

**Lewis River Hydroelectric Projects Settlement Agreement  
Terrestrial Coordination Committee (TCC)  
Meeting Agenda**

**Date & Time:** Wednesday, May 8, 2013  
9:00 a.m. – 3:00 p.m.

**Place:** Merwin Hydro Control Center  
105 Merwin Village Court  
Ariel, WA 98603

**Contacts:** Kirk Naylor: (503) 813-6619; cell (503) 866-8750

Time	Discussion Item
9:00 a.m.	Welcome <ul style="list-style-type: none"> <li>➤ Review Agenda &amp; 4/09/13 Meeting Notes</li> <li>➤ Comment &amp; accept Agenda &amp; 4/09/13 Meeting Notes</li> </ul>
9:15 a.m.	Review Old-Growth Connectivity Memo: Unit 17 (field review if time permits)
9:45 a.m.	<ul style="list-style-type: none"> <li>➤ Next Meeting's Agenda</li> <li>➤ Public Comment Opportunity</li> </ul> Note: all meeting notes and the meeting schedule can be located at: <a href="http://www.pacificorp.com/es/hydro.html">http://www.pacificorp.com/es/hydro.html</a>
10:00 a.m.	Safety <sup>1</sup> orientation for tour of Units 6, 25, and 15 (last year's harvest areas), Unit 17 (connectivity objective and new hazard tree issue); and BPA crossing (Unit 16).
10:15 a.m.	Depart for tour and plan to return to HCC by 3:00
<b>3:00 p.m.</b>	<b><i>Adjourn</i></b>

Please bring rain gear and sturdy walking shoes for hiking in the forest – PacifiCorp will have 2 vehicles for transportation of up to 7 additional passengers

Join by Phone  
+1 (503) 813-5252 [Portland, Ore.]  
+1 (855) 499-5252 [Toll Free]

**Conference ID: 4641794**

**Please bring your lunch**

**FINAL Meeting Notes**  
**Lewis River License Implementation**  
**Terrestrial Coordination Committee (TCC) Meeting**  
**May 8, 2013**  
**Ariel, WA**

**TCC Participants Present: (6)**

Ray Croswell, RMEF  
 Bob Nelson, RMEF  
 Peggy Miller, WDFW  
 Kirk Naylor, PacifiCorp Energy  
 Kimberly McCune, PacifiCorp Energy  
 Nathan Reynolds, Cowlitz Indian Tribe

**Calendar:**

Wednesday – June 12, 2013	TCC Meeting	HCC
Wednesday – July 10, 2013	TCC Meeting	HCC

<b>Assignments from April 9, 2013</b>	<b>Status</b>
Old Growth Connectivity - Emmerson will write up a summary to identify the clear old-growth objective for TCC consideration and use during the Unit 17 field visit on May 8, 2013. GIS to create maps to assist TCC review of Unit 17. Emmerson will identify riparian to type and identify DNR lands.	<b>Complete 5/8/13</b>

<b>Assignments from January 9, 2013</b>	<b>Status</b>
Gritten-MacDonald: Investigate an inter-local agreement with Skamania County for 2013 weed control.	<b>Pending as of 4/9/13</b>

<b>Assignments from June 13, 2012</b>	<b>Status</b>
Naylor: Review the SA/WHMP budget(s) as well as determine status and opportunity for coordination with John Cook (NCASI) and Lisa Shipley (Washington State University) doing the blacktail study and report back to the TCC.	<b>In Progress</b>

<b>Parking lot items from April 13, 2011 Meeting</b>	<b>Status</b>
Naylor: Provide TCC with Riparian Management Plan for review.	<b>Pending</b>

<b>Parking lot items from December 12, 2012 Meeting</b>	<b>Status</b>
PacifiCorp: Work with TCC to proceed with second RMEF/PAC Project Proposal.	<b>Pending</b>

<b>Parking lot items from February 12, 2013 Meeting</b>	<b>Status</b>
Cowlitz PUD: Schedule a field tour of the Devil's Backbone management unit	<b>Pending for summer 2013</b>

## **Review of Agenda and Finalize Meeting Notes**

Kirk Naylor (PacifiCorp Energy) called the meeting to order at 9:15 a.m. Naylor reviewed the agenda and asked the TCC if there were any changes/additions. Naylor requested one addition of a site visit to view a hazard tree area near Unit 17 and Speelyai Canal.

Naylor reviewed the April 9, 2013 meeting notes and assignments. The meeting notes were approved at 9:35am with those changes submitted via email by Peggy Miller (WDFW).

## **Review Old-Growth Connectivity Memo: Unit 17 (field review if time permits)**

Naylor provided a map of Unit 17, Unit 5, and Unit 15 to the TCC attendees ([Attachments A, B and C](#)) to assist with review of what does connectivity mean. Naylor also informed the TCC attendees that he reviewed historical TCC meeting notes but did not locate helpful information to assist with the connectivity question. In addition, Kendel Emmerson (PacifiCorp Energy) provided a summary to identify the old-growth objective as well as a GIS map for TCC consideration to assist TCC review of Unit 17. The GIS map included riparian and shoreline buffers and identified DNR lands ([Attachment B](#)).

