10. Is the Forest Practice activity located within the OESF?
- Yes, Go to #11.
- No, Go to #12.
11. Landscape planning has been initiated, but has it been completed?
- Yes, Proceed with the activity, ensuring that all commitments of the Landscape Plan are fulfilled. Please describe in Question #13; if the activity will be harvesting habitat or non-habitat, whether it is an enhancement activity or even-age harvest and how many acres or percentage of suitable habitat will remain within the SOMU after harvest. Go to #12.
- No, Proceed with the activity, ensuring that the total amount of habitat harvested since HCP implementation will not exceed the allowable amount as described within the substitution agreement, Section II. Please describe in Question #13; if the activity will be harvesting habitat or non-habitat, whether it is an enhancement activity or even-age harvest and how many acres or percentage of suitable habitat will remain within the SOMU after harvest. Go to #12.
12. Is the Forest Practice activity located within a Status 1 or 2 spotted owl management circle based on the WDFW database?
- Yes, Apply harvest timing restrictions to activities within the best 70-acre core around the site center; refer to Substitution Agreement, Section III. Include location of best 70-acre core on Forest Practices Map. Go to #13.
- No, Go to #13.
13. Provide any additional information or details requested from previous questions on the following lines. If no additional information is required, simply state “not applicable” below. Otherwise, include the SOMU name(s) when necessary if activity is within NRF or dispersal management areas or OESF and how habitat will be maintained or enhanced, etc. If varying from standard HCP guidance, attach concurrence/variance approval from Land Management Division and/or Federal Services and discuss below.

End checklist.

The Proposed Forest Practice activity is located within the North Fork Skykomish Spotted Owl Management Unit. The activity is within both a NRF non-habitat stand and a NRF “Next Best” stand. Proposed activities within the NRF “Next Best” stand include harvesting a small sliver (approximately 40 feet wide by 600 feet long) of timber along the DF-ML road that poses a safety risk following harvest of the adjacent NRF non-habitat stand. See NRF “Next Best” memo, Allen Estep, dated July 21, 2016. Also within the NRF “Next Best” stand approximately 600 feet of new road construction and right of way clearing will occur.

This new road construction will be utilized for future enhancement activities in the NRF "Net Best" stand.

July 21, 2016

TO: Allen Estep, Assistant Division Manager, Forest Resources Division
THROUGH: Laurie Bergvall, State Lands Assistant, NW Region
FROM: Lisa Egtvedt, Wildlife Biologist, NW Region
RE: Regeneration Harvest of Small Sliver of NRF "Next Best" Stand in Association with the Proposed Pathfinder Timber Sale

SUMMARY:

There is a small sliver (approximately 0.4 acres) of Nesting, Roosting, Foraging (NRF) "next-best" stand that is suspected to be mapped incorrectly, due to its location in relation to a mainline road (it overlaps a portion of the road by 30-40 feet). This sliver represents a potential safety hazard due to its location along the mainline. The adjacent stand to the south is mapped as "Non-habitat" in the current NSO Habitat Classes layer, and is proposed to be part of the Pathfinder Timber Sale (Unit 2), a variable retention harvest (VRH). Following this harvest, the remaining sliver of "next-best" would result in a single-tree-width fence row along the Deer Flats Mainline for a stretch of about 600+ feet. Because this scenario has been determined to represent a significant blowdown hazard, it is proposed that this sliver be included in the VRH (as opposed to a variable density thinning that is typically implemented for "next best" stand enhancement). This memo is submitted to Forest Resources Division as a request for consultation regarding this proposal.

INTRODUCTION:

During office review for the proposed Pathfinder Timber Sale, it was determined that a narrow strip of "next best" is shown by the NSO Habitat Classes layer to extend approximately 30-40 feet to the south over the Deer Flats Mainline, for a length along the road of approximately 600+ feet. Because a VRH is proposed for a stand of "non-habitat" that is located immediately adjacent to the south of this "next best" stand, concern was raised that the resulting line of single trees (a "fence row") that would be left on the south side of the road would be prone to windthrow. See Figures 1 & 2 for maps depicting this scenario.

ON-SITE OBSERVATIONS / SPECIFIC DETAILS and ALTERNATIVES CONSIDERED:

According to the Settlement Agreement (page 4, Section 1.A.6.), "Regeneration harvests may be used as a means of promoting long-term development of habitat in 'next-best stands' that will not reach Niche Diversification or Fully Functional stand development stages over the life of the HCP, and *where variable density thinnings are not likely to be successful (due to risk of blowdown or other factors) in enhancing the quality of the habitat.* Where DNR comes across such a stand, it will document why it believes regeneration harvest is appropriate." Please note that certain phrases of this excerpt have been highlighted in order to draw attention to key aspects that are relevant to the current situation.

