



Forest Practices Application/Notification
Office Checklist Page 1
SOUTHEAST Region

FPA/N #: 2707894

Received Date: 12/8/25

Complete Date: 12/11/25

WDFW Concurrence Due Date: _____

WDFW Concurrence Completed: _____

Comments Due Date: 12/24/25

Decision Due Date: 12/16/25

FP Forester: 3162 - Marty

Shutdown Zone: 675

RMAP #: R27008114

FPA/N CLASSIFICATION: [] II [] III [] IVG <input checked="" type="checkbox"/> IVS		Biomass [] FFFPP [] 20-acre exempt []	
Landowner Name: <u>WA DNR</u>	Project Name: <u>West Fork Teanaway Restoration</u>		
WRIA: <u>39 - Upper Yakima</u>	WAU: <u>WF Teanaway</u>		
WRIA: _____	WAU: _____		
Legal Description: <u>19, 29, 30 - 21N - 1SE</u>	County: <u>Kittitas</u>		
Activity Type: Harvest <u>45</u> ac	Spray _____ ac	Stream X's _____	
Road _____	Road _____	Rock Pit _____ ac	
Construction <u>6,783</u> ft	Abandonment <u>11,952</u> ft	Spoils _____ cy	

ALTERNATIVE PRESCRIPTIONS

- Alternate Plan
- Ten-Year Forest Management Plan
- Columbia River Gorge National Scenic Area
- Watershed Analysis: _____
- Habitat Conservation Plan
- Landowner Option Plan for Northern Spotted Owl
- Cooperative Habitat Enhancement Agreement
- EARR Tax Credit [] Yes No

RESOURCE REVIEW

- Unstable Slopes (Risk: Highway, Water; _____)
- Soils Map (Highly Erodible & Very Unstable)
- SLPSTAB
- Landslide Hazard Zonation
- Landslide Inventory Polygon
- Rain-on-Snow and Outside Approved WA
- Hydric Soils
- Wetland [] Forested, [] A, [] B
- In WMZ of [] A, or B Wetland
- In RMZ/ELZ of Type S, F, N water
- Water Verification
- Bull Trout Overlay
- HCP Bull Trout Population
- Bald Eagle nest or roost within 660 feet
- Group A or B Water Supply
- Hatchery (Name: _____)
- Even-Aged Harvest greater than 120 Acres
- Ground-based Equipment on Slopes greater than 40%
- Road Construction on Slopes greater than 65%
- Saltwater Islands (Name: _____)
- In or Over Typed Water
- Volume greater than 5 mbf per acre

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

ADDITIONAL COMMENTS:

All in-water work being permitted under WDFW HPA.

Form completed by M² 12/9/25
Oct 2020 Version



For DNR Region Office Use Only	
FPA/N No.:	2707894
Region:	SE
Date of Receipt:	12/8/25

Forest Practices Application/Notification Eastern Washington

Project Name: West Fork Teanaway Restoration

PLEASE READ FPA/N INSTRUCTIONS PRIOR TO COMPLETING THIS APPLICATION.

1. Landowner, Timber Owner and Operator

Legal Name of Landowner WA Department of Natural Resources	Legal Name of Timber Owner <input checked="" type="checkbox"/> Same as Landowner	Legal Name of Operator <input checked="" type="checkbox"/> Same as Landowner
Mailing Address 713 E Bowers Rd.	Mailing Address	Mailing Address
City, State, Zip Ellensburg, WA 98926	City, State, Zip	City, State, Zip
Phone: (509) 925-8510	Phone:	Phone:
Email:	Email:	Email:

Contact Person: Sebastian McRae (WDFW Forester)	Phone: 564-233-9878 Email: sebastian.mcrae@dfw.wa.gov
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2. Are you converting any portion of the land to non-forestry use within three (3) years of harvest?

No Yes If yes, include a SEPA checklist and SEPA determination (if applicable) and copies of county clearing and grading permits (if applicable).

3. If you are harvesting timber, enter the Forest Tax Number of the Timber Owner.

800-888-888

Contact the Department of Revenue at 360-534-1324 to obtain a forest tax number or further information.

4. Are you eligible for the Enhanced Aquatic Resources Requirements (EARR) Tax Credit? See FPA/N instructions for further information.

No Yes

5. Are you a small forest landowner per RCW 76.09.450? See FPA/N instructions for details.

No Yes If yes, check all that apply. If no, skip to Question 6.

- My entire proposed harvest area is on a single contiguous ownership consisting of one or more parcels.
- My proposed forest practices activities are within an area covered by an approved Forest Stewardship Plan or Forest Management Plan developed in cooperation with DNR.
- I received technical assistance from a DNR small forest landowner Stewardship and Technical Assistance Forester in preparing this FPA/N.

6. Are you substituting prescriptions from an approved state or federal habitat conservation plan (HCP) or Watershed Analysis?

No Yes Write "HCP" or "Using Prescriptions" in tables that apply. Attach or reference prescriptions and/or crosswalk(s) for the approved HCP or Watershed Analysis on file at the region office.

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

Section	Township	Range	E/W	Tax Parcel Number	County
19	21	15	E	117235	Kittitas
30	21	15	E	417535	Kittitas
29	21	15	E	407535	Kittitas

8. Have you reviewed this forest practices activity area to determine whether it may involve historic sites and/or Native American cultural resources? Please read FPA/N instructions prior to answering this question.

No Yes If you made any contacts, please provide information in Question 28.

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

- a. No Yes If no, skip to c., if yes, enter your RMAP number: R2700811L; continue to b.
- b. No Yes Is this forest practices activity for work that is included in the approved RMAP?
- c. No Yes Is a Small Forest Landowner Checklist RMAP required? See FPA/N instructions for details.

10. Are there potential unstable slopes or landforms in or around the area of your forest practices activity?

No Yes If yes, attach Appendix D. Slope Stability Informational Form and map of areas reviewed for and locations of unstable slopes and landforms found. If applicable, attach a geotechnical letter, memo, or report, Watershed Analysis prescriptions, and/or SEPA Environmental Checklist.

11. Is this Forest Practices Application/Notification (answer all of the following questions)

- a. No Yes A request for a multi-year permit? If yes, length requested: 4 years or 5 years.
See FPA/N instructions to verify you qualify for a multi-year permit.
- b. No Yes An Alternate Plan? If yes, include a template Alternate Plan Form or detailed plan. *See FPA/N instructions for details.*
- c. No Yes For a funded Forest Family Fish Passage Program (FFFPP) project?
- d. No Yes Within an urban growth area? If yes, review FPA/N instructions for additional required documents.
- e. No Yes Within a public park? If yes, include a SEPA Environmental Checklist or SEPA Determination, except for harvest/salvage of less than 5,000 board feet within a developed public park.
Park Name: _____
- f. No Yes Within 500 feet of a public park? Park Name: _____
- g. No Yes Part of an approved Conversion Option Harvest Plan (COHP) prepared by a local government entity? If yes, include a copy.
- h. No Yes Within 200 feet 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 shoreline master plan.
- i. No Yes Within 50 miles of saltwater AND you own more than 500 acres of forestland in Washington state? If yes, include Appendix J. Marbled Murrelet Form or attach/reference applicable HCP prescriptions.
- j. No Yes In or directly adjacent to a potential Channel Migration Zone (CMZ)? If yes, include Appendix E. CMZ Assessment Form or attach/reference applicable HCP and/or Watershed Analysis prescriptions.

You are required to verify all waters within 200 feet of your proposed forest practices activities prior to submitting a Forest Practices Application/Notification. Use Appendix A. Water Type Classification Worksheet and/or a Water Type Modification form to explain how you verified water types. See *Water Typing Requirements in the FPA/N instructions for details.*

***** IF NOT WORKING IN OR OVER TYPED WATER, SKIP TO QUESTION 16 *****

Prior to answering Questions 12-15 in this section, please refer to the Forest Practices Application/Notification Instructions and Forest Practices Board Manual Section 5.

12. 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 that exceeds a five percent gradient?
- b. No Yes Construction, replacing, or repairing a bridge at or below the bankfull width of unconfined streams in Type S or F Water?
- c. No Yes Placing fill material within the 100-year flood level of unconfined streams in Type S or F Water?

13. Have you consulted with DNR and/or WDFW about the proposed hydraulic project(s) in or over Type S or F Water?

- No Yes

14. If installing, replacing, removing, or maintaining structures in or over any typed water, complete the table below. Provide crossing locations and identifiers on your Activity Map. Provide plan details in Question 28 or attach plan to the FPA/N. Type S and F and complex Type N Waters require detailed plan information per WAC 222-24-042(2). See FPA/N instructions for detailed plan requirements.

Crossing Identifier (letter, number)	Water Type (S, F, Np, Ns)	Planned Activity (install, replace, remove, temporary, maintenance)	Structure (bridge, ford/equipment crossing*, puncheon/fill, arch, round culvert, other)	Proposed Size (width x length)	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)	Is this an RMAP Project
		None - See HPA	and question 28					

*Fords and/or equipment crossings on Type S and F Waters may result in an unauthorized incidental take of certain threatened or endangered fish species. For more information, see 'Background for the State's Incidental Take Permits for certain threatened and endangered fish species' following Question 22 of the FPA/N Instructions.

15. 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 28. See FPA/N instructions for details.

*Activity	Type S Water	Type F Water	Type Np Water	Type Ns Water
Equipment Crossing**	PROVIDE DETAILS IN QUESTION 14			
Suspending Cables				
Cable Yarding				
LWD Placement/Removal				
Beaver Dam Removal				
Felling and Bucking	X	X	X	
Other (describe in Question 28)				

*Fords and/or equipment crossings on Type S and F Waters must be identified in Question 14.

16. If constructing or abandoning forest roads, complete the table below. Show the road locations and identifiers on the Activity Map. Include abandonment plans for all temporary roads and abandonment projects. See FPA/N instructions for abandonment plan requirements.

Road Identifier (name, number)	Road Construction		Road Abandonment	
	Length (feet)	Steepest Side-slope (%)	Length (feet)	Abandonment Date (MM/YYYY)
See FPA Addendum				

17. 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
N/A		N/A		

18. If operating within 200 feet of a wetland that is not associated with Type S or F Water, complete the table below. Wetlands associated with Type S or F Water should be listed in Question 25 or Question 23 if using 20-acre exempt rules. Show the boundaries of each wetland, along with its identifier, and Wetland Management Zone (WMZ) on the Activity Map. See FPA/N instructions for details.

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

***** IF NOT HARVESTING OR SALVAGING TIMBER, SKIP TO QUESTION 27 *****

19. 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, show surrounding stand information on the Activity Map. See FPA/N instructions for details.

Unit Number	Harvest Method (Even-aged, Uneven-aged, Salvage, Right of Way)	Biomass Harvest (Y or N)	Logging System (rubber tired skidder, tracked skidder, dozer, shovel, full suspension cable, leading end suspension cable, helicopter, cable assist/tethered, animal, chipper, forwarder, slash bundler)	Acres to be Harvested	Volume to be Harvested (mbf)	Biomass Volume to be Harvested (tonnage)	Salvage Volume to be Harvested (%)	Estimated Number of Trees per acre Remaining after Harvest		Steepest Slope in Harvest Unit (%)
								Less than 10" dbh	Greater than or equal to 10" dbh	
			See Addendum							

20. Reforestation. Check all that apply:

- Planting. Tree Species: See Inter-Fluve plan sheets 30-38
- Natural. Include a Natural Regeneration Plan
- Not required because of one of the following:
 - I am converting some or all of this land to non-forestland in the next three (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 150 tree seedlings per acre are established on the harvest area and my harvest will not damage them.
 - Road right-of-way or rock pit development harvest only.

**** IF YOU OWN MORE THAN 80 ACRES OF FORESTLAND IN WASHINGTON, SKIP TO QUESTION 25 ****

21. Are you using the exempt 20-acre parcel riparian management zone (RMZ) rule on Type S, F, or Np Waters?
See FPA/N instructions for details.

- No Skip to Question 25.
- Yes Continue to Question 22. *See FPA/N instructions for qualifications and information.*

22. 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):**
If any of the statements below apply AND you use the exempt 20-acres parcel RMZ rule, you are NOT authorized under the State's Incidental Take Permits. *See FPA/N instructions for details.*
 - 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.

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

Harvest/Salvage Boundaries: Pink flagging for M and H units; Lime glo flagging for GE and CA units

Clumped Wildlife Reserve Trees | Green Recruitment Trees: Red flagging for leave islands

Right-of-Way Limits | Road Centerlines: Orange flagging for roads and staging/refueling areas

Stream Crossing Work: _____

Riparian Management Zone Boundaries and Leave/Take Trees: Orange paint for leave trees (M units)

Channel Migration Zone: RMZ and CMZ unmarked - see alternate plan

Wetland Management Zone Boundaries and Leave/Take Trees: WMZ unmarked - see alternate plan

28. Additional information (attach additional pages if necessary):

- See FPA/N instructions for required plan information for hydraulic projects in or over Type S, F, or complex N Water.
- If applicable, include mitigation measures from a geotechnical memo, letter, or report.

Question 8: The United State Fish and Wildlife Service (USFWS) is the federal nexus for National Historic Preservation Act Section 106 consultation, and consultation with the Washington State DAHP and the affected Tribes is underway.

Question 11: Substantial Development Permit not required due to the use of a Fish Habitat Enhancement HPA pathway. Appendix E - CMZ assessment not required due to requested WAC variance - see alternate plan proposal for more information.

Question 12: All in-stream activities will be permitted under the HPA (#0045610 - in progress).

Question 14: At the intersection of road R1 and stream S1, a cross drain will be installed to accommodate a water diversion pipe. S1 will be de-fished upstream of the road in accordance with de-watering plans (sheets W4-W5 of design sheets: Inter-Fluve, 2025) and the HPA (#0045610 - in progress).

Question 15: All in-stream activities will be permitted under the HPA (#0045610 - in progress). See alternate plan proposal for felling and bucking.

Question 16: On the south end of the project (along private boundary), 150 ft. of the T4500 Rd. will be left open for administrative access.

Question 18: All wetlands are listed in the addendum table, including those associated with type S and F waters, because pre-project assessments had already delineated them. Project design minimizes impacts to wetlands by avoiding them wherever possible and enhancing wetland functions (see alternate plan proposal).

See the following attachments:

- FPA Addendum (questions 16,18, and 19)
- Alternate Plan Proposal for West Fork Teanaway Restoration FPA
- FPA and Alternate Plan Maps (including version showing modeled post-project 2-year flows)
- WFT Haul Route Map
- Inter-Fluve, 2025. West Fork Teanaway RM 5.1 – 7.1. Appendix 7.1. 80% (Permit-Level) Design Plan Sheets
- WFT Monitoring Plan
- SEPA Checklist
- WFT NSO Thinning Unit Cruise
- Appendix A: Water Type Classification Worksheet
- Appendix D: Slope Stability Informational Form
- Saturna Watershed Sciences, 2025. West Fork Teanaway Restoration (RM 5.1–7.2) Geologic Evaluation - Analysis of Potential Effects on Unstable Slopes (Title 222 WAC).

23. If harvesting on an exempt 20-acre parcel and are within 345 feet of a Type S or F Water or periodically inundated areas of their associated wetlands, 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 in Question 28 how stream shade was determined to be met or use Appendix F. Stream Shade Assessment Worksheet.

Stream Segment Identifier (letter)	Water Type (S, F,)	Segment Length (feet)	Adjacent Harvest Type (partial cut or other)	RMZ Maximum Width (feet)	Are you harvesting within the maximum RMZ? (Y or N)	Only complete if harvesting within 75 feet or within the maximum RMZ, whichever is less	
						Minimum Shade Required (%)	Shade met per FPBM – Section 1? (Y or N)

24. Are you harvesting within 29 feet of a Type Np Water on an exempt 20-acre parcel?

No Skip to Question 27.

Yes Describe leave tree strategy in Question 28 and Skip to Question 27. See FPA/N instructions for details.

25. If harvesting within 130 feet of any Type S or F Water or periodically inundated areas of their associated wetlands, complete the table below. Include stand information 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 in Question 28 how stream shade was determined to be met or use Appendix F. Stream Shade Assessment Worksheet.

Stream Segment Identifier (letter)	Water Type (S, F,)	Site Class (I - V)	Stream Width (feet)	Is there a CMZ? (Y or N)	RMZ Harvest Code(s) (see instructions)	DFC Run Number	Total width of RMZ (feet)	Only complete if harvesting within 75 feet or within the maximum RMZ, whichever is less	
								Minimum Shade Required (%)	Shade met per FPBM – Section 1? (Y or N)
WFTR	S	II	89	Y	A	N/A	200	N/A	N/A
S1	F	II	4	N	A	N/A	110	N/A	N/A
S2	F	II	12	N	A	N/A	110	N/A	N/A

26. If harvesting within 50 feet of Type Np Water, complete the table below. Show RMZs and stream segment identifiers on the Activity Map.

Stream Segment Identifier (letter)	Selected Strategy (partial cut or clearcut)
S4	Clearcut - see alternate plan
S4A	Clearcut - see alternate plan

Stream Segment Identifier (letter)	Selected Strategy (partial cut or clearcut)

29. 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 six (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 or fords that are in or over Type S and F Waters.
- Inadvertent Discovery – Chapter 27.44, 27.53, 68.50 and 68.60 RCW
 - If you find or suspect you have found an archeological 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/N they are 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 Legal Landowner 	Signature of Legal of Timber Owner* <i>(if different than landowner)</i>	Signature of Legal Operator <i>(if different than landowner)</i>
Print Name: MAZLA BIEKOR	Print Name:	Print Name:
Date: 12/8/25	Date:	Date:

***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.

Forest Practice Application Addendum

West Fork Teanaway Restoration

Question 16 (Road construction and abandonment)

Road Identifier	Road construction		Road abandonment	
	Length (ft.)	Steepest Side-slope (%)	Length (ft.)	Abandonment Date (MM/YY)
T5000	0	N/A	3715	11/27
T4500	0	N/A	1454	11/27
R1	1382	50	1382	11/27
R2	2831	10	2831	11/27
TA1	153	10	153	11/27
TA2	135	10	135	11/27
TA3	115	10	115	11/27
TA4	84	10	84	11/27
TA5	31	10	31	11/27
TA6	256	10	256	11/27
TA7	21	10	21	11/27
TA8	46	10	46	11/27
TA9	254	10	254	11/27
TA10	30	10	30	11/27
TA11	25	10	25	11/27
TA12	52	10	52	11/27
TA13	34	10	34	11/27
TA14	116	10	116	11/27
TA15	233	10	233	11/27
TA16	82	10	82	11/27
TA17	178	10	178	11/27
TA18	479	10	479	11/27
TA19	246	10	246	11/27

Question 18 (Wetlands – including those associated with Type S or F water)

Wetland Identifier	Wetland Type	Planned Activities in Wetland	Planned Activities in WMZ	Total Wetland Acres	Acres drained?	Acres filled?
WF 2	B	Grading/excavation	Grading/excavation	0.82	0	0.01
WF 3	Forested	None	Grading/excavation	0.5	0	0
WF 7	B	None	Grading/excavation	0.26	0	0
WF 10	B	Grading/excavation	Grading/excavation	0.5	0	0.01
WF 11	Forested	None	Grading/excavation	0.79	0	0
WF 12	Forested	Grading/excavation	Grading/excavation	0.48	0	0.48
WF 12.2	Forested	None	None	0.29	0	0
WF 13	B	None	None	0.34	0	0
WF 19	B	None	Road construction	2.1	0	0

Note: Wetland names correlate to the original wetland assessment(s), documented in GG Environmental, 2025.