General discussion took place regarding the absence of other old growth lands (on state or federal lands) that connect to the mature stand in Unit 17. The question was, “what are we connecting to from an old growth perspective; what are we doing for the spotted owl and pileated woodpecker?” The adjacent land was looked at from an aerial photo to observe that it was mostly private rural residential development or private industrial timberlands. The state DNR land doesn’t provide any old growth and has been largely cut-over in recent years.

The Unit 5 mature stand was also looked at with adjacent aerial photography showing the cut-over state and private lands. This mature stand, like the stands in Unit 15 was previously thinned in 1993 in order to enhance or develop an understory shrub layer. The question again being raised; “what are we providing connectivity in Unit 5 for?”

The Unit 15 stands that are being considered for connectivity were thinned in 1995 in order to develop the understory shrub layer as well. The stands that were previously thinned had all the suppressed trees removed and that is why the average diameter indicates a mature stand. The vegetation cover types use diameter as a primary indicator of old growth and mature vegetation types. This initial model is defined by diameter not age or other characteristics (decadent trees, secondary conifer understory etc.).

Naylor also noted in Unit 15 ([Attachment C](#)), that the area west of the mature stands in question has already been protected and managed for a bald eagle winter roost and bald eagle staging area. Adding the mature thinned stands to the east doesn’t effectively “connect” to anything. Naylor also pointed out that Objective “i” of the Raptor Management Plan requires that the WHMP manage at least 50% of lands within a 2-mile buffer outside the Spotted Owl Special Emphasis Area to provide high quality nesting spotted owl habitat. The areas we are looking at are far removed from SOSEA and any spotted owl circles. Perhaps these areas need to be part of the decision criteria.

As a result of the discussion, PacifiCorp doesn't think we are ready to make a decision regarding connectivity in either Unit 5, 15 or 17. The TCC would like to get in a field visit to take a look and gather more data before the TCC decides what to do.

Peggy Miller (WDFW) expressed that if you weighted size; connectivity to old growth, the one in Unit 15 connects to old growth just by doing the weighting. She too would like to get out in the field in order to meet all the objectives. Naylor stated that this is his first rough look and is not trying to persuade the TCC, only trying to establish more information and question what the objective is; memo Emmerson provided is a good from first blush. What does the TCC really want from the connectivity standpoint?

Miller asked for clarification about the buffer around the creek in Unit 5; is that within a creek, how far down in there can they get. Naylor said the creek is Rock Creek with a 300 foot buffer on the lower end and 150 feet on the upper end. What was managed in 1995 was as close as you could get to the stream and today's buffers are greater.

The TCC agreed to further discuss the connectivity issue; schedule a site visit to have more comprehensive discussion prior to making a decision. Additionally Naylor said it may be necessary for the TCC to approve extending into next year the final analysis of the connectivity objective because the selection of sites is just the first step and each site must then be reviewed to determine what management would be done to develop old growth habitat characteristics. The TCC agreed.

### **Hazard Tree Area**

Naylor provided a map ([Attachment D](#)) which illustrates a narrow strip of land (approximately 7 acres) that has hazard trees (alder) affecting nearby homes and out-buildings. The bigger issue is public safety from alder trees that are imminent for falling down. The area was identified by one of the adjacent homeowners and was concerned about the trees falling onto their property and private road.

Naylor believes the hazards are indeed high and requested putting this work into the annual plan this year; and start the required bird surveys this spring but only conducting the one survey... Naylor noted that 100% of the affected area is in a riparian area formed around Speelyai Canal. Speelyai Creek is fish bearing stream (300' buffer) but the canal was included as part of the reservoir with a 200' buffer. In the case of the canal, most of the WHMP ownership is just about 200 feet even if the buffer was extended (but the buffer could be adjusted). Naylor said that the TCC can manage inside the buffers but it has to be for wildlife and the TCC must approve in advance. Naylor proposes to cut 100% of the alder and re-establish with conifer. Miller asked if we can re-vegetate to provide more shade. Naylor said the conifer planted in this area would eventually provide more shade, however we can't plant between the canal and PacifiCorp road because of the integrity of the canal road/dike. The road is built on a dike that considered a dam structure.

Naylor further informed the TCC that goshawk acoustical surveys would have to start this month. PacifiCorp can address the hazard trees now; August 2013 would be appropriate timing with TCC approval. A site visit was added to the field trip for today. **Need confirmation of TCC decision.**

## Other Topics

Naylor provided Site Access Agreements for certain attendees to sign that are not a government agency. Representatives from RMEF and the Cowlitz Indian Tribe signed the Agreement prior to participating in the field visit.

In addition, Naylor conducted a Safety Orientation for all attendees participating in the field visit of timber harvest and hazard tree areas.

## Public Comment Opportunity

No public comment was provided.