It is proposed that this sliver of "next best" (line of single trees) be included in the VRH unit, as they are likely to blow down onto the Deer Flats Mainline and represent a safety hazard. Additionally, the trees will not have an opportunity to serve an ecological function as "next best" or better habitat as a narrow strip with VRH on one side of them and a road right-of-way on the other side of them.

CONCLUSION:

It is my recommendation that this narrow strip of "next best" trees be included in Pathfinder Unit 2 for safety concerns due to the potential for blow down onto the Deer Flats mainline. It is further my recommendation that the 0.4 acres that would be removed *not* be counted toward threshold levels for the SOMU. Please indicate your concurrence with this proposal by signing below.



Allen Estep
Assistant Division Manager, HCP & Scientific Consulting Section
Forest Resources Division

7-22-2016

Date

Figure 1. Map of the proposed Pathfinder Timber Sale, Unit 2, in relation to NRF “next best” stand located immediately adjacent to the north.

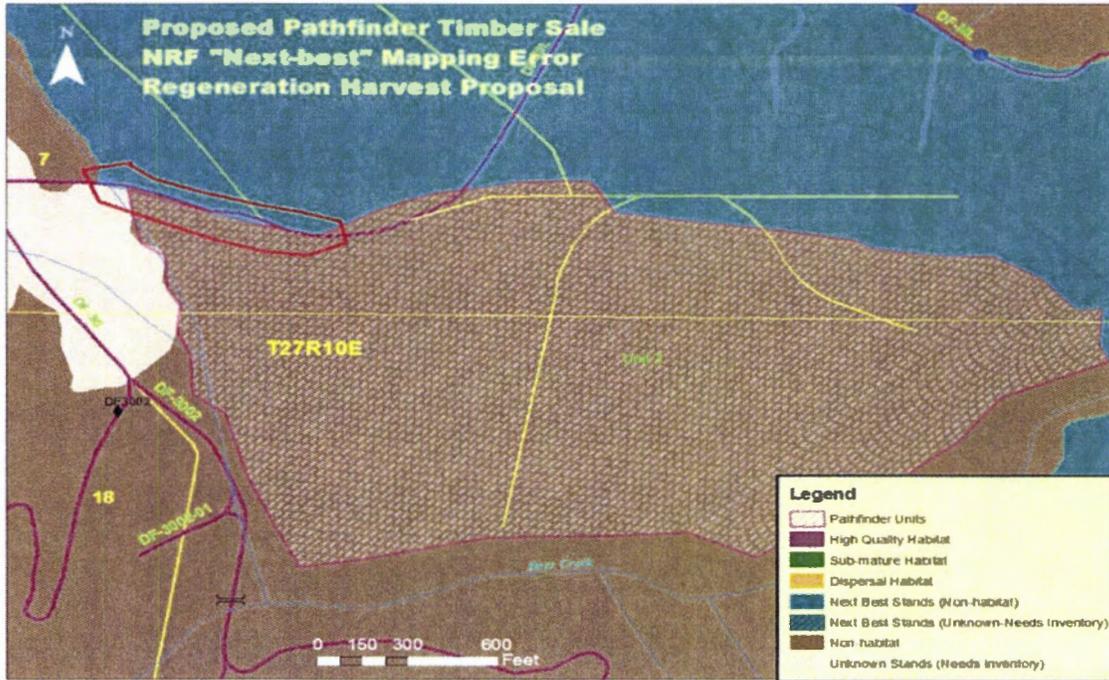
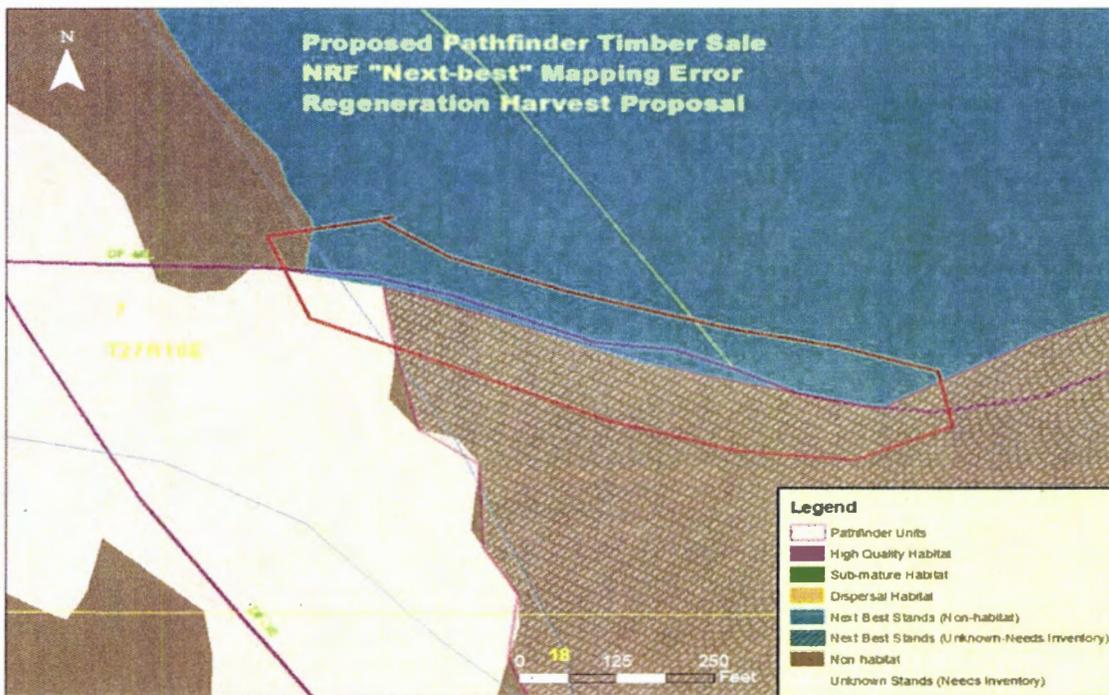