Question 19 (Harvest Units)

Unit	Harvest Method	Biomass (Y/N)	Logging System	Acres	Volume (MBF)	Biomass (tons)	Salvage Volume	Leave trees/ac. <10"	Leave trees/ac. >10"	Steepest Slope
SR1	ROW	N	Shovel, rubber-tired skidder	0.5	0.5	N/A	N/A	5	0	5
SR2	ROW	N	Shovel, rubber-tired skidder	0.8	6.5	N/A	N/A	5	0	5
SR3	ROW	N	Shovel, rubber-tired skidder	0.1	0.1	N/A	N/A	5	0	5
SR4	ROW	N	Shovel, rubber-tired skidder	0.1	0.5	N/A	N/A	10	10	5
SR5	ROW	N	Shovel, rubber-tired skidder	0.1	0.5	N/A	N/A	5	0	5
SR6	ROW	N	Shovel, rubber-tired skidder	0.1	0.1	N/A	N/A	5	0	5
SR7	ROW	N	Shovel, rubber-tired skidder	0.1	0.5	N/A	N/A	5	0	5
GE1	Even-aged	N	Shovel, rubber-tired skidder	17.9	120	N/A	N/A	5	10	5
GE2	Even-aged	N	Shovel, rubber-tired skidder	3.5	32	N/A	N/A	5	5	5
GE3	Even-aged	N	Shovel, rubber-tired skidder	2.2	26	N/A	N/A	5	1	5
GE4	Even-aged	N	Shovel, rubber-tired skidder	1.6	12	N/A	N/A	5	0	5
GE5	Even-aged	N	Shovel, rubber-tired skidder	1.9	15	N/A	N/A	5	0	5
GE6	Even-aged	N	Shovel, rubber-tired skidder	0.1	4	N/A	N/A	0	0	5
GE7	Even-aged	N	Shovel, rubber-tired skidder	0.9	5	N/A	N/A	0	0	5
CA1	Even-aged	N	Shovel, rubber-tired skidder	0.1	2	N/A	N/A	0	0	5
CA2	Even-aged	N	Shovel, rubber-tired skidder	0.1	2	N/A	N/A	0	0	5
CA3	Even-aged	N	Shovel, rubber-tired skidder	0.1	0.25	N/A	N/A	0	0	5
CA4	Even-aged	N	Shovel, rubber-tired skidder	0.1	2	N/A	N/A	0	0	5

CA5	Even-aged	N	Shovel, rubber-tired skidder	0.2	6	N/A	N/A	0	0	5
CA6	Even-aged	N	Shovel, rubber-tired skidder	0.7	10	N/A	N/A	0	0	5
CA7	Even-aged	N	Shovel, rubber-tired skidder	0.1	1	N/A	N/A	0	0	5
CA8	Even-aged	N	Shovel, rubber-tired skidder	0.1	6	N/A	N/A	0	0	5
CA9	Even-aged	N	Shovel, rubber-tired skidder	0.1	4	N/A	N/A	0	0	5
CA10	Even-aged	N	Shovel, rubber-tired skidder	0.1	5	N/A	N/A	0	0	5
CA11	Even-aged	N	Shovel, rubber-tired skidder	0.1	0.5	N/A	N/A	0	0	5
CA12	Even-aged	N	Shovel, rubber-tired skidder	0.1	0.5	N/A	N/A	0	0	5
CA13	Even-aged	N	Shovel, rubber-tired skidder	0.1	0.5	N/A	N/A	0	0	5
M1	Uneven-aged	N	Shovel, rubber-tired skidder	0.5	5	N/A	N/A	40	100	5
M2	Uneven-aged	N	Shovel, rubber-tired skidder	0.3	4	N/A	N/A	20	110	5
M3	Uneven-aged	N	Shovel, rubber-tired skidder	0.7	6	N/A	N/A	30	120	5
M4	Uneven-aged	N	Shovel, rubber-tired skidder	0.3	3	N/A	N/A	20	140	5
M5	Uneven-aged	N	Shovel, rubber-tired skidder	1	8	N/A	N/A	30	125	5
H1	Uneven-aged	N	Chainsaw, shovel/winch	0.2	N/A	N/A	N/A	150	N/A	5
H2	Uneven-aged	N	Chainsaw, shovel/winch	0.1	N/A	N/A	N/A	150	N/A	5
H3	Uneven-aged	N	Chainsaw, shovel/winch	0.1	N/A	N/A	N/A	150	N/A	5
H4	Uneven-aged	N	Chainsaw, shovel/winch	1.8	N/A	N/A	N/A	150	N/A	5

Note: SR = Staging/refueling area. GE = Grading/excavation area. CA = Channel activation area. M = Mechanical thin. H = Hand thin (chainsaw). SR (Staging/refueling area) units have just a handful of trees, as they are in existing openings. Tree removal in staging areas may be unnecessary, making the effective harvest volume 0 MBF. Hand thinning of material <8" DBH in units H1-H4 is a Class I activity, except for relevance in the alternate plan.

Appendix A. Water Type Classification Worksheet

Eastern Washington

Stream/Segment ID	Stream/Segment ID	Stream/Segment ID
S1, S2, S5	S3, S4, S4A	
Date(s) Observed	Date(s) Observed	Date(s) Observed
7/9/2025	7/9/2025	
1. Did you determine fish use as described in the Forest Practices Board Manual Section 13? Or, does the stream have waiver characteristics? See WAC 222-16-031(3)(b)(ii).		
<input checked="" type="checkbox"/> No. Continue to 2. <input type="checkbox"/> Yes. Meets waiver criteria. Skip to 6. <input type="checkbox"/> Yes. Attach documentation or provide approved WTMF number: <hr style="width: 80%; margin-left: 0;"/> <input type="checkbox"/> Fish found. Stop: Type F water. <input type="checkbox"/> No fish. Skip to 6.	<input checked="" type="checkbox"/> No. Continue to 2. <input type="checkbox"/> Yes. Meets waiver criteria. Skip to 6. <input type="checkbox"/> Yes. Attach documentation or provide approved WTMF number: <hr style="width: 80%; margin-left: 0;"/> <input type="checkbox"/> Fish found. Stop: Type F water. <input type="checkbox"/> No fish. Skip to 6.	<input type="checkbox"/> No. Continue to 2. <input type="checkbox"/> Yes. Meets waiver criteria. Skip to 6. <input type="checkbox"/> Yes. Attach documentation or provide approved WTMF number: <hr style="width: 80%; margin-left: 0;"/> <input type="checkbox"/> Fish found. Stop: Type F water. <input type="checkbox"/> No fish. Skip to 6.
2. Were fish observed, or are fish known to use the stream any time of the year?		
<input type="checkbox"/> No. Continue to 3. <input checked="" type="checkbox"/> Yes. Stop: Type F water.	<input checked="" type="checkbox"/> No. Continue to 3. <input type="checkbox"/> Yes. Stop: Type F water.	<input type="checkbox"/> No. Continue to 3. <input type="checkbox"/> Yes. Stop: Type F water.
3. Is there an impoundment (ponded water) upstream of the assessed segment that is greater than 0.5 acres?		
<input type="checkbox"/> No. Continue to 4. <input type="checkbox"/> Yes. Stop: Type F water.	<input checked="" type="checkbox"/> No. Continue to 4. <input type="checkbox"/> Yes. Stop: Type F water.	<input type="checkbox"/> No. Continue to 4. <input type="checkbox"/> Yes. Stop: Type F water.
4. Are there segments within or upstream of the assessed portion of the stream where the average bankfull width is three feet or greater? AND, is the average stream gradient less than or equal to 16%?		
<input type="checkbox"/> No. Continue to 5. <input type="checkbox"/> Yes. Stop: Type F water.	<input checked="" type="checkbox"/> No. Continue to 5. <input type="checkbox"/> Yes. Stop: Type F water.	<input type="checkbox"/> No. Continue to 5. <input type="checkbox"/> Yes. Stop: Type F water.
5. Are there segments within or upstream of the assessed portion of the stream where the average bankfull width is three feet or greater? AND, is the average stream gradient between 16 and 20%? AND, is the contributing basin to the stream greater than 175 acres?		
<input type="checkbox"/> No. Continue to 6. <input type="checkbox"/> Yes. Stop: Type F water.	<input checked="" type="checkbox"/> No. Continue to 6. <input type="checkbox"/> Yes. Stop: Type F water.	<input type="checkbox"/> No. Continue to 6. <input type="checkbox"/> Yes. Stop: Type F water.
6. Does the stream segment contain water at all times during a normal rainfall year?		
<input type="checkbox"/> No. Continue to 7. <input type="checkbox"/> Yes. Type Np water. Skip to 9	<input type="checkbox"/> No. Continue to 7. <input checked="" type="checkbox"/> Yes. Type Np water. Skip to 9	<input type="checkbox"/> No. Continue to 7. <input type="checkbox"/> Yes. Type Np water. Skip to 9
7. Is the stream segment downstream of a perennial source of water?		
<input type="checkbox"/> No. Continue to 8. <input type="checkbox"/> Yes. Type Np water. Skip to 9	<input type="checkbox"/> No. Continue to 8. <input type="checkbox"/> Yes. Type Np water. Skip to 9	<input type="checkbox"/> No. Continue to 8. <input type="checkbox"/> Yes. Type Np water. Skip to 9
8. Is the stream physically connected by an above-ground channel to Type S, F or Np water?		
<input type="checkbox"/> No. Non-typed water. <input type="checkbox"/> Yes. Type Ns water.	<input type="checkbox"/> No. Non-typed water. <input type="checkbox"/> Yes. Type Ns water.	<input type="checkbox"/> No. Non-typed water. <input type="checkbox"/> Yes. Type Ns water.
9. Describe how you determined the uppermost point of perennial flow. Include a description of its location and show the point on a map. Use a separate piece of paper if necessary.		
Stream survey of physical characteristics to 200' from project boundary	Stream survey of physical characteristics to 200' from project boundary	

Appendix D. Slope Stability Informational Form

Complete and submit this form with your FPA/N if you indicated you are working in or around potentially unstable slopes or landforms.

- Instructions for Appendix D. Slope Stability Informational Form is located in the Forest Practices Application/Notification Instructions document.
- 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.a. What preliminary screening tools were used to identify unstable slopes or landform features in and/or around your proposal?

- Aerial Photo LiDAR Landslide Inventory GIS Field Review
 Forest Practices Application Mapping Tool (FPAMT) Resource Map Other. Describe:

b. Did any of the features identified during the preliminary screening not exist when you performed a field review?

- No. Yes. Describe:

Field review with Forest Practices Forester on June 30th, 2025, revealed that some mapped unstable slopes >70% were perched above sandstone cliffs, requiring review by licensed geologist.

2.a. Are you conducting forest practices activities in or over potentially unstable slopes or landforms?

- No. Skip to Question 3.a Inner Gorge Bedrock Hollow Convergent Headwall
 Groundwater recharge area of glacial deep-seated landslides Outer edges of meander bends
 Toe of deep-seated landslide with slopes $\geq 65\%$ Category E. Describe in "Other" below.
 Other. Describe:

b. What activities may occur in or over potentially unstable slopes or landforms? Check all that apply and describe in the space provided. See FPA/N instructions.

- Timber Harvest Road Construction Road Maintenance Suspending Cables
 Yarding Tailholds Other

Describe:

3.a. Are you conducting forest practices activities around potentially unstable slopes or landforms?

- No. Skip to Question 4.a Inner Gorge Bedrock Hollow Convergent Headwall
 Groundwater recharge area of glacial deep-seated landslides Outer edges of meander bends
 Toe of deep-seated landslide with slopes $\geq 65\%$ Category E. Describe in "Other" below.
 Other. Describe:

See Saturna Watershed Sciences, 2025. West Fork Teanaway Restoration (RM 5.1–7.2) Geologic Evaluation - Analysis of Potential Effects on Unstable Slopes (Title 222 WAC) for more information.

b. What activities may occur around potentially unstable slopes or landforms? Check all that apply and describe in the space provided: See FPA/N instructions.

- Timber Harvest Road Construction Road Maintenance Suspending Cables
 Yarding Tailholds Other

Describe:

Grading/excavation and construction/abandonment of temporary roads.

4.a. Were any features identified in Question 3.a. excluded from your forest practices activity?

- No. Skip to Question 5 Yes. Continue to Question 4.b

b. Describe the field indicators you used to exclude potentially unstable slopes or landforms from your forest practices activity (example: harvest boundary was placed a crown width away from the break in slope of the inner gorge):

All features fall outside the project area, and project modifications to river flows are not expected to increase the risk of unstable slope activation (see Saturna Watershed Sciences, 2025. West Fork Teanaway Restoration (RM 5.1–7.2) Geologic Evaluation - Analysis of Potential Effects on Unstable Slopes (Title 222 WAC) for more information and unstable slopes map). See ICN #SE-25-150094 for concurrence by DNR SE Region Geologist.

5. Are there areas of public use located in or around the area of your proposed forest practices activity?

- No. Yes. Check all that apply and show locations on map (Question 7).

- Public Road(s) Utilities Designated Recreation Area(s) Structure(s)
 Other. Describe:

6. Complete the table below with date(s) and person(s) that conducted field review(s):

Date	Name	Title/Position
6/30/2025	Sebastian McRae	WDFW Forester
6/30/2025	William Meyer	WDFW Habitat Biologist
6/30/2025	Morgan Bucher	WDFW Habitat Biologist
6/30/2025	Rebecca Wassell	Mid-Columbia Fisheries Yakima Basin Program Director
6/30/2025	Marty Mauney	Forest Practices Forester

7. Attach a map showing the following:

- All areas reviewed.
- Locations of unstable slopes and landforms that were identified as described in Question 2.a. and 3.a.
- Locations where areas of public use exist as described in Question 5 above.

This map is intended to be developed by the field practitioner.

This can be a forest practices activity map, harvest map, or GIS map – See FPA/N instructions for example map.

Alternate Plan Proposal for West Fork Teanaway Restoration Forest Practices Application/Notification

Note: The proposal is composed of three river reaches, the canyon reach (river mile 7.2-8.0), the upstream reach (river mile 6.75-7.2, designed by WDFW), and the downstream reach (river mile 5.1-6.75, designed by Inter-Fluve). These are referred to as the “canyon reach,” “upstream reach,” and “downstream reach”.

Current Conditions and Management Goals

1. Describe each of the following elements within the proposed alternate plan area.

a. Predominant tree species

The riparian forest along the upstream and downstream reaches contains a diverse mix of tree species, including deciduous black cottonwoods (*Populus balsamifera ssp. trichocarpa*) and quaking aspen (*Populus tremuloides*), as well as the coniferous Douglas-fir (*Pseudotsuga menziesii*), grand fir (*Abies grandis*), western white pine (*Pinus monticola*), ponderosa pine (*Pinus ponderosa*), lodgepole pine (*Pinus contorta*), western larch (*Larix occidentalis*), and western redcedar (*Thuja plicata*). Due to degradation of the river’s natural flood ecology, the floodplain now supports fewer deciduous trees than would be expected in a functional river system and conifer encroachment threatens the remaining patches of deciduous trees. In the canyon reach, the narrow floodplain extent and steep canyon walls make the riparian zone more suitable for conifers than deciduous trees.

b. Average tree height and age

The riparian forest along the upstream and downstream reaches consists of patches and corridors of trees 80-130 feet in height (at the upper canopy) and is quite variable, with at least 30% of the project area consisting of well-drained alluvial soils that do not support continuous tree cover. Most of the trees are 60-100 years old, with scattered older individuals. The stratified age cohorts suggest a rapid ingrowth of trees following logging disturbance in the late 1800’s to early 1900’s, with older individuals (primarily western redcedar and Douglas-fir) being those that remained after early logging.

c. Excessive blowdown/ fire damage

There is excessive mortality and blowdown in the canyon and upstream reaches, which burned in the 2017 Jolly Mountain Fire. At 8 years post-fire, many trees killed in the fire are

now falling, creating a buildup of continuous dry fuels in the understory, and significantly increasing the risk of a re-burn lethal to the remaining trees and adjacent unburned forest. Due to the river's incision, this floodplain is inaccessible to seasonal flood waters and thus, apart from trees in the immediate vicinity of the active channel, this large woody material pulse is unable to contribute to in-stream habitat and fluvial geomorphic processes.

d. Root rot or other forest health issues

Outside of the Jolly Mountain Fire burn area, there are pockets of grand fir mortality where drought-affected trees are in decline and more susceptible to insects and root disease. While these conditions create canopy complexity and provide habitat, they also increase the risk of high-severity fire in the riparian forest.

e. Describe topography

The project is situated along river miles 5.1 to 8.0, below the West Fork Teanaway River's exit from the steep and confined canyon reach. There are several large (type-F) and two smaller (type-Np) tributaries that flow from the surrounding hills into the project area. The topography within the valley bottom consists of the current river channel and its small active CMZ (due to significant channel incision), a much larger historic/inactive CMZ, inactive floodplain terraces, and areas of elevated anthropogenic fill from historic railroads and roads built on the river floodplain.

2. Describe the resource management goals you wish to achieve through this alternate plan.

The alternate plan proposal area covers a portion of the West Fork Teanaway River and its associated floodplain that exhibit significant impairment of ecological functions and geomorphic processes, necessitating the degradation reversal measures described below (Natural Systems Design, 2021). Channel incision of 6-10 ft. and modifications to floodplain elevations resulting from historic logging, log drives, and railroad/road construction have significantly reduced the quantity and quality of habitat available for aquatic species in the West Fork Teanaway River drainage. Historical removal of in-channel wood effectively increased the river gradient, resulting in increased transport capacity and channel incision. Logging in the floodplain and surrounding uplands resulted in additional increases in flow due to reduced surface roughness and less abstractions (i.e., surface storage, interception, evapotranspiration) during precipitation events. Climate change is shifting the historically snowmelt dominated upper watershed to become more rain dominant, resulting in flashier peak flows and lower base flows. Additionally, the reduction of groundwater levels, seasonal inundation, and periodic fire across the floodplain have

created conditions that favor conifers, leading to a shift in riparian forest composition. These combined impacts have led to degraded stream habitat and riparian function, including:

- 1) A lack of large woody material and altered recruitment trajectory.
- 2) An altered seasonal shade regime.
- 3) Increased flow velocities resulting in poor bank stability and gravel recruitment.
- 4) Reduced filtering of sediment and nutrients from seasonal floodwaters.
- 5) An altered nutrient input regime.

The West Fork Teanaway Restoration Project RM 5.1 – 8.0 will reconnect two miles of the river with its floodplain, reverse anthropogenic incision, increase in-stream and floodplain hydraulic roughness through wood additions, and restore native vegetation. From RM 5.1 – 7.2 (upstream and downstream reaches), the project will excavate up to 6 feet deep in places to reconnect side channels, create floodplain, and improve wetland habitat. The excavated native material will be placed in the incised river channel to raise the bed elevation and deflect flow out of vulnerable bed-rock incised areas. The total area to be cut or filled is 28.8 acres, with another 7.3 acres to be used for staging and access. Large wood and small wood (slash) will be generated on site from clearing, as well as logs with roots imported to the project. These will be used to create log structures to restore geomorphic function and habitat. The trees will be harvested to retain their root wads and placed in 1.4 acres of the channel and floodplain. Disturbed areas will be stabilized with straw and slash, and 30% of disturbed areas – outside of expected seasonal inundation - will be replanted with native vegetation. From RM 7.2 to 8.0 (canyon reach), the project will improve shade and large wood recruitment by planting 5000 conifer seedlings within 200 feet of the channel banks and 1250 conifer seedlings on 5 priority acres throughout the 129-acre slopes above the river.