*<10:30 a.m. meeting adjourned – depart for field tour>*

## Agenda items for June 12, 2013

- Review April 9, 2013 Meeting Notes
- Review Old-Growth Connectivity; Unit 17
- Unit 17; Discuss connectivity objective
- Unit 5 Field Visit

## Next Scheduled Meetings

June 12, 2013	July 10, 2013
TCC Meeting	TCC Meeting
Merwin Hydro Control Center	Merwin Hydro Control Center
Ariel, WA	Ariel, WA
9:00am – 3:00pm	9:00am – 3:00pm

## Attachments:

- May 8, 2013 Meeting Agenda
- April 9, 2013 Meeting Notes
- **Attachment A** – Map of Management Unit 17 and Unit 5
- **Attachment B** – Summary to identify the clear old-growth objective as well as a GIS map for TCC consideration to assist TCC review of Unit 17
- **Attachment C** – Map of South Side of Reservoir Unit 15
- **Attachment D** – Hazard Tree Area near Unit 17 and Speelyai Canal

Depart for field visit of last year's timber harvest areas (Units 6, 25 and 15), Unit 17 (connectivity objective and new hazard tree issue near Unit 17 and Speelyai Canal); and BPA crossing (Unit 16).

## Unit 6



2012 harvest in Management Unit 6 of approximately 19 acres (two photos). Harvest included placement of large woody debris from reservoir, reserve trees in islands and grass/legume forage seeding. The TCC also viewed the adjacent oak site where the adjacent conifers were removed to allow more sunlight to the site.





## Near Unit 17 and Speelyai Canal - Hazard Tree Area



Approximately a 65 year-old stand of declining alder with numerous rotten trees; PacifiCorp proposed removal of 100% alder in the Fall of 2013 (August/September), retain young fir, hemlock and cascara to maintain diversity. The proposal would exclude a second acoustical survey in order to fall the trees this year (if TCC approved). Possible that cottonwood may be removed as well. Miller would like to avoid nests, if any, and listen for Flammulated Owl to determine if present. Naylor indicated that the acoustical survey calls would take place at the edge of the stand along the road. PacifiCorp will contact its logger to see if it is even possible this year. Public safety is critical and protection of the road as it's a part of a Project infrastructure. Nathan Reynolds commented that he wasn't comfortable with making an exception to the requirement of two acoustical surveys.



**Near Unit 17 and Speelyai Canal - Hazard Tree Area**



## Unit 25



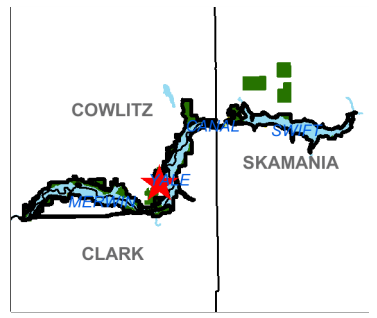
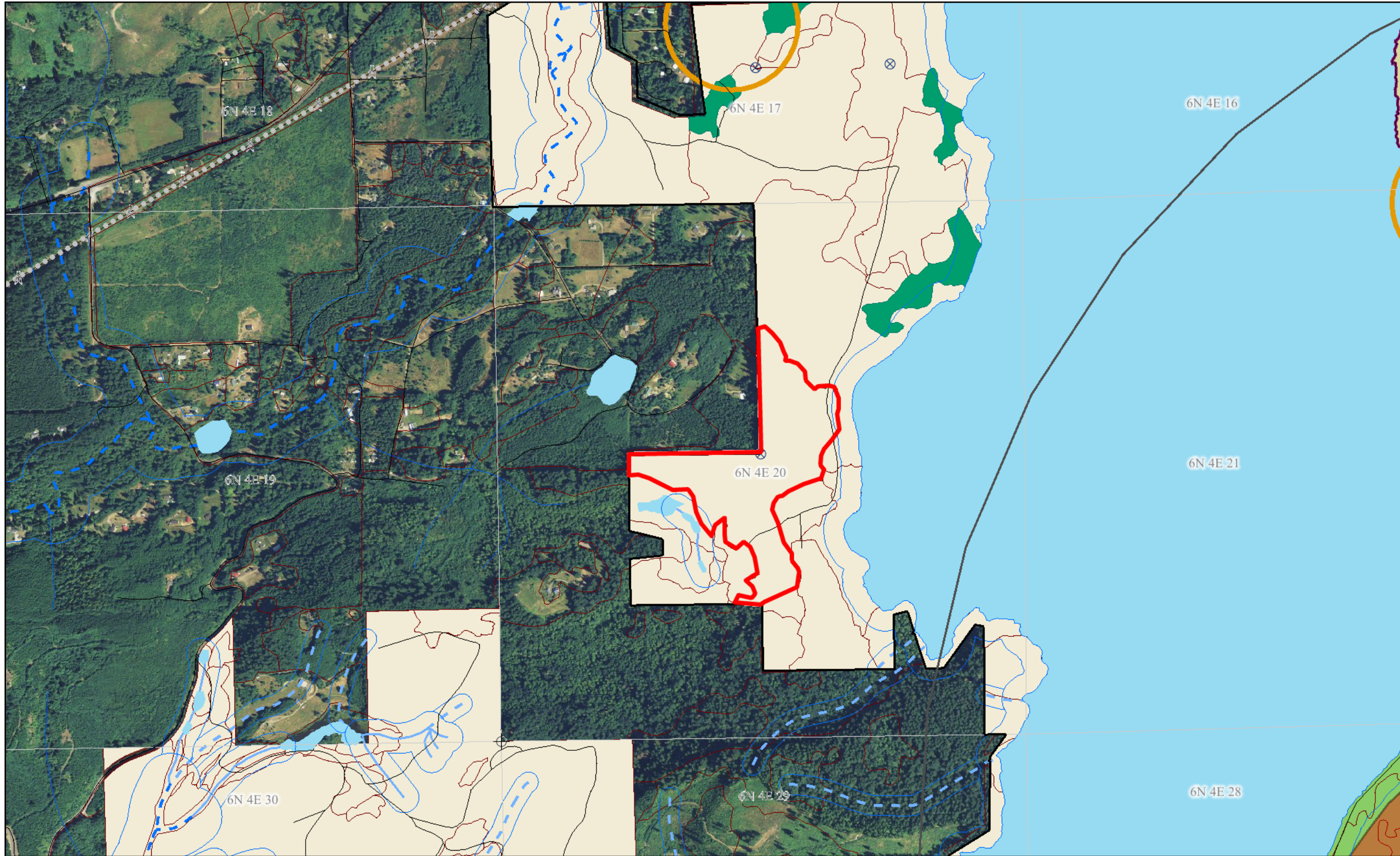
Approximately 17 acres of hardwoods harvested in 2012 to provide short term elk forage but convert area to an old growth conifer stand per the WHMP. The prescription retained conifer and some bigleaf maple. Some cottonwoods were snagged because of their large crowns and blow-down hazard. Heavy elk use; scarified, grass seeded and retained most rhododendrons. TCC also viewed the meadow created in 2012 east of the Swift Warehouse.