Figure 2. A portion of the proposed Pathfinder Timber Sale, Unit 2, zoomed in to the area of concern re: NRF “next best” stand that is immediately adjacent to the north (but south of the Deer Flats Mainline).



July 21, 2016

TO: John Van Hollebeke, Forester

FROM: Lisa Egtvedt, Wildlife Biologist

SUBJECT: Wildlife Review of the Proposed Pathfinder Timber Sale

This memo serves as documentation of a region biologist review of the proposed Pathfinder Timber Sale in sections 13 & 14 of Township 27 North, Range 9 East, and sections 7 & 18 of Township 27 North, Range 10 East. I conducted field reviews of portions of the proposal on 6/21/16 & 6/22/16 for the purpose of verifying marbled murrelet habitat delineation, as well as assessing the stands for HCP habitat features and reviewing the leave tree strategy. I was not accompanied during any of these site visits.

Based on the site visits and a GIS review, I have the following input:

Both units have DNR-sanctioned trails running through them that are part of the Reiter Foothills Recreation Plan (including some "bouldering" features on the trail in Unit 1). Unit 1 contains a mix of mature Douglas-fir (DF) and western hemlock (WH) trees, along with a considerable amount of intermediate trees that are primarily western redcedar (RC). There are also interspersed hardwoods (mostly red alder, RA) and occasional openings with shrubs & sapling WH. Ground vegetation is moderate to dense, but mostly low-growing. Unit 2 is fairly similar in composition, though with generally a more pronounced division between canopy layers. There is a low-growing layer of intermediate vegetation (seedling/sapling WH, huckleberry shrubs, etc.), and occasional codominant DF & WH (or just below that level, so that there is not a truly clean "bole zone"). However, overall there is a fairly straightforward upper canopy throughout most of this stand. There are occasional RC & RA in this stand, with some concentrations of RC, and there is an abundant layer of low-growing forbs and scattered ferns.

John Moon & John Van Hollebeke (presales foresters who have been trained to conduct delineation for marbled murrelet habitat) conducted the delineation for this proposal. I found it to be generally accurate, with only one potential platform tree (PFT) removed from the official count, and none added. In Unit 1 there is a lot of moss on low limbs, especially in the intermediate trees, but most of it has not resulted in platforms of at least seven inches in diameter. Most of the PFTs in this unit are located along the NW edge of the unit, and are comprised of forked tops and large branches in DF trees ranging in size from 17" to 32" dbh (aside from one 13"-dbh WH with a witches broom platform). There are three PFTs located to the north of Unit 2, three located in the NE portion of the unit, one located just inside the southern boundary, and another just to the SW of the unit. Most of these PFTs are DF trees ranging in size from 17" to 34" dbh that contain large branches and forked tops that are marginal in quality (as platforms). None of the PFTs comprise a contiguous area of at least five acres, so there are no suitable habitat blocks associated with this proposal or adjacent areas.