The project aims to:

- Induce sinuosity and branching channels by creating hydraulic roughness and natural stream forms that facilitate stream flow movement onto the created floodplain, the existing valley bottom, and historical side channels.
- Increase and improve available fish habitat for focal species, including threatened steelhead (*Oncorhynchus mykiss*) and bull trout (*Salvelinus confluentus*), by increasing perennial channel length, pool frequency, and gravel retention/cover.
- Enhance natural water storage by increasing groundwater infiltration potential and seasonal groundwater elevations.
- Increase and improve wetland habitat extent and quality.
- Increase floodplain connection and frequency of inundation.

- Increase hyporheic flow paths and decrease depth to groundwater.
- Improve stream/floodplain/wetland habitat to encourage re-colonization by beavers (*Castor canadensis*).
- Enhance the long-term trajectory of all five riparian functions by restoring the geomorphic processes that support healthy riparian vegetation.

The project will directly restore the stream habitats and processes that the Forest Practices rules were developed to protect. While the proposed actions constitute a short-term disturbance, they will improve the long-term trajectory of all five riparian functions outlined in WAC 222-16-010. This alternate plan will thereby "facilitate voluntary landscape, riparian, or stream restoration" (WAC 222-12-040) in alignment with the Teanaway Community Forest Management Plan (WA DNR and WDFW, 2015).

Proposed Management Activities

3. Describe what, where, how, and when activities will be conducted (template Q3-6).

This alternate plan proposal is designed to be implemented in a single operating season running from May to November. However, two operating seasons may be necessary to finish the work, which was designed with a modular approach to facilitate phasing, if necessary. Regardless, activities farthest from the river will occur first, followed by activities closer to the river. In-channel work will occur during the designated in-water work window agreed upon by WDFW (anticipated July 16th-October 31st). This schedule will prevent sediment delivery to the river channel and minimize the time needed to complete in-water work. The following is an *approximate* timeline:

Roads/access/staging and forest thinning – May 2026

Contractors will reopen old road grades as temporary access to the project area and construct temporary access roads to in-channel work locations. Contractors will clear staging areas, if necessary. Staging areas with anticipated tree removal have been recorded as harvest units.

Roads have been located to utilize existing grades and minimize potential impacts to wetlands whenever possible. Staging areas, refueling areas, and channel access points have been located in existing openings to minimize tree removal. Roads will not be built on slopes with erosion potential to prevent sediment delivery. Water diversion measures directed under the HPA (#0045610 – in progress) will ensure access roads do not cross typed water.

Contractors will conduct mechanical thinning in designated northern spotted owl (*Strix occidentalis*) habitat enhancement units (M1-M5), leaving a residual stand of 130-160 TPA and multi-storied structure that will enhance habitat for northern spotted owls. Units M1-M5 have been leave-tree marked using orange paint to facilitate thinning and ensure retention of appropriate forest structure. Hand thinning of non-commercial trees (<8" DBH) in designated hand thinning units (H1-H4) will leave a residual stand of 150-200 TPA and a heterogenous structure, which will also enhance northern spotted owl habitat. Thinning will occur concurrently with road/access work so trees removed from the units can be stockpiled for use in later construction.

See WFT NSO Thinning Unit Cruise for residual stand data in mechanical units M1-M5.

Prescription for hand thinning units: H1-H4

- Retain all trees >8" DBH within the thinning unit. Only trees <8" DBH may be cut.
- Retain a minimum of 150 TPA (average 17 ft. spacing) and a maximum of 200 TPA (average 15 ft. spacing).
- Retain all hardwoods (e.g., black cottonwood, quaking aspen) for riparian functions.
- Retain all unique species (western redcedar, western white pine, ponderosa pine), except where local abundance conflicts with desired structural characteristics.
- Favor retention of Douglas-fir over grand fir to improve drought and fire resilience.
- Retain a mix of tree heights to encourage development of a multi-layered canopy. Vary the spacing with a mix of clumps and openings for structural complexity.
- Remove all trees <8" DBH within the dripline (15 ft.) of mature conifers.

Grading/channel creation/floodplain development – June 2026

Contractors will excavate elevated anthropogenic fill surfaces down to the target floodplain elevation and stockpile trees, woody material, and topsoil for use in-place or elsewhere on the project. Leave tree patches in grading areas will preserve high-quality tree cover and other riparian vegetation. All trees removed in the excavation process will be used for large woody material in the channel and floodplain. Contractors will augment surface roughness in the floodplain and excavated side channels with woody material of both small and large size classes. Native fill material composed of alluvium from excavation of floodplain surfaces will be used for channel bed supplementation and channel plugs. No fill material will be exported from or imported to the project area.

Grading areas have been concentrated in the upstream reach where the floodplain impairment is greatest. The design team has taken a lighter-touch approach emphasizing

wood supplementation in the downstream reach of the proposal, which has a more intact flow regime.

The proposal will implement the following standard erosion control measures:

1. Temporary erosion controls will be in place before any significant alteration of the action site and appropriately installed downslope of project activity within the riparian buffer area until site rehabilitation is complete.
2. If there is a potential for eroded sediment to enter the stream, sediment barriers will be installed and maintained for the duration of project implementation.
3. Temporary erosion control measures may include sedge mats, fiber wattles, silt fences, jute matting, wood fiber mulch and soil binder, or geotextiles and geosynthetic fabric.
4. Soil stabilization utilizing wood fiber mulch and tackifier (hydro-applied) may be used to reduce erosion of bare soil if the materials are noxious weed free and nontoxic to aquatic and terrestrial animals, soil microorganisms, and vegetation.
5. Sediment will be removed from erosion controls once it has reached 1/3 of the exposed height of the control.
6. Once the site is stabilized after construction, temporary erosion control measures will be removed.
7. Emergency erosion controls. The following materials for emergency erosion control will be available at the work site:
 - a. A supply of sediment control materials.
 - b. An oil-absorbing floating boom whenever surface water is present.

See sheets 6-8 of the 80% design plan sheets (Inter-Fluve, 2025) for other applicable conservation measures.

De-watering – July 2026

See sheets W4-W5 of the 80% design plan sheets (Inter-Fluve, 2025) for dewatering/rewatering plan details.

Excavation of channel activation cuts – July 2026

Contractors will excavate channel activation cuts where incision of the main river channel has disconnected historic side channels.

Channel activation cuts have been located to maximize geomorphic effect with minimal disturbance extent and tree removal. See sheets 11-23 of the 80% design plan sheets (Inter-Fluve, 2025) for topography details.

This work will follow conditions outlined in HPA #0045610 (in progress).

Channel bed supplementation/ channel plugs/ logjams – July/August/September 2026

Contractors will place a combination of large woody material and excavated native alluvium in the main river channel to raise channel bed elevations, improve retention of gravel substrates, and push floodwaters into reactivated side channels. Most of this wood (~8000 logs) will come from off-site thinning projects, and the remainder will be salvaged from grading and excavation areas. Logs will not be fastened together and will be held in place with boulder and cobble ballast.

This work will follow conditions outlined in HPA #0045610 (in progress).

Re-watering – September/October 2026

See sheets W4-W5 of the 80% design plan sheets (Inter-Fluve, 2025) for dewatering/rewatering plan details.

Road abandonment – November 2026

Contractors will carry out heavy abandonment of all utilized road grades in the project area and reshape them to historic floodplain profiles and elevations. At project completion, all temporary access roads and paths will be abandoned, and the soil will be stabilized and revegetated. Abandonment measures will include de-compacting the surface and ditch, pulling fill material onto the running surface, reshaping to match the original contour, and placing woody material for hydraulic roughness.

Contractors will target completion of road abandonment before the onset of the rainy season.

Revegetation and reseeding – November 2026

Revegetation is proposed for approximately 35 of the 37 project area acres utilized for equipment staging/transport or impacted by grading activities (areas of flowing water will not be planted). In this area, floodplain habitat will be enhanced using cluster installation of container plants and live cuttings to provide floodplain roughness and bank shading, and

8.3 ac of seeding above the estimated 1 yr flood elevation. Encompassed in the project revegetation footprint is 0.3 acres of wetland enhancement, including 0.3 acres of seeding and planting emergent and forested wetland habitats, and installation of 460 linear ft of wetland mats. Staging areas will be rehabilitated using seeding and straw application on 6 acres above the 1 yr flood elevation, and straw mulch application only on 6 acres that are located below the 1 yr flood elevation. See revegetation plan details on sheets 30-38 of the 80% design plan sheets (Inter-Fluve, 2025).

See the attached FPA and Alternate Plan Maps for locations of proposed alternate plan activities.

4. Describe how your proposed management activity would affect the alternate plan area (template Q7). See Board Manual Section 21. For activities in a riparian area, describe the current level and explain the short- and long-term changes of each of the following. Be as specific as possible.

a. Large woody material

Current:

- The West Fork Teanaway River currently exhibits a lack of large woody material (LWM) and a dysfunctional recruitment process, both of which bear consequences for fish habitat (Collins and Montgomery, 2002; Natural Systems Design, 2021).
- LWM was removed from the channel in historic log drives, which disrupted geomorphic processes and initiated a positive feedback of wood transport exceeding retention (Natural Systems Design, 2021).
- If the river remains confined to its present channel, from which only 47% percent of its historic floodplain is accessible (Natural Systems Design, 2021), a large proportion of the riparian woodshed will be unable to contribute large woody material to the river.
- Additionally, the reduction of groundwater elevations and seasonal flooding, combined with fire suppression in the last 115 years, has shifted the riparian forest composition towards conifers, which play a different ecological role than deciduous trees when recruited as LWM. Many riparian-adapted deciduous trees (e.g., black cottonwood) can root adventitiously if they recruit while still alive, providing greater longevity to logjams and increasing hydraulic complexity (Gurnell et al., 2005).
- Collectively, this means the LWM supply in this riparian zone is limited and recruitment of deciduous trees is lacking.

Near-term:

- The proposal will massively increase the amount of LWM in the river system by supplementing logs directly to the river channel, activated side channels, and adjacent floodplain.
- Hydraulic roughness in the new channel(s) will improve retention of LWM transported into the upstream and downstream reaches each year from upper West Fork slopes burned in the 2017 Jolly Mountain fire.
- The proposal will also nearly double the accessible floodplain, and thus, nearly double the future recruitment area available to the river.

Long-term:

- Logjams are designed for 50-year longevity and to withstand 25- and 50-year flood events, and over time, the river will build new jams as wood recruitment processes are restored.
- In the long term, the proposal will support geomorphic processes that maintain the large wood recruitment area at its natural extent across an active floodplain.
- Revegetation plans include both deciduous and conifer trees in the upstream and downstream reaches, which will recover the long-term trajectory of LWM supply as they grow up and recruit into the river channel.
- Conifer planting in the canyon reach will increase the long-term trajectory of LWM supply in areas of the 2017 Jolly Mountain Fire footprint that show little to no natural regeneration.

b. Shade (and other temperature-moderation influences)

Current conditions:

- In the upstream reach, the 2017 Jolly Mountain fire has reduced shade significantly.
- In the downstream reach, the river is oriented NW-SE and steep hillslopes on the SW side provide some shade year-round.
- The riparian forest contains a lower proportion of deciduous trees than would be expected with a functional flood regime; consequently, the river receives less winter-time sun than intact river systems, which is an important component of primary productivity in the river food web (Ostrofsky et al., 1998).

- The river is confined in many locations to a single, wide channel (average 89 ft. bank full width), which receives shade mostly at the edges, reducing the riparian forest's ability to moderate water temperatures.
- Hyporheic flow in floodplain soils is limited by the depth of incision and proportion of channel bed composed of bedrock, reducing the ability for hyporheic flows to moderate water temperatures (Natural Systems Design, 2021).

Near-term:

- In the upstream reach, the proposal will contribute large amounts of LWM to the channel and to the floodplain, which will provide immediate shade as plantings take root.
- Planting fast-growing riparian species (e.g., black cottonwood, Sitka willow) will quickly develop shade along reoccupied channels.
- Many areas of beneficial riparian vegetation have been designated as leave islands and will continue to contribute shade to the river. In numerous cases, the river is expected to occupy constructed/reactivated side channels with more riparian forest cover than the present channel (see activity maps showing post-project flows).
- In the upstream and downstream reaches, the proposal will raise groundwater elevations, increasing the residence time and proportion of water occupying the hyporheic zone in the floodplain (Singh et al., 2018), which will moderate water temperatures (Faulkner et al., 2020).
- Most project-necessitated shade reduction is on the NE side of the river, which contributes less shade to the stream than the SW side. The SW side (river-right bank) will remain relatively undisturbed below the upstream reach.

Long-term:

- Revegetation in the canyon and upstream reaches will increase shade over time where shade has been significantly reduced by the 2017 Jolly Mountain fire.
- Process restoration will mean that the river, no longer confined to a single, wide channel, has access to a larger area of shade-providing riparian vegetation.
- Elevated groundwater in the floodplain will support a healthy riparian forest composition dominated by deciduous trees, making winter-time light available for primary production in the river.

c. Bank stability

Current condition:

- Through much of the project area, the river is trapped in a single, incised channel. All stream power is concentrated in this single channel and the over-steepened banks are vulnerable to erosion, making high flows damaging to stream banks under current conditions. The channel is incised into bedrock and continues to down cut up to 0.9 in./year, preventing the retention of spawning gravels for fish (Natural Systems Design, 2021).
- The present channel is more efficient at eroding its cut banks and transporting sediment than recruiting and retaining beneficial gravel substrates for fish habitat. Reduced groundwater elevations and hyporheic flows make the banks too dry to support typical riparian vegetation (e.g., red osier dogwood, Sitka willow) in many places, which reduces bank stability. Riparian vegetation is severely inhibited in bedrock channel segments with little or no soil development (Natural Systems Design, 2021).

Near-term:

- The proposal will reintroduce the river into historic side channels, many of which already have riparian vegetation. Spreading the water out into smaller, more numerous channels has been modeled to significantly reduce flow velocities and scour potential and improve retention of beneficial gravels for fish (see Fig. 1).
- Input of large amounts of LWM and slash will enhance channel function and stream bank stability by slowing water velocities, facilitating sediment deposition, and providing cover for fish (Natural Systems Design, 2021).
- Revegetation in the upstream and downstream reaches will provide in-situ soil stabilization within the floodplain, facilitated by higher groundwater elevations. Vegetation cover is expected to increase rapidly in the first 5 years post-project.

Long-term:

- The proposal will restore fluvial geomorphic processes with increased hydraulic roughness, reducing erosive power in the channel and across the floodplain, and increasing the potential to recruit gravels for fish habitat.
- Conifer planting in the canyon reach will augment bank stability over time as conifers develop larger root systems.

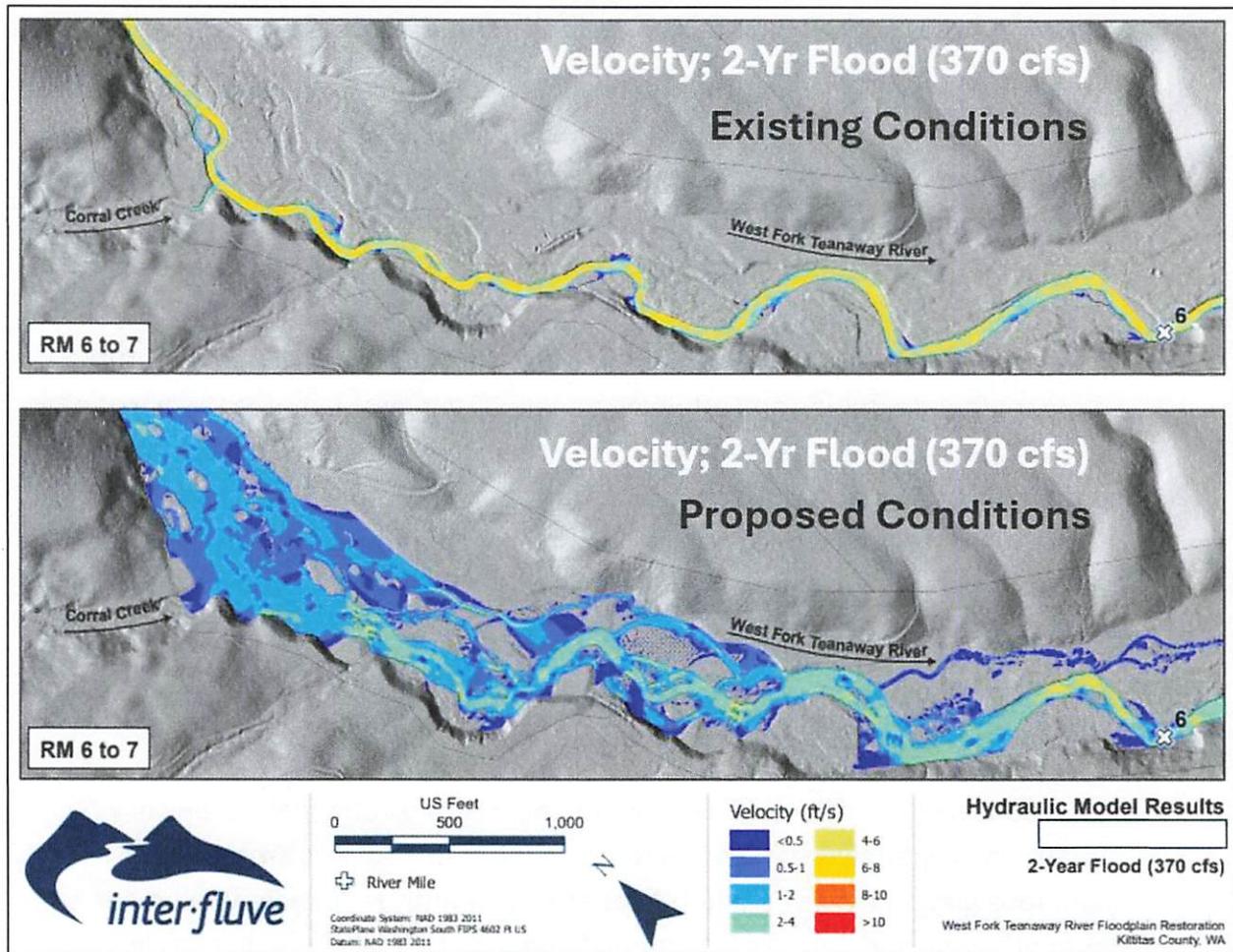


Figure 1. Modeled flow velocities from RM 6 to 7 during a 2-year flood event (370 cubic feet per second) under existing conditions (top) and proposed conditions following restoration (bottom). Modeling by Inter-Fluve; graphic adapted by WDFW.

d. Sediment filtering

Current condition:

- The 2017 Jolly Mountain Fire reduced sediment filtering capacity in the upstream reach, although vegetation has grown up since then. This has contributed large amounts of fine sediment to the river, which has largely transported downstream, due to the lack of roughness and floodplain connection.
- With the river confined to its present, incised channel, there is reduced opportunity for floodplain surfaces to filter sediment and nutrients from floodwaters (Natural Systems Design, 2021) – an important lateral exchange process for river and riparian forest health (Mason et al., 2025).

- There is a road through the floodplain, which sees limited use but may contribute some sediment to the river. The road also hampers the growth of riparian vegetation within its footprint, reducing the area of vegetation with filtration capacity.