### **Unit 17**

TCC toured a mature stand of conifer that was identified as part of the Connectivity discussion. The stand lacked old growth characteristics such as a secondary or tertiary lower canopy level, no downed wood, no site patchiness. There is a well-developed shrub layer.



The TCC will conduct a field visit of Unit 15 and the BPA crossing at the next regularly scheduled TCC meeting on May 8, 2013.



**Legend**

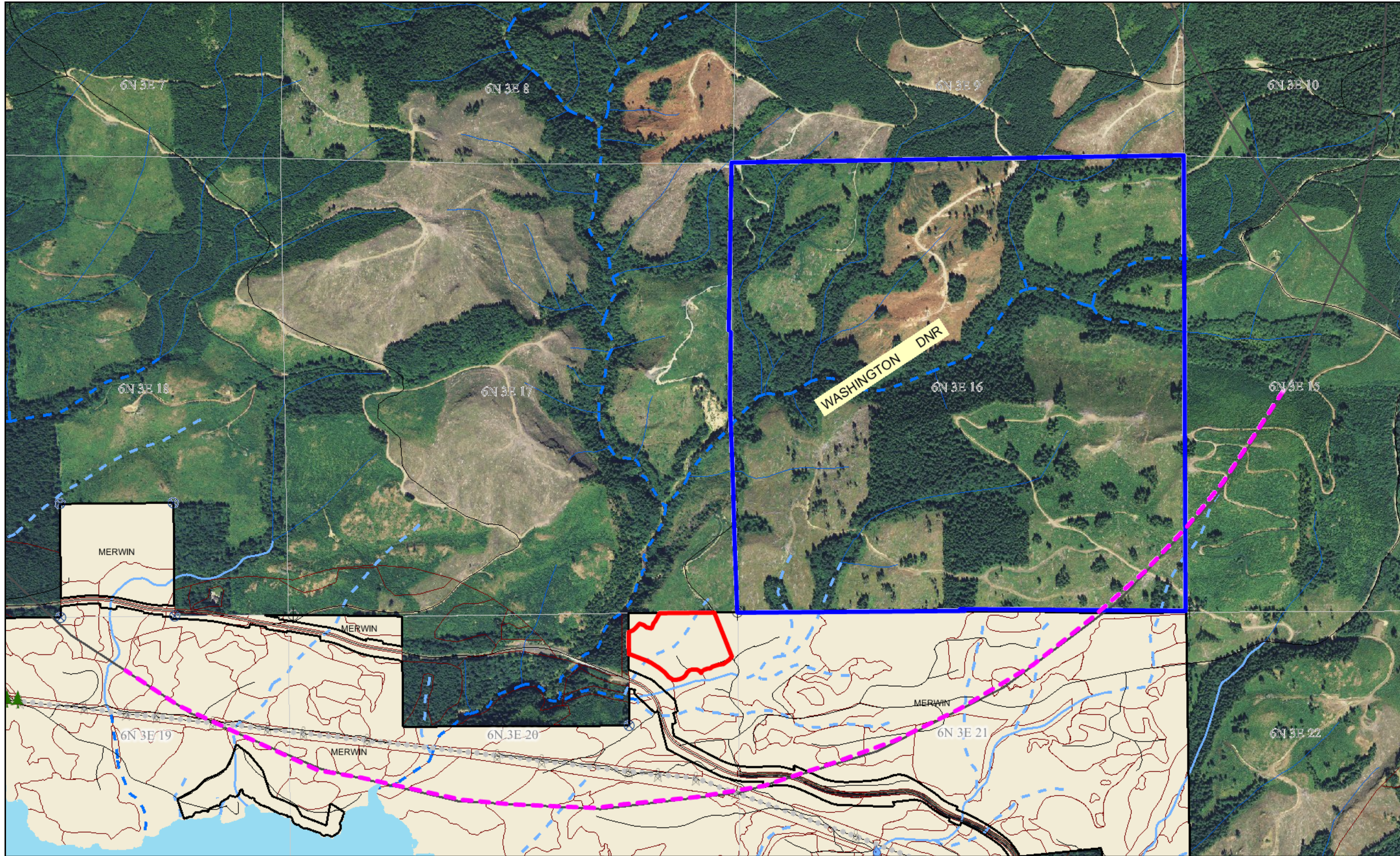
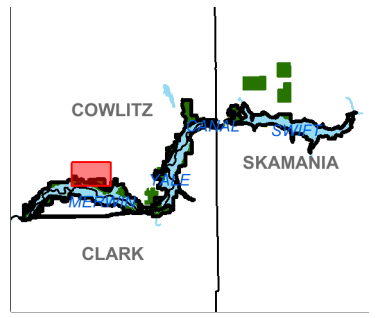
- Generation Facilities**
  - Hydro
  - Geothermal
  - Thermal
  - Wind
  - Biomass
- Surveyed Corner**
  - Surveyed Section Corner
  - Surveyed Property Corner
  - Other Surveyed Corner
- Wetland (Point)**
- PacifiCorp Transmission Pole**
- Road**
- PacifiCorp Transmission Line**
- Siouxon SOSEA**
- NSO Nest Circle**
- FERC Boundary**
- Section**
- Stream Buffer**
- Raptor Nest Buffer**
- Bald Eagle Roost / Staging Areas**
  - Roost Boundary
  - Roost Core Area
  - Staging Area
- Wetland (Polygon)**
- Stream**
  - Fish Stream
  - Non-Fish Perennial
  - Non-Fish Seasonal
  - Other
- Old Growth**
- Vegetation Cover**
  - NSO Management Area
  - Objective h
  - Objective i
  - Objective j
- PacifiCorp Ownership**