Following my field visit, I provided a number of recommendations for the leave tree strategy, primarily focusing on large, structurally unique trees (including PFTs) that exist in the stands,

snags warranting a buffer or other form of retention, and unique species (e.g., at least one western white pine tree was observed). The plan for leave trees (particularly in Unit 1) has been geared significantly toward aesthetics related to the recreation trails in the unit(s). Field reconnaissance determined that this would be possible to implement without neglecting other requirements or priorities of the leave tree strategy. In Unit 1, this focus has translated to strategic placement of clumps at key locations along the trail, along with some scattered individuals also along the trail (primarily on the west side of the existing Deer Flats Mainline road that runs through this unit). My recommendations for the portion of Unit 1 that is on the east side of this road included marking scattered individuals in areas that have been previously thinned, and clumps in denser parts of the stand (which have not been previously thinned). I also identified some features that could be targeted for clumps and/or individual marking.

It was recommended that the leave tree marking in Unit 2 be comprised primarily of evenly-distributed scattered individuals, though some habitat features were also pointed out as candidates for "mini clumps". One type of feature that was highlighted is large down cedar, particularly pieces with channels inside or underneath. Waypoints were provided for several of these pieces, including one that has a small "den-like" spot underneath it, with bobcat scat present. I have since been informed that a leave tree clump was marked around this feature. I also addressed a large "legacy" snag, which is a bit punky and tall, but it appears to be fairly solid. A leave tree clump has been marked around it, but not large enough to provide an L&I buffer. Since I did stress the need to keep safety in mind, contract language has been included that will allow for felling of this snag if deemed necessary for safety (but requiring that the felled log remain on site). Based on past experience, it is likely that logging operators will leave the snag standing (particularly if working with ground-based machinery, as is anticipated in this unit).

Following a GIS review of WDFW and DNR wildlife & habitat databases, it was determined that the nearest known occupied marbled murrelet site is located approximately 6.5 miles to the north. The nearest known suitable habitat (which has not been surveyed) is located approximately 1.8 miles east-northeast of the proposal area. Due to these distances, no mitigation measures are necessary for the protection of known or potential occupied sites in association with this proposal.

There are several peregrine falcon eyries that have been documented and monitored *just beyond* ½ mile to the southeast of Unit 2. Because this species has been delisted, the DNR is no longer required to develop management plans for peregrine eyries. However, the distance beyond ½ mile from the proposal would also negate the need to do so.

During my 6/21/16 field visit, I heard bald eagles calling to the north-northeast of Unit 1. This is not a surprising detection for the area, considering the proximity of the Skykomish River, as well as some significant fish-bearing streams, and a bald eagle nest site (last documented in 2006) located approximately two miles to the southeast. No known bald eagle nests or winter roosts are located within distances from this proposal that would warrant mitigation measures.

There is *much* use of the stands in the units, as well as the surrounding areas, by black-tailed deer. This does not warrant any special protection or mitigation measures.

Besides those mentioned above, no other occurrences of habitats or species of concern are reported within or near the proposal area.

Thank you for the opportunity to review and provide input for this proposal.



WASHINGTON STATE DEPARTMENT OF
Natural Resources
 Peter Goldmark - Commissioner of Public Lands

FPA/N No: 2815343

Effective Date: 9/6/2016

Expiration Date: 9/6/2019

**Forest Practices Application/Notification
 Notice of Decision**

Shut Down Zone: 658

EARR Tax Credit: Eligible Non-eligible

Reference: **Pathfinder CH**

DECISION:

- NOTIFICATION Operations shall not begin before the effective date.
- APPROVED This Forest Practices Application is subject to the conditions listed below.
- DISAPPROVED This Forest Practices Application is disapproved for the reasons listed below.
- CLOSED Applicant has withdrawn FPA/N.

FPA/N CLASSIFICATION

Number of Years Granted on Multi-Year Request

Class II Class III Class IVG Class IVS 4yrs 5 yrs

Conditions on Approval / Reasons for Disapproval

THIS OPERATION IS SUBJECT TO THESE CONDITIONS:

No additional conditions.

FOR YOUR INFORMATION:

Notify DNR Northwest Region Office (360-856-3500) 48 business hours before commencing timber harvest operations. Please provide the application number and legal description for your operation.