Near-term:

- The proposal includes a full abandonment of the road within the floodplain, exceeding Forest Practices standards for road abandonment (see description in #3 above).
- The proposal will create ~20 acres of seasonal or year-round inundation, facilitating wetland development and increasing sediment filtration capacity in the upstream and downstream reaches.
- All planned activities are within the valley bottom, avoiding the erosion-prone valley slopes to reduce potential for sediment delivery (Saturna Watershed Sciences, 2025).
- Disturbed areas will be stabilized with straw and slash and replanted with native vegetation. See revegetation plan details on sheets 30-38 of the 80% design plan sheets (Inter-Fluve, 2025).

Long-term:

- The proposal will raise groundwater elevations and increase seasonal inundation, which will expand seasonal and year-round wetlands, with improved filtration capacity over dry-mesic forest vegetation present in many areas.
- With the river reconnected with its natural floodplain extent, complete with intact riparian vegetation and roughness features, the river will have greater sediment filtration capacity during high flows and restored lateral exchange.

e. Nutrient inputs

Current conditions:

- With the river confined to its present, incised channel (especially in bedrock areas) there is reduced hyporheic nutrient exchange (Woessner, 2017), lateral exchange of nutrients between the river and its limited floodplain (Mason et al., 2025), and very little channel roughness for physical retention of leaves, needles, and branches (Natural Systems Design, 2021).

- Due to habitat unsuitability, anadromous fish populations are significantly reduced, and as a result, marine-derived nutrient inputs from salmonids returning to spawn are significantly reduced (Helfield and Naiman, 2001).
- Due to elevated water temperatures, nutrients in the river system are more likely to be lost via microbial respiration than cycled through the aquatic food web via macroinvertebrates (Marks, 2019).
- Given the shift in riparian forest composition towards conifers, leaf-litter inputs have a different timing and quality (nutrient content) relative to riparian forests dominated by deciduous trees in functional floodplains (Xiang et al., 2022).

Near-term:

- Direct LWM and slash supplementation from the proposal will increase hydraulic roughness and help to catch and retain nutrient-laden organic materials, both in the channel and across the floodplain (Natural Systems Design, 2021).
- Restored flood processes will also facilitate restored lateral exchange of nutrients between the river and its floodplain during high flows (Mason et al., 2025).
- The proposal will foster hydrologic conditions favoring a shift in species composition toward a mix of deciduous and conifer species. This will provide a timing and quality of nutrient release that supports aquatic food webs through leaf litter diversity (Marks, 2019).
- Raising groundwater elevations and burying bedrock sections of the river will reestablish hyporheic flow, greatly benefiting the hyporheic zone in-channel and within the riparian area. This will restore nutrient exchange pathways in the hyporheic zone (Boulton, 2007).

Long-term:

- The proposal will raise groundwater elevations in the floodplain, encourage more cottonwood and cedar growth over time, and thereby restore an appropriate mix of nutrient inputs for the river food web.
- Revegetation of the floodplain in the upstream and downstream reaches, along with conifer planting in the canyon reach will foster increased and appropriate nutrient inputs as the forest develops.
- With an improvement in habitat suitability, the return of anadromous fish populations to the project reaches will restore annual pulses of marine-derived nutrients to the river and surrounding forest (Helfield and Naiman, 2001).

f. Additional information

Riparian forest/fire ecology:

Due to the impairment of both the river’s flow/flood regime and fire suppression in the surrounding landscape, the riparian forest is denser and more conifer-dominated than would be expected when these processes are active. This means the riparian corridor does not function as a natural dampener on fire spread, nor is it highly resilient to fires that occur, as it can be under the right conditions with more active flow/flood and fire regimes (Dwire and Kauffman, 2003; Pettit and Naiman, 2007). Restoring this structure and function is expected to benefit the functional relationship between riparian zones and upland fires, making the river more resilient and future prescribed burning efforts in the Teanaway more feasible.

The “no action” alternative:

Taking no action at the proposal site will result in perpetuation of current conditions and further impairment of the river system (Natural Systems Design, 2021). In the absence of a reduction in flow velocities, the river is expected to continue downcutting into bedrock at rates of up to 0.9 in./year, and the river system will perpetuate the impairment of the five riparian functions described above. The no action alternative would be detrimental to fish populations, including threatened steelhead and bull trout, which stand to benefit from restoration of high-quality in-stream habitat.

5. If you are planning activities in the riparian area, complete the table below (template Q8).

Stream Segment Identifier	Water Type (S, F, Np)	Affected Stream Segment Length (ft.)	Average Bank full Width (ft.)	Average Width of No-cut Buffer (ft.)	Harvest One Side or Both Sides
WFTR	S	11,100	89	0	Both sides
S1	F	20	4	0	Both sides
S2	F	230	12	0	One side
S4	Np	30	2	0	Both sides

Note: S1 is a tributary – grading “harvest” and in-channel activities will occur right at the confluence. 20 feet affected length refers to the approximate reach that falls within the grading area. S4 is a disconnected segment that flows for 30 feet within a grading unit before going subsurface. All streams will be diverted during in-stream work in accordance with the HPA (#0045610 – in progress).

-- (Template Q9 omitted – no hardwood conversion) --

6. List the specific parts of the Forest Practices Board Rules that the proposal departs from (template Q10):

WAC Section	Sub-section	WAC Section/Sub-section Title
222	30	020(7) Forested wetlands
222	30	020(8) Wetland management zones (WMZ)
222	30	020(12) Wildlife reserve tree management
222	30	020(13) Channel migration zones (CMZ)
222	30	020(14) Bank full width
222	30	022 – Eastern WA riparian management zones (RMZ)
222	30	030 – Stream bank integrity
222	30	040 – Shade requirements to maintain water temperature
222	30	045 – Salvage logging within RMZ’s
222	30	050(1) Felling along water
222	30	050(2) Bucking or limbing along water
222	30	050(3) Felling near RMZ’s and WMZ’s
222	30	062 – Large woody debris removal or repositioning
222	30	070(1) Ground-based logging in typed waters and wetlands
222	34	020 – Required reforestation, Eastern WA
222	34	040(1) – Site preparation and rehabilitation

7. Attach a map(s) with updated stream locations, wetlands, unstable slopes and roads. Clearly designate proposed alternate plan area. The alternate plan area must also be shown on the forest practices activity map (template Q11).

See the attached FPA and Alternate Plan Maps.

8. Attach information, such as timber cruise, water type modification forms, technical filed notes, literature references, etc., that support the alternate plan (template Q12).

References cited:

- Boulton, A.J., 2007. Hyporheic rehabilitation in rivers: restoring vertical connectivity. *Freshwater Biology* 52, 632-650.
- Collins, B. D., and Montgomery, D. R., 2002. Forest development, wood jams, and the restoration of floodplain rivers in the Puget lowland, Washington. *Restoration Ecology* 10(2), 237-247.
- Dwire, K. A., and Kauffman, J. B., 2003. Fire and riparian ecosystems in landscapes of the western USA. *Fire Ecology and Management* 178, 61-74.
- Faulkner, B. R., Brooks, J. R., Keenan, D. M., and Forshay, K. J., 2020. Temperature decrease along hyporheic pathlines in a large river riparian zone. *Ecohydrology* 13(1), 1-10.
- Gurnell, A., Tockner, K., Edwards, P., and Petts, G., 2005. Effects of deposited wood on biocomplexity of river corridors. *Front. Ecol. Environ.* 3(7), 377-382.
- Helfield, J. M., and Naiman, R. J., 2001. Effects of salmon-derived nitrogen on riparian forest growth and implications for stream productivity. *Ecology* 82, 2403-2409.
- Inter-Fluve, 2025. West Fork Teanaway RM 5.1 – 7.1. Appendix 7.1. 80% (Permit-Level) Design Plan Sheets.
- Marks, J. C., 2019. Revisiting the fates of dead leaves that fall into streams. *Annual Review of Ecology, Evolution, and Systematics* 50, 547-568.
- Mason, R. J., Johnson, M. F., Wohl, E., Russell, C. E., Olden, J. D., Polvi, L. E., Rice, S. P., Hemsworth, M. J., Sponseller, R. A., and Thorne, C. R., 2025. Rebalancing River Lateral Connectivity: An Interdisciplinary Focus for Research and Management. *WIREs Water* 12, e1766.
- Natural Systems Design, 2021. Geomorphic Assessment & Restoration Prioritization Report: Middle & West Fork Teanaway Rivers in Areas within the Teanaway Community Forest.
- Ostrofsky, M.L., Weigel, D.E., Hasselback, C.K., and Karle, P. A., 1998. The significance of extracellular production and winter photosynthesis to estimates of primary production in a woodland stream community. *Hydrobiologia* 382, 87–96.
- Pettit, N. E., and Naiman, R. J., 2007. Fire in the riparian zone: Characteristics and ecological consequences. *Ecosystems* 10, 673-687.

- Saturna Watershed Sciences, 2025. West Fork Teanaway Restoration (RM 5.1-7.2) Geologic Evaluation: Analysis of Potential Effects on Unstable Slopes (Title 222 WAC).
- Singh, H. V., Faulkner, B. R., Keeley, A. A., Freudenthal, J., and Forshay, K. J., 2018. Floodplain restoration increases hyporheic flow in the Yakima River watershed, Washington. *Ecol. Eng.* 116, 110-120.
- WA DNR and WDFW, 2015. Teanaway Community Forest Management Plan.
- Woessner, W. W., 2017. Hyporheic Zones. In F. R. Hauer & G. A. Lamberti (Eds.), *Methods in Stream Ecology*, Volume 1 (Third Edition). Academic Press, 129-157.
- Xiang, H., Li, K., Cao, L., Zhang, Z., Yang, H., 2022. Global patterns and drivers of coniferous leaf-litter decomposition in streams and rivers. *Frontiers in Ecology and Evolution*. 10, 940254.

9. Does this alternate plan contain a monitoring strategy? If yes, include a monitoring plan with your FPA/N submittal (template Q13).

The project team will take an adaptive management approach to ensure that restoration objectives are being met. Adaptive management may include, but will not be limited to, the following measures:

- Chemical weed management to prevent growth of invasive weeds and encourage recovery of native vegetation.
- Replanting of native vegetation, following revegetation survey.
- On the valley floor within the upstream and downstream reaches where seasonal inundation does not accomplish the desired riparian forest shift from conifer-dominated to deciduous-dominated composition, thinning in the understory (<8" DBH) to aid in cottonwood germination and resprouting.

See WFT Monitoring Plan for monitoring details.

West Fork Teanaway River Restoration Project RM 5.1 – 8.0 Monitoring Plan

The following elements will be monitored by project partners Washington Department of Fish and Wildlife (WDFW), Mid-Columbia Fisheries Enhancement Group (MCFEG), and Yakama Nation Fisheries (YKFP) staff following river restoration on the West Fork Teanaway River from river mile 5.1 – 8.0. Each of the monitoring tasks will be continued for a period of 3 years beyond project construction. Data collected as part of the monitoring plan will be stored in a shared location between the partners, or with the organization that collects it. Analysis of data throughout the monitoring period may be used in an adaptive management approach to inform decisions and achieve project outcomes. An annual summary of monitoring activities and/or findings will be made available for Forest Practices review.

Drone imagery:

We expect the project to change the West Fork's flow path and surrounding floodplain considerably. Because of the large spatial scale of the project, we will utilize drone imagery to capture the dynamic response of the river to restoration efforts, especially in relation to the five riparian functions. Drone flights of the project reach from RM 5.1 – 8.0 will be conducted semi-annually or annually. Flight 'missions' will be flown between 200 – 300 feet above takeoff elevation adjacent to the river and will extend laterally to encompass the entire floodplain. A pre-project flight following these specifications has been completed. If time, resources, and weather conditions allow, flights during both high and low flow conditions would be ideal to address seasonal variation of surface water. Orthomosaics and Digital Surface Models produced from drone flights will be compared year to year and against pre-project conditions to assess:

- Floodplain inundation extent
- Movement of Large Woody Material
- Extent and condition of riparian vegetation

Riparian vegetation recovery:

In areas of the project at or below the 5-year flood elevation, and where depth to groundwater is < 4 ft below ground surface, we anticipate extensive natural regeneration of native riparian trees and shrubs due to the restoration of floodplain functions, and due to the retention of parent trees in the project area during construction. In addition, we anticipate that riverine wetlands will increase in extent, as will palustrine wetlands that are targeted for enhancement. To augment natural regeneration, and to accelerate vegetation recovery, revegetation during and after construction efforts include deep planting and container planting of riparian and upland native trees and shrubs, and seeding riparian and upland native bunchgrasses. Surveys will be completed in the summer season to evaluate extent of successful natural regeneration,

establishment of container plants, and establishment of seeded bunchgrasses. We expect some areas of the project to be difficult to access post-project. Because of this, where conditions are favorable, drone imagery may be utilized to supplement vegetation surveys. Project team members will measure and compute:

- Extent and density of riparian tree seedlings due to natural regeneration (yr 1-3)
- Extent of riverine and palustrine emergent wetlands (yr 2)
- Percent mortality of plantings (yr 1-2)
- Density of native bunchgrass seedlings (yr 1- 2)

Water temperature:

One of the project goals is to increase the resilience of the Yakima headwaters to climate change through hydrologic improvements, in-stream thermal heterogeneity and enhanced shade. Water temperature in the project reach will be monitored by HOBO brand dataloggers that measure water temperature at 4 set locations in the main channel of the West Fork Teanaway. At 3 locations dataloggers will be in stilling wells, and record water temperature at 1-hour intervals. At one location a datalogger will be temporarily deployed from ~ May to October each year, and record water temperature at 30-minute intervals as part of a long-term temperature study that spans the Teanaway Community Forest (TCF). Additional dataloggers may be added at the discretion of the project partners to supplement existing locations. Data from these loggers can be analyzed for:

- Spatial temperature trends
- Temporal temperature trends
- Comparison to overall TCF water temperatures

Bio-Acoustic recorders:

Bioacoustic recorders are an efficient tool for detecting wildlife. There are several sensitive terrestrial species that could be found within the project reach that could be impacted by construction noise and activities if they are present (see SEPA for more information). Autonomous recording units will be deployed at pre-determined locations within listening radius of the project area to record vocalizing wildlife species. Recording units will be placed at 7 locations for a 6-week period between March and August following general survey schedule guidelines outlined by the Pacific Northwest Bioacoustics lab (Lesmeister 2023) for Song Meter Mini 2s. All recordings will be processed using PNW-Cnet version 5 (or the most up-to-date iteration), a neural network trained to identify sound classes. Biologists will listen to sound clips tagged as sensitive species (e.g. northern spotted owl, gray wolf, American goshawk) to validate accuracy. Pre-project conditions were captured in 2025. Validated sound clips will be used to:

- Detect presence of sensitive species
- Infer occupancy where appropriate

Example schedule of monitoring events (subject to change)

Monitoring element	J	F	M	A	M	J	J	A	S	O	N	D
Drone imagery				x				x				
Revegetation success						x	x	x				
Water temperature	x	x	x	x	x	x	x	x	x	x	x	x
Acoustic recorders					x	x						

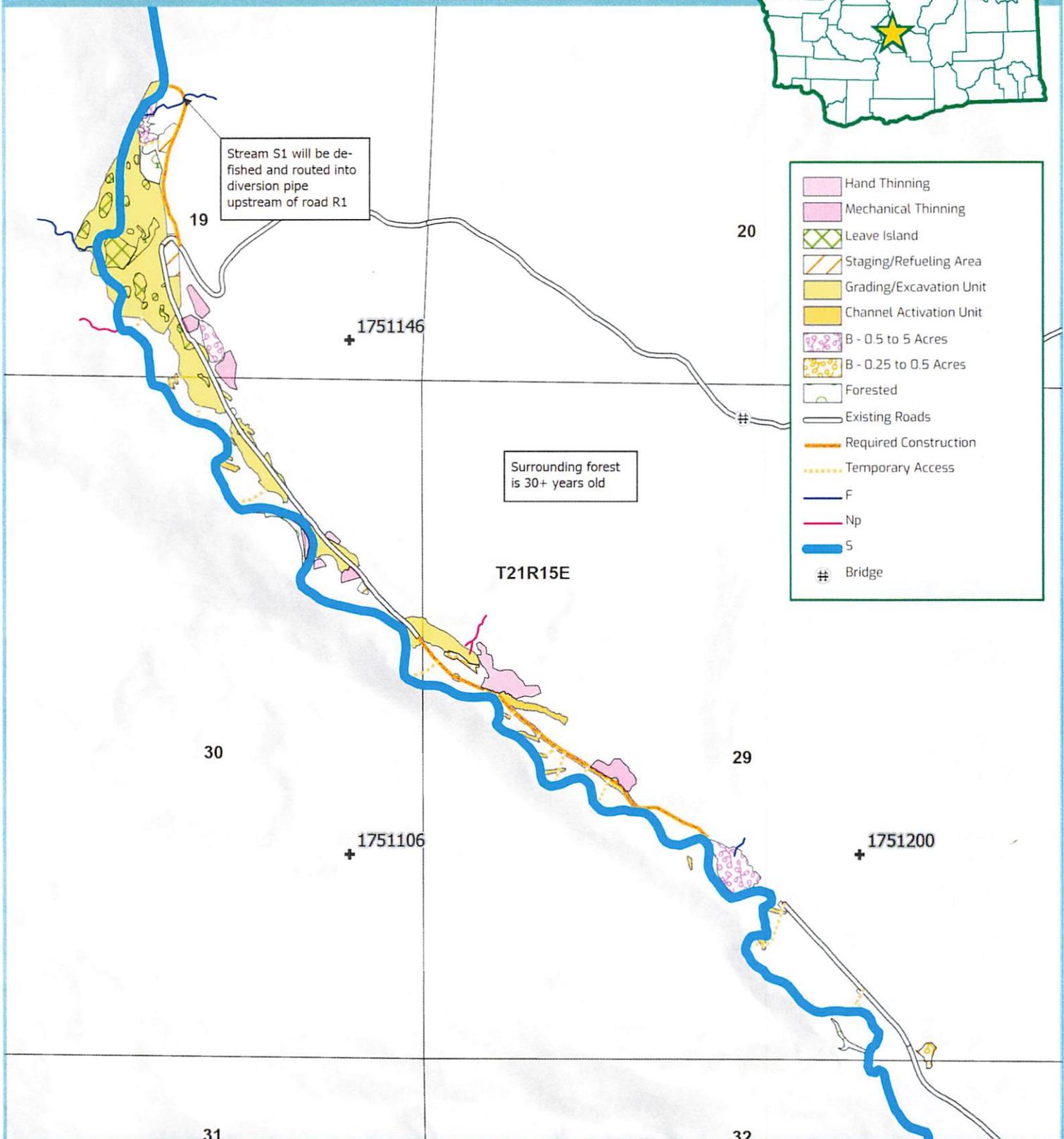
References

Lesmeister, D. B., J. M. A. Jenkins, N. M. Rugg, Z. J. Ruff, T. Chestnut, R. Christophersen, R. Claremont, R. J. Davis, S. Gremel, A. Henderson, E. Henson, J. Kasper, H. Lambert, C. McCafferty, S. Mitchell, S. Mohren, A. Mueller, T. Munger, L. Platt, D. Press, C. Quinn, S. Reffler, D. Rhea-Fournier, M. Ruggiero, J. K. Swingle, E. Tevini, A. D. Thomas, and K. Wert. 2024. Passive Acoustic Monitoring within the Northwest Forest Plan Area: 2023 Annual Report. USDA Forest Service Pacific Northwest Research Station and USDI National Park Service. Corvallis, OR. 45 p. bioRxiv: 2025.09.04.674320 DOI:10.1101/2025.09.04.674320