0 1250 2500 3750 ft.



Scale: 1:12,544

This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.



**Legend**

**Generation Facilities**

- Hydro
- Geothermal
- Thermal
- Wind
- Biomass

**Surveyed Corner**

- Surveyed Section Corner
- Surveyed Property Corner
- Other Surveyed Corner

**ROW Vegetation Screen**

- Wetland (Point)
- PacifiCorp Transmission Pole

**Road**

- PacifiCorp Transmission Line

**NSO Nest Circle**

- FERC Boundary
- Section
- Wetland (Polygon)

**Stream**

- Fish Stream
- Non-Fish Perennial
- Non-Fish Seasonal
- Other

**Vegetation Cover**

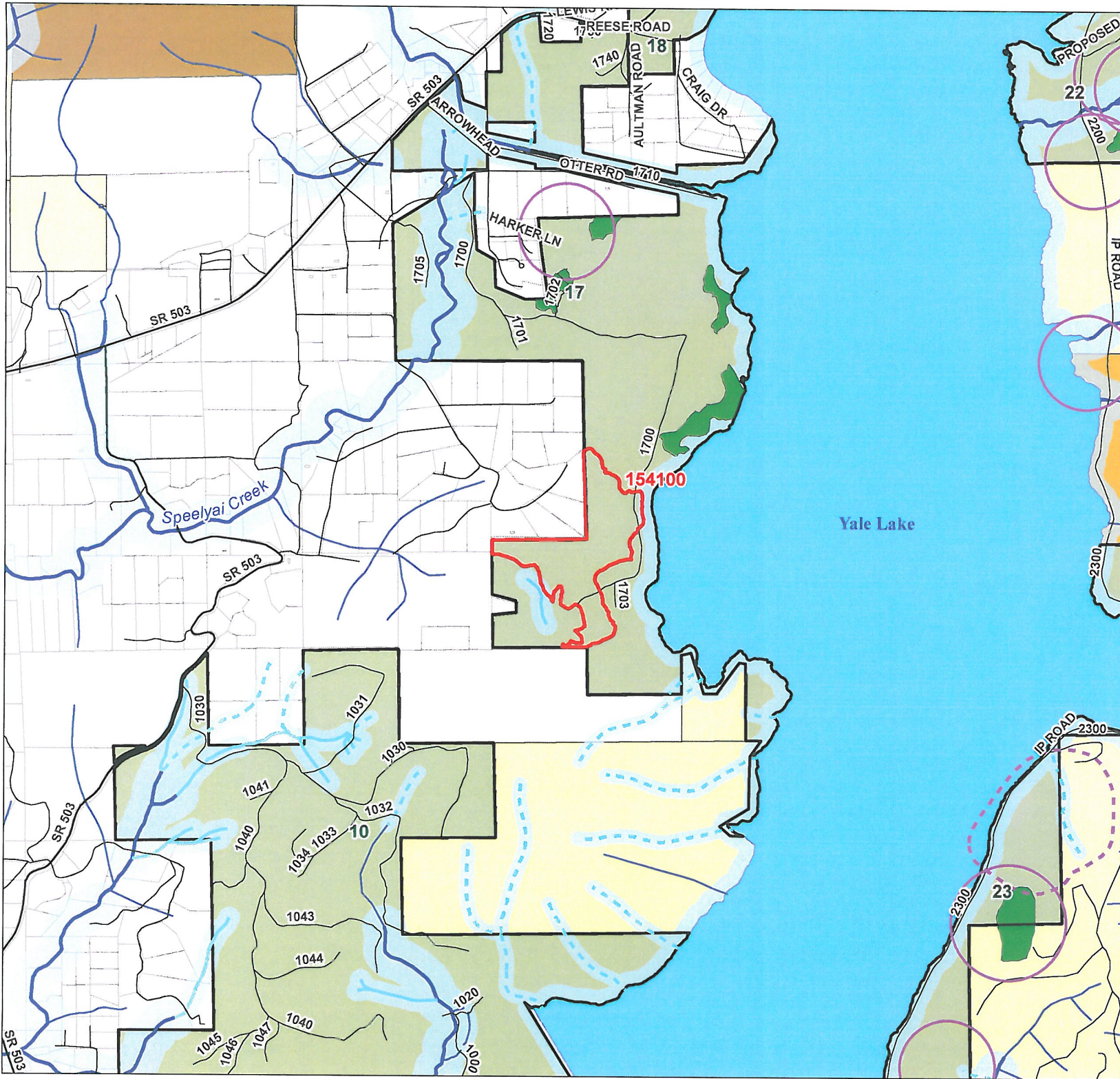
- PacifiCorp Ownership

0 1400 2800 4200 ft.

Scale: 1:14,740

This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.

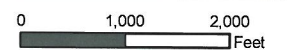
# Lewis River Unit 17 Stand 154100



- Stand 154100
- Stand - 1 Mile Buffer
- Road
- Fish Stream, Shoreline
- Non-fish Perennial
- Non-fish Seasonal
- Unknown, Non-fish
- Stream Buffer
- Raptor Nest Buffer
- Raptor Roost Buffer