Issued By: Steven Huang *S.H.*

Region: Northwest

Title: Skykomish Forest Practice Forester

Date: 9/6/2016

Copies to: Landowner, Timber Owner and Operator

Issued in Person: Landowner, Timber Owner Operator By: *L. Utter*

Appeal Information

You have thirty (30) days to appeal this Decision and any related State Environmental Policy Act determinations to the Pollution Control Hearings Board in writing at the following addresses:

Physical address: 1111 Israel Rd. SW, Ste 301, Tumwater, WA 98501

Mailing address: P.O. BOX 40903, OLYMPIA, WA 98504-0903

Information regarding the Pollution Control Hearings Board can be found at: <http://www.eluho.wa.gov/>

At the same time you file an appeal with the Pollution Control Hearings Board, also send a copy of the appeal to the Department of Natural Resources' region office and the Office of the Attorney General at the following addresses:

Office of the Attorney General
Natural Resources Division
1125 Washington Street SE
PO Box 40100
Olympia, WA 98504-0100

And

Department Of Natural Resources
Northwest Region
919 N Township Street
Sedro-Woolley, WA 98284

Other Applicable Laws

Operating as described in this application/notification does not ensure compliance with the Endangered Species Act, or other federal, state, or local laws.

Hydraulic Project Approval (HPA) (Chapter 77.55RCW and WAC 222-50-020(2))

The Department of Fish and Wildlife (WDFW), as the jurisdictional agency issuing HPAs, has final authority for approving water crossing structures in Type S and F waters. WDFW continues to have authority on Type N waters and may exercise that authority on some Type N waters.

Notice: The HPA water crossing requirements supersede what is indicated on the FPA. Landowners are required by law to follow the provisions as directed on the HPA.

Transfer of Forest Practices Application/Notification (WAC 222-20-010)

Use the "Notice of Transfer of Approved Forest Practices Application/Notification" form. This form is available at region offices and on the Forest Practices Division website: <http://www.dnr.wa.gov/businesspermits/forestpractices>. Notify DNR of new Operators within 48 hours.

Continuing Forest Land Obligations (RCW 76.09.060, RCW 76.09.070, RCW 76.09.390, and WAC 222-20-055)

Obligations include reforestation, road maintenance and abandonment plans, conversions of forest land to non-forestry use and/or harvest strategies on perennial non-fish habitat (Type Np) waters in Eastern Washington.

Before the sale or transfer of land or perpetual timber rights subject to continuing forest land obligations, the seller must notify the buyer of such an obligation on a form titled "Notice of Continuing Forest Land Obligation". The seller and buyer must both sign the "Notice of Continuing Forest Land Obligation" form and send it to the DNR Region Office for retention. This form is available at DNR region offices.

If the seller fails to notify the buyer about the continuing forest land obligation, the seller must pay the buyer's costs related to continuing forest land obligations, including all legal costs and reasonable attorneys' fees incurred by the buyer in enforcing the continuing forest land obligation against the seller.

Failure by the seller to send the required notice to the DNR at the time of sale will be prima facie evidence in an action by the buyer against the seller for costs related to the continuing forest land obligation prior to sale.

DNR affidavit of mailing:

On this day _____, I placed in the United States mail at Sedro-Woolley, WA, postage paid, a true and accurate copy of the attached document. Notice of Decision FPA #__2815343__

_____ L Utgard _____

(Printed name)

(Signature)



WASHINGTON STATE DEPARTMENT OF
Natural Resources

**Forest Practices Application/Notification
NOTICE OF TRANSFER**

I DEPARTMENT OF NATURAL RESOURCES, hereby transfer my (our) rights, privileges, and obligations under this approved Forest Practices Application or Notification. I affirm that the information contained below is true and agree to comply with the rules authorized by the Forest Practices Act and to be bound by all conditions on the approved application or notification.

FPA/N Number: 2815343 Section(s): 13 and 14 Township: 27 North Range: 9 East
7 and 18 27 North 10 East

Original Landowner (Signature): [Signature]

Original Landowner (Printed): Uweke Novaro Date: 11 / 8 / 16

30-093900 – PATHFINDER SORTS

New Operator – Fill out this section <u>only</u> if you are changing or adding an operator	
Legal Name of New Operator: (Print) PRECISION FORESTRY, INC.	Mailing Address: 25820 121ST AVE NE ARLINGTON, WA 98223
Phone: 360-631-9200	
Email: <u>precisionforestry@apt.com</u>	
New Operator Signature: <u>[Signature]</u>	Date: <u>10-28-16</u>

New Landowner – Fill out this section <u>only</u> if you are transferring your FPA to a new landowner	
Legal Name of New Landowner: (Print)	Mailing Address:
Phone:	
Email:	
New Landowner Signature:	Date:

New Timber Owner – Fill out this section <u>only</u> if you are transferring your timber rights	
Legal Name of Timber Owner: (Print)	Mailing Address:
Phone:	
Email:	
Forest Tax Reporting Account Number: (Contact Dept. of Revenue to get this number: 1-800-548-8829)	
New Timber Owner Signature:	Date:

<input checked="" type="checkbox"/> Received by: <u>[Signature]</u>	Date: <u>11 / 10 / 16</u>
(DNR Forest Practices Staff Signature)	11/08/2005 Form QQ50



WASHINGTON STATE DEPARTMENT OF
Natural Resources

**Forest Practices Application/Notification
NOTICE OF TRANSFER**

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FPA/N Number: 2815343 Section(s): 13 and 14 Township: 27 North Range: 9 East
7 and 18 27 North 10 East

Original Landowner (Signature): Annette Mesman

Original Landowner (Printed): Annette Mesman Date: 12/27/16
30-094349 – PATHFINDER SORT 1

New Operator – Fill out this section <u>only</u> if you are changing or adding an operator	
Legal Name of New Operator: (Print) PRECISION FORESTRY, INC.	Mailing Address: 25820 121ST AVE NE ARLINGTON, WA 98223
Phone: 360-631-9200	Date:
Email:	
New Operator Signature:	

New Landowner – Fill out this section <u>only</u> if you are transferring your FPA to a new landowner	
Legal Name of New Landowner: (Print)	Mailing Address:
Phone:	Date:
Email:	
New Landowner Signature:	

New Timber Owner – Fill out this section <u>only</u> if you are transferring your timber rights	
Legal Name of Timber Owner: (Print) BUSE TIMBER & SALES INC.	Mailing Address: 3812 28TH PLACE NE EVERETT, WA 98201
Phone: 425-258-5849	Date: <u>12-19-16</u>
Email:	
Forest Tax Reporting Account Number: (Contact Dept. of Revenue to get this number: 1-800-548-8829) 800-010-473	
New Timber Owner Signature: <u>Will Miller</u>	

<input checked="" type="checkbox"/> Received by: <u>D. Utzard</u>	Date: <u>12/27/16</u>
(DNR Forest Practices Staff Signature) 11/08/2005 Form QQ50	



WASHINGTON STATE DEPARTMENT OF
Natural Resources

**Forest Practices Application/Notification
NOTICE OF TRANSFER**

I DEPARTMENT OF NATURAL RESOURCES, hereby transfer my (our) rights, privileges, and obligations under this approved Forest Practices Application or Notification. I affirm that the information contained below is true and agree to comply with the rules authorized by the Forest Practices Act and to be bound by all conditions on the approved application or notification.

FPA/N Number: 2815343 Section(s): 13 and 14 Township: 27 North Range: 9 East
7 and 18 27 North 10 East

Original Landowner (Signature): Annette Mesman

Original Landowner (Printed): Annette Mesman Date: 12/27/16

30-094350 – PATHFINDER SORT 2

New Operator – Fill out this section <u>only</u> if you are changing or adding an operator	
Legal Name of New Operator: (Print) PRECISION FORESTRY, INC.	Mailing Address: 25820 121ST AVE NE ARLINGTON, WA 98223
Phone: 360-631-9200	Date:
Email:	
New Operator Signature:	

New Landowner – Fill out this section <u>only</u> if you are transferring your FPA to a new landowner	
Legal Name of New Landowner: (Print)	Mailing Address:
Phone:	Date:
Email:	
New Landowner Signature:	

New Timber Owner – Fill out this section <u>only</u> if you are transferring your timber rights	
Legal Name of Timber Owner: (Print) SIERRA PACIFIC INDUSTRIES	Mailing Address: 14353 MCFARLAND ROAD MOUNT VERNON, WA 98273
Phone: 360-424-7619	Date:
Email:	
Forest Tax Reporting Account Number: (Contact Dept. of Revenue to get this number: 1-800-548-8829) 800-459-059-489	
New Timber Owner Signature: <u>William S. Turner</u>	<u>12-19-16</u>

<input checked="" type="checkbox"/> Received by: <u>S. Utgard</u>	Date: <u>12/27/16</u>
(DNR Forest Practices Staff Signature) 11/08/2005 Form QQ50	



WASHINGTON STATE DEPARTMENT OF
Natural Resources

**Forest Practices Application/Notification
NOTICE OF TRANSFER**

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FPAN Number: 2815343 Section(s): 13 and 14 Township: 27 North Range: 9 East
7 and 18 27 North 10 East