West Fork Teanaway River Restoration

FPA / Alternate Plan Map

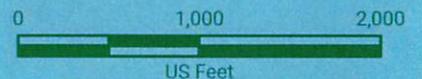
Teanaway Community Forest



	Hand Thinning
	Mechanical Thinning
	Leave Island
	Staging/Refueling Area
	Grading/Excavation Unit
	Channel Activation Unit
	B - 0.5 to 5 Acres
	B - 0.25 to 0.5 Acres
	Forested
	Existing Roads
	Required Construction
	Temporary Access
	F
	Np
	S
	Bridge



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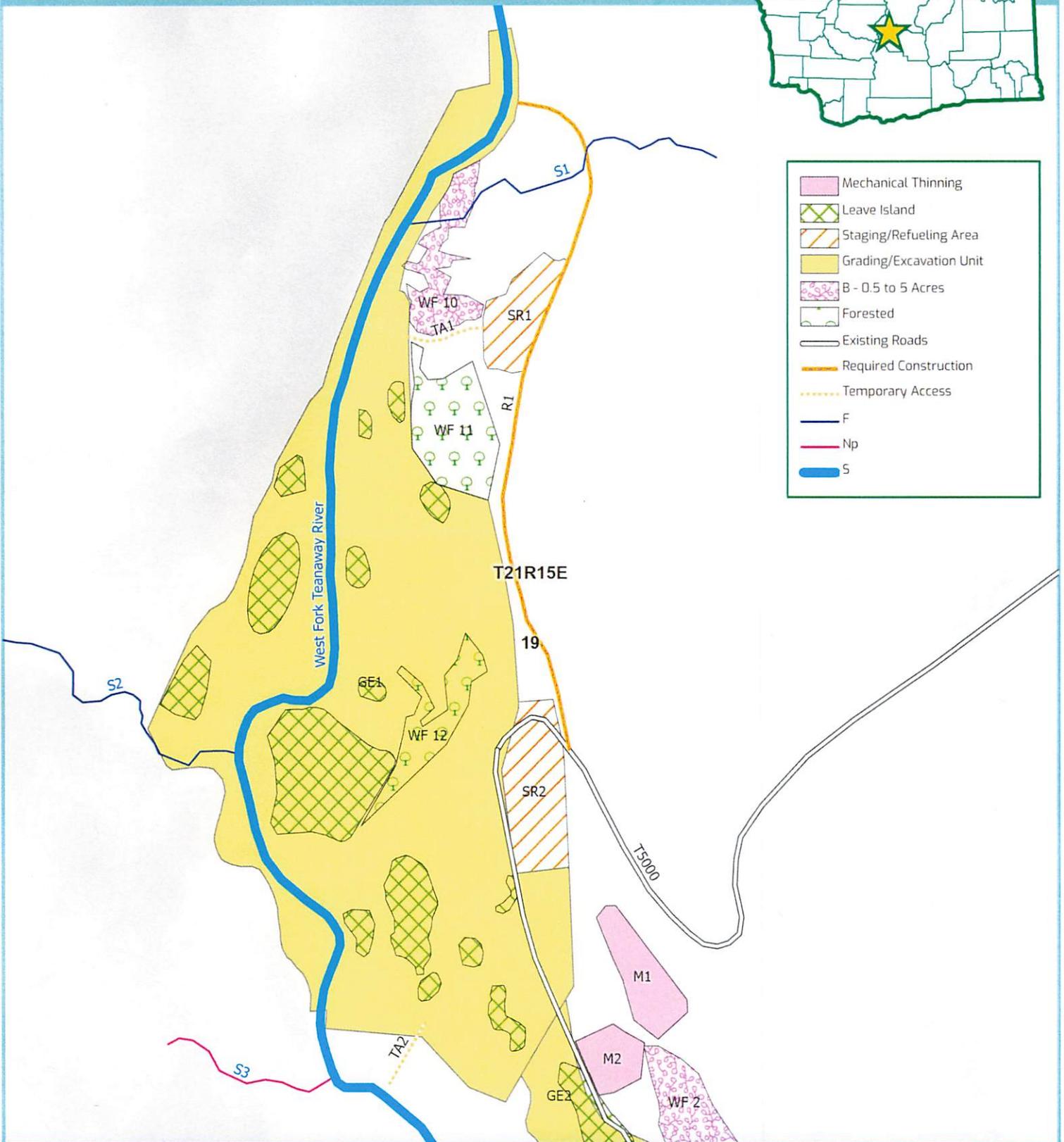


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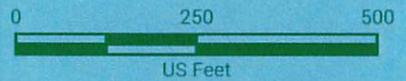
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	Required Construction
	Temporary Access
	F
	Np
	S



Department of Fish and Wildlife

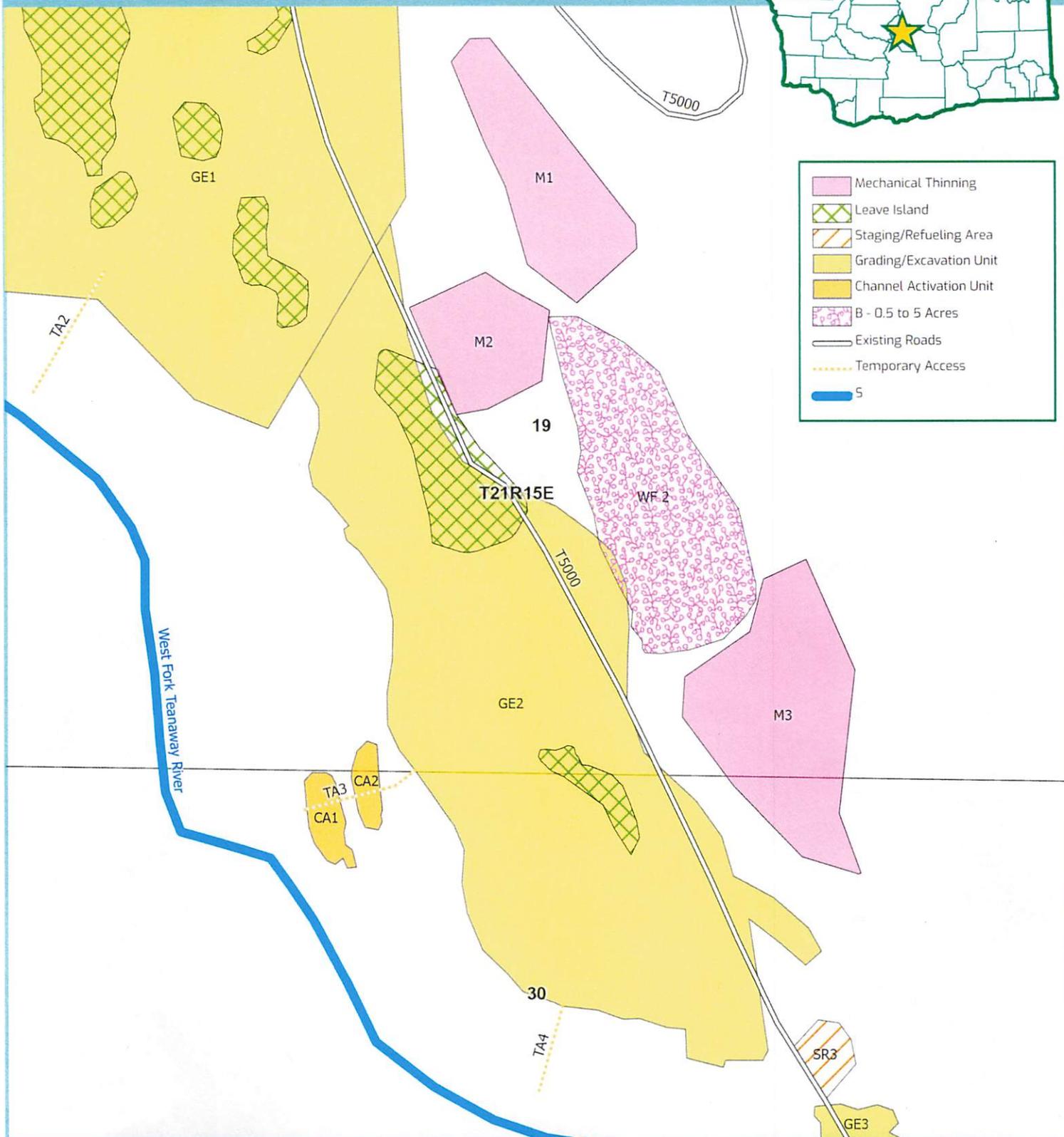


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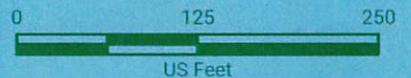
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- 5



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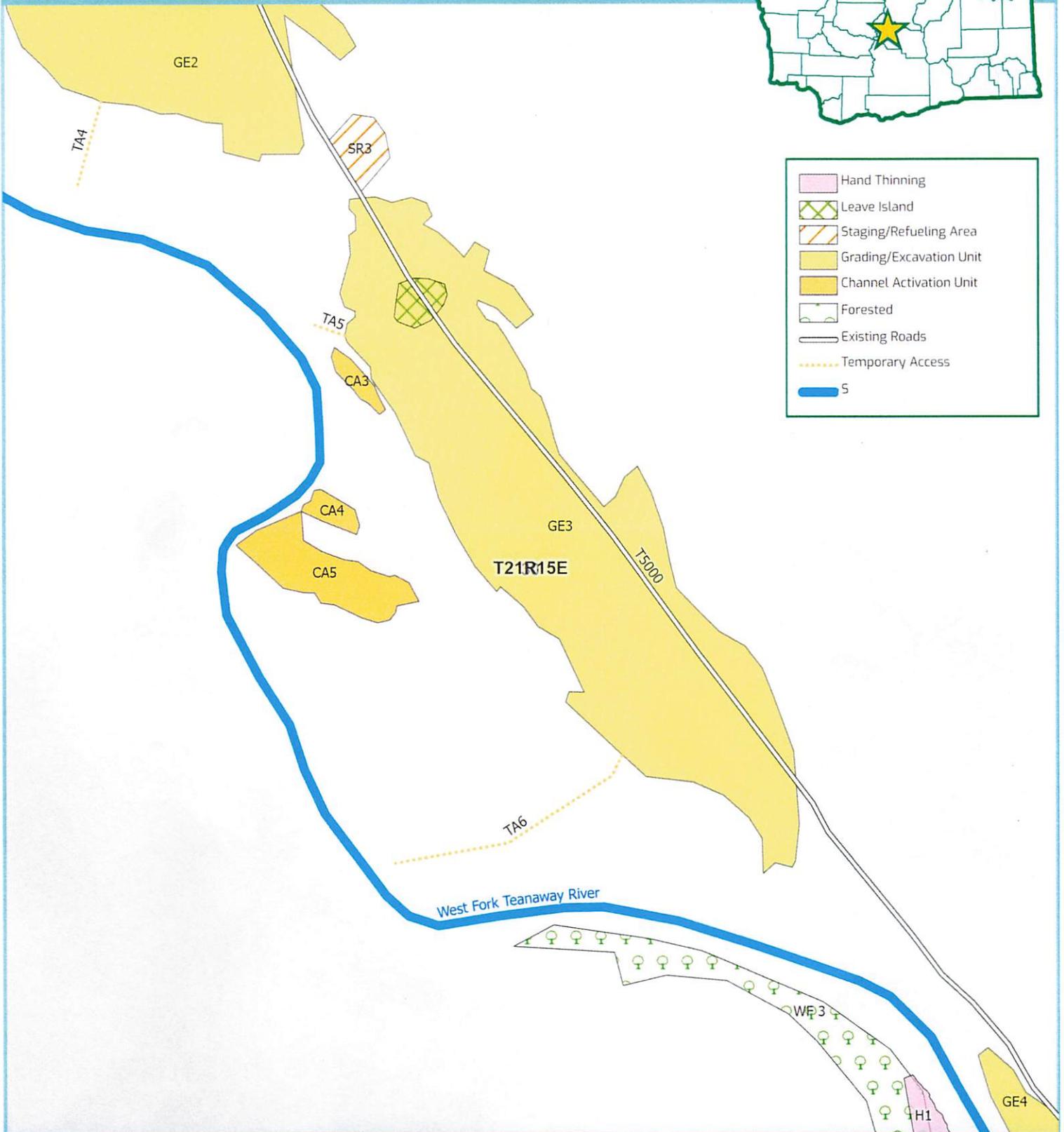


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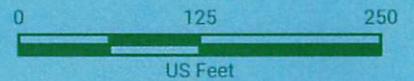
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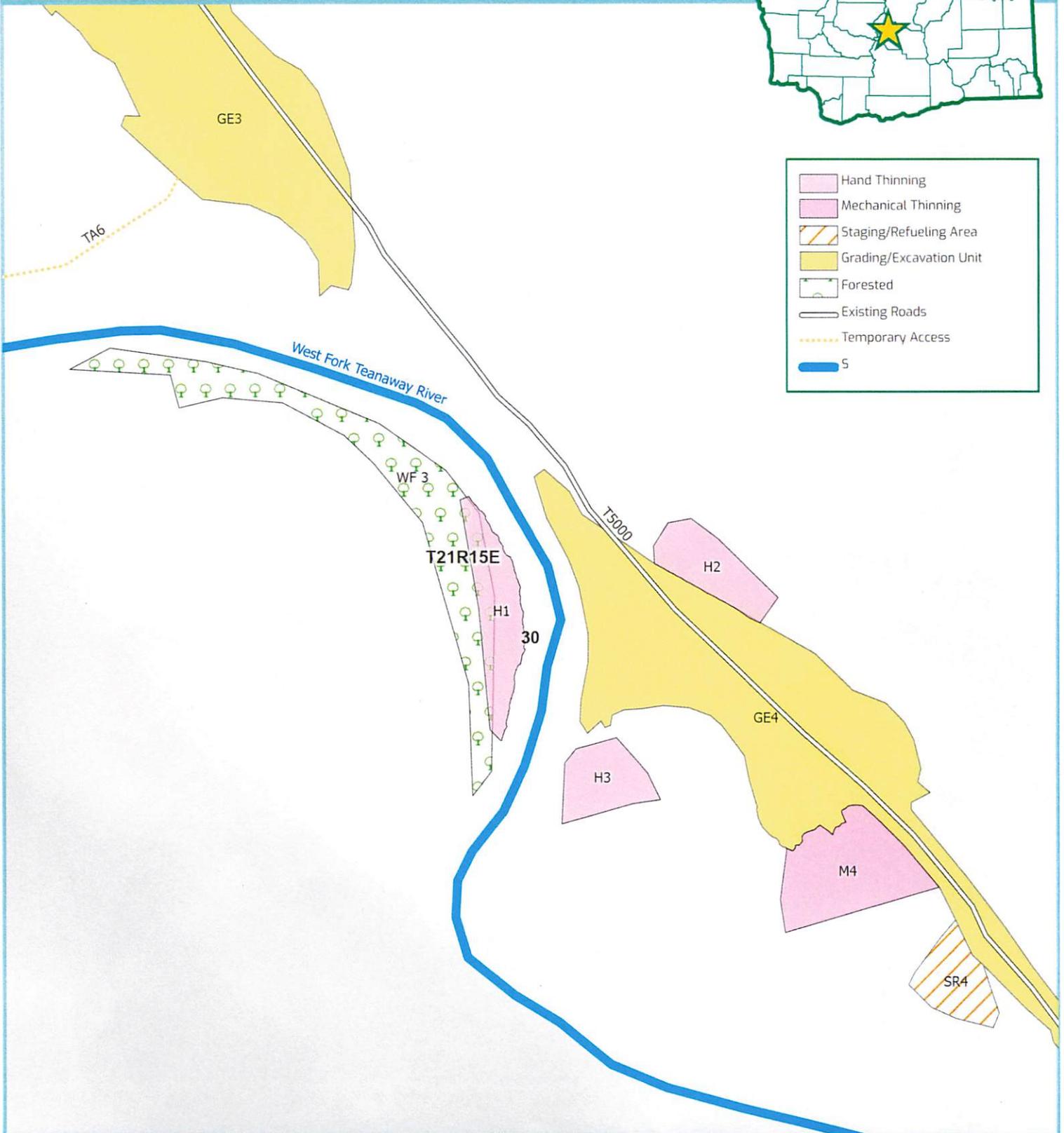


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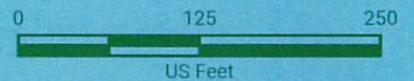
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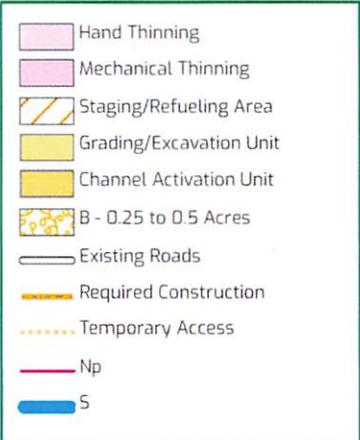
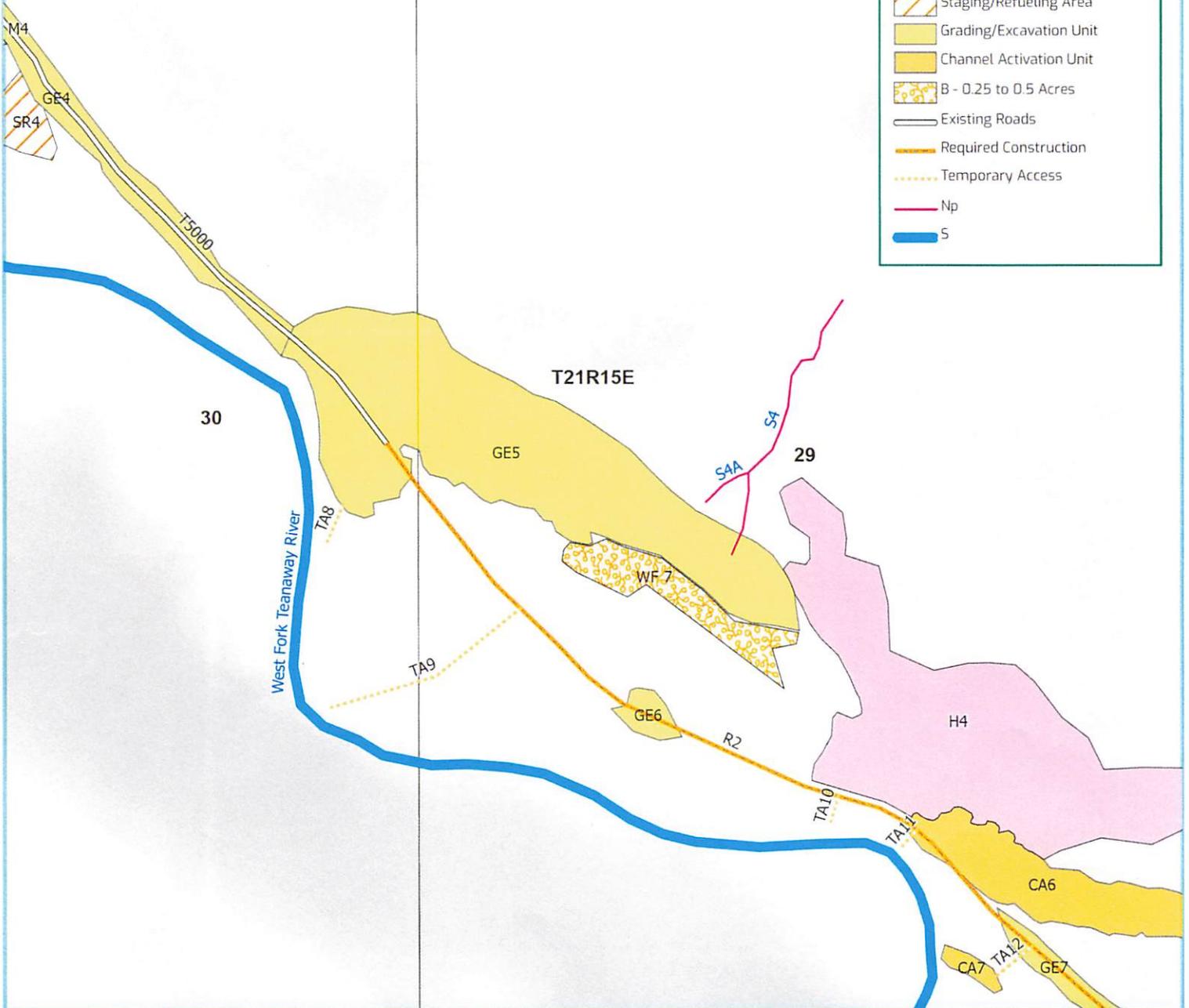