- Old Growth
- Management Unit
- Parcels
- Public Ownership**
- COUNTY
- FEDERAL
- STATE



1:22,000



## Old Growth Connectivity

**Goal:** Promote the development, maintenance, and connectivity of old-growth coniferous forest and/or associated habitat components (e.g. Snags, down wood, “wolf trees”, multistoried stands) for wildlife species that use old-growth habitat.

**Species Association:** Pileated Woodpecker, northern flying squirrel, marten, Larch Mountain salamander, northern spotted owl, and bald eagle.

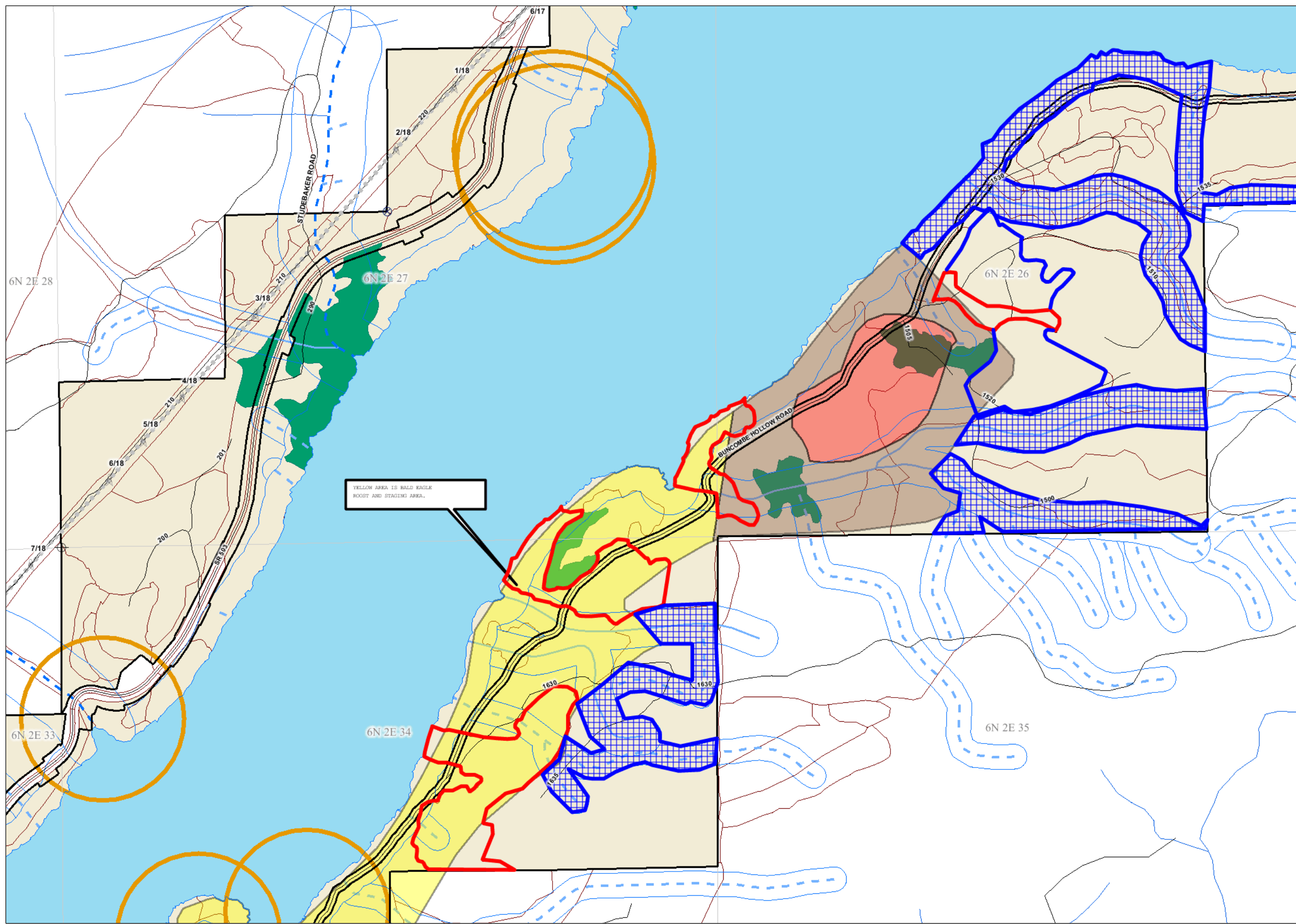
**Objective d:** Within 5 years of Lewis River WHMP implementation, identify and evaluate specific mature conifer stands or other areas that could improve habitat connectivity between old-growth stands or increase number or size of old-growth patches, and develop a schedule to manage/protect these areas as appropriate. Complete the identification/evaluation process within 5 years of the acquisition of Interests in Land.