Original Landowner (Signature): Annette Mesman

Original Landowner (Printed): Annette Mesman Date: 12/27/16

30-094351 - PATHFINDER SORT 3

New Operator - Fill out this section <u>only</u> if you are changing or adding an operator	
Legal Name of New Operator: (Print) PRECISION FORESTRY, INC.	Mailing Address: 25820 121ST AVE NE ARLINGTON, WA 98223
Phone: 360-631-9200	Date:
Email:	
New Operator Signature: _____	

New Landowner - Fill out this section <u>only</u> if you are transferring your FPA to a new landowner	
Legal Name of New Landowner: (Print)	Mailing Address:
Phone:	Date:
Email:	
New Landowner Signature: _____	

New Timber Owner - Fill out this section <u>only</u> if you are transferring your timber rights	
Legal Name of Timber Owner: (Print) SIERRA PACIFIC INDUSTRIES	Mailing Address: 14353 MCFARLAND ROAD MOUNT VERNON, WA 98273
Phone: 360-424-7619	Date: <u>12-19-16</u>
Email:	
Forest Tax Reporting Account Number: (Contact Dept. of Revenue to get this number: 1-800-548-8829) 800-459-059-489	
New Timber Owner Signature: <u>Walt S. Turner</u>	

<input checked="" type="checkbox"/> Received by: <u>G. Utter</u>	Date: <u>12/27/16</u>
(DNR Forest Practices Staff Signature) 11/08/2005 Form QQ50	



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FPA/N Number: 2815343 Section(s): 13 and 14 Township: 27 North Range: 9 East
7 and 18 27 North 10 East

Original Landowner (Signature): Annette Mesman

Original Landowner (Printed): Annette Mesman Date: 12/27/16
30-094352 – PATHFINDER SORT 4

New Operator – Fill out this section <u>only</u> if you are changing or adding an operator	
Legal Name of New Operator: (Print) PRECISION FORESTRY, INC.	Mailing Address: 25820 121ST AVE NE ARLINGTON, WA 98223
Phone: 360-631-9200	Date:
Email:	
New Operator Signature:	

New Landowner – Fill out this section <u>only</u> if you are transferring your FPA to a new landowner	
Legal Name of New Landowner: (Print)	Mailing Address:
Phone:	Date:
Email:	
New Landowner Signature:	

New Timber Owner – Fill out this section <u>only</u> if you are transferring your timber rights	
Legal Name of Timber Owner: (Print) SIERRA PACIFIC INDUSTRIES	Mailing Address: 14353 MCFARLAND ROAD MOUNT VERNON, WA 98273
Phone: 360-424-7619	Date:
Email:	
Forest Tax Reporting Account Number: (Contact Dept. of Revenue to get this number: 1-800-548-8829) 800-059-489	
New Timber Owner Signature: <u>William S. Turner</u>	<u>12-19-16</u>

<input checked="" type="checkbox"/> Received by: <u>L. Utgard</u>	Date: <u>12/27/16</u>
(DNR Forest Practices Staff Signature) 11/08/2005 Form QQ50	



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FPA/N Number: 2815343 Section(s): 13 and 14 Township: 27 North Range: 9 East
7 and 18 27 North 10 East

Original Landowner (Signature): Annette Mesman

Original Landowner (Printed): Annette Mesman Date: 12/27/16

30-094353 – PATHFINDER SORT 5

New Operator – Fill out this section <u>only</u> if you are changing or adding an operator	
Legal Name of New Operator: (Print) PRECISION FORESTRY, INC.	Mailing Address: 25820 121ST AVE NE ARLINGTON, WA 98223
Phone: 360-631-9200	Date:
Email:	
New Operator Signature:	

New Landowner – Fill out this section <u>only</u> if you are transferring your FPA to a new landowner	
Legal Name of New Landowner: (Print)	Mailing Address:
Phone:	Date:
Email:	
New Landowner Signature:	

New Timber Owner – Fill out this section <u>only</u> if you are transferring your timber rights	
Legal Name of Timber Owner: (Print) COLUMBIA CEDAR INC.	Mailing Address: 24419 N HWY 395 KETTLE FALLS, WA 99141
Phone: 509-690-3127	Date: <u>12/21/16</u>
Email:	
Forest Tax Reporting Account Number: (Contact Dept. of Revenue to get this number: 1-800-548-8829) 800-051-959	
New Timber Owner Signature:	

<input checked="" type="checkbox"/> Received by: <u>H. Wegard</u>	Date: <u>12/27/16</u>
(DNR Forest Practices Staff Signature) 11/08/2005 Form QQ50	