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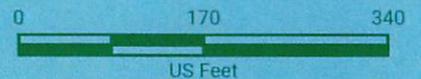
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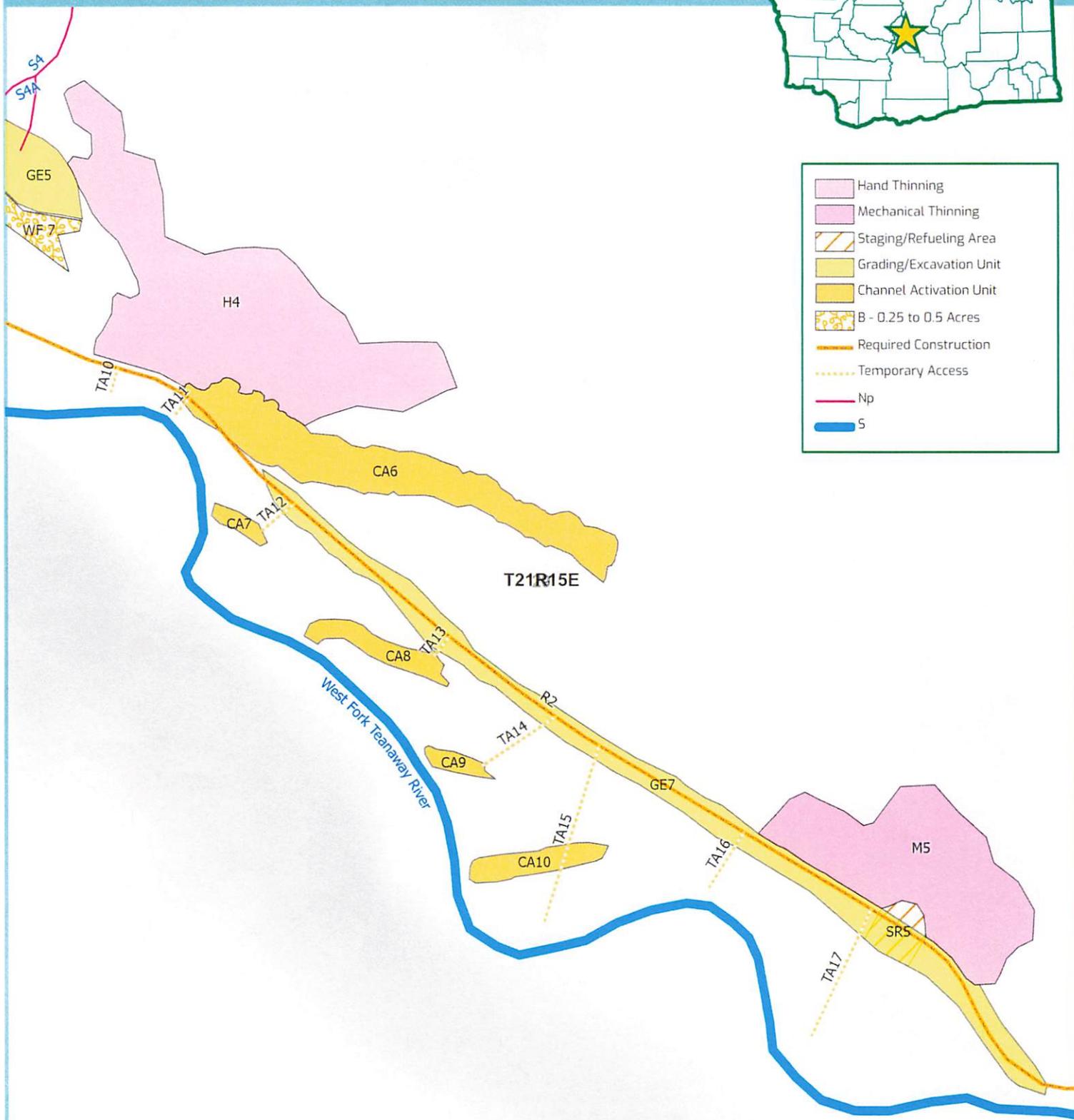


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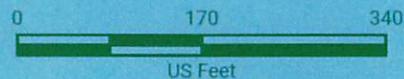
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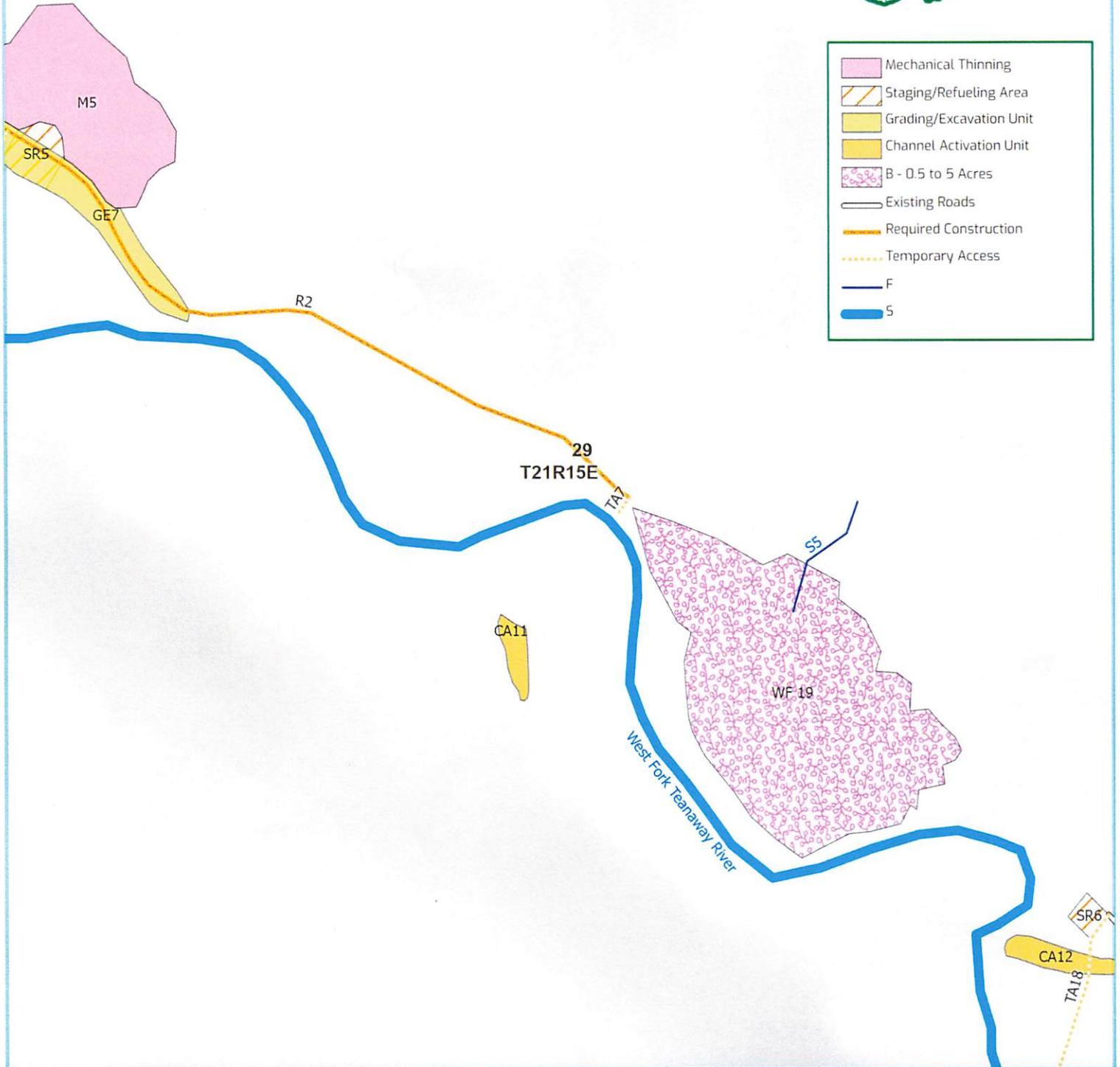


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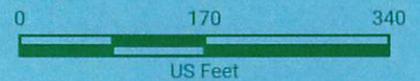
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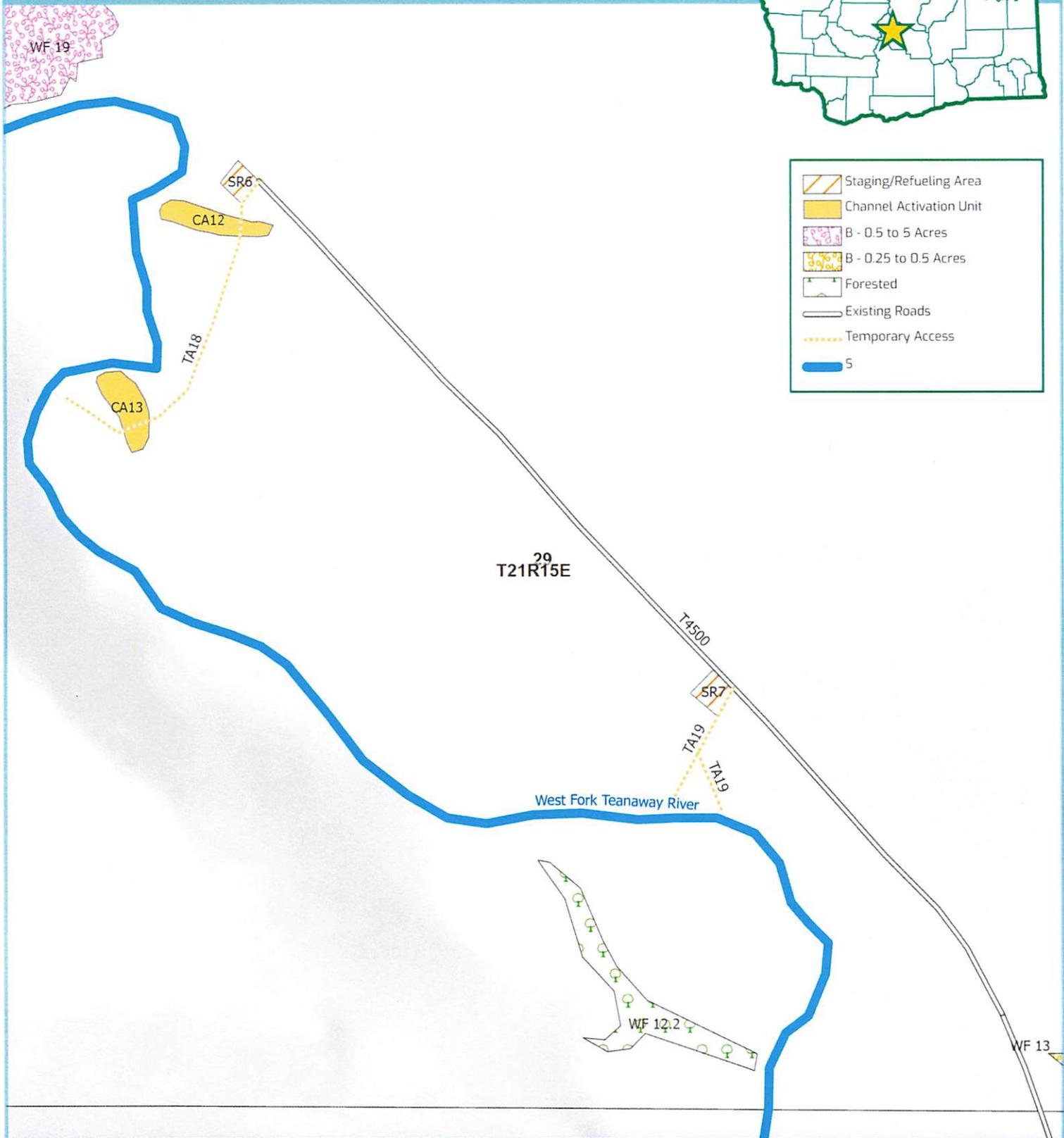


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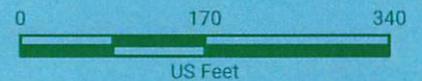
West Fork Teanaway River Restoration

Teanaway Community Forest

FPA / Alternate Plan Map



Department of Fish and Wildlife

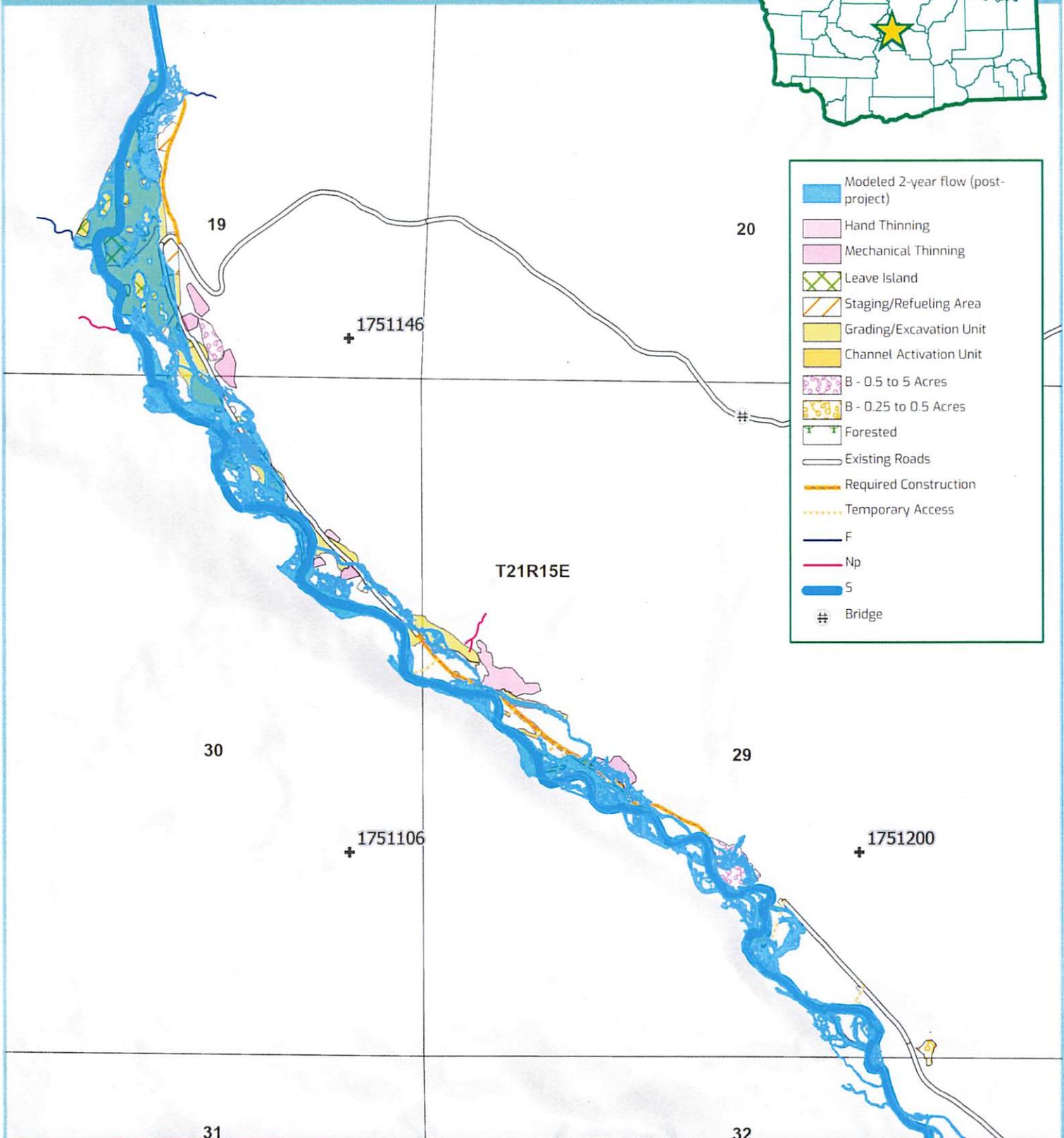


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West Fork Teanaway River Restoration

Teanaway Community Forest

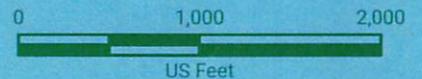
FPA / Alternate Plan Map (showing modeled post-project 2-year flows)



	Modeled 2-year flow (post-project)
	Hand Thinning
	Mechanical Thinning
	Leave Island
	Staging/Refueling Area
	Grading/Excavation Unit
	Channel Activation Unit
	B - 0.5 to 5 Acres
	B - 0.25 to 0.5 Acres
	Forested
	Existing Roads
	Required Construction
	Temporary Access
	F
	Np
	S
	Bridge