Criteria	Description	Points	Stand ID 154100 Score
Size	The stand is $\geq 10$ acres	3	<b>3</b> (44.86 acres in size)
	The stand is between $\geq 5$ and $\leq 9.99$ acres	2	
	The stand is between $\geq 1$ and $\leq 4.99$ acres	1	
Old-Growth Proximity	The stand is adjacent (i.e., $\leq 1,000$ ft.) to an old-growth stand on WHMP or USFS lands or within the SOSEA	3	<b>3</b>
	The stand is $\geq 1000$ ft. and $\leq 0.25$ miles from old-growth stand on WHMP or USFS lands or within the SOSEA	2	
	The stand is $\geq 0.25$ and $\leq 0.5$ miles from old-growth stand on WHMP or USFS lands or within the SOSEA	1	
Spotted Owl Habitat	Any portion of the stand is within Raptor Management Objective J lands (i.e., these are lands within the Siouxon SOSEA)	3	<b>0</b>
	Any portion of the stand that is within Raptor Management Objective I lands (i.e., These are lands, that unless separated by a reservoir, are within 2.0 miles of the Siouxon SOSEA)	2	
	Any portion of the stand that is within Raptor Management Objective H lands (i.e., These are lands, that unless separated by a reservoir, are within a spotted owl circle and greater than 2.0 miles of the Siouxon SOSEA)	1	
Protected Raptor Habitat	Any portion of the stand that is within a raptor nest buffer	2	<b>0</b>
	Any portion of the stand that is within a raptor roost buffer	1	
Riparian Buffer	Any portion of the stand that is within the Cougar/Panamaker Conservation Covenant	3	<b>2</b>
	Any portion of the stand that is within a Fish or Non-fish Perennial stream or shoreline buffer.	2	
	The stands only applicable buffer(s) is a non-fish seasonal or other stream buffer.	1	

**Methods:** Mature stands that are a priority to old-growth connectivity will include stands that are adjacent to and/or connected by forested buffers to old-growth stands. These priority mature stands will be evaluated in the field to determine if any management activities are required to develop old-growth habitat characteristics within the stand (i.e., snag development, thinning, large woody debris development). Evaluations and management recommendations will be documented and discussed with the TCC. Evaluations will follow the same procedures and use the same evaluation forms as used for the old-growth evaluations. The result of these stand evaluations will provide recommended management actions and will identify mature stands that may be developed into old-growth during the life of the licenses.

**Future Management:** Old-growth development can be achieved through snag development, thinning, and increasing large woody debris.

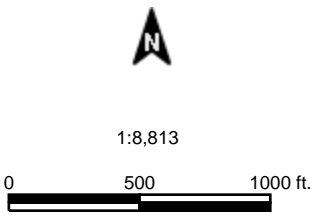
# CONNECTIVITY



YELLOW AREA IS BALD EAGLE ROOST AND STAGING AREA.