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FPA/N Number: 2815343 Section(s): 13 and 14 Township: 27 North Range: 9 East
7 and 18 27 North 10 East

Original Landowner (Signature): Annette Mesman

Original Landowner (Printed): Annette Mesman Date: 12/27/16
30-094354 – PATHFINDER SORT 6

New Operator – Fill out this section <u>only</u> if you are changing or adding an operator	
Legal Name of New Operator: (Print) PRECISION FORESTRY, INC.	Mailing Address: 25820 121ST AVE NE ARLINGTON, WA 98223
Phone: 360-631-9200	Date:
Email:	
New Operator Signature:	

New Landowner – Fill out this section <u>only</u> if you are transferring your FPA to a new landowner	
Legal Name of New Landowner: (Print)	Mailing Address:
Phone:	Date:
Email:	
New Landowner Signature:	

New Timber Owner – Fill out this section <u>only</u> if you are transferring your timber rights	
Legal Name of Timber Owner: (Print) NORTHWEST HARDWOODS	Mailing Address: 13421 FARM TO MARKET ROAD MOUNT VERNON, WA 98273
Phone: 360-424-0447	Date: <u>12-19-2016</u>
Email:	
Forest Tax Reporting Account Number: (Contact Dept. of Revenue to get this number: 1-800-548-8829) 800-073-032	
New Timber Owner Signature: <u>Mark Fein</u>	

<input checked="" type="checkbox"/> Received by: <u>G. Utgard</u>	Date: <u>12/27/16</u>
(DNR Forest Practices Staff Signature)	11/08/2005 Form QQ50



WASHINGTON STATE DEPARTMENT OF
Natural Resources

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FPA/N Number: 2815343 Section(s): 13 and 14 Township: 27 North Range: 9 East
7 and 18 27 North 10 East

Original Landowner (Signature): Annette Mesmer

Original Landowner (Printed): Annette Mesmer Date: 12/27/16

30-094355 – PATHFINDER SORT 7

New Operator – Fill out this section only if you are changing or adding an operator

Legal Name of New Operator: (Print) PRECISION FORESTRY, INC.	Mailing Address: 25820 121ST AVE NE ARLINGTON, WA 98223
Phone: 360-631-9200	
Email:	Date:
New Operator Signature:	

New Landowner – Fill out this section only if you are transferring your FPA to a new landowner

Legal Name of New Landowner: (Print)	Mailing Address:
Phone:	
Email:	Date:
New Landowner Signature:	

New Timber Owner – Fill out this section only if you are transferring your timber rights

Legal Name of Timber Owner: (Print) JKCK RESOURCES INC	Mailing Address: 2866 SPADONI LANE GIG HARBOR, WA 98335
Phone: 360-931-4686	
Email:	
Forest Tax Reporting Account Number: (Contact Dept. of Revenue to get this number: 1-800-548-8829) 800-073-244	
New Timber Owner Signature: <u>Chris the... President</u>	Date: <u>12/24/2016</u>

Received by: L. Utgard Date: 12/27/16
(DNR Forest Practices Staff Signature) 11/08/2005 Form QQ50



WASHINGTON STATE DEPARTMENT OF
Natural Resources

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FPA/N Number: 2815343 Section(s): 13 and 14 Township: 27 North Range: 9 East
7 and 18 27 North 10 East

Original Landowner (Signature): Annette Mesman

Original Landowner (Printed): Annette Mesman Date: 12/27/16

30-094356 – PATHFINDER SORT 8

New Operator – Fill out this section only if you are changing or adding an operator

Legal Name of New Operator: (Print) PRECISION FORESTRY, INC.	Mailing Address: 25820 121ST AVE NE ARLINGTON, WA 98223
Phone: 360-631-9200	
Email:	Date:
New Operator Signature:	

New Landowner – Fill out this section only if you are transferring your FPA to a new landowner

Legal Name of New Landowner: (Print)	Mailing Address:
Phone:	
Email:	Date:
New Landowner Signature:	

New Timber Owner – Fill out this section only if you are transferring your timber rights

Legal Name of Timber Owner: (Print) NORTHWEST HARDWOODS	Mailing Address: 13421 FARM TO MARKET ROAD MOUNT VERNON, WA 98273
Phone: 425-210-5880	
Email:	Date:
Forest Tax Reporting Account Number: (Contact Dept. of Revenue to get this number: 1-800-548-8829) 800-073-032	
New Timber Owner Signature: <u>Mark Fein</u>	<u>12-19-2016</u>

Received by: L. Utgard Date: 12/27/16
(DNR Forest Practices Staff Signature) 11/08/2005 Form QQ50