Department of Fish and Wildlife

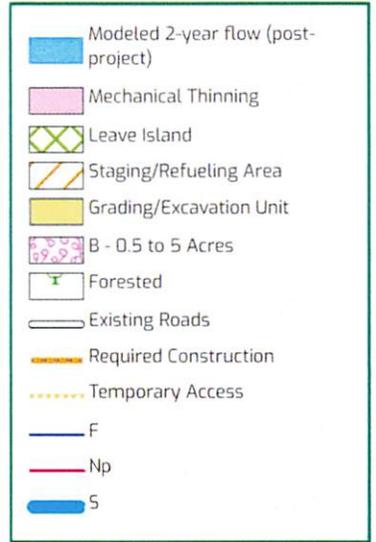
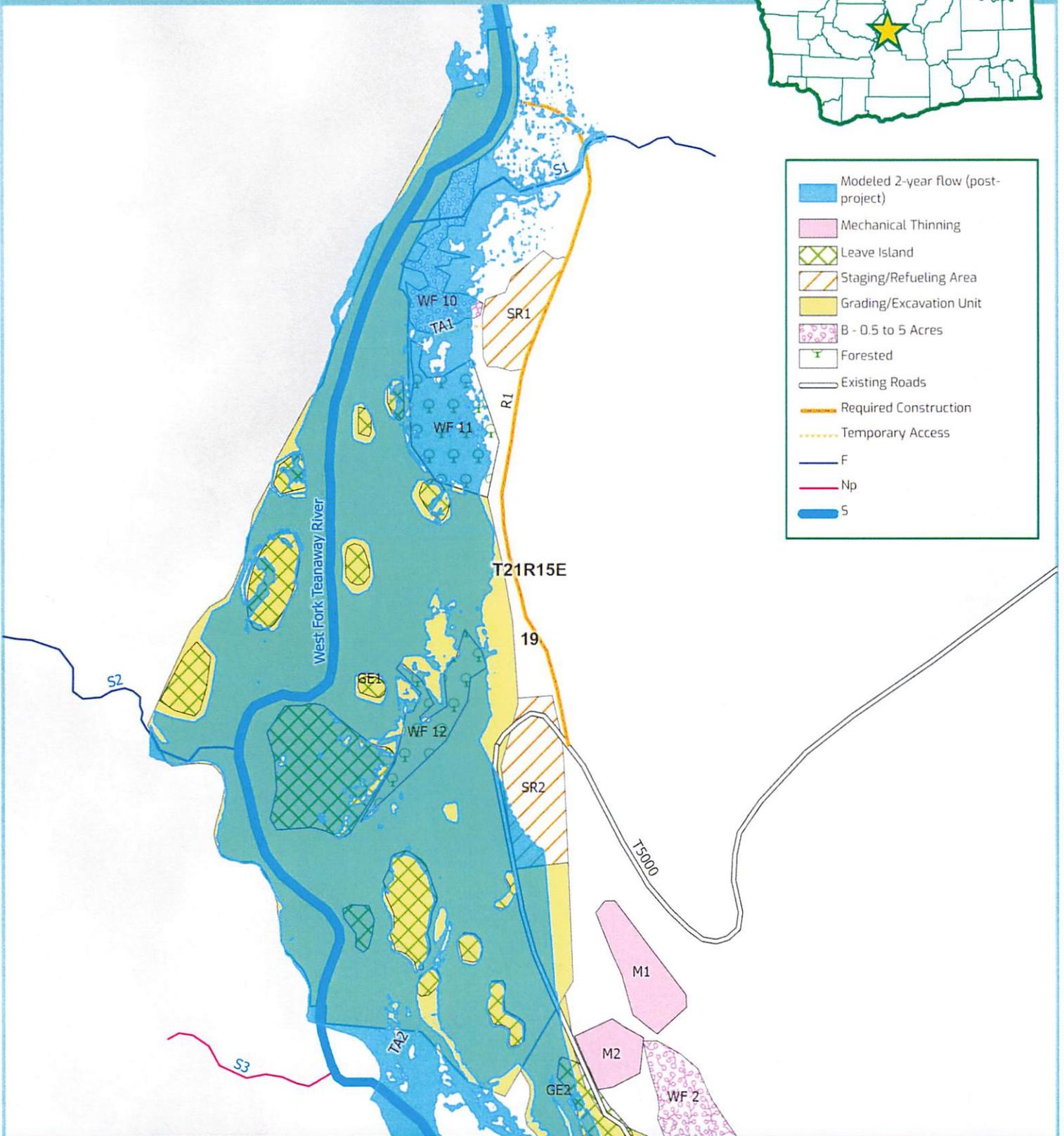


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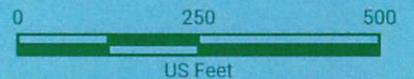
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Teanaway Community Forest

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Department of Fish and Wildlife

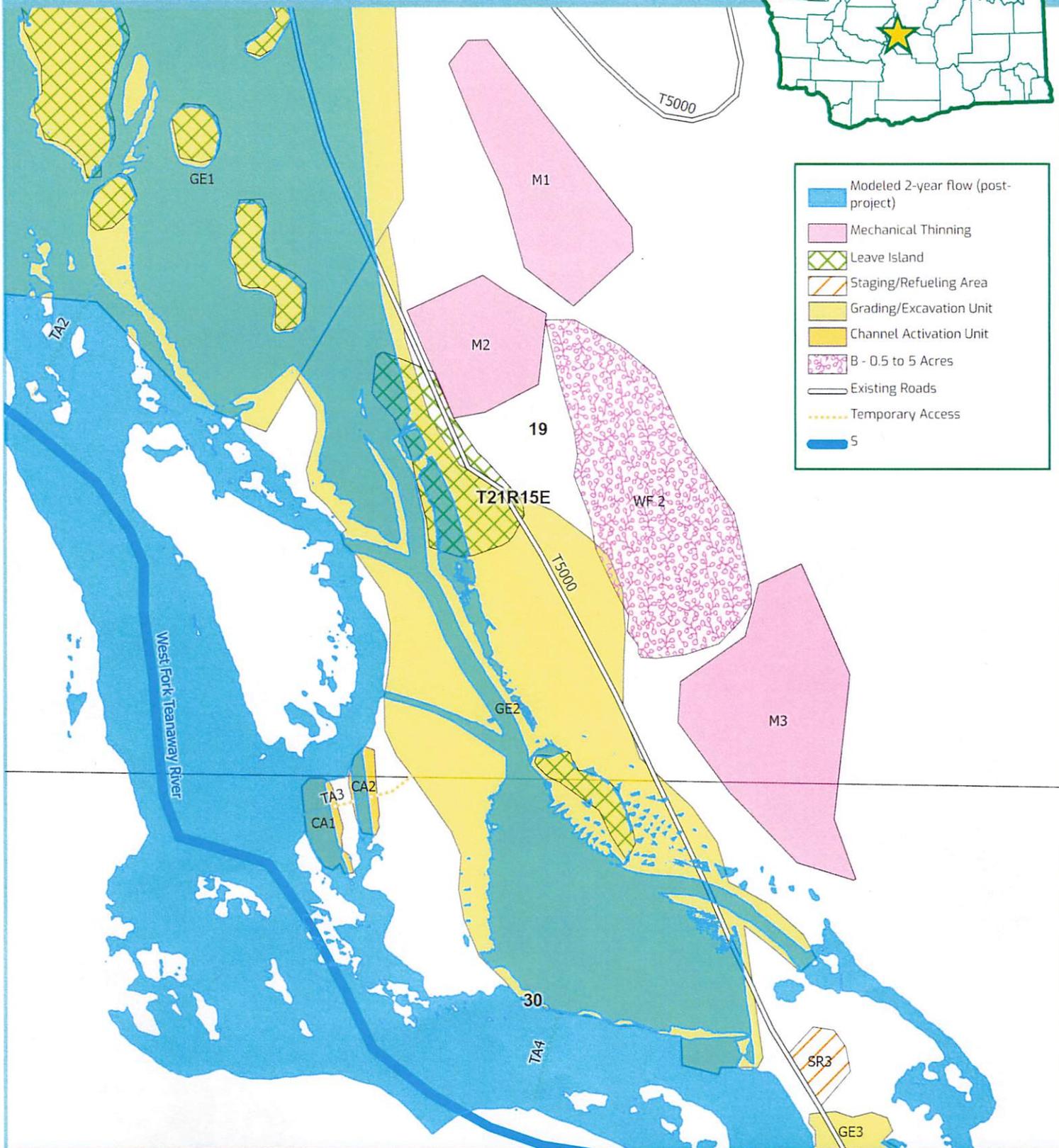


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Teanaway Community Forest

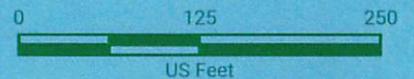
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-  Channel Activation Unit
-  B - 0.5 to 5 Acres
-  Existing Roads
-  Temporary Access
-  5



Department of Fish and Wildlife

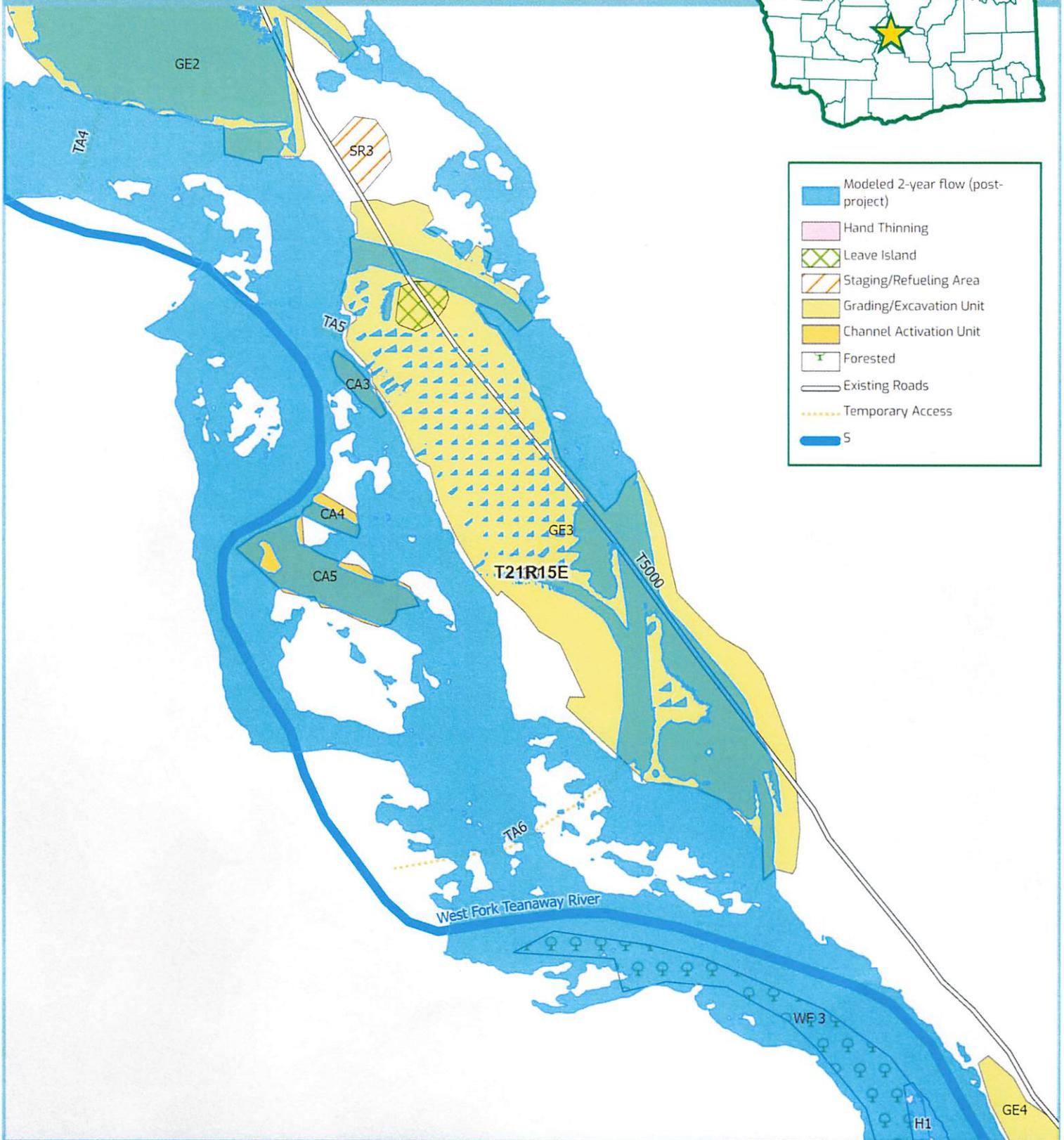


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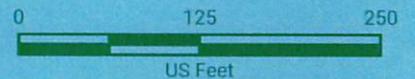
West Fork Teanaway River Restoration

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Teanaway Community Forest



Department of Fish and Wildlife

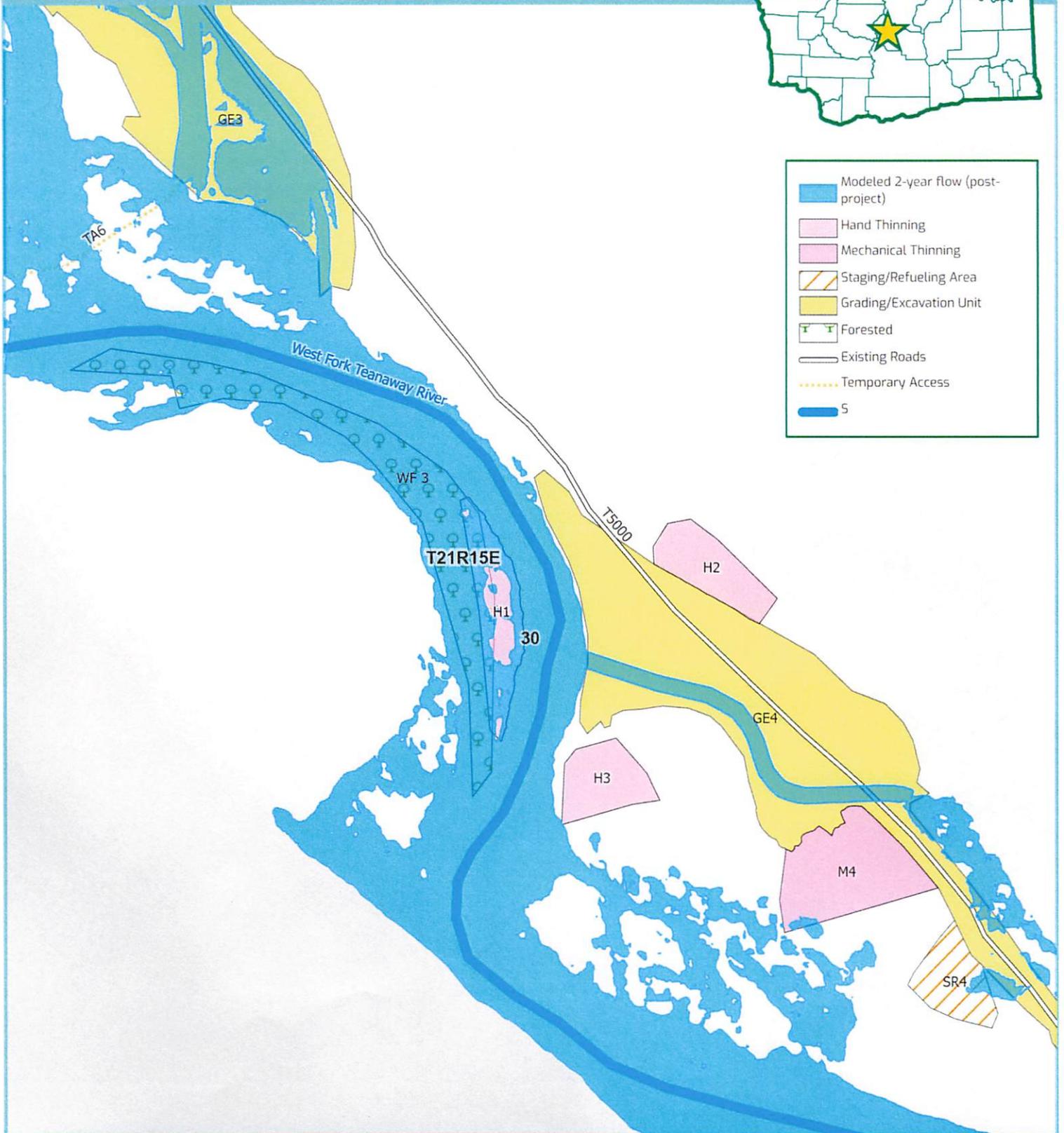


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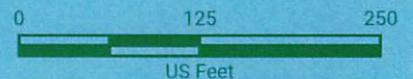
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Teanaway Community Forest



Department of Fish and Wildlife

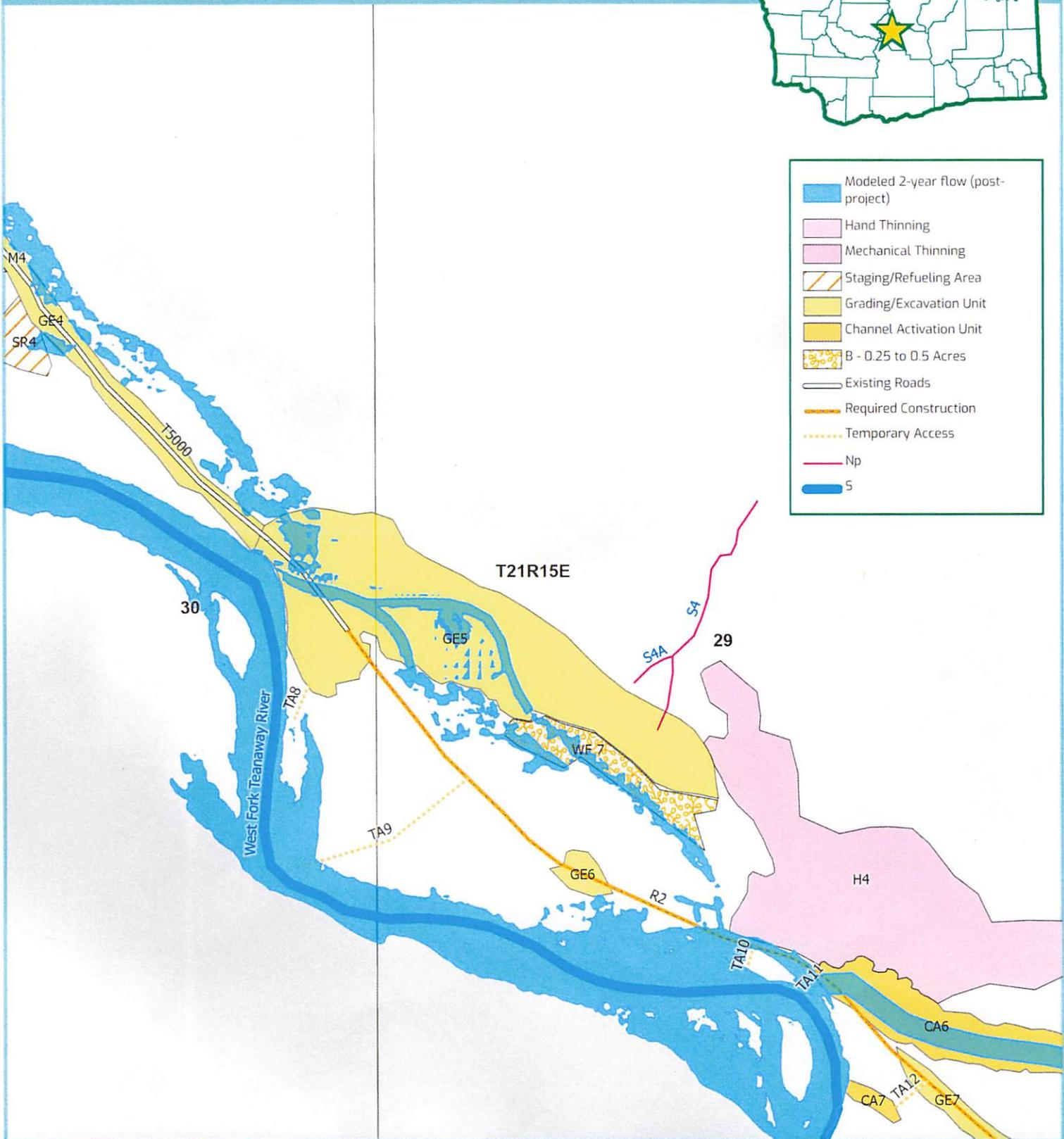


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West Fork Teanaway River Restoration

Teanaway Community Forest

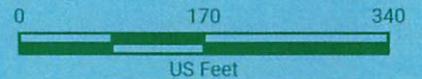
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- Grading/Excavation Unit
- Channel Activation Unit
- B - 0.25 to 0.5 Acres
- Existing Roads
- Required Construction
- Temporary Access
- Np
- S