### Legend

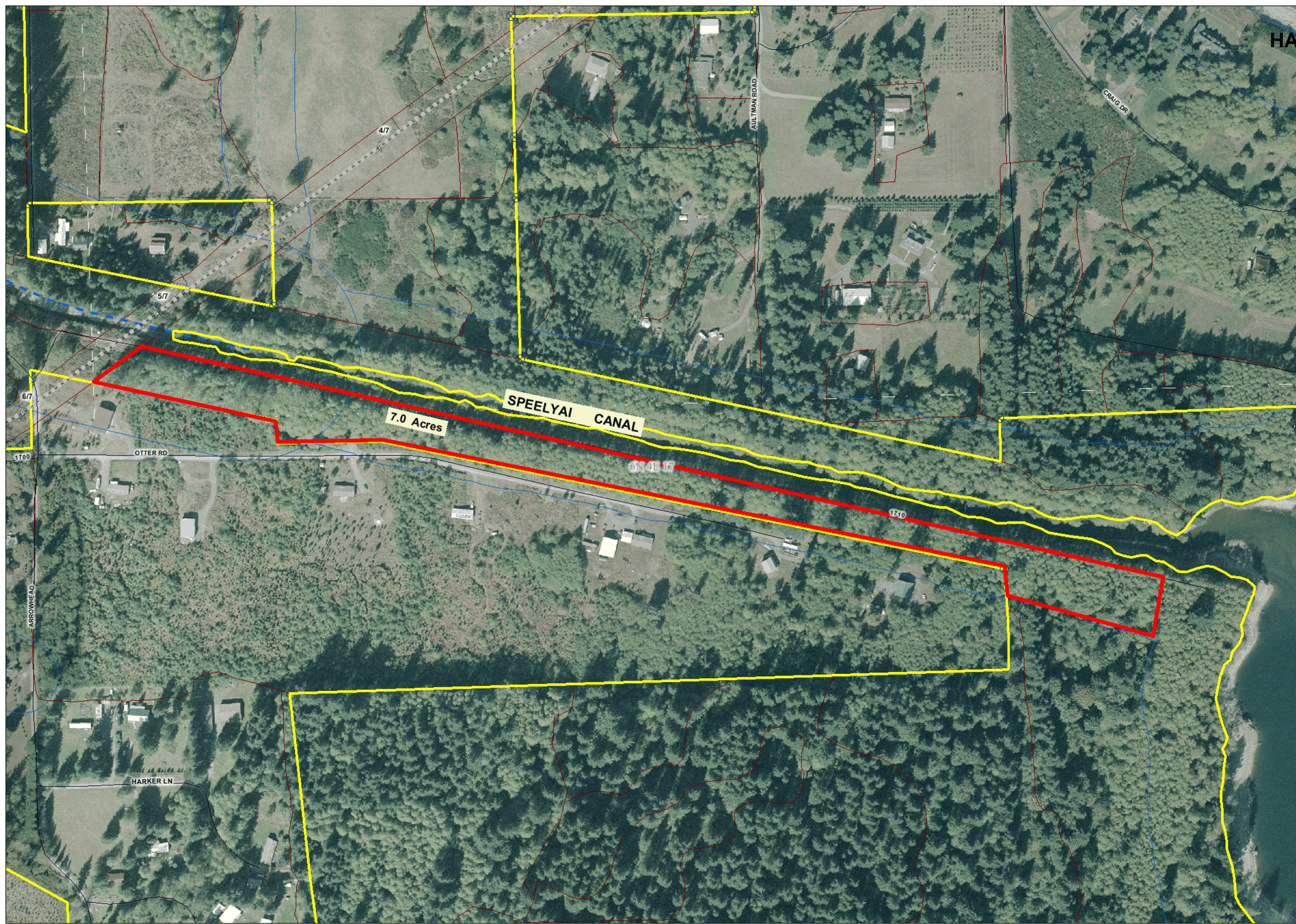
- Generation Facilities**
  - Hydro
  - Geothermal
  - Thermal
  - Wind
  - Biomass
- Surveyed Corner**
  - Surveyed Section Corner
  - Surveyed Property Corner
  - Other Surveyed Corner
- Wetland (Point)**
- PacifiCorp Transmission Pole**
- Road**
- PacifiCorp Transmission Line**
- NSO Nest Circle**
- FERC Boundary**
- Section**
- Stream Buffer**
- Raptor Nest Buffer**
- Bald Eagle Roost / Staging Areas**
- Roost Boundary**
- Roost Core Area**
- Staging Area**
- Wetland (Polygon)**
- Stream**
  - Fish Stream
  - Non-Fish Perennial
  - Non-Fish Seasonal



Data are collected from a variety of City, County, State, Federal and Private sources. PacifiCorp GIS makes no warranty as to the accuracy, reliability, or completeness of this data for individual or aggregate use. Maps and data from PowerMap are not to be released to nor put into any location that is accessible electronically or otherwise available to Market Affiliates.

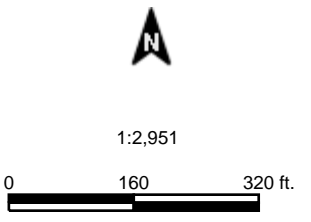


# HAZARD TREE AREA



### Legend

- Generation Facilities**
  - Hydro
  - Geothermal
  - Thermal
  - Wind
  - Biomass
- Surveyed Corner**
  - Surveyed Section Corner
  - Surveyed Property Corner
  - Other Surveyed Corner
- Wetland (Point)**
- PacifiCorp Transmission Pole**
- Road**
- PacifiCorp Transmission Line**
- Management Unit**
- Section**
- Stream Buffer**
- Stream**
  - Fish Stream
  - Non-Fish Perennial
  - Non-Fish Seasonal
  - Other
- Vegetation Cover**



Data are collected from a variety of City, County, State, Federal and Private sources. PacifiCorp GIS makes no warranty as to the accuracy, reliability, or completeness of this data for individual or aggregate use. Maps and data from PowerMap are not to be released to nor put into any location that is accessible electronically or otherwise available to Market Affiliates.