Department of Fish and Wildlife

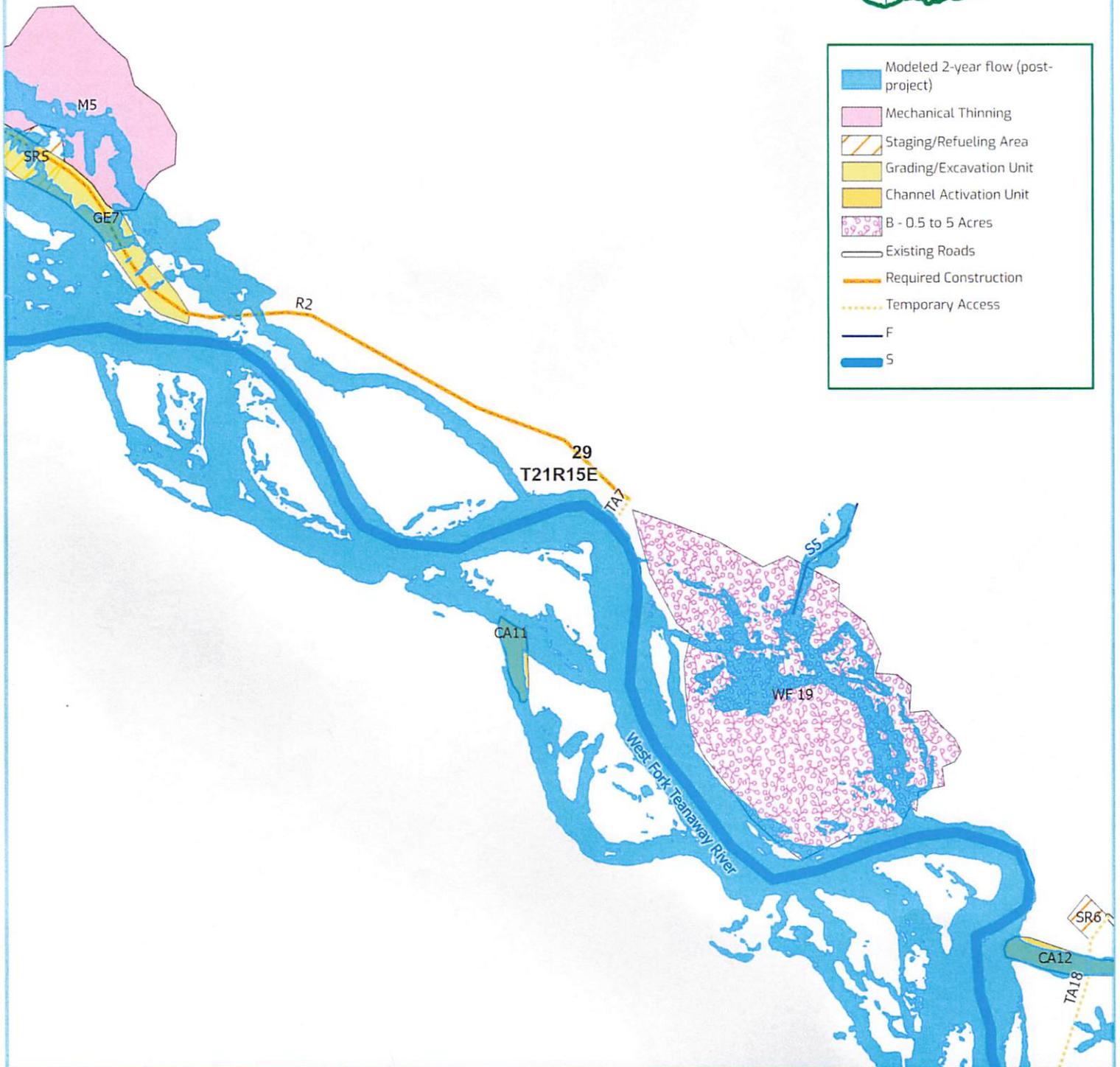


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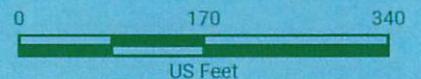
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Department of Fish and Wildlife

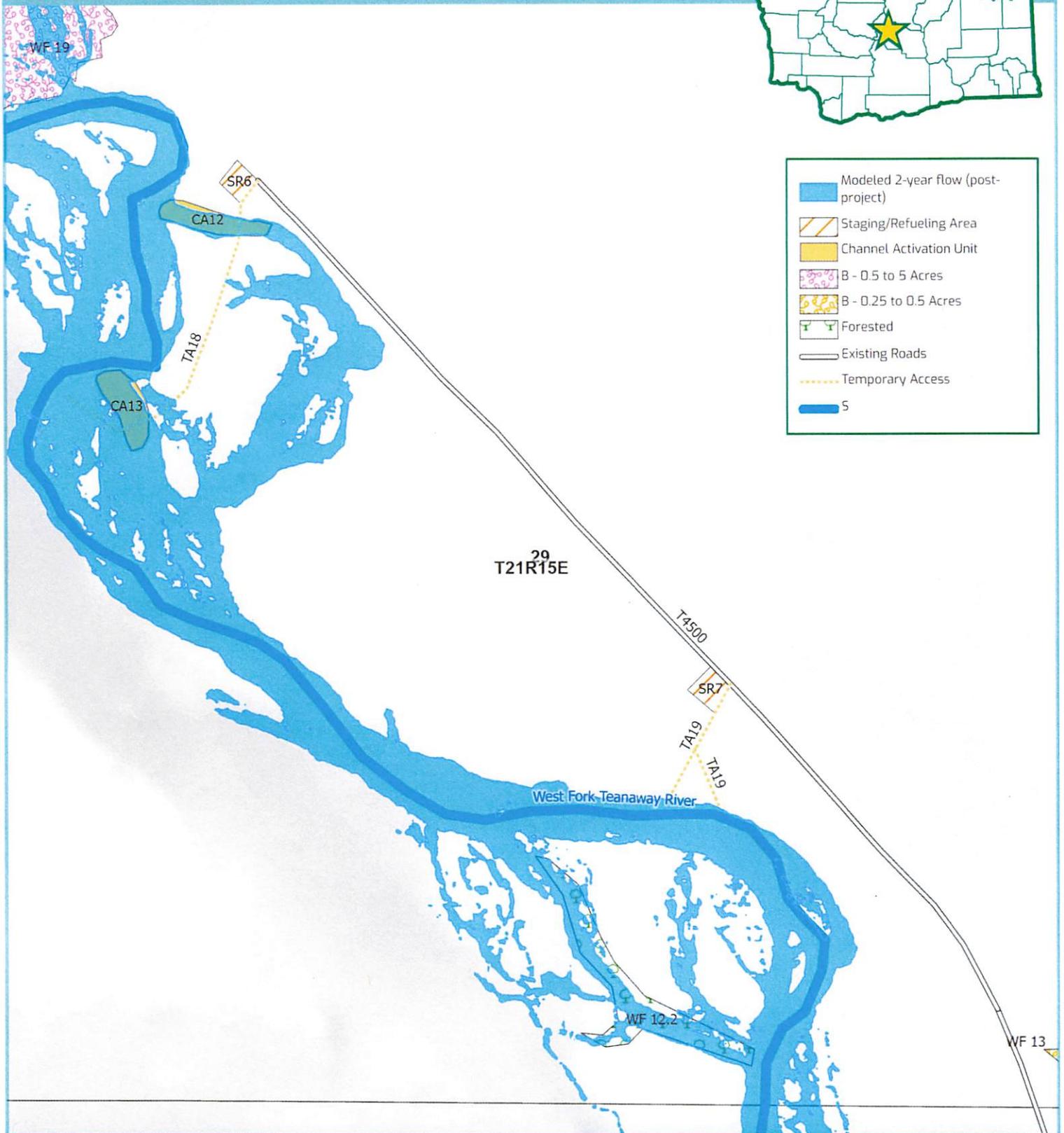


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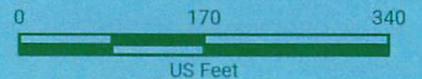
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West Fork Teanaway Restoration – Forest Practice Application

Question 28 (amended)

Question 8: The United State Fish and Wildlife Service (USFWS) is the federal nexus for National Historic Preservation Act Section 106 consultation, and consultation with the Washington State DAHP and the affected Tribes is underway

Question 11: Substantial Development Permit not required due to the use of a Fish Habitat Enhancement HPA pathway Appendix E - CMZ assessment not required due to requested WAC variance - see alternate plan proposal for more information

Question 12: All in-stream activities will be permitted under the HPA (#0045610 - in progress)

Question 14: At the intersection of road R1 and stream S1, a cross drain will be installed to accommodate a water diversion pipe S1 will be de-fished upstream of the road in accordance with de-watering plans (sheets W4-W5 of design sheets: Inter-Fluve, 2025) and the HPA (#0045610 - in progress)

Question 15: All in-stream activities will be permitted under the HPA (#0045610 - in progress) See alternate plan proposal for felling and bucking

Question 16: On the south end of the project (along private boundary), 150 ft of the T4500 Rd will be left open for administrative access

Question 18: All wetlands are listed in the addendum table, including those associated with type S and F waters, because pre-project assessments had already delineated them Project design minimizes impacts to wetlands by avoiding them wherever possible and enhancing wetland functions (see alternate plan proposal)

See the following attachments:

- FPA Addendum (questions 16,18, and 19)
- Alternate Plan Proposal for West Fork Teanaway Restoration FPA
- FPA and Alternate Plan Maps (including version showing modeled post-project 2-year flows)
- WFT Haul Route Map

- Inter-Fluve, 2025 West Fork Teanaway RM 5 – 7 Appendix 80% (Permit-Level) Design Plan Sheets
- WFT Monitoring Plan
- SEPA Checklist
- WFT NSO Thinning Unit Cruise
- Appendix A: Water Type Classification Worksheet
- Appendix D: Slope Stability Informational Form
- Saturna Watershed Sciences, 2025 West Fork Teanaway Restoration (RM 5 – 7) Geologic Evaluation - Analysis of Potential Effects on Unstable Slopes (Title 222 WAC)

** Added 12/29/2025

Note: The language "mature conifers" in this application refers to areas of trees generally >8" DBH, requiring specialized felling techniques or equipment, and which will qualify as NSO habitat immediately after thinning due to average canopy heights over 70 ft. Leave trees in units M1-M5 were selected to retain the largest trees and meet WAC requirements for structural diversity, while removing smaller codominant and intermediate trees where their overabundance reduced habitat quality based on WAC characteristics. Residual stand characteristics in units M1-M5 following leave-tree marking were verified using a random fixed-radius plot sampling method, with a sampling intensity of 2 plots per acre (see the WFT NSO Thinning Unit Cruise). "Non-mature" refers to trees <8" DBH which may be felled by hand without specialized felling techniques or equipment, and which will not qualify as NSO habitat until further growth and maturation has occurred. Leave trees in units H1-H4 are designated by prescription (see alternate plan for prescription).

Before harvest operations begin on this FPA, a WDFW Forester will host a TFW site review of NSO habitat management activities in the project area, including mechanical thinning proposed in units M1-M5.

West Fork Teanaway River restoration - NSO thinning unit cruise

Format: 1/10th acre fixed-radius plots, 2/acre.

Unit M1 **0.5 ac.** **Mechanical thin**

Trees per acre	140
% Fir	93
% Intermediate	36
Canopy height (ft.)	84
Short snags per acre	0

DF = Douglas fir; GF = Grand fir; PP = Ponderosa pine; WR = Western redcedar

Plot	Tree	Species	Height (ft.)	Canopy Position	Short snag?
1	1	DF	94	Overstory	No
	2	DF	98	Overstory	No
	3	DF	78	Intermediate	No
	4	DF	109	Overstory	No
	5	DF	104	Overstory	No
	6	GF	27	Intermediate	No
	7	GF	31	Intermediate	No
	8	WR	39	Intermediate	No
	9	DF	112	Overstory	No
	10	DF	109	Overstory	No
	11	GF	105	Overstory	No
	12	DF	104	Overstory	No
	13	DF	107	Overstory	No
	14	GF	56	Intermediate	No

West Fork Teanaway River restoration - NSO thinning unit cruise

Format: 1/10th acre fixed-radius plots, 2/acre.

Unit M2 **0.3 ac.** **Mechanical thin**

Trees per acre	130
% Fir	100
% Intermediate	38
Canopy height (ft.)	104
Short snags per acre	10

DF = Douglas fir; GF = Grand fir; PP = Ponderosa pine; WR = Western redcedar

Plot	Tree	Species	Height (ft.)	Canopy Position	Short snag?
1	1	GF	100	Intermediate	No
	2	DF	130	Overstory	No
	3	DF	127	Overstory	No
	4	DF	115	Overstory	No
	5	GF	58	Intermediate	No
	6	DF	118	Overstory	No
	7	GF	73	Intermediate	No
	8	DF	118	Overstory	No
	9	DF	132	Overstory	No
	10	DF	58	Intermediate	No
	11	DF	142	Overstory	No
	12	DF	61	Intermediate	No
	13	DF	120	Overstory	No
	14	DF			

West Fork Teanaway River restoration - NSO thinning unit cruise

Format: 1/10th acre fixed-radius plots, 2/acre.

Unit M3 0.7 ac. Mechanical thin

Trees per acre	150
% Fir	97
% Intermediate	27
Canopy height (ft.)	93
Short snags per acre	5

DF = Douglas fir; GF = Grand fir; PP = Ponderosa pine; WR = Western redcedar

Plot	Tree	Species	Height (ft.)	Canopy Position	Short snag?
1	1	GF	64	Intermediate	No
	2	DF	70	Intermediate	No
	3	GF	61	Intermediate	No
	4	GF	119	Overstory	No
	5	DF	121	Overstory	No
	6	DF	120	Overstory	No
	7	GF	105	Overstory	No
	8	GF	97	Overstory	No
	9	GF	98	Overstory	No
	10	GF	94	Overstory	No
	11	DF	105	Overstory	No
	12	GF	86	Intermediate	No
	13	GF	96	Overstory	No
	14	GF	90	Overstory	No
2	1	WR	25	Understory	No
	2	DF	76	Intermediate	No
	3	DF	109	Overstory	No
	4	GF	110	Overstory	No
	5	DF	62	Intermediate	No
	6	GF	52	Intermediate	No
	7	DF	121	Overstory	No
	8	DF	119	Overstory	No
	9	DF	105	Overstory	No
	10	DF			Yes
	11	DF	110	Overstory	No
	12	DF	115	Overstory	No
	13	DF	105	Overstory	No
14	GF	91	Overstory	No	
15	GF	51	Intermediate	No	
16	DF	107	Overstory	No	
17	GF	92	Overstory	No	

West Fork Teanaway River restoration - NSO thinning unit cruise

Format: 1/10th acre fixed-radius plots, 2/acre.

Unit M4 0.3 ac. Mechanical thin

Trees per acre	160
% Fir	94
% Intermediate	31
Canopy height (ft.)	98
Short snags per acre	20

DF = Douglas fir; GF = Grand fir; PP = Ponderosa pine; WR = Western redcedar

Plot	Tree	Species	Height (ft.)	Canopy Position	Short snag?
1	1	DF	62	Intermediate	No
	2	DF	74	Intermediate	No
	3	DF	120	Overstory	No
	4	DF	118	Overstory	No
	5	GF	61	Intermediate	No
	6	DF	115	Overstory	No
	7	GF	125	Overstory	No
	8	DF			Yes
	9	DF	130	Overstory	No
	10	GF	50	Intermediate	No
	11	DF	71	Intermediate	No
	12	GF	118	Overstory	No
	13	GF	103	Overstory	No
	14	DF	97	Overstory	No
	15	DF			Yes
	16	PP	106	Overstory	No
	17	DF	108	Overstory	No
	18	DF	112	Overstory	No

West Fork Teanaway River restoration - NSO thinning unit cruise

Format: 1/10th acre fixed-radius plots, 2/acre.

Unit M5 1 acre Mechanical thin

Trees per acre	155
% Fir	100
% Intermediate	39
Canopy height (ft.)	81
Short snags per acre	10

DF = Douglas fir; GF = Grand fir; PP = Ponderosa pine; WR = Western redcedar

Plot	Tree	Species	Height (ft.)	Canopy Position	Short snag?
1	1	DF	99	Overstory	No
	2	DF			Yes
	3	DF	38	Intermediate	No
	4	GF	106	Overstory	No
	5	GF	81	Overstory	No
	6	GF	40	Intermediate	No
	7	GF	50	Intermediate	No
	8	DF	102	Overstory	No
	9	DF	95	Overstory	No
	10	DF	91	Overstory	No
	11	DF	42	Intermediate	No
	12	DF	59	Intermediate	No
	13	DF	106	Overstory	No
	14	DF	62	Intermediate	No
	15	GF	80	Overstory	No
	16	DF	101	Overstory	No
	17	GF	82	Overstory	No
	18	GF	72	Intermediate	No
2	1	GF	55	Intermediate	No
	2	DF	125	Overstory	No
	3	DF	111	Overstory	No
	4	GF	92	Overstory	No
	5	DF	113	Overstory	No
	6	DF	121	Overstory	No
	7	DF	127	Overstory	No
	8	GF	53	Intermediate	No
	9	GF	62	Intermediate	No
	10	GF	90	Overstory	No
	11	GF	55	Intermediate	No
	12	GF	68	Overstory	No
	13	GF	72	Overstory	No
	14	GF	48	Intermediate	No
	15	GF			Yes



Forest Practices Application/Notification Notice of Decision

FPA/N No: 2707894

Effective Date: 1/6/2026

Expiration Date: 1/6/2029

Shut Down Zone: 675

EARR Tax Credit: Eligible Non-eligible

Reference: 19, 29, 30-21N-15E
WADNR – “West Fork Teanaway Restoration”

Decision

- Notification Accepted** 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.
- Withdrawn** Applicant has withdrawn the Forest Practices Application/Notification (FPA/N).
- Closed** All forest practices obligations are met.

FPA/N Classification

- Class II
- Class III
- Class IVG
- Class IVS

Number of Years Granted on Multi-Year Request

- 4 years
- 5 years

Conditions on Approval/Reasons for Disapproval

No additional conditions required.

Issued By: Marty Mauney

Region: Southeast

Title: Forest Practices Forester

Date: 12/31/2025

Copies to: Landowner, Timber Owner and Operator

Issued in person: LO TO OP By: Amanda Moody Date: 1/2/2026

Appeal Information

You have thirty (30) days to **file** (i.e., **actually deliver**) an appeal in writing of this Decision and any related State Environmental Policy Act (SEPA) determinations to the Pollution Control Hearings Board, the Attorney General’s Office, and the Department of Natural Resources’ region office. See [RCW 76.09.205](http://www.wa.gov/RCW76.09.205). The appeal period starts when the applicant receives this decision, which usually happens electronically on the date indicated below.

You must file your appeal at all three addresses below:

Pollution Control Hearings Board	Office of the Attorney General Natural Resources Division	Department Of Natural Resources Southeast Region
Post Office Box 40903 Olympia, WA 98504-0903	<u>Physical Address</u> 1125 Washington Street, SE Olympia, WA 98504 <u>Mailing Address</u> Post Office Box 40100 Olympia, WA 98504-0100	713 Bowers Road Ellensburg, WA 98926

Information regarding the Pollution Control Hearings Board can be found at: <https://eluh0.wa.gov>

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.

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 website <https://www.dnr.wa.gov/programs-and-services/forest-practices/review-applications-fpars/forest-practices-forms-and>. Notify DNR of new Operators within 48 hours.

Continuing Forestland 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 forestland 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 and 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 forestland obligation, the seller must pay the buyer’s costs related to continuing forestland obligations, including all legal costs and reasonable attorneys’ fees incurred by the buyer in enforcing the continuing forestland obligation against the seller.

Failure by the seller to send the required notice to 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 forestland obligation prior to sale.

DNR Declaration of Mailing

I Enter Name, caused the Notice of Decision for FPA/N No. Enter FPA/N No. to be placed in the United States mail at Enter Location, WA, postage paid. I declare under penalty of perjury of the laws of the State of Washington, that the foregoing is true and correct.

(Date)

(City & State where signed)

(Signature)